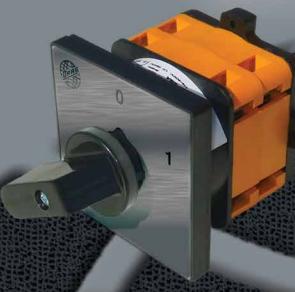




# KATALOG

# CATALOG

PAKET ŞALTER  
CAM SWITCH



İZOLATÖR  
INSULATOR



IP 65 POLYESTER PANO  
IP 65 POLYESTER ENCLOSURE



PAKET ŞALTER  
CAM SWITCH



IP 65 & IP 54 MUHAFAZA KUTUSU  
IP 65 & IP 54 CAM SWITCH ENCLOSURE



IP 65 ABS/POLİKARBON PANO  
IP 65 ABS/POLYCARBONATE ENCLOSURE





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OPAŞ ELK. MLZ. LTD. ŞTİ. 30 yıldır sektörde yeni bir soluk, müşteri memnuniyeti getirmenin gururunu yaşıyor. Paket şalter piyasasına yaptığı yeniliklerle adını duyuran OPAŞ, Türkiye'de önemli bir bayilik ağına sahiptir ve dünyanın 35 ülkesine de ihracatta kalite ve güvenini sunarak dünyanın elektriğine yön vermektedir.

Yaşanan ekonomik krize rağmen OPAŞ, yeni projelere ve teknolojilere her geçen gün yatırım yapmaya, istihdamı artırmaya devam etmektedir.

2010 yılı itibarı ile OPAŞ ürettiği paket şalterlere ek olarak polyester ve polikarbon panolar, izolatör ve aydınlatma grubu ile sektörde yeni bir soluk getirmeye, sizlere hizmet vermeye devam etmektedir.

OPAŞ, ISO(BUREAU VERITAS), CE ve TSE belgelerine sahiptir.

OPAŞ yerli sanayimiz içinde haklı gururumuzu sürdürmeye devam etmektedir.

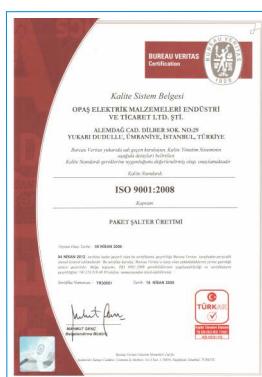
*OPAS will continue to share the pride of passing the 30-year period with you by improving the customer satisfaction and bringing innovation to the sector. As you know, OPAS community was established on 3000 square meter space in Turkey as a hundred percent domestic production.*

*OPAS, which has introduced improvements to cam switch market, has a significant network of franchise in both Turkey and the world, whose products are being used in 35 countries in the world.*

*Contrary to the economical crisis in the world, OPAS continues to invest on new projects and develops a new product every passing day.*

*OPAS completed its investments and launched production of applications of polyester material which are polyester enclosures, isolators and lighting products and OPAS will continue to bring a new breath to the sector.*

*Newly developed polyester and policarbon enclosures and their plexiglass versions have been introduced to our dear customers. Last but not least, our company and products have the following certifications: ISO 9001: 2008 ( BUREAU VERITAS ), CE , TSE.*



**ISO 9001:2008**



No: 91533 | No: 00229  
**TSE**  
 EN 60947-3 | EN 60947-5-1  
 No:1401/4066 | No:140001/4066

## PAKET ŞALTERLER HAKKINDA GENEL BİLGİ

Paket şalterler sık açma-kapama gerektiren aşağıdaki ana ve yardımcı devrelerde kullanılır.

- 1- Bir, iki ve üç fazlı elektrik devrelerinin açma-kapamasında,
- 2- Gerilim-akım değerlerini ölçen cihazların kumandasında,
- 3- Motorların beslenme devrelerini açıp-kapatarak yol verme veya durdurma işlemlerinde,
- 4- Transformatör ve kaynak makinalarında açma-kapama, seเลktör ve kademe değiştirici olarak,
- 5- Kutup değiştirici veya gruplama şalteri olarak şebeke-regülatör gibi ihtiyaç olan yerlerde,
- 6- Otomatik geri dönüşlü startlı şalter olarak kullanılır.



Paket şalterlerimiz, en kaliteli izolasyon malzemesi ve gümüş alaşımı perçin çakılmış bakır kontak kullanılarak şalt cihazları alanında modern teknolojik ilerlemelerden istifade etmek suretiyle, en yüksek mühendislik standartlarına göre imal edilmektedir.

Seri üretilmekte olan temel yapı elemanları sayesinde şalterler, çok kısa zamanda monte edilip, her türlü açma-kapama gereksinimini yerine getirmektedir. Pano üzerine, içine, trafo merkezlerinin alçak gerilim tarafına, şalt panolarına, dağıtım kabinlerine monte edilebilir, madencilik, gemicilik ve benzeri sahalarda çeşitli ihtiyaçlara cevap verir.

Her şalter, şalt programına göre kolayca monte edilip sökülebilen çeşitli açma-kapama elemanlarından meydana gelmiştir. Açma-kapama elemanlarının gövdesi, kaçak akım ve ark etkilerine dirençli plastik malzemeden yapılmıştır. Her elemanı birbirinden 180 derece açı ile yerleştirilmiş tek açmalı iki kontak çifti vardır. Kontak çifti, iki sabit kontak ile hareketli kontak köprüsünden oluşur.

Kontak kapanması basınc yayı, açılması ise şalt elemanın merkezindeki bir kama (program disk) sayesinde olur. Bütün şalt elemanlarının birbirlerine sıkı bir şekilde bağlı olmasıyla kontakların hemen hemen aynı anda açılıp-kapanmaları sağlanır.

Cift kontak paralel açma ve elektrik arklarına dayanıklı bakır kontaklara özel gümüş alaşımı perçinler sayesinde yüksek akım kesme kapasitesi ve uzun عمر sağlamaktadır. Şalterin şalt açıları 30 derece , 45 derece, 60 derece ve 90 derece şeklindedir.

## GENERAL INFORMATION ABOUT CAM SWITCHES

*Cam Switches are used at the following main and auxiliary circuits requiring frequent switching on-off.*

- 1-In switching on-off of single, two and three-phase electric circuits,
- 2-In controlling of devices measuring voltage-current values,
- 3-In processes of starting or stopping by switching on or off the supply circuits of motors,
- 4-As on-off switch, selector and step-alternator in transformers and welding machines,
- 5-As pole-alternator or grouping switch, in required places such as network-regulator;
- 6-As automatic, reversible switch with start.

*Our Package switches are manufactured according to the highest engineering standards by benefiting from the modern technological developments in the range of switch devices by using the highest-quality isolation materials and silver compound riveted copper contact. Thanks to the basic structural elements produced in series, the switches are mounted in a very short time and perform the function of any kind of switching on-off . It can be mounted on the low voltage side of transformers on or in the board, on switchboards, at distribution panels and meets the various requirements of mining, navigation and etc as well.*

*Each switch consists of various on-off elements that can be easily assembled-disassembled according to the switching program. The casing of the switching on-off elements are made of plastic material resistant to electric leakage and arc effects. There are two pair of contacts with a single opening and each component is positioned to 180° to the other. Contact pairs consist of two fixed contacts and a movable contact bridge.*

*Contact closing is realized through pressure spring and opening through a wedge (program disc) at the center of the switch element. Due to the fact that all the switch elements are connected tightly to each other, the contacts are provided to open and close synchronously. High current breaking capacity and long life-span is provided through special silver compound rivets resistant to electric arcs and double-contact parallel opening. The switching angles of switches are as follows: 45°, 60° and 90°.*



## KAPALI TİP KÜÇÜK,ORTA VE BÜYÜK ŞALTERLER



Kapalı tip şalterler genel kullanım olarak tasarılanmış olup,kumanda sistemlerinde, ölçü komutatörlerinde,kademeli,kutup değiştirici ve motor kumanda devrelerinde güvenle kullanılır. Hava ve yüzey atlama gerilim mesafeleri 690volttan daha büyuktur.

Kontak malzemeleri ve kablo bağlantı klemensleri EN 60947-3'e uygundur. Bütün klemens ve kontak bağlantıları el temasına karşı korumalıdır. Bu ise VDE 0106. Bölümün 100.maddesi veya VBG4'e uygun olarak üretilmiştir.

Yıldız/Düz Tornavida ile çalışmalarda kontak vidaları seri ve emniyet olarak sıkılabilir. Şalterlerin tasarımında azami yer tasarrufu,kolay montaj ön planda tutulmuş, kullanımda kolaylık ve zaman tasarrufu sağlayacak bir yapıdadır. Şalterlerin anahtarlama açıları 30-45-60-90 derecedir.

Hareketli kontak elemanları bakır olup, gümüş içerikli perçinler kullanılır.

Kontaklar basarak açıp-kapama yaptığından emniyetle çalışırlar. Tahrik mili üzerinde bulunan kamlar, yani programlar diskleri kontakların aynı zamanda açıp kapasını gerçekleştirdiğinden bütün kumanda devrelerinin veya fazlarının gecikmesiz aynı anda açıp kapasını temin eder.

Hammaddesi yanmaya dayanıklı ve alev almayan "PBT" plastiktir. Kapalı tip şalterler,EN 60947-3,IEC 947-3 ve diğer arası normlara ve çevre şartlarının özellikleri dikkate alınarak AR-GE çalışmaları yapılmıştır. AB ve bazı dünya devletlerinin kabul ettiği CE normlarına ve kriterlerine uyumlu hale getirilmiştir. Kontak ve köprüler tamamen kapatılarak elektriğin el ile teması kesilmiştir.

Kullanım şartları ve istege bağlı olarak kilitli asma kilit kullanılır. Dünya standarı normlarına göre paket şalterlerimiz; Ana şalter,yüksek kesici şalterler ve kesici şalterler olarak üç şekilde kullanılabilirler. Üksteki kesici şalterler en az AC23A. Kullanım şartlarına dayanıklı olmalıdır. Kesici şalterler ise yük devresini kontaktör üzerinden kapatmayı temin eden yardımcı kontak bulunacak şekilde olmalıdır. Kesici şalterlerin seçiminde sürekli çalışma akımı dikkate alınmalıdır. Şalterlerin seçimini yaparken teknik değerler bölümünü dikkatli incelemek gereklidir.

## CLOSED TYPE SMALL,MEDIUM AND LARGE SIZE SWITCHES

*Close type switch has been designed for general use in control systems.*

*User safety, less space and easy mounting are the primary advantages of this special design. Padlock can be used on locked type as in our other types of switches.*

*Closed type switch has been developed according to the standards of EN6097-3, IEC and CE which meets the world standards about quality and ecology. Contacts and terminals are concealed to prevent electric shocks caused by touch.*

*The body material is PBT which can resist and is non-flammable up to very high temperatures. Contact materials and terminals fully comply with EN 60947-3.*

*Moveable contact elements are of copper and silver riveted compound which enables high conducting. Control circuits operate without delay due to program discs, cams and contacts in the switch moving synchronously.*  
*The switching angles are 45°, 60°, 90°.*

*The user must pay attention to the technical specifications before defining type and capacity of the cam switch to be used on the control panel or machine.*



## KAPALI TİP MİNİK BOY ŞALTERLER

## CLOSED TYPE MINI SIZE SWITCHES

Yeni teknoloji ve uluslararası standartlara göre geliştirilmiş olan MİNİ tip paket şalterlerimiz kumanda devrelerinde güvenle kullanılabilir.

Bu şalterler minimum ölçülerde tasarlanmış olup dokunmaya karşı tam korumalıdır.

Modern tasarımlı paket şalterlerimiz hızlı kablo montajına olanak sağlayan vida bağlantı sistemine sahiptir.

Az montaj yeri gerektiren MİNİ tip şalterlerimiz standart olarak 35x35 mm ön plakalı, 4 delik montajlı olarak 6A, 8A ve 10A olarak üretilmektedir.

## SQUARE TYPE MINI SIZE SWITCHES

*Mini square type of cam switches has been developed regarding to international standards that safe using in control circuit.*

*Mini type of switches has designed by minimum dimensions for finger protection.*

*Our modern design of cam switches have easy screw connection system for fast cable mounting.*

*Mini type of switches have standard front frame 35x35mm, 4 assembly holes that need less space for montage and manufactured in 6A and 10A*

- Dokunmaya karşı tam koruma
- Hızlı ve kolay montaj
- Minimum ölçü
- Modern tasarım
- Yeni teknoloji
- Isıya dayanıklı termoplastik gövde
- Yüksek kontak teması
- Protection against touching
- Easy and quick assembling
- Minimum size
- Modern design
- New technology
- Heat-resistant thermoplastic body
- High contact conductivity



## YUVARLAK TİP ŞALTERLER

## ROUND TYPE CAM SWITCHES

### Şalterlerin Doğru Seçimi :

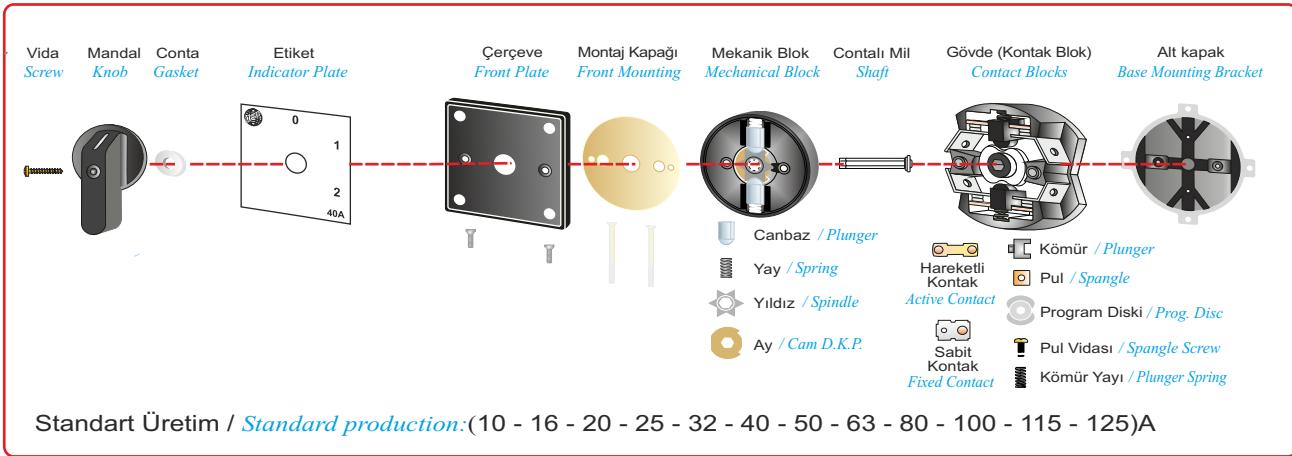
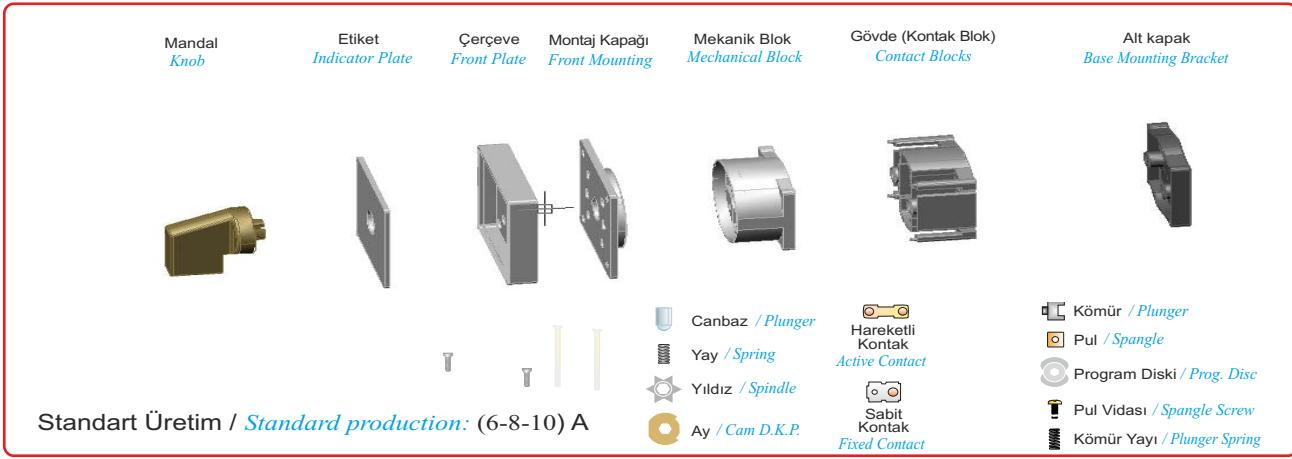
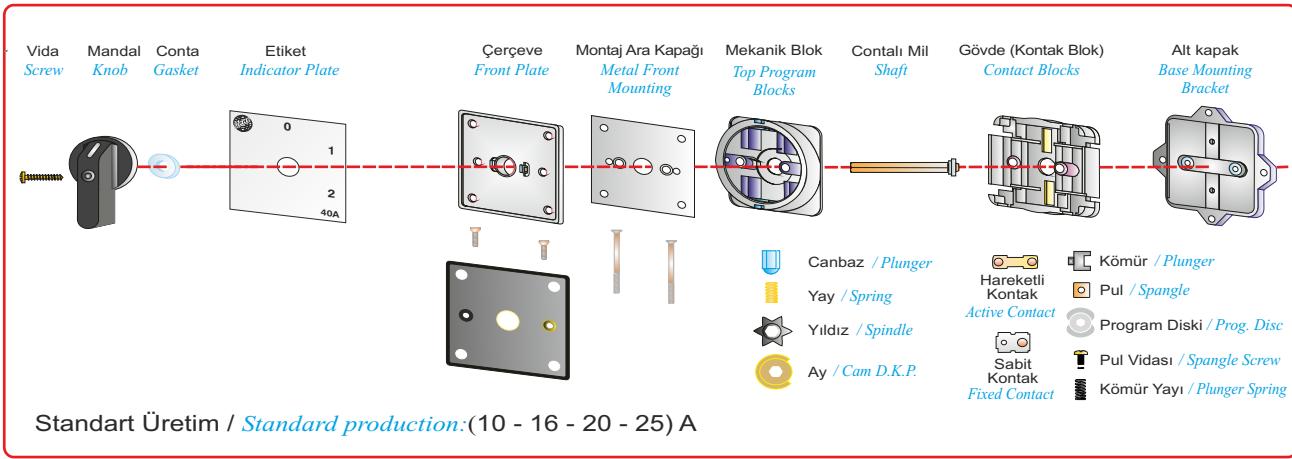
Yükte kesici şalterler, en az AC-23A kullanım şartlarına dayanıklı olmalıdır. Kesici şalterlerin seçiminde sürekli çalışma akımı dikkate alınır. Ana şalter olarak kullanıldığında, makina üzerindeki en büyük motorun tam frenlenmiş konumda çekeceği akım ile diğer tüm sarf birimlerinin toplam akım değerlerine eşit olmalıdır. Ayrıca, tüm sarf birimlerinin nominal çalışma akım değeri toplamı, şalterin sürekli çalışma akım değeri üzerine girmemelidir. Teknik değerler kısmı iyi incelenmelidir.



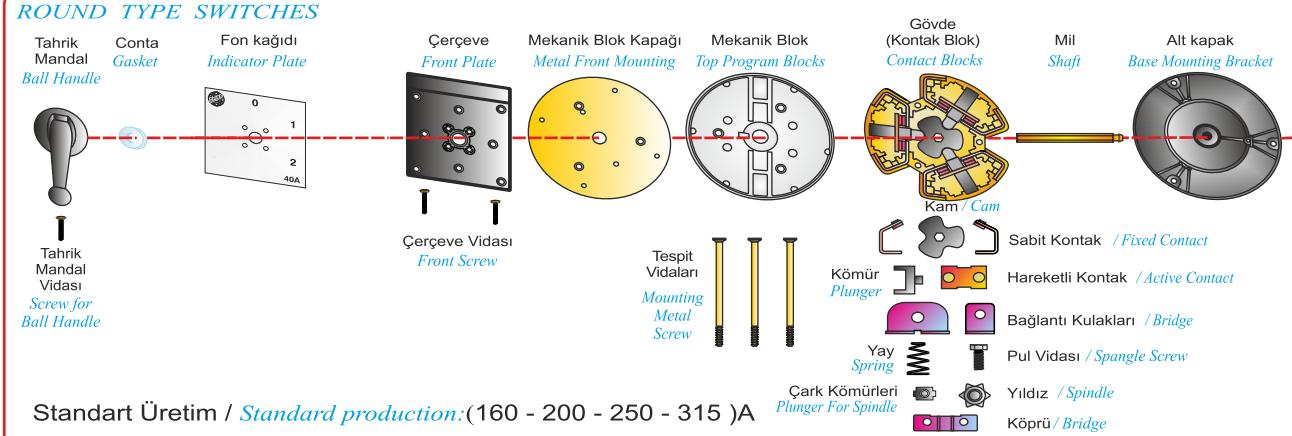
*These package switches with the design registration held by OPAS have superior characteristics: body heat-resistant up to 1200°C, switch components positioned at 120° to each other, control of 3 phases in a block and 3 moving contacts with a single opening moving contacts bridge the fixed one and contain copper bars, 2 and 3 mm in width. Special silver rivets mounted on moving contacts provide a long life, and high capacity to break currents, and prevent excessive arcing. Package switches have high capacity to break currents and adequate mechanical and electrical strength. They can accept short overcharges and, when used with a fuse, feature high resistance to peak short-circuits.*

### Selecting the right switches

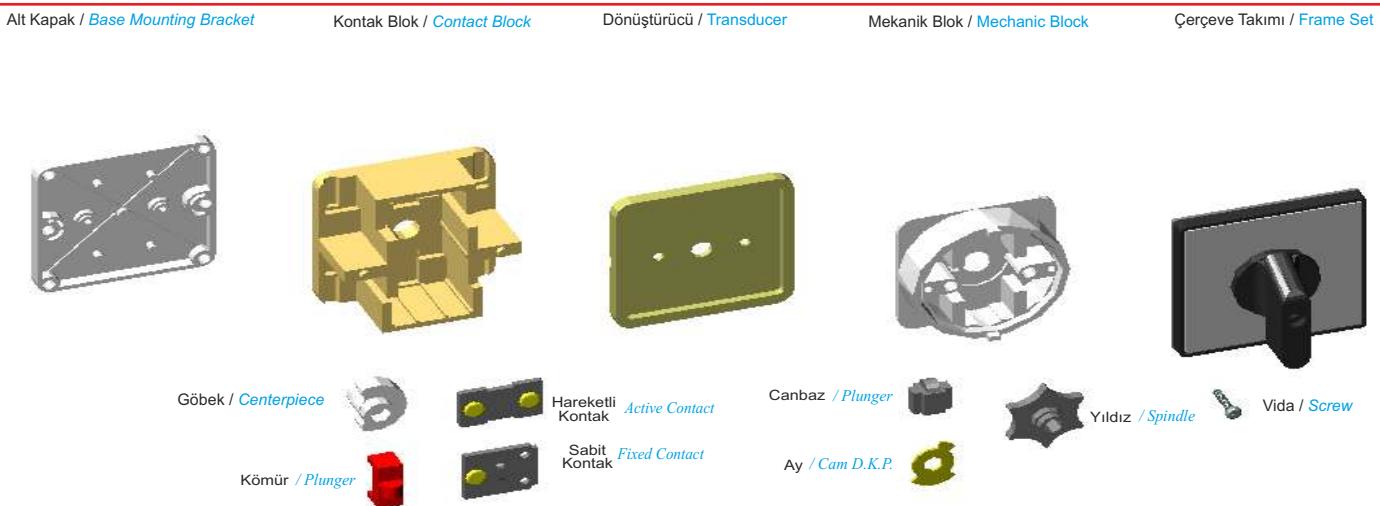
*Charge breaking switches must be at least AC-23A and have adequate strength against conditions of use. In selecting breaking switches the continuous operating current will be considered. If used as the main switch, it must be rated up to the current to be consumed by the fully braked largest engine of the machine, plus the current to be consumed by all the other components. In addition, the nominal operating current of all the current-consuming components should not exceed the continuous operating current of the switch. Technical values should be checked carefully.*



#### YUVARLAK TİP ŞALTERLER (B4) / ROUND TYPE SWITCHES



## BÜYÜK KARE TİP ŞALTERLER / LARGE SQUARE TYPE



Standart Üretim / Standard Production : (100 - 115 - 125 - 160 - 200 - 250 - 315 )A

## NORMAL ve KAPALI PAKET ŞALTERLERDE ÖN PANEL TİPLERİ

Normal ve kapalı paket şalterlerimizin ön paneli 4 tipte tasarlanmıştır.

### 1 - Standart Tip

Siyah çerçeve, beyaz veya gri ekran fonundan oluşmaktadır.



STANDART  
STANDARD

### 2 - Kilitli Tip ( Kilitli Mekanizma)

Ana şalter veya emniyet şalteri üzerinde kullanılmak üzere, şalter kapalı konumdayken 1-2 asma kilit takılabilir.

Renk Kombinasyonu;

Çerçeve : Sarı ( İsteğe bağlı olarak siyah, kırmızı yapılabılır.)

Mandal : Kırmızı ( İsteğe bağlı olarak sarı, siyah olabilir. )



KİLİTLİ  
WITH PADLOCK

### 3 - Geniş Çerçeve

Genel olarak makinaların üzerine, 4 köşesinden monte edilerek, fizikal olaraq güzel görünüm vermektedir.



GENİŞ ÇERÇEVELİ  
MOUNTING FRAME

### 4 - Etiketli Çerçeve

Siyah çerçeveye, beyaz veya gri ekran fonundan oluşmaktadır. Etiketli kısım standarttır.

### FRAME TYPES FOR STANDARD AND CLOSED TYPE SWITCHES

The front panel of standard cam switches is designed in 4 types:

#### 1 - Standard Type

Consists of black frame, white or grey label.

#### 2 - With Padlock (Locked Mechanism)

1-2 padlocks may be mounted on the switch as closed, in order to be used as the main switch or safety switch.

Color combination;

Frame: Yellow (may be black, red as optional.)

Latch: Red(may be yellow, black as optional.)



ETİKETLİ ÇERÇEVE  
LABELLED FRAME

#### 3 - Mounting Frame

Generally mounted to 4 corners of the machines and gains physically a nice view

#### 4 - Labelled Frame

Consists of black frame, white or grey label. Labelled part is standard.

**STANDART, KİLİTLİ ve GENİŞ ÇERÇEVELİ ŞALTER TİPLERİ ARASINDA FİYAT FARKI YOKTUR.  
NO PRICE DIFFERENCE FOR DIFFERENT TYPES OF FRAMES**



## IP 65 POLYESTER PANO ÖZELLİKLERİ / IP 65 POLYESTER ENCLOSURE'S QUALIFICATIONS

Yalıtkandır; elektriği iletmeyen. Oluşabilecek elektrik arkını 2 dakika gibi sürede sızdırmaz. Cam elyaf katkılıdır; Oluşan ark vb.den dolayı yanmalara karşı müdahele imkanı sağlar. Çabuk alev almaz. Su ve nem geçirmez; Dış atmosferik koşullara -50°C / +200°C dayanıklıdır. Paslanmazlık ve korozyonlara dayanıklılık; Boya ve bakım maliyeti yoktur. Darbelere ve asıtlere karşı dayanıklıdır. UHT katkılıdır; Ateşe ve güneşten gelen UV ışınlarına karşı dayanıklıdır. HALOJEN FREE'dır. Antibakteriyeldir; Mikro organizma üretmez (su ve sabunla kolay temizlenir). Modular; Kolayca işlenebilir montaj kitileyle kolay montajlanır. IP 65/67; sert hava koşullarına ve ortamda olan toz ile benzer etkilerden etkilenmez ve iç yapıyı korur.

*Isolated; Does not conduct electricity. Isolates possible electric arcs for 2 minutes. Fiberglass doped; Provides opportunity to act against possible deflagrations and resists fire. Water and humidity resistant; Resistant to environmental conditions of -50°C to 200°C. Oxidation and corrosion resistant; No paint or maintenance costs. Resistant to impacts and acid. UHT resistant; Resistant to fire and UV lights from the sun. It is halogen-free. Antibacterial; Does not harbor micro-organisms. Easily cleaned with soap and water. Modular; Ease of installation with the easy-to-use assembly kit. IP 65/67; Resistant to extreme environmental conditions and unaffected by impurities like particles in the air, thus the inner structure is protected.*

## IP 65 POLİKARBON / ABS PANO ÖZELLİKLERİ / IP 65 POLYCARBONATE / ABS ENCLOSURE'S QUALIFICATIONS

ABS reçineleri akrilonitril, butadien ve stiren den elde edilen kopolimer lerdır. AKRİLONİTRİL ; kimyasal olarak sağlamlık, STİREN; kolay işlenebilirlik, sertlik ve parlaklık sağlar. BUTADİEN ;ise soğuk hava şartlarında ve oda sıcaklığında darbelere dayanımı ve dayanıklılık sağlayıcı olarak rol oynar.

Polikarbonatlar, termoplastiklerin özel bir grubudur. Işık geçirgenliği cama çok yakındır, ışık iletimi ; ışığın homojen olarak dağılması en önemli özelliğidir. Aynı zamanda ışıya, kimyasal maddelere, çizilmeye, darbeye dayanıklılığı yüksek, gıda uygun, hafiflik , UV koruması, ateşe karşı dayanıklılık, alev yaymazlık özelliği, ses ve ısı yalıtımı olan şeffaf plastikler diyebiliriz.

*ABS resins are copolymer that is made of acrylonitrile, butadiene and styrene. Acrylonitrile; provides chemical integrity, Styrene; provides processability, solidity and gloss. Butadiene; provides impact resistance and durability in extreme environmental conditions.*

*Polycarbonates are a special group of thermoplastics. Their transparency is close to glass's. Transparency; homogenous dispersal of the light is the most important specification. Also they can be described as transparent plastics with resistance to heat, chemicals, scratching an impact, suitability to food, lightness, UV protection, fire resistance, resistance to spreading flames, noise and heat isolation.*

Polikarbonat kullanım sıcaklık aralığı : -100° C den + 135° C ye

Polikarbonat in erime sıcaklığı : 270°C / 380°C civarı

Polikarbonatın kırılma endeksi : 1.585 ± 0.001

Polikarbonatın ışık geçirme endeksi: 90 % ± 1%

OPAŞ ABS Panoları bu özellikleri taşımaktadır.

Polycarbonate usage temperature range: -100°C to 135°C

Polycarbonate melting temperature: ~270 - 380°C

Polycarbonate fracture index: 1,585 ± 0,001

Polycarbonate transparency index: 90% ± 1%

OPAŞ ABS enclosures carry these qualifications.

İki çeşit ürünümüz vardır.

1- opak 2-polikarbon

Opak denilen ürün cam kapaksız olup tamamı ABS den üretilmiştir. Polikarbon ise ; şeffaf kapağın polikarbondan imal edilmesinden dolayıdır. Yani gövde ABS, şeffaf kapak polikarbondur.

We have two kind of products

1- opaque 2 – polycarbonate

Opaque products are without glass cover, manufactured by ABS completely. Transparent cover manufactured by polycarbonate. Casing is ABS, glass cover is polycarbonate.

## İZOLATÖRLERİN ÖZELLİKLERİ / INSULATORS' QUALIFICATIONS

Gri PBT malzemeden yapılır. Vida ve somun kısımları nikel kaplamadır. 0-5000 V atlama testinden başarıyla geçmiştir. PBT malzemenin özelliğinden dolayı 400C'ye kadar dayanıklıdır. Metrik 5-6-8 olarak üretilir.

*Insulators made with gray PBT material. Screws and bolts are nickel-coated. tested and proved to be dielectric up to 5000V because of the PBT material, insulators are resistant up to 400C. Insulators are produced in metric 5-6-8 sizes.*

### KORUMA SINIFLARININ AÇIK OKUNUŞU

İlk hane kutunun kati yabancı maddelerin tehlikeli parçalara erişimine karşı sağladığı korumayı belirtir.  
The first digit indicates the level of protection that the enclosure provides against access to hazardous parts (e.g., electrical conductors, moving parts) and the ingress of solid foreign objects...

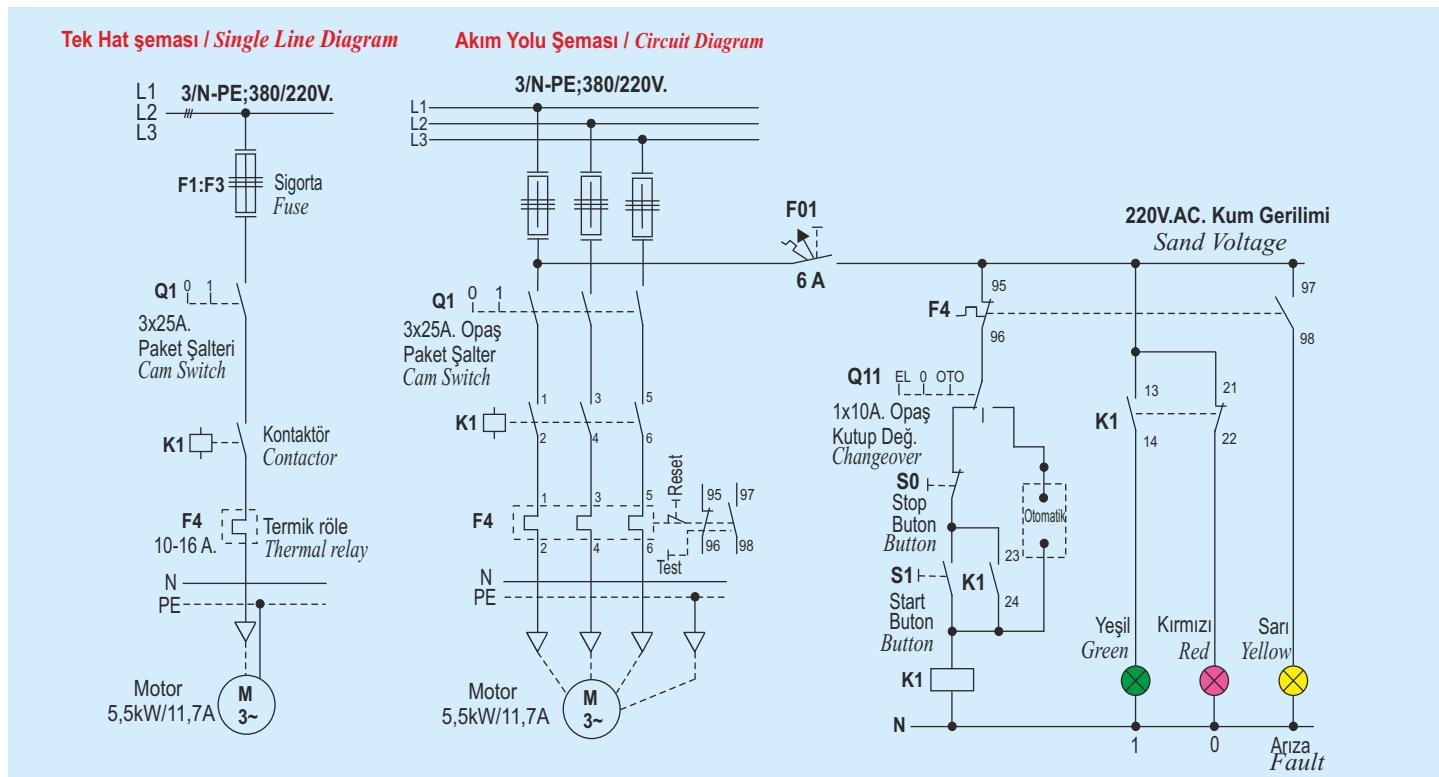
IP	Testler	Tests
0	Korumasız	No protection
1	Vücutun herhangi geniş bir bölgesinde, elin tersi gibi, fakat kasti olarak temas'a karşı koruma sağlama	Any large surface of the body, such as the back of a hand, but no protection against deliberate contact with a body part
2	Parmak veya benzer objeler	Fingers or similar objects
3	Aletler, kalın kablolardır vb.	Tools, thick wires, etc.
4	Çoğu kablo, vida vb.	Most wires, screws, etc.
5	Totzun tamamıyla engellememekte, fakat ekipmanın çalışmasına engel olacak kadar fazla engellemekte. Temasa karşı tam koruma	Ingress of dust is not entirely prevented, but it must not enter in sufficient quantity to interfere with the normal operation of the equipment; complete protection against contact
6	Toz girişi yok; Temasa karşı tam koruma	No ingress of dust; complete protection against contact

### PROTECTION DEGREE

IP	Testler	Tests
0	Korumasız	No protection
1	Damlayan suların (dik olarak düşen) hiç bir zarar yoktur.	Dripping water (vertically falling drops) shall have no harmful effect.
2	Kökkendeki polisyonundan 15 dereceye kadar döndürulse bile damlayan suların hiç bir zarar yoktur.	Vertical dripping water shall have no harmful effect when the enclosure is tilted at an angle up to 15° from its normal position.
3	Dikenlerden 60 derecede kadar püskürme şekilde düşen suların hiç bir zarar yoktur.	Water falling as a spray at any angle up to 60° from the vertical shall have no harmful effect.
4	Herhangi bir yönden gelen serpme suların hiç bir zarar yoktur.	Water splashing against the enclosure from any direction shall have no harmful effect.
5	Herhangi bir yönden kutuya karşı bir ağızdan doğrudan suların hiç bir zarar yoktur.	Water projected by a nozzle against enclosure from any direction shall have no harmful effects.
6	Herhangi bir yönden kutuya karşı güçlü fışkırtılan suların hiç bir zarar yoktur.	Water projected in powerful jets against the enclosure from any direction shall have no harmful effects.
7	Belirtilen zaman ve basınc koşullarında kütü suyun içine daldırıldığında zarar olmaması. Suyun içeri girmesi mümkün degildir.	Ingress of water in harmful quantity shall not be possible when the enclosure is immersed in liquid under defined conditions of pressure and time (up to 1 m of submersion).
8	Üretici tarafından belirtilen koşullar altında kütü suyun altında devamlı kalmaya uygundur	The equipment is suitable for continuous immersion in water under conditions which shall be specified by the manufacturer.

## 3 FAZLI BİR MOTORA DİREKT YOL VERME

DIRECT START A 3-PHASE MOTOR



### ŞALTER KORUMALARI İÇİN KABLO SEÇİMİ

CABLE SELECTION FOR SWITCH PROTECTION

Nominal Kesit mm <sup>2</sup> <i>Nominal Section</i>	Nominal Akım (In) Grup 2 <i>Nominal Current Group 2</i>		Max.Akım Taşıma Kapasitesi <i>Max. Current Bearing Capacity</i>	OPAS Paket Şalterleri Seçimi <i>Selection of OPAS cam switches</i>
	Cu A	Al A		
0,75	6	-	12	3 x 10 A.
1	10	-	15	3 x 10 A.
1,5	10	-	18	3 x 10 A.
2,5	20	16	26	3 x 16 A.
4	25	20	34	3 x 25 A.
6	35	25	44	3 x 25 A.
10	50	35	61	3 x 40 A.
16	63	50	82	3 x 63 A.
25	80	63	108	3 x 100 A.
35	100	80	135	3 x 125 A.
50	125	100	168	3 x 160 A.
70	160	125	207	3 x 200 A.
95	200	160	250	3 x 200 A.
120	250	200	292	3 x 250 A.
150	250	200	335	3 x 315 A.
185	315	250	382	3 x 315 A.
240	400	315	453	-
300	400	315	504	-

Bakır bara kullanılması tavsiye edilir / Copper bar is recommended

### GÜC - AKIM - TERMİK RÖLE - SİGORTA VE PAKET ŞALTER SEÇİMİ

POWER-CURRENT-THERMAL RELAY-FUSE and SELECTION OF CAM SWITCH

GÜC POWER <i>Power</i>	AKIM CURRENT <i>Current</i>	GÜC FAKTORU <i>Power Factor</i>	TERMİK RÖLE <i>Thermal Relay</i>	SİGORTA (380V.) <i>FUSE</i>	OPAŞ PAKET ŞALTER <i>OPAS CAM SWITCH</i>
				A	
0,06 1/12	0,22	0,74	0,16 - 0,25	2	3X6
0,09 1/8	0,32	0,74	0,25 - 0,4	2	3X6
0,12 1/6	0,44	0,75	0,4 - 0,63	2	3X6
0,18 1/4	0,61	0,75	0,4 - 0,63	2	3X6
0,25 1/3	0,78	0,76	0,63 - 1	2 - 4	3X6
0,37 1/2	1,12	0,76	1 - 1,6	4 - 6	3X6
0,55 3/4	1,47	0,80	1 - 1,6	4 - 6	3X6
0,75 1	1,95	0,80	1,6 - 2,5	6	3X6
1,1 1,5	2,85	0,81	2,5 - 4	6	3X6
1,5 2	3,8	0,82	2,5 - 4	10	3X10
2,2 3	5,4	0,82	4 - 6,3	16	3X16
3 4	6,8	0,83	6,3 - 10	16	3X16
4 5,5	8,8	0,83	6,3 - 10	20	3X25
5,5 7,5	11,7	0,85	10 - 16	25 - 32	3X25 / Y-D
7,5 10	15,6	0,85	10 - 16	32	3X40 / Y-D
11 15	22	0,86	16 - 25	40	3X63 / Y-D
15 20	29	0,86	25 - 40	50	3X63 / Y-D
18,5 25	37,5	0,83	25 - 40	63	3X63
22 30	43,5	0,83	40 - 57	80	3X100
30 40	60	0,83	50 - 63	100	3X100
37 50	73	0,84	55 - 80	100-125	3X125
45 60	88	0,84	80 - 110	125-160	3X160
55 75	104	0,86	80 - 110	160	3X200
75 100	140	0,86	120 - 150	200-250	3X200
90 125	168	0,86	-	250	3X250
110 150	198/205	0,86	-	315	3X250
132 180	230/290	0,87	-	315	3X315

DIN VDE göre 0100, Bölüm 430.6.81 / 5.2. Tablo:1

According to DIN VDE, 0100, Section 430.6.81 / 5.2. Table:1

(BS, ANSI CSA ve NF Standartlarına göre tablo :

9,16 / 9,17 göre A.C. Sincap kafesi motorlarının çektiği akımlar) (Devir sayısı : 1500 d/d = 3 faz)

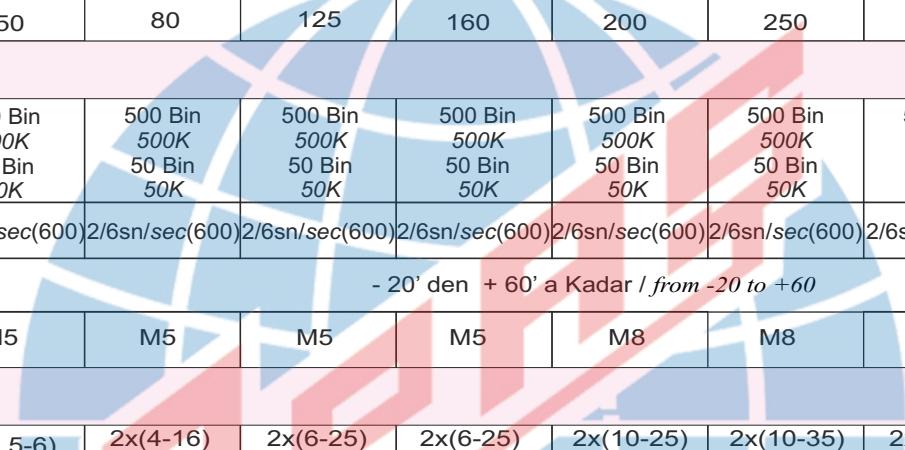
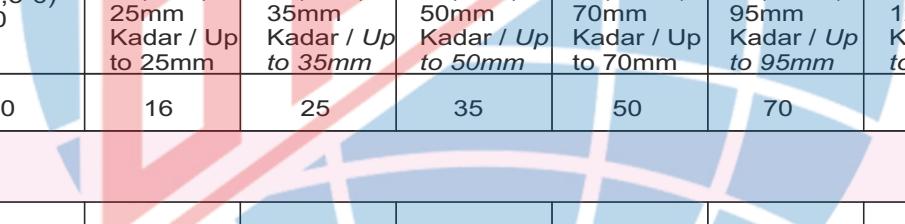
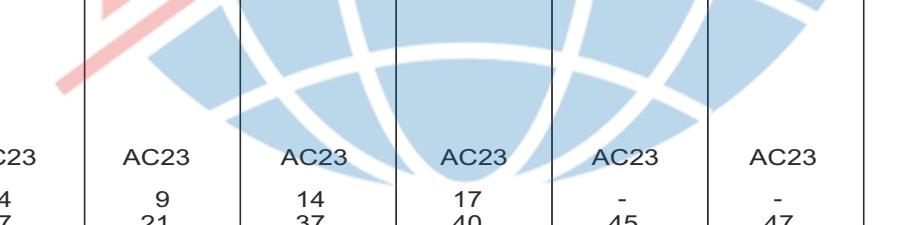
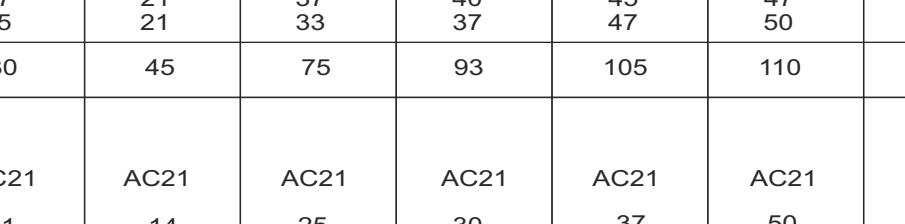
According to BS, ANSI, CSA and NF, Table:

According to 9,16 / 9,17, squirrel-cage motors' current draw) (Number of Rev : 1500 rpm = 3phases)



Standartlar / Standards					TS EN 60947-3, DIN, VDE 0660, IEC 947			
Boyut / Size					B0	B1	B2	
Şalter Kodu / Switch code					Tip / Type	MB/MS.....006	YPT....010	YPT....016
İzolasyon Gerilimi / Isolation Voltage	: Ui	V	450		450		500	
İşletme Gerilimi / Operation Voltage	: Ue	V.AC.	230 / 400		230 / 400		230 / 400	
Frekans / Frequency		Hz	50.....60		50.....60		50.....60	
Darbe Gerilimi / Stroke Voltage	: Uimp	kV	4		4		4	
Nominal Akım / Nominal Current	: Ie	A	6		10		16	
Nominal Termik Akımı / Nominal Thermal Current	: Ith (AC)	A	10		16		20	
Kısa Devre Koruma Akımı / Short circuit protection Current (gL Sigorta ile Testte Geçen Değer) (Value Tested with gL Fuse)		kA	6		6		6	
Max.Sigorta Değeri (gL) / Max. Fuse Value (gL)		A	10		16		20	
Çalışma Ömrü / Operation Life								
Mekanik / Mechanical	Elektrik ..... (400V.AC.) / Electrical (400V.AC.)	Çevrim Operations	1 Milyon 1M 50 Bin 50K		1 Milyon 1M 50 Bin 50K		750 Bin 750K 50 Bin 50K	
Manevra Kabiliyeti -1Saatte / Maneuvering Capability - per hour		1/h	1/3 sn/sec (1200)		1/3 sn/sec (1200)		1000	
Sıcaklık / Medium Temperature		°C	- 20' den + 60' a Kadar / from -20 to +60					
Bağlantı Vidası / Connection Screw			M2,5		M3		M4	
Kablo Bağlantısı (Kesit) / Cable Connection (Section)								
Tek Damarlı ve Çok Damarlı / Single Vessel and Multi-vessel (Kablo Papuçsuz) / Without cable shoe		mm <sup>2</sup>	2x(0,75-1) 1x1,5		2x(1-1,5) 1x2,5		2x(1-2,5) 1x4	
Kablo Papuçları / Cable shoes		mm <sup>2</sup>	-		-		2,5	
Elektriği Yükleme / Electric Loading								
<b>AC23 :</b> Sincap Kafesi Motor, Direkt Kalkış Yükte Devreye Alma, Yıldız-Üçgen Şalter Squirrel Cage Motor, Direct Start, To Put into Circuit Under Load, Star-Delta Switch	Ue:230V. Ue:380/400V. Ue:500/660V.  Ie:400V.Kadar.	AC23	AC23	AC23	AC23	AC23	AC23	AC23
Motor ve Diğer Yüksek İndüktif Yüklerin Sık Aralıklarla Devreye Alınması. Putting Into Operation Frequently the Motor and the other High Inductive Loads			1 2,2 -		1,5 3 -		2 5 7,5	
		A	4		6,6		11,5	
<b>AC21 :</b> Az Aşırı Yükte, Rezistif Yüklerin Kumandası. At underload, resistive loads Control	Ue:230V. Ue:380/400V. Ue:500/660V.  Ie:400V Kadar	AC21	AC21	AC21	AC21	AC21	AC21	AC21
Kullanma Katagorisi / Usage Category			2 4,4		3 6		4 9	
Nominal Güç..... / Nominal Power		A	6		10		16	
Nominal Çalışma Akımı Nominal Operation Current V. le: Up to 400 V								
<b>Kullanma Sınıfı</b> Class of Use	I/Ie	U/Ue	CosQ	Çevrim				
AC21A AC21B	1,5	1,05	0,95	5				
AC22A AC22B	3	1,05	0,95	5				
AC23A AC23B	10	1,05	0,95	5(10xle) 3(10xle)	A	60	100	160
					A	-	-	-

## TS EN 60947-3, DIN, VDE 0660, IEC 947

B2	B3					B4			
YPT.....025	YPT..032/040	YPT.....063	YPT.....100	YPT.....125		YPT.....160	NP.....200	NP.....250	NP.....315
660	660	660	660	660	660	660	660	660	660
230 / 400	230 / 400	230 / 400	230 / 400	230 / 400	230 / 400	230 / 400	230 / 400	230 / 400	230 / 400
50.....60	50.....60	50....60	50.....60	50.....60	50.....60	50.....60	50.....60	50.....60	50.....60
4	4	4	4	4	6	6	6	6	6
25	32/40	63	100	125	160	200	250	315	
30	45	70	120	140	170	215	260	330	
6	6	6	6	6	6	6	6	6	6
32	50	80	125	160	200	250	250	315	
									
750 Bin 750K 50 Bin 50K	500 Bin 500K 50 Bin 50K	500 Bin 500K 50 Bin 50K	500 Bin 500K 50 Bin 50K	500 Bin 500K 50 Bin 50K	500 Bin 500K 50 Bin 50K	500 Bin 500K 50 Bin 50K	500 Bin 500K 50 Bin 50K	500 Bin 500K 50 Bin 50K	500 Bin 500K 50 Bin 50K
1000	2/6sn/sec(600)	2/6sn/sec(600)	2/6sn/sec(600)	2/6sn/sec(600)	2/6sn/sec(600)	2/6sn/sec(600)	2/6sn/sec(600)	2/6sn/sec(600)	2/6sn/sec(600)
- 20° den + 60° a Kadar / from -20 to +60									
M4	M5	M5	M5	M5	M8	M8	M8	M8	M8
									
2x(1-4) 1x6	2x(2,5-6) 1x10	2x(4-16) 25mm Kadar / Up to 25mm	2x(6-25) 35mm Kadar / Up to 35mm	2x(6-25) 50mm Kadar / Up to 50mm	2x(10-25) 70mm Kadar / Up to 70mm	2x(10-35) 95mm Kadar / Up to 95mm	2x(16-50) 120mm Kadar / Up to 120mm	2x(95) 150mm Kadar / Up to 150mm	
4	10	16	25	35	50	70	95	2x70	
									
AC23	AC23	AC23	AC23	AC23	AC23	AC23	AC23	AC23	AC23
2,6 8 11	4,4 17 15	9 21 21	14 37 33	17 40 37	- 45 47	- 47 50	- 50 55	- 55 57	
18	30	45	75	93	105	110	117	130	
AC21	AC21	AC21	AC21	AC21	AC21	AC21	AC21	AC21	AC21
6 15	11 25	14 30	25 50	30 59	37 63	50 80	55 90	60 110	
25	40	63	100	125	160	200	250	315	
									
250	320/400	630	1000	-	-	-	-	-	-
-	-	-	-	1250	1600	2000	2500	3150	

**Seri Kodu / Serial Code**

N: Normal  
Y: Yeni

**Model / Model**

PT : Pano Modeli / Standard type  
KL : Kilitli Modeli / Padlock Type  
GT : Geniş Çerçeve Modeli / Wide Type  
ET : Etiketli Model / Labelled Type

**Kutup Sayısı / Count of Pole**

1, 2, 3, 4, 5, 6, 7 Faz veya Kutuplu / Phase or Pole

**Tanıtım Numarası, Devredeki Görevi / Function in circuit**

01 : Açıma - Kapama, Pako / On - Off  
02 : Yıldız - Üçgen / Star Delta  
04 : Enversör / Reversing  
05 : Kutup Değiştirici / Changeover  
06 : Kutup Değiştirici+Aç-Kapa / Changeover+On-Off  
08 : Çift Devirli Tek Yönlü / 2 Speed single winding  
09 : Çift Devirli Çift Yönlü / 2 Speed Single Winding(reversing)  
10 : Kilitli Emniyet Mekanizmalı / Doorlock Safety

12 : 2 Kademeli Sıfırı / 2 Steps with "0"  
13 : 3 Kademeli Sıfırı / 3 Steps with "0"  
14 : 4 Kademeli Sıfırı / 4 Steps with "0"  
15 : 5 Kademeli Sıfırı / 5 Steps with "0"  
16 : 6 Kademeli Sıfırı / 6 Steps with "0"  
17 : 7 Kademeli Sıfırı / 7 Steps with "0"

22 : 2 Kademeli Sıfırsız / 2 Steps without "0"  
23 : 3 Kademeli Sıfırsız / 3 Steps without "0"  
24 : 4 Kademeli Sıfırsız / 4 Steps without "0"  
25 : 5 Kademeli Sıfırsız / 5 Steps without "0"  
26 : 6 Kademeli Sıfırsız / 6 Steps without "0"  
27 : 7 Kademeli Sıfırsız / 7 Steps without "0"  
28 : 8 Kademeli Sıfırsız / 8 Steps without "0"

32 : Yıldız - 0 - Üçgen / Star - 0 - Delta  
33 : Yıldız Üçgen Enversör / Star Delta Reversing  
44 : 0 - Start / 0 - Start  
45 : 0 - Stop / 0 - Stop  
46 : Stop - 0 - Start / Stop - 0 - Start  
47 : Start1 - 0 - Start2 / Start1 - 0 - Start2

VD : Vidalı / with screw  
AK : Açı - Kapa / with on-off  
Ç1 : Çift Devirli Enversör / 2 speed reversing  
Ç2 : Çift Yön /Double winding  
G1...G3 : Gazaltı Kademe / MIG/MAG Welding Step  
V1...V6 : Voltmetre Komutatörü / Voltmeter Selector  
A1 , A2 : Ampermetre Komutatörü / Ammeter Selector

**Anma Akımı / Amperage**

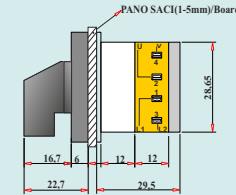
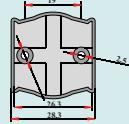
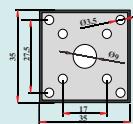
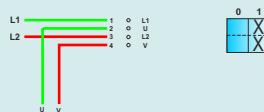
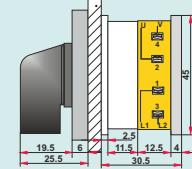
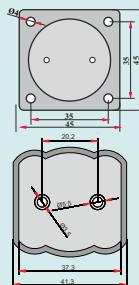
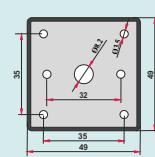
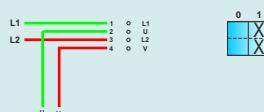
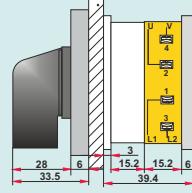
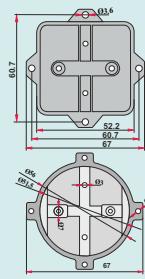
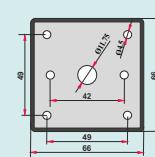
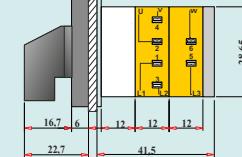
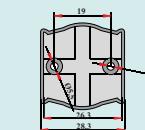
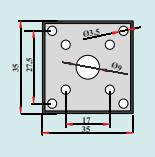
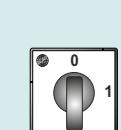
(6,8,10,16,20,25,32,40,50,63,80,100,115,125,160,200,250,315)A

K : Kademeli Komutatör / Step Commutator  
S : Kademeli Şebekeli / Step with aux. winding  
E : Enversör Yardımcı Sargılı / Reversing switch with aux. winding  
Y : Brülör Yağ Salter / Burner Oil Switch

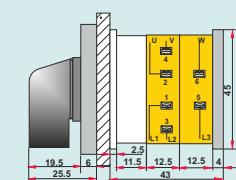
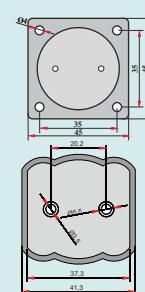
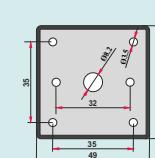
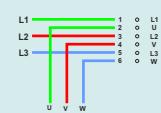
**Örnek / Example :**

**YPT1 01 010**

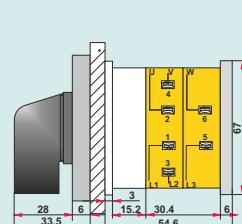
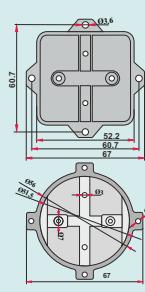
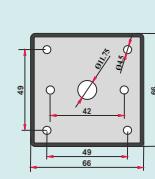
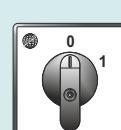
**1 Faz 10 Amper Açıma - Kapama Şalteri**  
**1 Phase 10A On-Off Switch**

BAĞLANTI ŞEMASI  
CONNECTION DIAGRAMÖN GÖRÜNÜŞ  
FRONTÇERÇEVE  
FRAMEALT KAPAK  
BOTTOMYANDAN GÖRÜNÜŞ  
SIDE1.1 - MİNİK BOY (6A/8A/10A) 1 VE 2 FAZ AÇMA - KAPAMA  
MINI SIZE (6A/8A/10A) 1 AND 2 PHASE ON - OFFYPM1 01 006/008/010  
YPM2 01 006/008/0101.2 - KÜCÜK BOY (10A) 1 VE 2 FAZ AÇMA - KAPAMA  
SMALL SIZE (10A) 1 AND 2 PHASE ON - OFFYPT1 01 010  
YPT2 01 0101.3 - ORTA BOY (16A/20A/25A/32A) 1 VE 2 FAZ AÇMA - KAPAMA  
MEDIUM SIZE (16A/20A/25A/32A) 1 AND 2 PHASE ON - OFFYPT1 01 016/020/025/032  
YPT2 01 016/020/025/0321.4 - MİNİK BOY (6A/8A/10A) 3 FAZ AÇMA - KAPAMA  
MINI SIZE (6A/8A/10A) 3 PHASE ON - OFF

YPM3 01 006/008/010

1.5 - KÜCÜK BOY (10A) 3 FAZ AÇMA - KAPAMA  
SMALL SIZE (10A) 3 PHASE ON - OFF

YPT3 01 010

1.6 - ORTA BOY (16A/20A/25A/32A) 3 FAZ AÇMA - KAPAMA  
MEDIUM SIZE (16A/20A/25A/32A) 3 PHASE ON - OFF

YPT3 01 016/020/025/032



# AÇMA - KAPAMA ŞALTERLERİ

ON - OFF SWITCHES

AÇ KAPA ŞALTERLERİ  
ON OFF SWITCHES

## BAĞLANTI ŞEMASI CONNECTION DIAGRAM

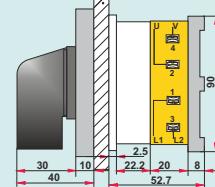
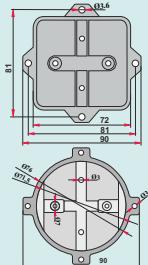
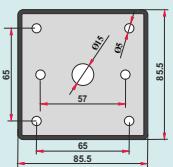
## ÖN GÖRÜNÜŞ FRONT

## ÇERÇEVE FRAME

## ALT KAPAK BOTTOM

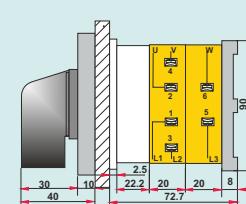
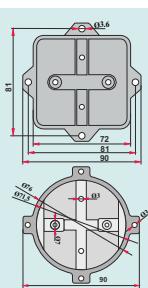
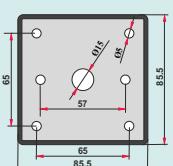
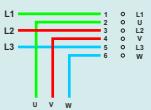
## YANDAN GÖRÜNÜŞ SIDE

1.7 - BÜYÜK BOY (40A/50A/63A/80A) 1 VE 2 FAZ AÇMA - KAPAMA  
LARGE SIZE (40A/50A/63A/80A) 1 AND 2 PHASE ON - OFF



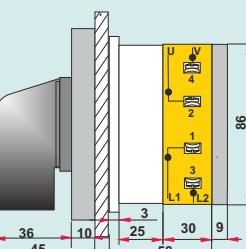
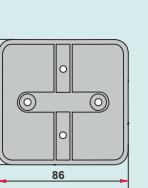
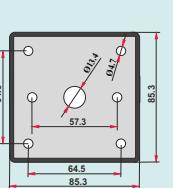
**YPT1 01 040/050/063/080**  
**YPT2 01 040/050/063/080**

1.8 - BÜYÜK BOY (40A/50A/63A/80A) 3 FAZ AÇMA - KAPAMA  
LARGE SIZE (40A/50A/63A/80A) 3 PHASE ON - OFF



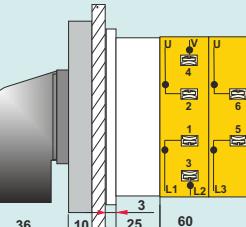
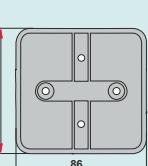
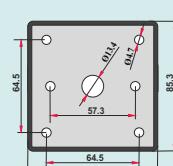
**YPT3 01 040/050/063/080**

1.9 - BÜYÜK KARE TİP (100A/125A/160A/200A) 1 VE 2 FAZ AÇMA - KAPAMA  
LARGE SQUARE TYPE (100A/125A/160A/200A) 1 AND 2 PHASE ON - OFF



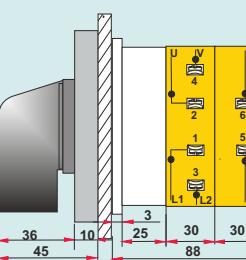
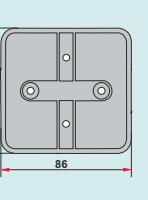
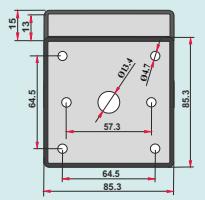
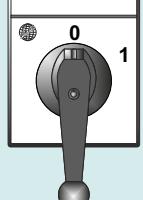
**YPT1 01 100/125/160/200**  
**YPT2 01 100/125/160/200**

1.10 - BÜYÜK KARE TİP (100A/125A/160A/200A) 3 FAZ AÇMA - KAPAMA  
LARGE SQUARE TYPE (100A/125A/160A/200A) 3 PHASE ON - OFF



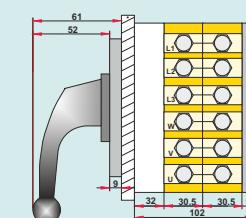
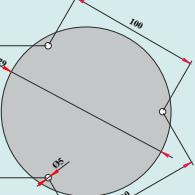
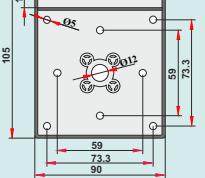
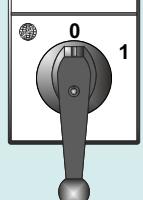
**YPT3 01 100/125/160/200**

1.11 - BÜYÜK KARE TİP (250A/315A) 1 VE 3 FAZ AÇMA - KAPAMA  
LARGE SQUARE TYPE (250A/315A) 1 AND 3 PHASE ON - OFF



**YPT1 01 250/315**  
**YPT2 01 250/315**

1.12 - YUVARLAK TİP (250A/315A) 1 VE 3 FAZ AÇMA - KAPAMA  
ROUND SIZE (250A/315A) 1 AND 3 PHASE ON - OFF



**YPT3 01 250/315**

# AÇMA-KAPAMA ŞALTERLERİ

# ON - OFF SWITCHES



## BAĞLANTI ŞEMASI CONNECTION DIAGRAM

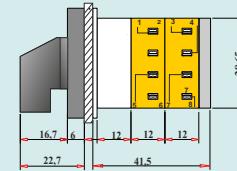
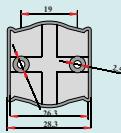
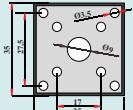
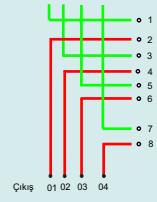
## ÖN GÖRÜNÜŞ FRONT

## ÇERÇEVE FRAME

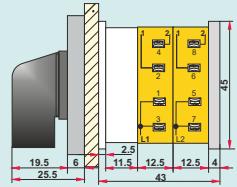
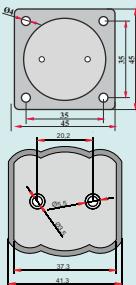
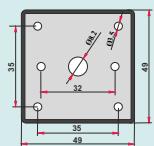
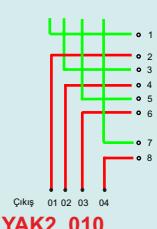
## ALT KAPAK BOTTOM

## YANDAN GÖRÜNÜŞ SIDE

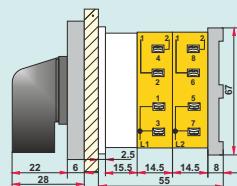
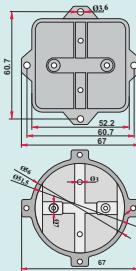
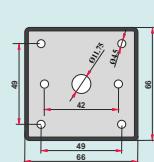
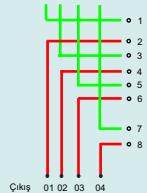
1.13 - MİNİK BOY (6A/8A/10A) 2 AÇ - 2 KAPA  
MINI SIZE (6A/8A/10A) 2 ON - 2 OFF



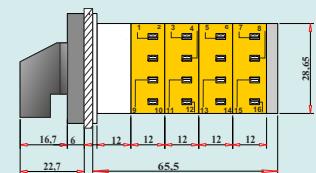
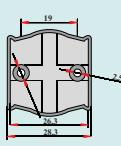
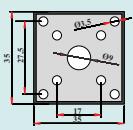
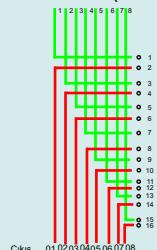
1.14 - KÜÇÜK BOY (10A) 2 AÇ 2 KAPA  
SMALL SIZE (10A) 2 ON-2OFF



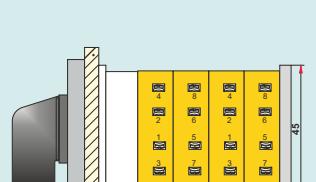
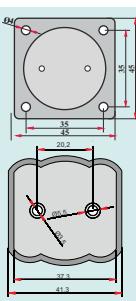
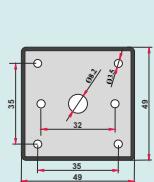
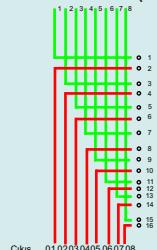
1.15 - ORTA BOY (16A/20A/25A/32A) 2 AÇ- 2 KAPA  
MEDIUM SIZE (16A/20A/25A/32A) 2 ON-2 OFF



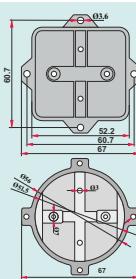
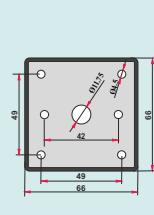
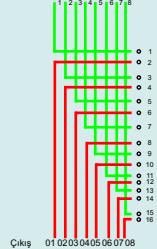
1.16 - MİNİK BOY (6A/8A/10A) 4 AÇ- 4 KAPA  
MINI SIZE (6A/8A/10A) 4 ON- 4 OFF



1.17 - KÜÇÜK BOY (10A) 4 AÇ- 4 KAPA  
SMALL SIZE (10A) 4 ON- 4 OFF



1.18 - ORTA BOY (16A/20A/25A/32A) 4 AÇ- 4 KAPA  
MEDIUM SIZE (16A/20A/25A/32A) 4 ON- 4 OFF



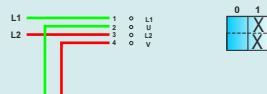
AC KAPASİTLER  
ON OFF SWITCHES



# KİLİTLİ EMNİYET MEKANİZMALI ŞALTERLER DOORLOCK SAFETY SWITCH

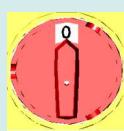
## BAĞLANTI ŞEMASI CONNECTION DIAGRAM

2.1 - KÜÇÜK BOY (10A) 1 VE 2 FAZ KİLİTLİ EMNİYET MEKANİZMALI ŞALTER  
SMALL SIZE (10A) 1 AND 2 PHASE DOORLOCK SAFETY SWITCH

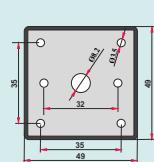


**YPT1 10 010**  
**YPT2 10 010**

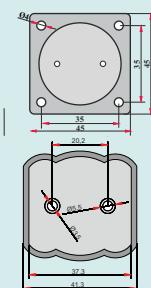
## ÖN GÖRÜNÜŞ FRONT



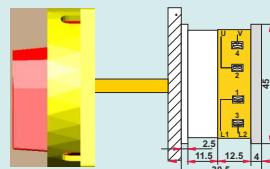
## ÇERÇEVE FRAME



## ALT KAPAK BOTTOM



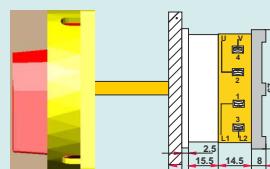
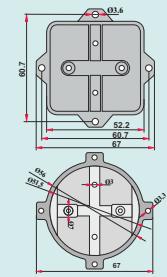
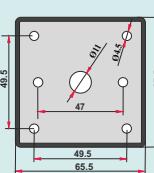
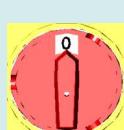
## YANDAN GÖRÜNÜŞ SIDE



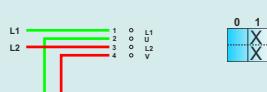
2.2 - ORTA BOY (16A/20A/25A/32A) 1 VE 2 FAZ KİLİTLİ EMNİYET MEKANİZMALI ŞALTER  
MEDIUM SIZE (16A/20A/25A/32A) 1 AND 2 PHASE DOORLOCK SAFETY SWITCH



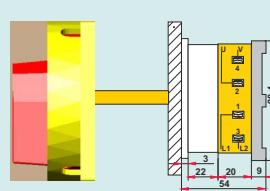
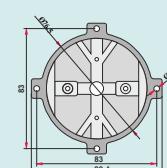
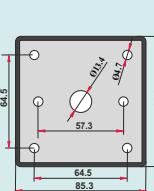
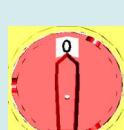
**YPT1 10 016/020/025/032**  
**YPT2 10 016/020/025/032**



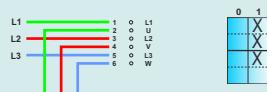
2.3 - BÜYÜK BOY (40A/50A/63A/80A) 1 VE 2 FAZ KİLİTLİ EMNİYET MEKANİZMALI ŞALTER  
LARGE SIZE (40A/50A/63A/80A) 1 AND 2 PHASE DOORLOCK SAFETY SWITCH



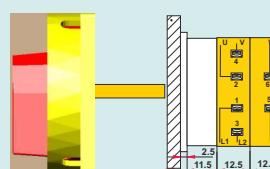
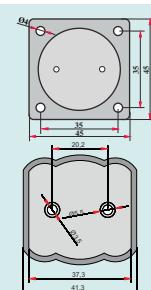
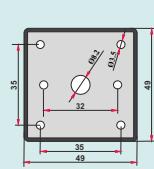
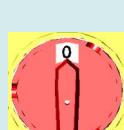
**YPT1 10 040/050/063/080**  
**YPT2 10 040/050/063/080**



2.4 - KÜÇÜK BOY (10A) 3 FAZ KİLİTLİ EMNİYET MEKANİZMALI ŞALTER  
SMALL SIZE (10A) 3 STEPS DOORLOCK SAFETY SWITCH



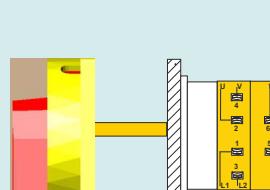
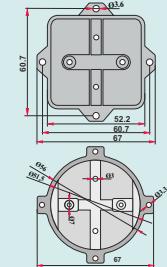
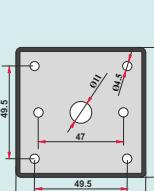
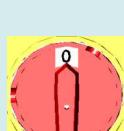
**YPT3 10 010**



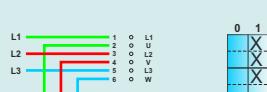
2.5 - ORTA BOY (16A/20A/25A/32A) 3 FAZ KİLİTLİ EMNİYET MEKANİZMALI ŞALTER  
MEDIUM SIZE (16A/20A/25A/32A) 3 PHASE DOORLOCK SAFETY SWITCH



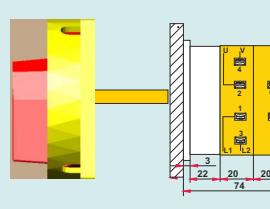
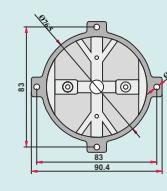
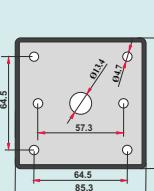
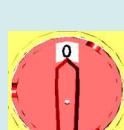
**YPT3 10 016/020/025/032**



2.6 - BÜYÜK BOY (40A/50A/63A/80A) 3 FAZ KİLİTLİ EMNİYET MEKANİZMALI ŞALTER  
LARGE SIZE (40A/50A/63A/80A) 3 PHASE DOORLOCK SAFETY SWITCH



**YPT3 10 040/050/063/080**



## KUTUP DEĞİŞİTİRİCİ ŞALTERLER

## CHANGEOVER SWITCHES



### BAĞLANTI ŞEMASI CONNECTION DIAGRAM

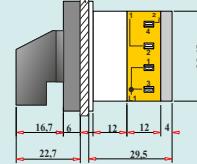
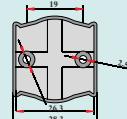
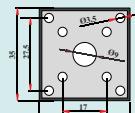
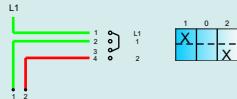
### ÖN GÖRÜNÜŞ FRONT

### ÇERÇEVE FRAME

### ALT KAPAK BOTTOM

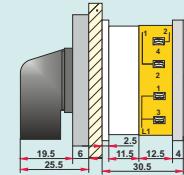
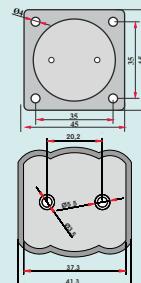
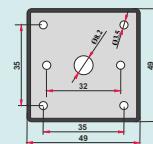
### YANDAN GÖRÜNÜŞ SIDE

#### 3.1-MİNİK BOY (6A/8A/10A) 1 FAZ KUTUP DEĞİŞİTİRİCİ MINI SIZE (6A/8A/10A) 1 PHASE CHANGE-OVER



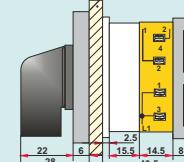
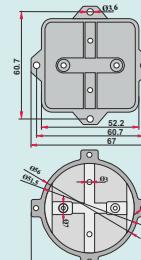
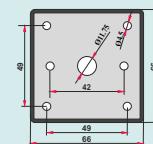
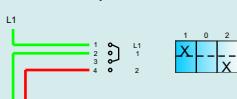
**YPM1 05 006/008/010**

#### 3.2-KÜÇÜK BOY (10A) 1 FAZ KUTUP DEĞİŞİTİRİCİ SMALL SIZE (10A) 1 PHASE CHANGE-OVER



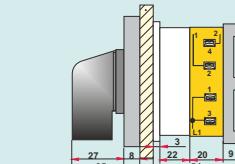
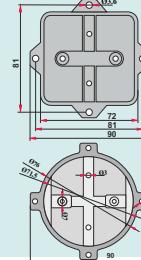
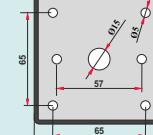
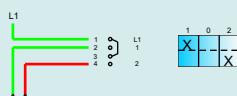
**YPT1 05 010**

#### 3.3-ORTA BOY (16A/20A/25A/32A) 1 FAZ KUTUP DEĞİŞİTİRİCİ MEDIUM SIZE (16A/20A/25A/32A) 1 PHASE CHANGE-OVER



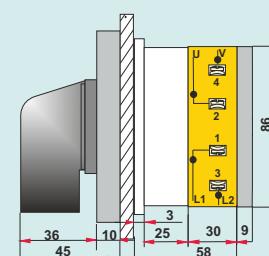
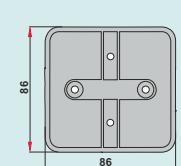
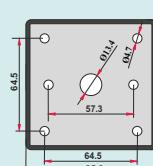
**YPT1 05 016/020/025/032**

#### 3.4-BÜYÜK BOY (40A/50A/63A/80A) 1 FAZ KUTUP DEĞİŞİTİRİCİ LARGE SIZE (40A/50A/63A/80A) 1 PHASE CHANGE-OVER



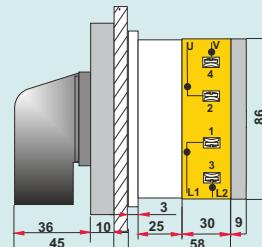
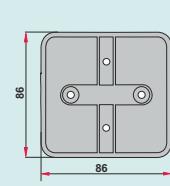
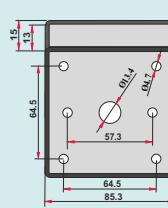
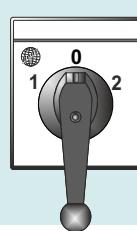
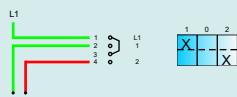
**YPT1 05 040/050/063/080**

#### 3.5-BÜYÜK KARE TİP (100A/125A/160A/200A) 1 FAZ KUTUP DEĞİŞİTİRİCİ LARGE SQUARE TYPE (100A/125A/160A/200A) 1 PHASE CHANGE-OVER



**YPT1 05 100/125/160/200**

#### 3.6-BÜYÜK KARE TİP (250A/315A) 1 FAZ KUTUP DEĞİŞİTİRİCİ LARGE SQUARE TYPE (250A/315A) 1 PHASE CHANGE-OVER



**YPT1 05 250/315**

**KUTUP DEĞİŞİTİRİCİ ŞALTERLERİ  
CHANGEOVER SWITCHES**



## KUTUP DEĞİŞİTRİCİ ŞALTERLER

## CHANGEOVER SWITCHES

### BAĞLANTI ŞEMASI CONNECTION DIAGRAM

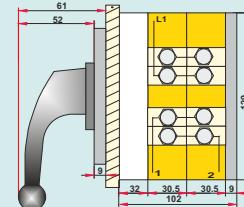
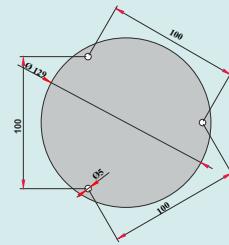
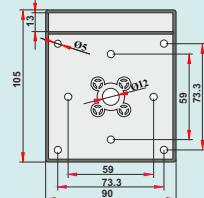
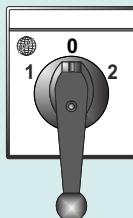
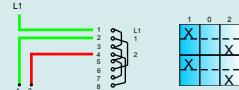
### ÖN GÖRÜNÜŞ FRONT

### ÇERÇEVE FRAME

### ALT KAPAK BOTTOM

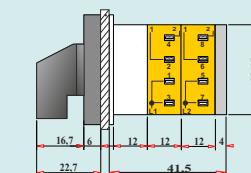
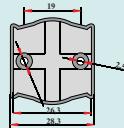
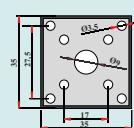
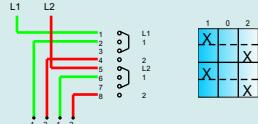
### YANDAN GÖRÜNÜŞ SIDE

**3.7-YUVARLAK TİP (250A/315A) 1 FAZ KUTUP DEĞİŞİTRİCİ  
ROUND TYPE (250A/315A) 1 PHASE CHANGE-OVER**



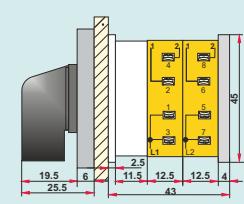
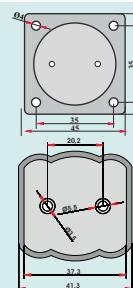
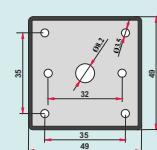
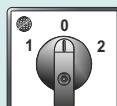
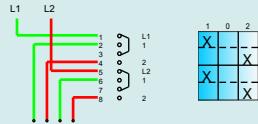
**YPT1 05 250/315**

**3.8-MİNİK BOY (6A/8A/10A) 2 FAZ KUTUP DEĞİŞİTRİCİ  
MINI SIZE (6A/8A/10A) 2 PHASE CHANGE-OVER**



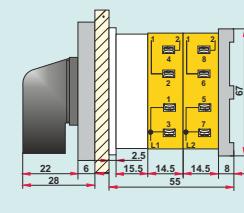
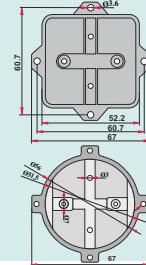
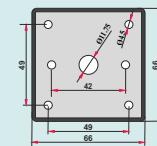
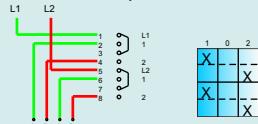
**YPM2 05 006/008/010**

**3.9-KÜÇÜK BOY (10A) 2 FAZ KUTUP DEĞİŞİTRİCİ  
SMALL SIZE (10A) 2 PHASE CHANGE-OVER**



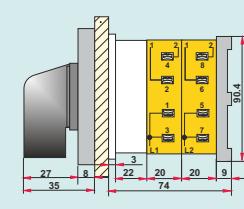
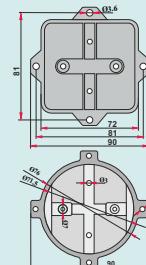
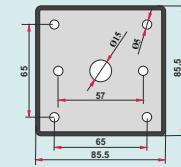
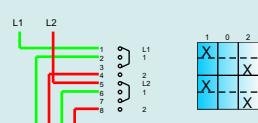
**YPT2 05 010**

**3.10-ORTA BOY (16A/20A/25A/32A) 2 FAZ KUTUP DEĞİŞİTRİCİ  
MEDIUM SIZE (16A/20A/25A/32A) 2 PHASE CHANGE-OVER**



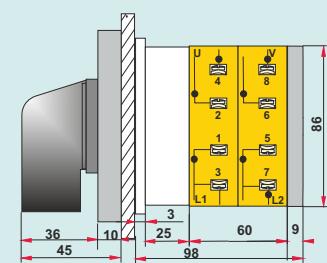
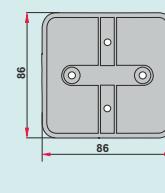
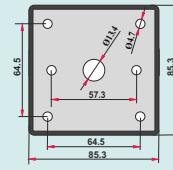
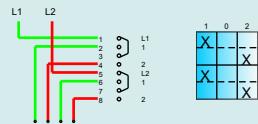
**YPT2 05 016/020/025/032**

**3.11-BÜYÜK BOY (40A/50A/63A/80A) 2 FAZ KUTUP DEĞİŞİTRİCİ  
LARGE SIZE (40A/50A/63A/80A) 2 PHASE CHANGE-OVER**



**YPT2 05 040/050/063/080**

**3.12-BÜYÜK KARE TİP (100A/125A/160A/200A) 2 FAZ KUTUP DEĞİŞİTRİCİ  
LARGE SQUARE TYPE (100A/125A/160A/200A) 2 PHASE CHANGE-OVER**



**YPT2 05 100/125/160/200**

## KUTUP DEĞİŞTİRİCİ ŞALTERLER

## CHANGEOVER SWITCHES



### BAĞLANTI ŞEMASI CONNECTION DIAGRAM

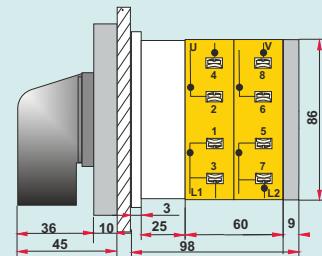
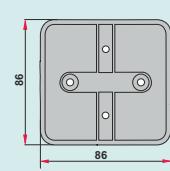
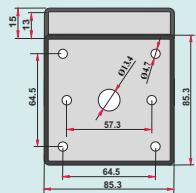
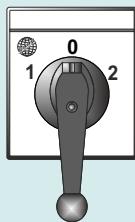
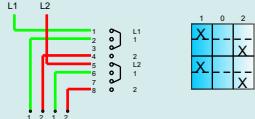
### ÖN GÖRÜNÜŞ FRONT

### ÇERÇEVE FRAME

### ALT KAPAK BOTTOM

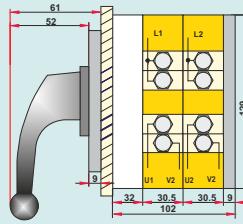
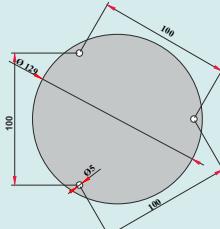
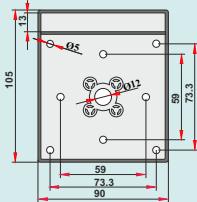
### YANDAN GÖRÜNÜŞ SIDE

3.13-BÜYÜK KARE TİP (250A/315A) 2 FAZ KUTUP DEĞİŞTİRİCİ  
LARGE SQUARE TYPE (250A/315A) 2 PHASE CHANGE-OVER



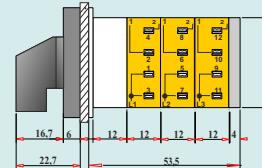
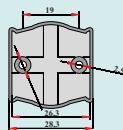
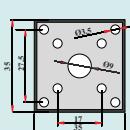
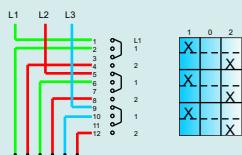
**YPT2 05 250/315**

3.14-YUVARLAK TİP (250A/315A) 2 FAZ KUTUP DEĞİŞTİRİCİ  
ROUND TYPE (250A/315A) 2 PHASE CHANGE-OVER



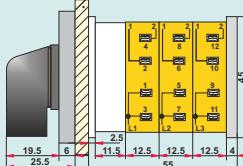
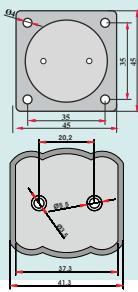
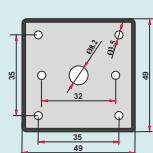
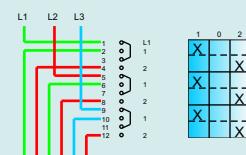
**YPT2 05 250/315**

3.15- MİNİK BOY (6A/8A/10A ) 3 FAZ KUTUP DEĞİŞTİRİCİ  
MINI SIZE(6A/8A/10A ) 3 PHASE CHANGE-OVER



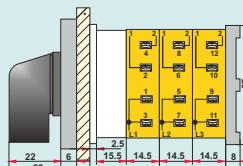
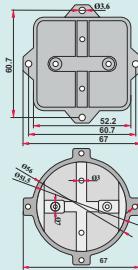
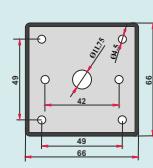
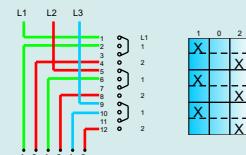
**YPM3 05 006/008/010**

3.16- KÜÇÜK BOY (10A ) 3 FAZ KUTUP DEĞİŞTİRİCİ  
SMALL SIZE (10A ) 3 PHASE CHANGE-OVER



**YPT3 05 010**

3.17- ORTA BOY (16A/20A/25A/32A ) 3 FAZ KUTUP DEĞİŞTİRİCİ  
MEDIUM SIZE (16A/20A/25A/32A ) 3 PHASE CHANGE-OVER



**YPT3 05 O16/020/025/032**

KUTUP DEĞİŞTİRİCİ ŞALTERLER  
CHANGE-OVER SWITCHES



## KUTUP DEĞİŞTİRİCİ ŞALTERLER

## CHANGEOVER SWITCHES

### KUTUP DEĞİŞTİRİCİ ŞALTERLER CHANGEOVER SWITCHES

#### BAĞLANTI ŞEMASI CONNECTION DIAGRAM

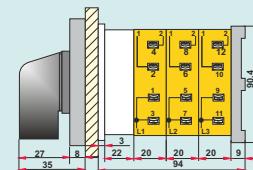
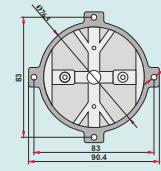
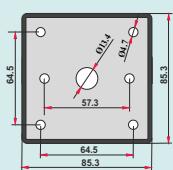
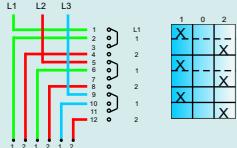
#### ÖN GÖRÜNÜŞ FRONT

#### ÇERÇEVE FRAME

#### ALT KAPAK BOTTOM

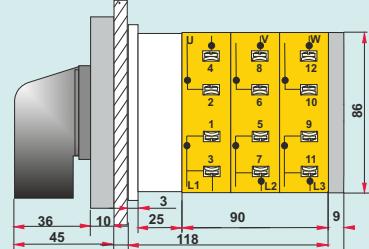
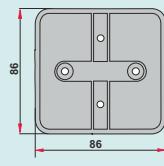
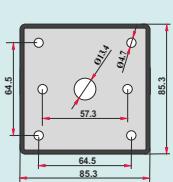
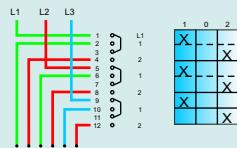
#### YANDAN GÖRÜNÜŞ SIDE

3.18-BÜYÜK BOY (40A/50A/63A/80A ) 3 FAZ KUTUP DEĞİŞTİRİCİ  
LARGE SIZE (40A/50A/63A/80A ) 3 PHASE CHANGE-OVER



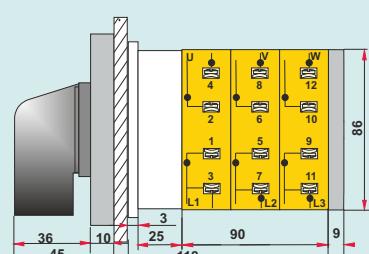
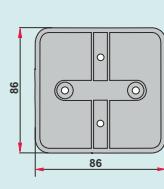
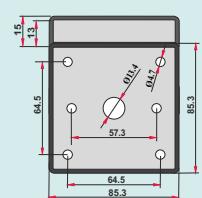
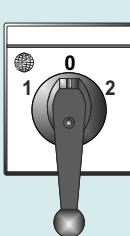
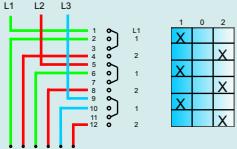
**YPT3 05 040/050/063/080**

3.19-BÜYÜK KARE TİP (100A/125A/160A/200A) 3 FAZ KUTUP DEĞİŞTİRİCİ  
LARGE SQUARE TYPE (100A/125A/160A/200A) 3 PHASE CHANGE-OVER



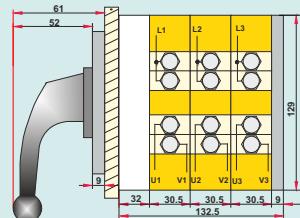
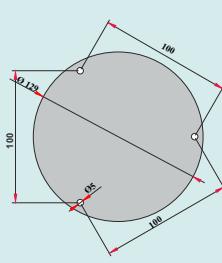
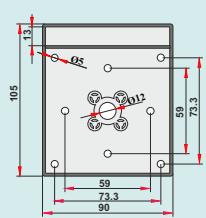
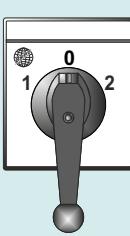
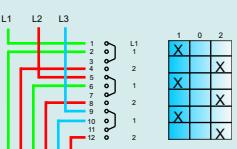
**YPT3 05 100/125/160/200**

3.20-BÜYÜK KARE TİP (250A/315A) 3 FAZ KUTUP DEĞİŞTİRİCİ  
LARGE SQUARE TYPE (250A/315A) 3 PHASE CHANGE-OVER



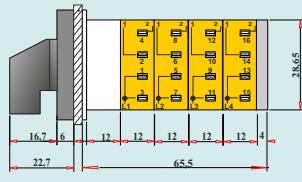
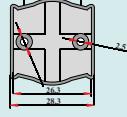
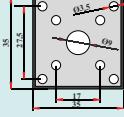
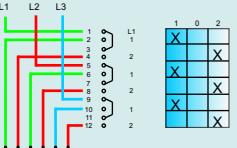
**YPT3 05 250/315**

3.21-YUVARLAK TİP (250A/315A) 3 FAZ KUTUP DEĞİŞTİRİCİ  
ROUND TYPE (250A/315A) 3 PHASE CHANGE-OVER



**YPT3 05 250/315**

3.22-MİNİK BOY (6A/8A/10A) 4 FAZ KUTUP DEĞİŞTİRİCİ  
MINI SIZE (6A/8A/10A) 4 PHASE CHANGE-OVER



**YPM4 05 006/008/010**

## KUTUP DEĞİŞİTİRİCİ ŞALTERLER

## CHANGEOVER SWITCHES



### BAĞLANTI ŞEMASI CONNECTION DIAGRAM

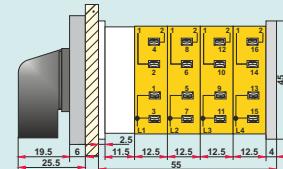
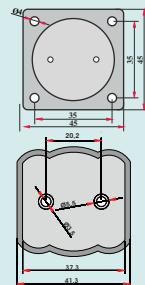
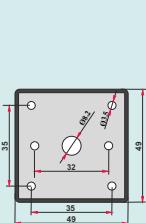
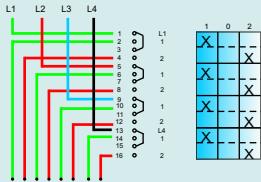
### ÖN GÖRÜNÜŞ FRONT

### ÇERÇEVE FRAME

### ALT KAPAK BOTTOM

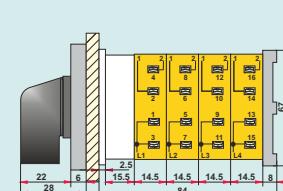
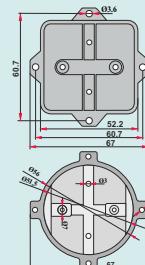
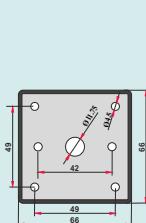
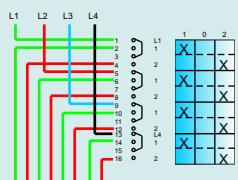
### YANDAN GÖRÜNÜŞ SIDE

#### 3.23-KÜÇÜK BOY (10A) 4 FAZ KUTUP DEĞİŞİTİRİCİ SMALL SIZE (10A) 4 PHASE CHANGE-OVER



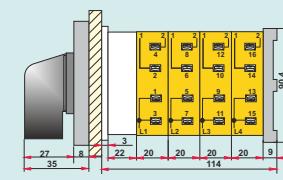
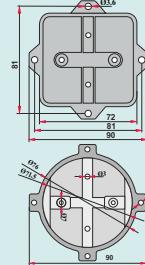
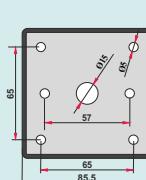
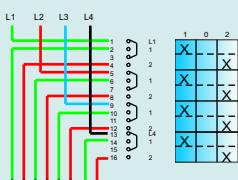
**YPT4 05 010**

#### 3.24-ORTA BOY (16A/20A/25A/32A) 4 FAZ KUTUP DEĞİŞİTİRİCİ MEDIUM SIZE (16A/20A/25A/32A) 4 PHASE CHANGE-OVER



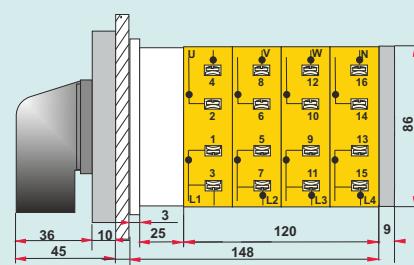
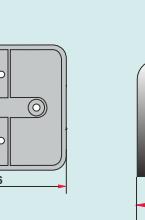
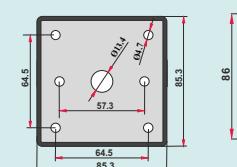
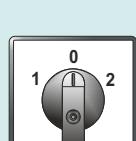
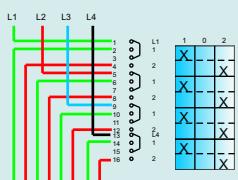
**YPT4 05 016/020/025/032**

#### 3.25- BÜYÜK BOY (40A/50A/63A/80A) 4 FAZ KUTUP DEĞİŞİTİRİCİ MEDIUM SIZE (40A/50A/63A/80A) 4 PHASE CHANGE-OVER



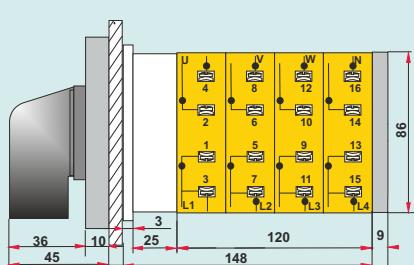
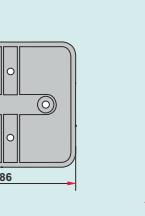
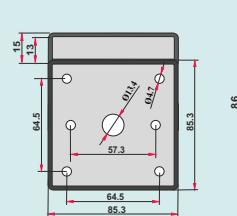
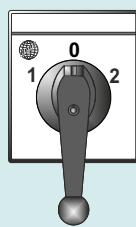
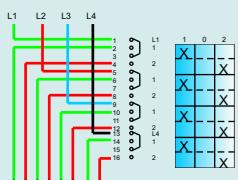
**YPT4 05 040/050/063/080**

#### 3.26- BÜYÜK KARE TİP (100A/125A/160A/200A) 4 FAZ KUTUP DEĞİŞİTİRİCİ LARGE SQUARE TYPE (100A/125A/160A/200A) 4 PHASE CHANGE-OVER



**YPT4 05 100/125/160/200**

#### 3.27- BÜYÜK KARE TİP (250A/315A) 4 FAZ KUTUP DEĞİŞİTİRİCİ LARGE SQUARE SIZE (250A/315A) 4 PHASE CHANGE-OVER



**YPT4 05 250/315**

**KUTUP DEĞİŞİTİRİCİ ŞALTERLERİ  
CHANGE-OVER SWITCHES**



## KUTUP DEĞİŞİTRİCİ ŞALTERLER

## CHANGEOVER SWITCHES

### BAĞLANTI ŞEMASI CONNECTION DIAGRAM

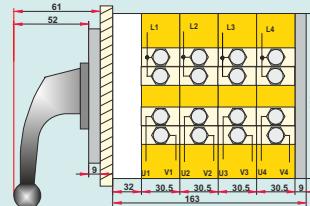
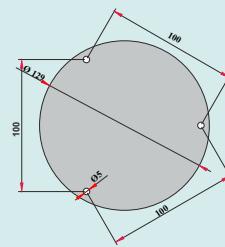
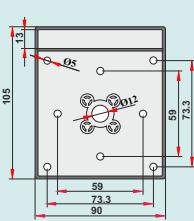
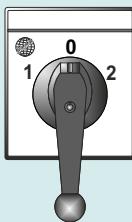
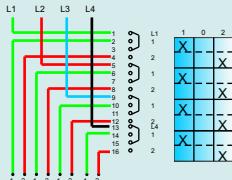
### ÖN GÖRÜNÜŞ FRONT

### ÇERÇEVE FRAME

### ALT KAPAK BOTTOM

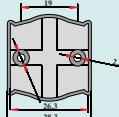
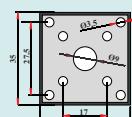
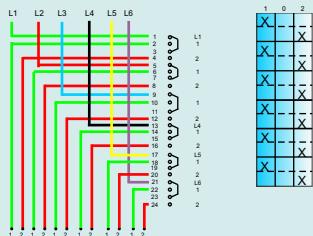
### YANDAN GÖRÜNÜŞ SIDE

**3.28- YUVARLAK TİP (250A/315A) 4 FAZ KUTUP DEĞİŞİTRİCİ  
ROUND TYPE (250A/315A) 4 PHASE CHANGE-OVER**



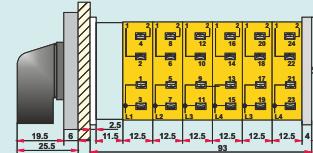
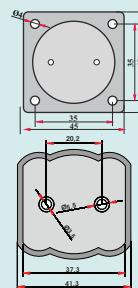
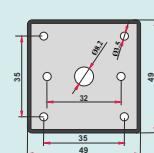
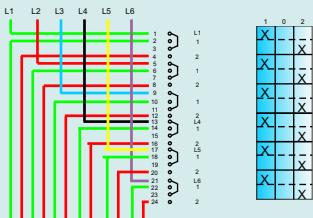
**YPT4 05 250/315**

**3.29- MINİK BOY (6A/8A/10A) 6 FAZ KUTUP DEĞİŞİTRİCİ  
MINI SIZE (6A/8A/10A) 6 PHASE CHANGE-OVER**



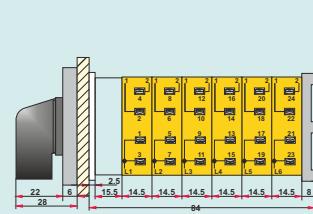
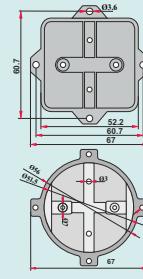
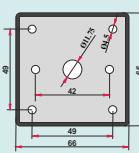
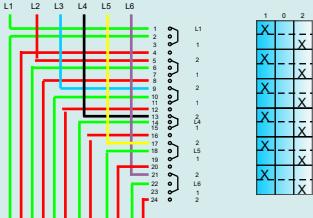
**YPM6 05 006/008/010**

**3.30- KÜÇÜK BOY (10A) 6 FAZ KUTUP DEĞİŞİTRİCİ  
SMALL SIZE (10A) 6 PHASE CHANGE-OVER**



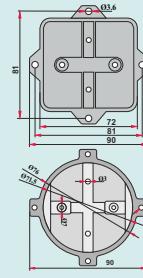
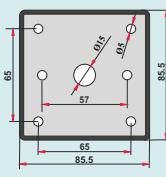
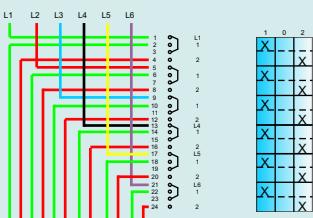
**YPT6 05 010**

**3.31- ORTA BOY (16A/20A/25A/32A) 6 FAZ KUTUP DEĞİŞİTRİCİ  
MEDIUM SIZE (16A/20A/25A/32A) 6 PHASE CHANGE-OVER**



**YPT6 05 016/020/025/032**

**3.32- BÜYÜK BOY (40A/50A/63A/80A) 6 FAZ KUTUP DEĞİŞİTRİCİ  
MEDIUM SIZE (40A/50A/63A/80A) 6 PHASE CHANGE-OVER**



**YPT6 05 040/050/063/080**

## KUTUP DEĞİŞTİRİCİ ŞALTERLER

## CHANGEOVER SWITCHES



### BAĞLANTI ŞEMASI CONNECTION DIAGRAM

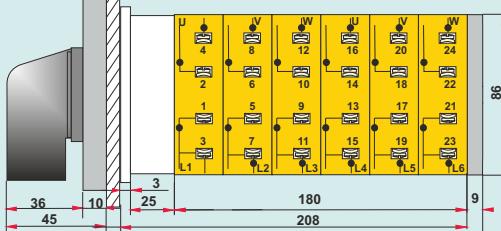
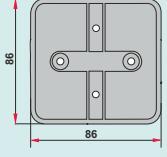
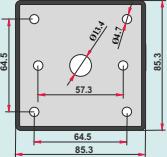
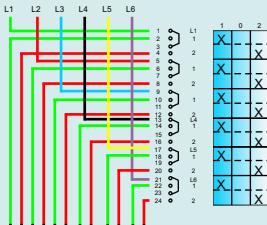
### ÖN GÖRÜNÜŞ FRONT

### ÇERÇEVE FRAME

### ALT KAPAK BOTTOM

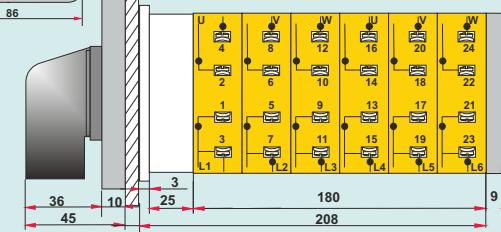
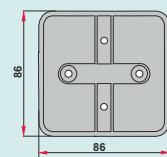
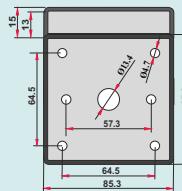
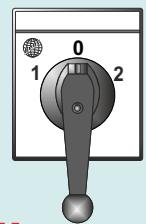
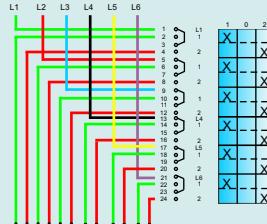
### YANDAN GÖRÜNÜŞ SIDE

3.33- BÜYÜK KARE TİP (100A/125A/160A/200A) 6 FAZ KUTUP DEĞİŞTİRİCİ  
LARGE SQUARE TYPE (100A/125A/160A/200A) 6 PHASE CHANGE-OVER



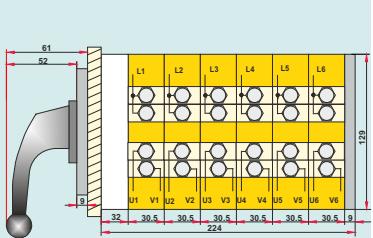
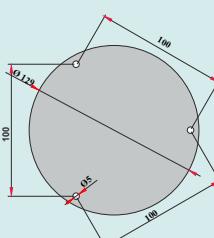
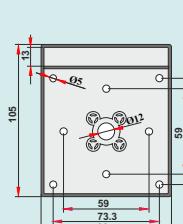
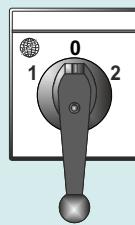
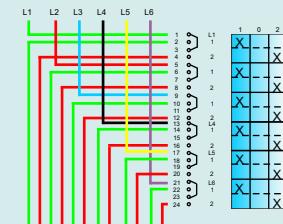
**YPT6 05 100/125/160/200**

3.34- BÜYÜK KARE TİP (250A/315A) 6 FAZ KUTUP DEĞİŞTİRİCİ  
LARGE SQUARE TYPE (250A/315A) 6 PHASE CHANGE-OVER



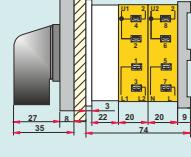
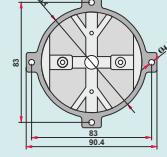
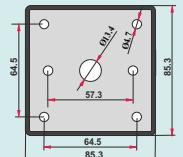
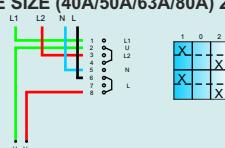
**YPT6 05 250/315**

3.35- YUVARLAK TİP (250A/315A) 6 FAZ KUTUP DEĞİŞTİRİCİ  
ROUND TYPE (250A/315A) 6 PHASE CHANGE-OVER



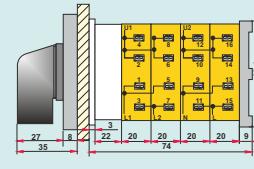
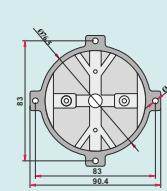
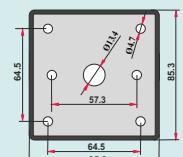
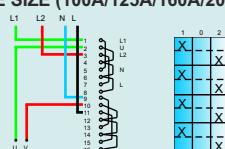
**YPT6 05 250/315**

3.36- BÜYÜK BOY (40A/50A/63A/80A) 220/380V. KUTUP DEĞİŞTİRİCİ  
LARGE SIZE (40A/50A/63A/80A) 220/380V. CHANGE-OVER



**YPT2 VD 040/050/063/080**

3.37- BÜYÜK BOY (100A/125A/160A/200A) 220/380V. KUTUP DEĞİŞTİRİCİ  
LARGE SIZE (100A/125A/160A/200A) 220/380V. CHANGE-OVER



**YPT2 VD 100/125/160/200**

**KUTUP DEĞİŞTİRİCİ ŞALTERLER  
CHANGE-OVER SWITCHES**



## MOTOR KUMANDA ŞALTERLERİ

## MOTOR CONTROL SWITCHES

### MOTOR KUMANDA ŞALTERLERİ MOTOR CONTROL SWITCHES

#### BAĞLANTI ŞEMASI CONNECTION DIAGRAM

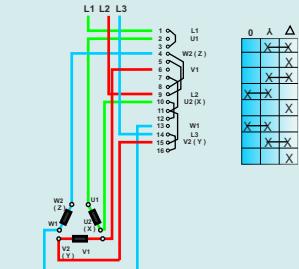
#### ÖN GÖRÜNÜŞ FRONT

#### ÇERÇEVE FRAME

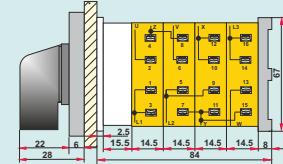
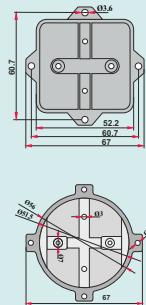
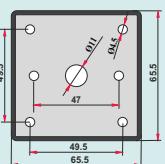
#### ALT KAPAK BOTTOM

#### YANDAN GÖRÜNÜŞ SIDE

**4.1-ORTA BOY (16A/20A/25A/32A) YILDIZ ÜÇGEN 0 / Y / D  
MEDIUM SIZE (16A/20A/25A/32A) STAR-DELTA 0 / S / D**

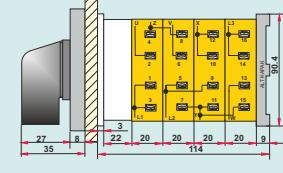
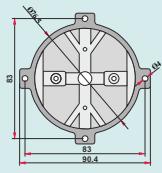
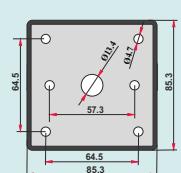
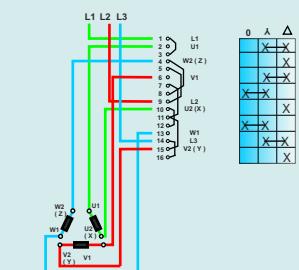


#### ÇERÇEVE FRAME



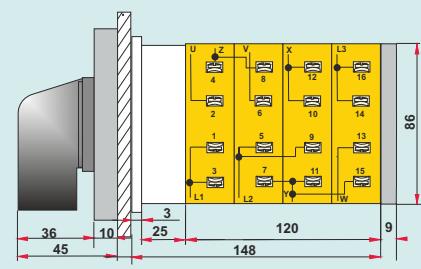
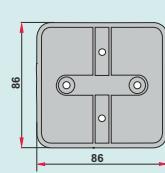
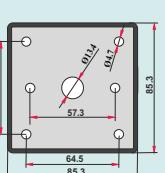
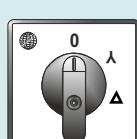
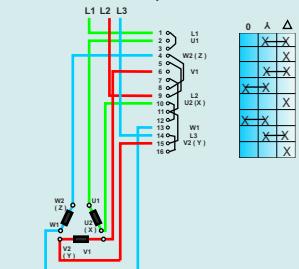
YPT3 02 016/020/025/032

**4.2-BÜYÜK BOY (40A/50A/63A/80A) YILDIZ ÜÇGEN 0 / Y / D  
LARGE SIZE (40A/50A/63A/80A) STAR-DELTA 0 / S / D**



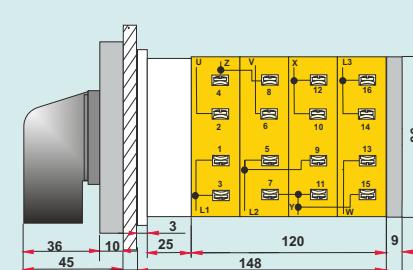
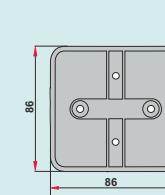
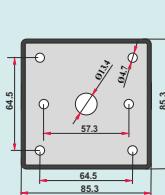
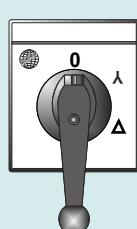
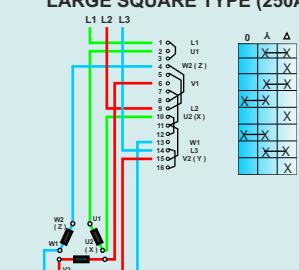
YPT3 02 040/050/063/080

**4.3-BÜYÜK BOY ( 100A/125A/160A/200A) YILDIZ ÜÇGEN 0 / Y / D  
LARGE SIZE ( 100A/125A/160A/200A) STAR-DELTA 0 / S / D**



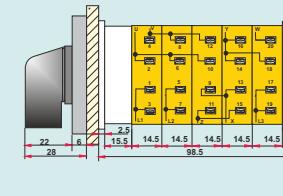
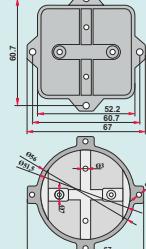
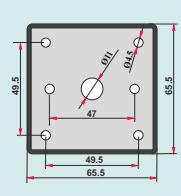
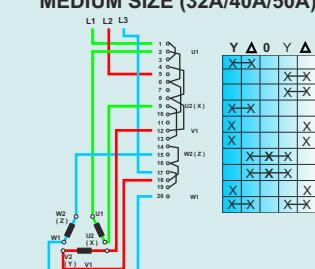
YPT3 02 100/125/160/200

**4.4- BÜYÜK KARE TİP (250A/315A) YILDIZ ÜÇGEN - 0 / Y / D  
LARGE SQUARE TYPE (250A/315A) STAR-DELTA - 0 / S / D**



YPT3 02 250/315

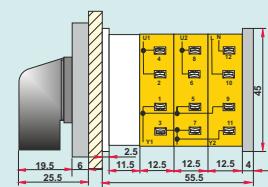
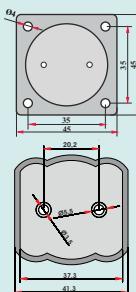
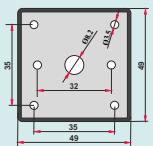
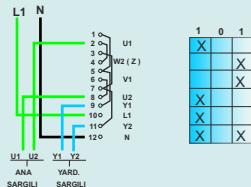
**4.5 ORTA BOY (32A/40A/50A) YILDIZ ÜÇGEN ENVERSÖRY /Δ/0/Y/Δ  
MEDIUM SIZE (32A/40A/50A) REVERSIBLE STAR DELTAY /Δ/0/Y/Δ**



YPT3 34 032/040/050

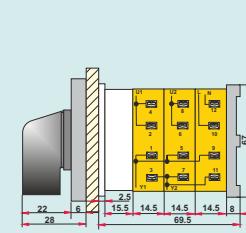
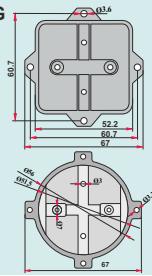
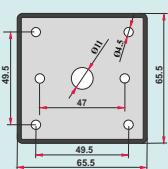
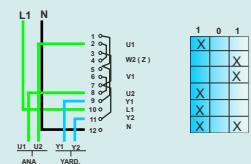
BAĞLANTI ŞEMASI  
CONNECTION DIAGRAMÖN GÖRÜNÜŞ  
FRONTÇERÇEVE  
FRAMEALT KAPAK  
BOTTOMYANDAN GÖRÜNÜŞ  
SIDE

**4.6-KÜCÜK BOY ( 10A ) MONOFAZE ENVERSÖR YARDIMCI SARGILI**  
SMALL SIZE ( 10A ) SINGLE-PHASE REVERSING SWITCH WITH AUXILIARY WINDING



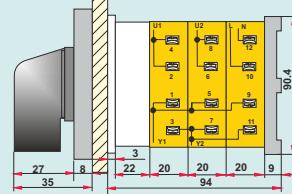
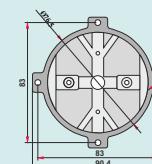
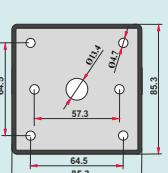
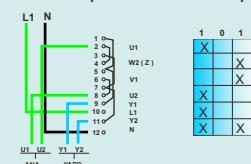
YPT1 04 010

**4.7- ORTA BOY ( 16A/20A/25A/32A ) MONOFAZE ENVERSÖR YARDIMCI SARGILI**  
MEDIUM SIZE ( 16A/20A/25A/32A ) SINGLE-PHASE REVERSING SWITCH WITH AUXILIARY WINDING



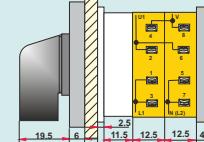
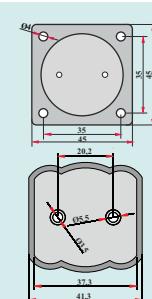
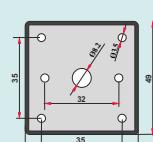
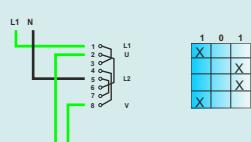
YPT1 04 016/020/025/032

**4.8 BÜYÜK BOY ( 40A/50A/63A/80A ) MONOFAZE ENVERSÖR YARDIMCI SARGILI**  
LARGE SIZE ( 40A/50A/63A/80A ) SINGLE-PHASE REVERSING SWITCH WITH AUXILIARY WINDING



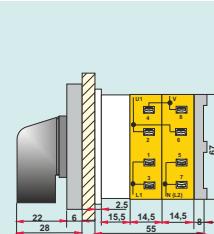
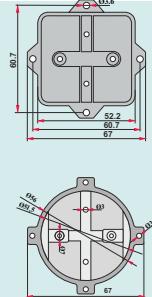
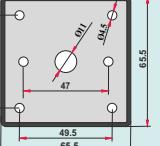
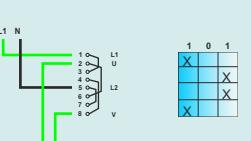
YPT1 04 040/050/063/080

**4.9 KÜCÜK BOY ( 10A ) 1 FAZLI ENVERSÖR ŞALTER**  
SMALL SIZE ( 10A ) 1 PHASE REVERSING SWITCH



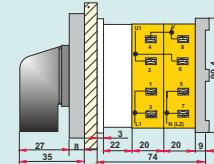
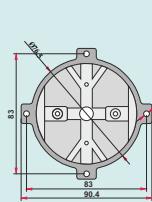
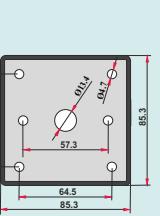
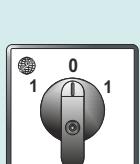
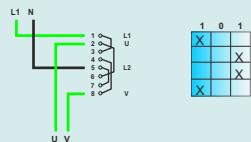
YPT1 04 010

**4.10 ORTA BOY ( 16A/20A/25A/32A ) 1 FAZLI ENVERSÖR ŞALTER**  
MEDIUM SIZE ( 16A/20A/25A/32A ) 1 PHASE REVERSING SWITCH



YPT1 04 016/020/025/032

**4.11- BÜYÜK BOY ( 40A/50A/63A/80A ) 1 FAZLI ENVERSÖR ŞALTER**  
LARGE SIZE ( 40A/50A/63A/80A ) 1 PHASE REVERSING SWITCH



YPT1 04 040/050/063/080

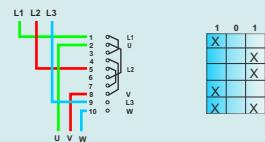


## MOTOR KUMANDA ŞALTERLERİ

## MOTOR CONTROL SWITCHES

### BAĞLANTI ŞEMASI CONNECTION DIAGRAM

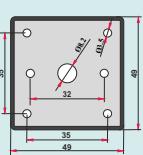
**4.12 KÜÇÜK BOY ( 10A ) 3 FAZLI ENVERSÖR ŞALTER  
SMALL SIZE ( 10A ) 3 PHASE REVERSING SWITCH**



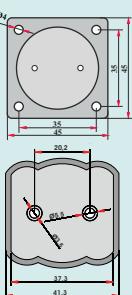
### ÖN GÖRÜNÜŞ FRONT



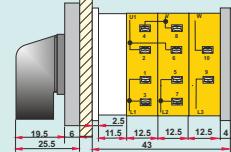
### ÇERÇEVE FRAME



### ALT KAPAK BOTTOM

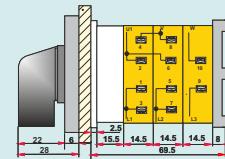
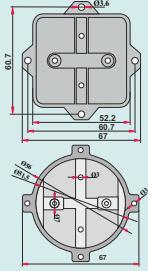
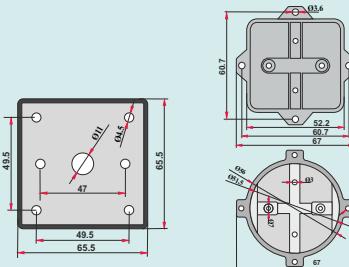
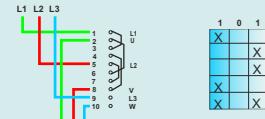


### YANDAN GÖRÜNÜŞ SIDE



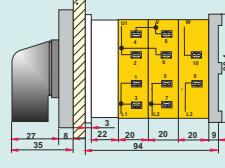
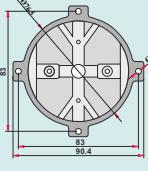
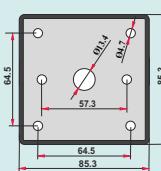
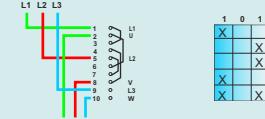
YPT3 04 010

**4.13 ORTA BOY ( 16A/20A/25A/32A ) 3 FAZLI ENVERSÖR ŞALTER  
MEDIUM SIZE ( 16A/20A/25A/32A ) 3 PHASE REVERSING SWITCH**



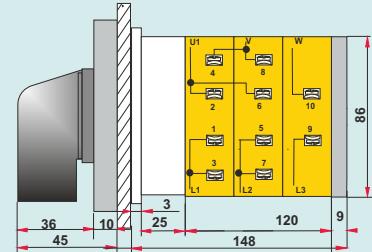
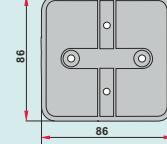
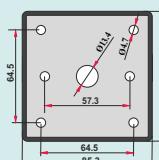
YPT3 04 016/020/025/032

**4.14- BÜYÜK BOY ( 40A/50A/63A/80A ) 3 FAZLI ENVERSÖR ŞALTER  
LARGE SIZE ( 40A/50A/63A/80A ) 3 PHASE REVERSING SWITCH**



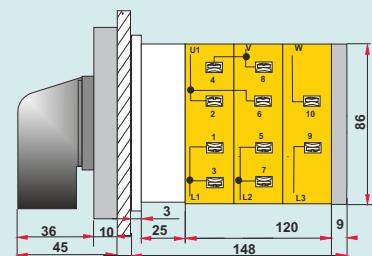
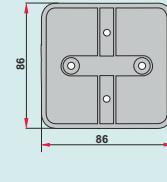
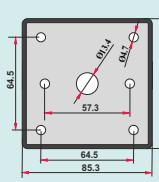
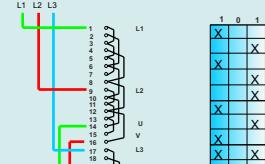
YPT3 04 040/050/063/080

**4.15- BÜYÜK KARE TİP (100A/125A/160A/200A ) 3 FAZLI ENVERSÖR ŞALTER  
LARGE SQUARE TYPE (100A/125A/160A/200A ) 3 PHASE REVERSING SWITCH**



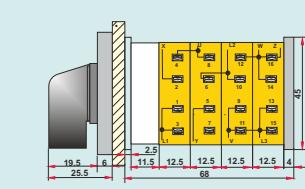
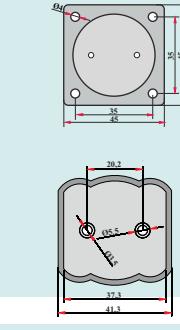
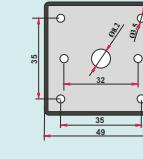
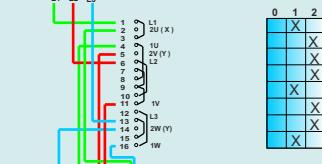
YPT3 04 100/125/160/200

**4.16-BÜYÜK KARE TİP (250A/315A ) 3 FAZLI ENVERSÖR ŞALTER  
LARGE SQUARE TYPE (250A/315A ) 3 PHASE REVERSING SWITCH**



YPT3 04 250/315

**4.17- KÜÇÜK BOY (10A) ÇIFT DEVİRLİ (DAHLANDER) ŞALTER  
SMALL SIZE (10A) DOUBLE SPEED SWITCH**



YPT3 08 010

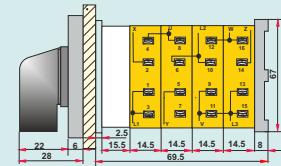
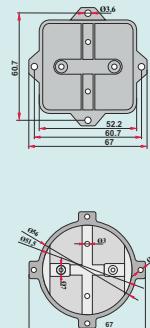
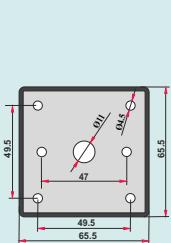
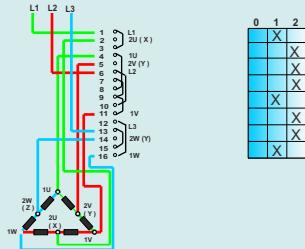
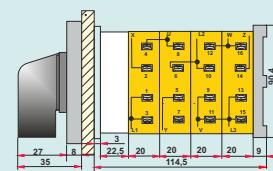
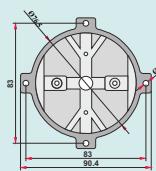
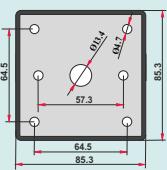
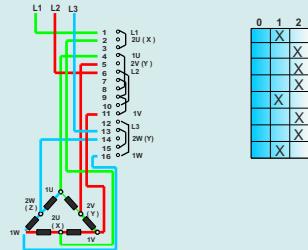
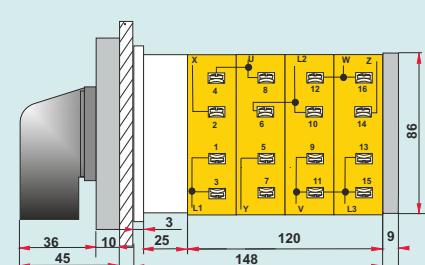
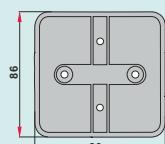
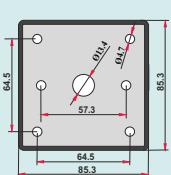
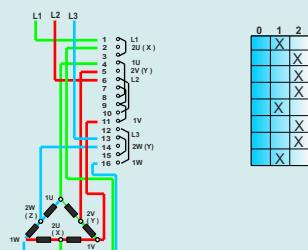
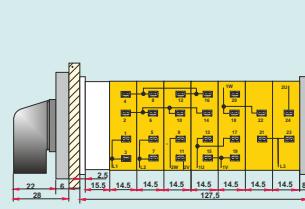
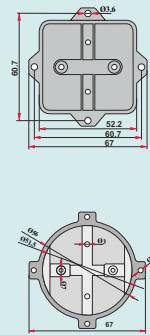
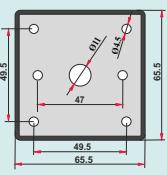
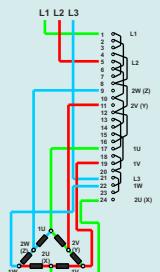
**BAĞLANTI ŞEMASI**  
 CONNECTION DIAGRAM

**ÖN GÖRÜNÜŞ**  
 FRONT

**ÇERÇEVE**  
 FRAME

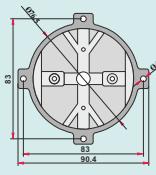
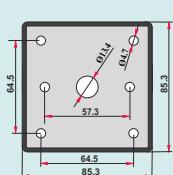
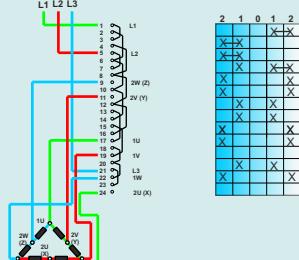
**ALT KAPAK**  
 BOTTOM

**YANDAN GÖRÜNÜŞ**  
 SIDE

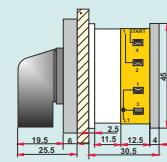
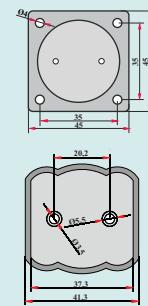
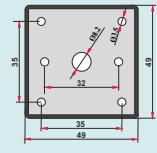
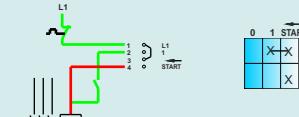
**4.18- ORTA BOY (16A/20A/25A/32A) ÇİFT DEVİRİLİ (DAHLANDER) ŞALTER**  
 MEDIUM SIZE (16A/20A/25A/32A) DOUBLE SPEED SWITCH

**YPT3 08 016/020/025/032**
**4.19- BÜYÜK BOY (40A/50A/63A/80A) ÇİFT DEVİRİLİ (DAHLANDER) ŞALTER**  
 LARGE SIZE (40A/50A/63A/80A) DOUBLE SPEED SWITCH

**YPT3 08 040/050/063/080**
**4.20- BÜYÜK KARE TİP (100A/125A/160A/200A) ÇİFT DEVİRİLİ (DAHLENDER) ŞALTER**  
 LARGE SQUARE TYPE (100A/125A/160A/200A) DOUBLE SPEED SWITCH

**YPT3 08 100/125/160/200**
**4.21- ORTA BOY (16A/20A/25A/32A) ÇİFT DEVİRİLİ ÇİFT YÖN ŞALTER (2-1-0-1-2)**  
 MEDIUM SIZE (16A/20A/25A/32A) DOUBLE SPEED DOUBLE WINDING SWITCH(2-1-0-1-2)

**YPT3 Ç1 016/020/025/032**

BAĞLANTI ŞEMASI  
CONNECTION DIAGRAMÖN GÖRÜNÜŞ  
FRONTÇERÇEVE  
FRAMEALT KAPAK  
BOTTOMYAN DAN GÖRÜNÜŞ  
SIDE

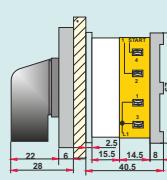
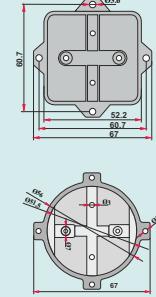
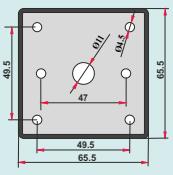
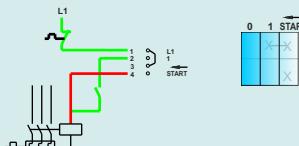
**4.22- BÜYÜK BOY (40A/50A/63A/80A) ÇİFT DEVİRLİ ÇİFT YÖNLÜ ŞALTER (2-1-0-1-2)**  
**LARGE SIZE (40A/50A/63A/80A) DOUBLE SPEED DOUBLE WINDING SWITCH (2-1-0-1-2)**



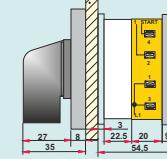
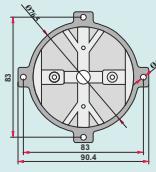
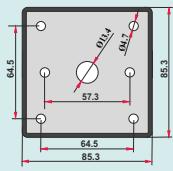
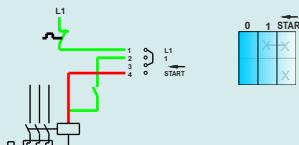
**4.23- KÜÇÜK BOY (10A) 1 FAZ 0-1/START ŞALTER**  
**SMALL SIZE (10A) 1 PHASE 0-1/START SWITCH**



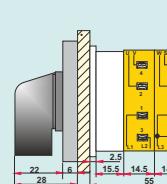
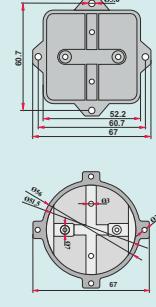
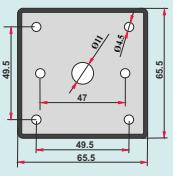
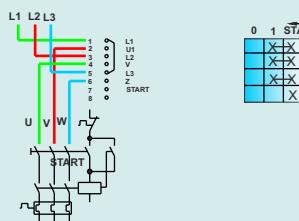
**4.24- ORTA BOY (16A/20A/25A/32A) 1 FAZ 0-1/START ŞALTER**  
**MEDIUM SIZE (16A/20A/25A/32A) 1 PHASE 0-1/START SWITCH**



**4.25- BÜYÜK BOY (40A/50A/63A/80A) 1 FAZ 0-1/START ŞALTER**  
**LARGE SIZE (40A/50A/63A/80A) 1 PHASE 0-1/START SWITCH**

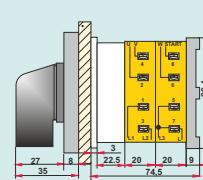
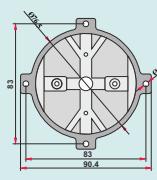
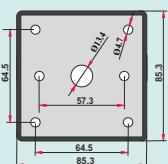
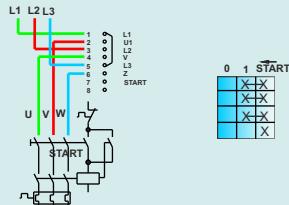


**4.26- ORTA BOY (16A/20A/25A/32A) 3 FAZ 0-1/STARTLI ŞALTER**  
**MEDIUM SIZE (16A/20A/25A/32A) 3 PHASE 0-1/START SWITCH**



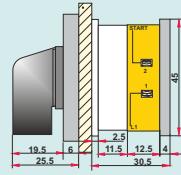
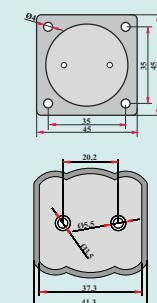
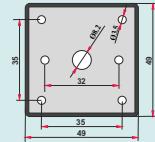
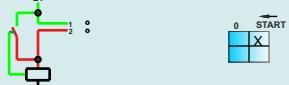
BAĞLANTI ŞEMASI  
CONNECTION DIAGRAMÖN GÖRÜNÜŞ  
FRONTÇERÇEVE  
FRAMEALT KAPAK  
BOTTOMYANDAN GÖRÜNÜŞ  
SIDE

4.27- BÜYÜK BOY (40A/50A/63A/80A) 3 FAZ 0-1/STARTLI ŞALTER  
LARGE SIZE (40A/50A/63A/80A) 3 PHASE 0-1/START SWITCH



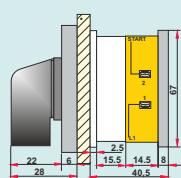
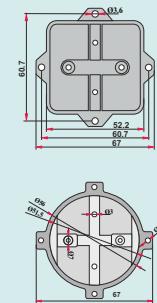
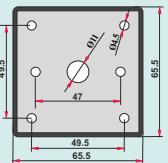
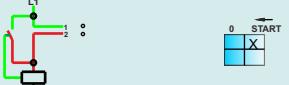
YPT3 S1 040/050/063/080

4.28- KÜÇÜK BOY (10A) 1 FAZ 0-START ŞALTER  
SMALL SIZE (10A) 1 PHASE 0-START SWITCH



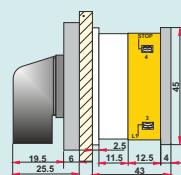
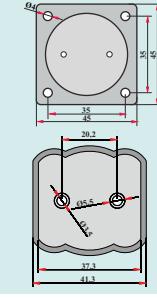
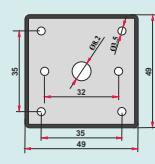
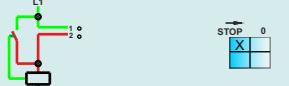
YPT1 44 010

4.29- ORTA BOY (16A/20A/25A/32A) 1 FAZ 0-START ŞALTER  
MEDIUM SIZE (16A/20A/25A/32A) 1 PHASE 0-START SWITCH



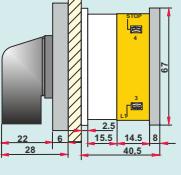
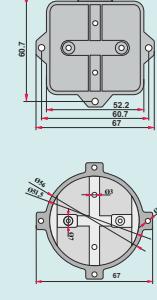
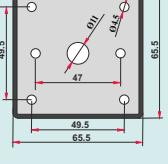
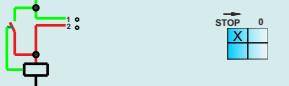
YPT1 44 016/020/025/032

4.30- KÜÇÜK BOY (10A) 1 FAZ STOP - 0 ŞALTER  
SMALL SIZE (10A) 1 PHASE STOP - 0 SWITCH



YPT1 45 010

4.31- ORTA BOY (16A/20A/25A/32A) 1 FAZ STOP - 0 ŞALTER  
MEDIUM SIZE (16A/20A/25A/32A) 1 PHASE STOP - 0 SWITCH



YPT1 45 016/020/025/032



## MOTOR KUMANDA ŞALTERLERİ

## MOTOR CONTROL SWITCHES

### BAĞLANTI ŞEMASI CONNECTION DIAGRAM

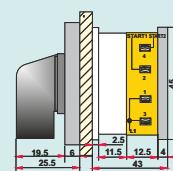
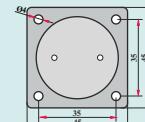
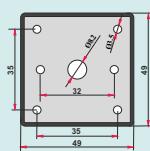
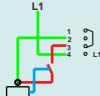
### ÖN GÖRÜNÜŞ FRONT

### ÇERÇEVE FRAME

### ALT KAPAK BOTTOM

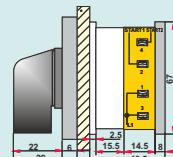
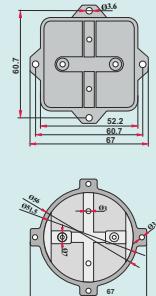
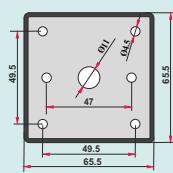
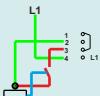
### YANDAN GÖRÜNÜŞ SIDE

**4.32 -KÜCÜK BOY (10A) 1 FAZ STOP - 0 - START ŞALTER  
SMALL SIZE (10A) 1 PHASE STOP - 0 - START SWITCH**



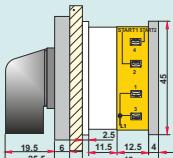
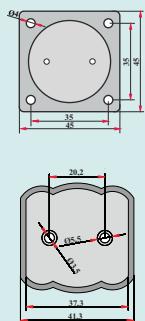
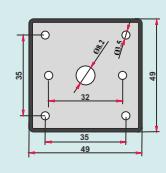
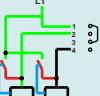
**YPT1 46 010**

**4.33 -ORTA BOY (16A/20A/25A/32A) 1 FAZ STOP - 0 - START ŞALTER  
MEDIUM SIZE (16A/20A/25A/32A) 1 PHASE STOP - 0 - START SWITCH**



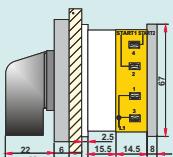
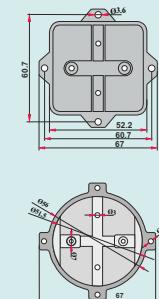
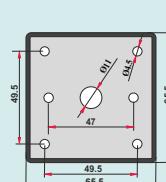
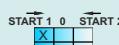
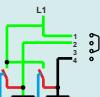
**YPT1 46 016/020/025/032**

**4.34- KÜCÜK BOY (10A) 1 FAZ START 1-0-START2 ŞALTER  
SMALL SIZE (10A) 1 PHASE START 1-0-START 2 SWITCH**



**YPT1 47 010**

**4.35- ORTA BOY (16A/20A/25A/32A) 1 FAZ START 1-0-START2 ŞALTER  
MEDIUM SIZE (16A/20A/25A/32A) 1 PHASE START 1-0-START 2 SWITCH**



**YPT1 47 016/020/025/032**

## BAĞLANTI ŞEMASI CONNECTION DIAGRAM

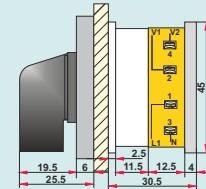
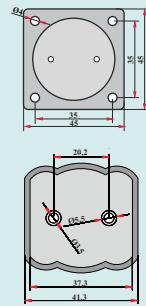
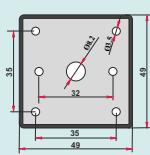
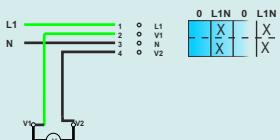
## ÖN GÖRÜNÜŞ FRONT

## ÇERÇEVE FRAME

## ALT KAPAK BOTTOM

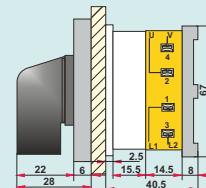
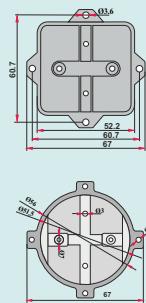
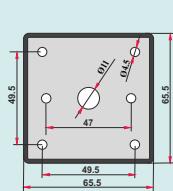
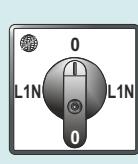
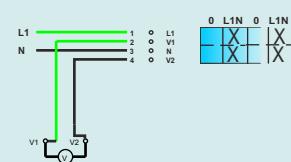
## YANDAN GÖRÜNÜŞ SIDE

**5.1-KÜCÜK BOY (10A) 1 FAZ (0-L) VOLT METRE KOMÜTATÖRÜ**  
SMALL SIZE (10A) 1 PHASE (0-L) VOLTMETER SELECTOR



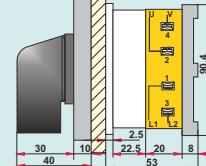
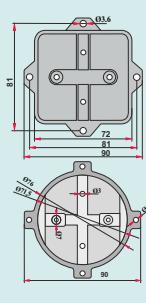
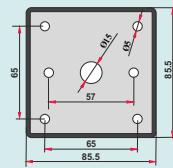
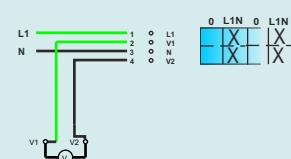
YPT1 V1 010

**5.2- ORTA BOY (16A/20A/25A/32A) 1 FAZ (0-L) VOLT METRE KOMÜTATÖRÜ**  
MEDIUM SIZE (16A/20A/25A/32A) 1 PHASE (0-L) VOLTMETER SELECTOR



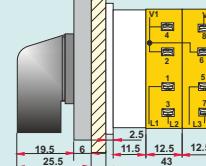
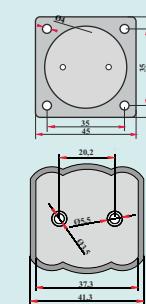
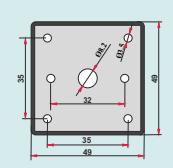
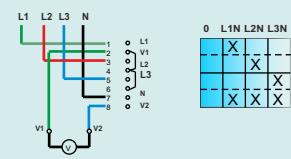
YPT1 V1 016/020/025/032

**5.3- BÜYÜK BOY (40A/50A/63A/80A) 1 FAZ (0-L) VOLT METRE KOMÜTATÖRÜ**  
LARGE SIZE (40A/50A/63A/80A) 1 PHASE (0-L) VOLTMETER SELECTOR



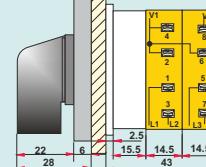
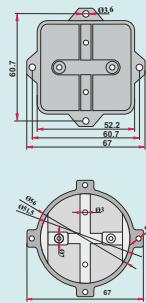
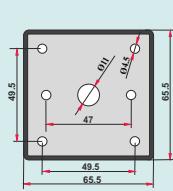
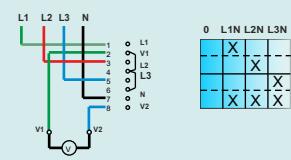
YPT1 V1 040/050/063/080

**5.4-KÜCÜK BOY (10A) 3 FAZ/NÖTR(0-LN) VOLT METRE KOMÜTATÖRÜ**  
SMALL SIZE (10A) 3 PHASE/NEUTRAL(0-LN) VOLTMETER SELECTOR



YPT3 V2 010

**5.5-ORTA BOY (16A/20A/25A/32A) 3 FAZ/NÖTR(0-LN) VOLT METRE KOMÜTATÖRÜ**  
MEDIUM SIZE (16A/20A/25A/32A) 3 PHASE/NEUTRAL(0-LN) VOLTMETER SELECTOR



YPT3 V2 016/020/025/032



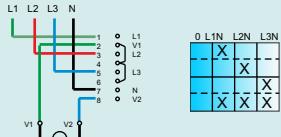
## ÖLÇÜ KOMUTATÖRLERİ

## MEASURING SWITCHES

### ÖLÇÜ KOMUTATÖRLERİ MEASURING SWITCHES

#### BAĞLANTI ŞEMASI CONNECTION DIAGRAM

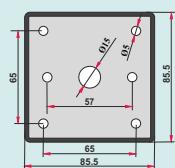
5.6-BÜYÜK BOY (40A/50A/63A/80A) 3 FAZ/NÖTR(0-LN) VOLT METRE KOMÜTATÖRÜ  
LARGE SIZE (40A/50A/63A/80A) 3 PHASE/NÖTR(0-LN) VOLTMETER SELECTOR



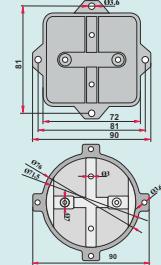
#### ÖN GÖRÜNÜŞ FRONT



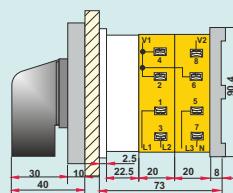
#### ÇERÇEVE FRAME



#### ALT KAPAK BOTTOM

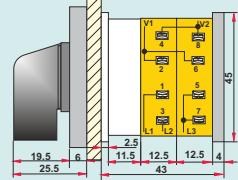
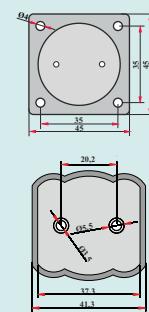
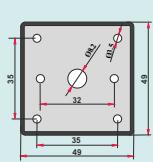
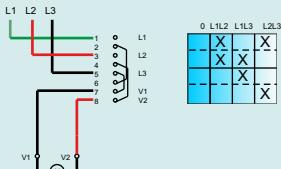


#### YANDAN GÖRÜNÜŞ SIDE



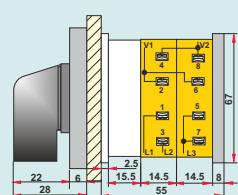
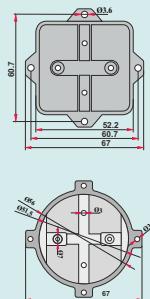
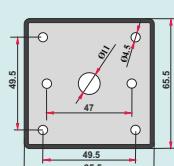
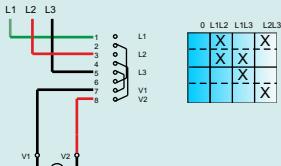
YPT3 V2 040/050/063/080

5.7-KÜCÜK BOY (10A) 3 FAZ SIFIRLI (0-LL) VOLT METRE KOMÜTATÖRÜ  
SMALL SIZE (10A) 3 PHASE WITH ZERO (0-LL) VOLTMETER SELECTOR



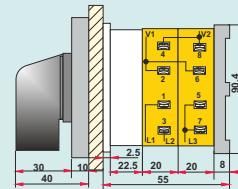
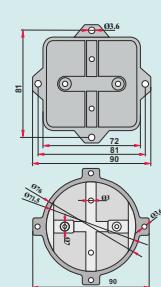
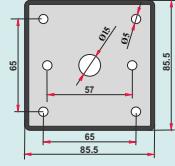
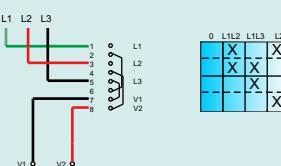
YPT3 V4 010

5.8-ORTA BOY (16A/20A/25A/32A) 3 FAZ SIFIRLI (0-LL) VOLT METRE KOMÜTATÖRÜ  
MEDIUM SIZE (16A/20A/25A/32A) 3 PHASE WITH ZERO (0-LL) VOLTMETER SELECTOR



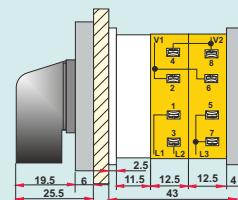
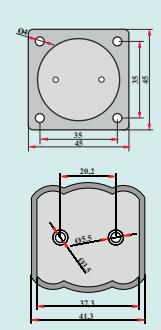
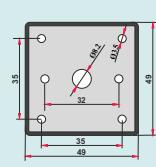
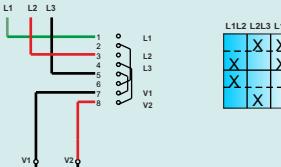
YPT3 V4 016/020/025/032

5.9-ORTA BOY (40A/50A/63A/80A) 3 FAZ SIFIRLI (0-LL) VOLT METRE KOMÜTATÖRÜ  
MEDIUM SIZE (40A/50A/63A/80A) 3 PHASE WITH ZERO (0-LL) VOLTMETER SELECTOR



YPT3 V4 040/050/063/080

5.10-KÜCÜK BOY (10A) 3 FAZ SIFIRSIZ (LL-LL) VOLT METRE KOMÜTATÖRÜ  
SMALL SIZE (10A) 3 PHASE WITHOUT ZERO (LL-LL) VOLTMETER SELECTOR



YPT3 V3 010

# ÖLÇÜ KOMUTATÖRLERİ

# MEASURING SWITCHES



## BAĞLANTI ŞEMASI CONNECTION DIAGRAM

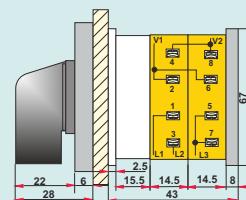
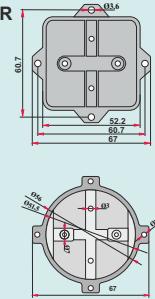
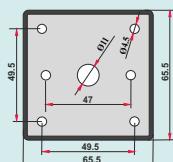
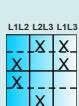
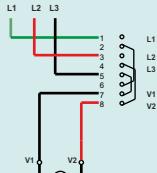
## ÖN GÖRÜNÜŞ FRONT

## ÇERÇEVE FRAME

## ALT KAPAK BOTTOM

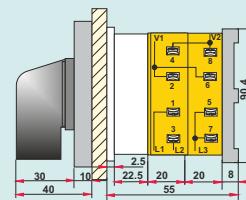
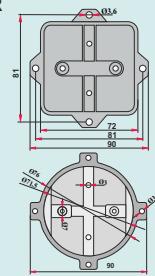
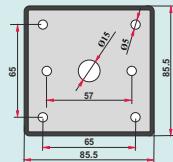
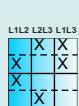
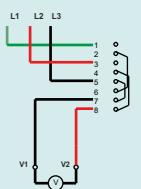
## YANDAN GÖRÜNÜŞ SIDE

**5.11-ORTA BOY (16A/20A/25A/32A) 3 FAZ SIFIRSIZ (LL-LL) VOLT METRE KOMÜTATÖRÜ**  
MEDIUM SIZE (16A/20A/25A/32A) 3 PHASE WITHOUT ZERO (LL-LL) VOLTMETER SELECTOR



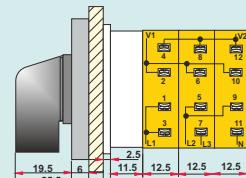
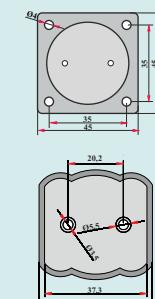
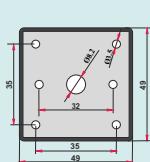
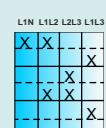
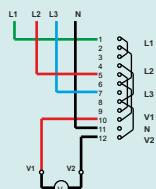
YPY3 V3 016/020/025/032

**5.12-BÜYÜK BOY (40A/50A/63A/80A) 3 FAZ SIFIRSIZ (LL-LL) VOLT METRE KOMÜTATÖRÜ**  
LARGE SIZE (40A/50A/63A/80A) 3 PHASE WITHOUT ZERO (LL-LL) VOLTMETER SELECTOR



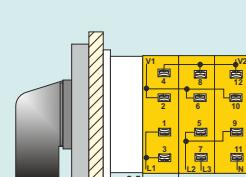
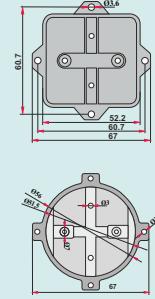
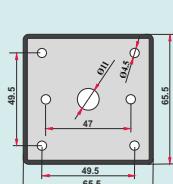
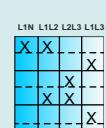
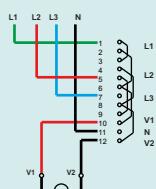
YPY3 V3 040/050/063/080

**5.13-KÜCÜK BOY (10A) 3FAZ,4 POZ (LN-LL) VOLT METRE KOMÜTATÖRÜ**  
SMALL SIZE (10A) 3PHASE,4 POSITION (LN-LL) VOLTMETER SELECTOR



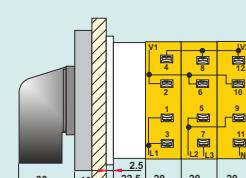
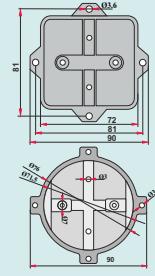
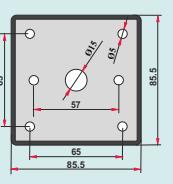
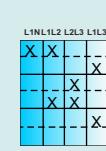
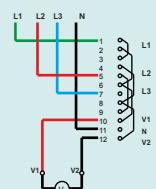
YPY4 V5 010

**5.14-ORTA BOY (16A/20A/25A/32A) 3FAZ,4 POZ (LN-LL) VOLT METRE KOMÜTATÖRÜ**  
MEDIUM SIZE (16A/20A/25A/32A) 3PHASE,4 POSITION (LN-LL) VOLTMETER SELECTOR



YPY4 V5 016/020/025/032

**5.15-BÜYÜK BOY (40A/50A/32A/80A) 3FAZ,4 POZ (LN-LL) VOLT METRE KOMÜTATÖRÜ**  
LARGE SIZE (40A/50A/32A/80A) 3PHASE,4 POSITION (LN-LL) VOLTMETER SELECTOR



YPY4 V5 040/050/063/080

ÖLÇÜ KOMUTATÖRLERİ  
MEASURING SWITCHES



# ÖLÇÜ KOMUTATÖRLERİ

# MEASURING SWITCHES

## ÖLÇÜ KOMUTATÖRLERİ MEASURING SWITCHES

### BAĞLANTI ŞEMASI CONNECTION DIAGRAM

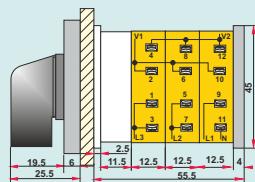
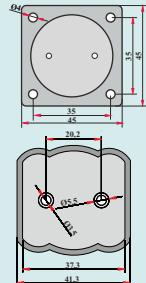
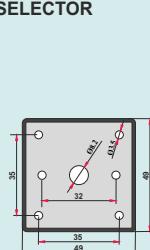
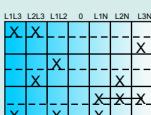
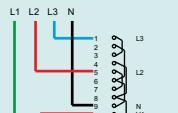
### ÖN GÖRÜNÜŞ FRONT

### ÇERÇEVE FRAME

### ALT KAPAK BOTTOM

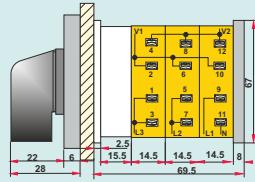
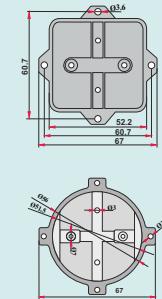
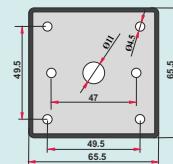
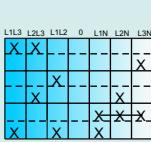
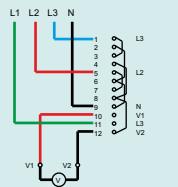
### YANDAN GÖRÜNÜŞ SIDE

5.16-KÜCÜK BOY (10A) 3 FAZ ,7POZ (LL-0-LN) VOLT METRE KOMUTATÖRÜ  
SMALL SIZE (10A) 3 PHASE ,7POSITION (LL-0-LN) VOLTMETER SELECTOR

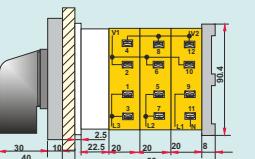
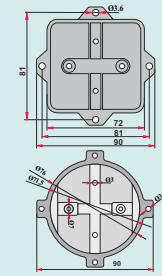
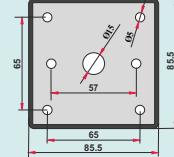
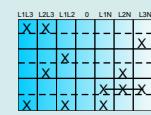
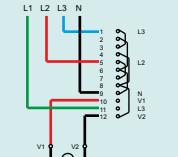


YPT3 V6 010

5.17-ORTA BOY (16A/20A/25A/32A) 3 FAZ ,7POZ (LL-0-LN) VOLT METRE KOMUTATÖRÜ  
MEDIUM SIZE (16A/20A/25A/32A) 3 PHASE ,7POSITION (LL-0-LN) VOLTMETER SELECTOR

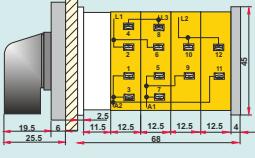
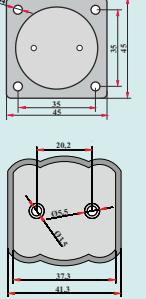
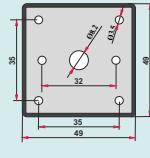
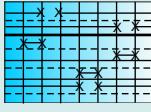
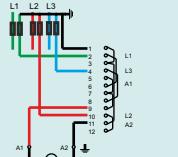


5.18-BÜYÜK BOY (40A/50A/63A/80A) 3 FAZ 7POZ (LL-0-LN) VOLT METRE KOMUTATÖRÜ  
LARGE SIZE (40A/50A/63A/80A) 3 PHASE 7 POSITION (LL-0-LN) VOLTMETER SELECTOR



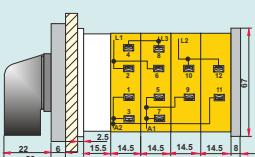
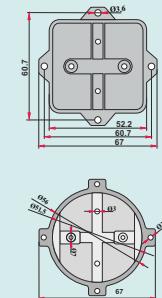
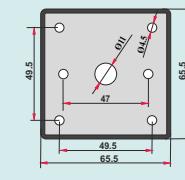
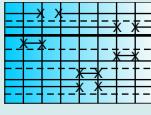
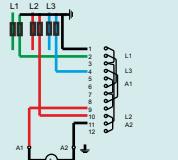
YPT3 V6 040/050/063/080

5.19-KÜCÜK BOY (10A) AMPERMETRE KOMUTATÖRÜ (AKIM TRAFOSU ÜZERİNDEN)  
SMALL SIZE (10A) AMMETER SELECTOR ON CURRENT TRANSFORMER

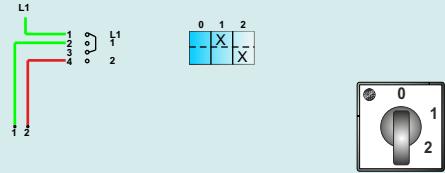


YPT3 A2 010

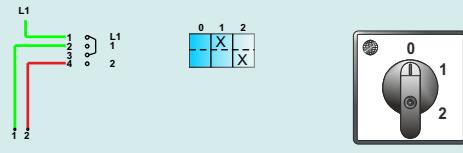
5.20-KÜCÜK BOY (16A/20A/25A/32A) AMPERMETRE KOMUTATÖRÜ (AKIM TRAFOSU ÜZERİNDEN)  
SMALL SIZE (16A/20A/25A/32A) AMMETER SELECTOR ON CURRENT TRANSFORMER



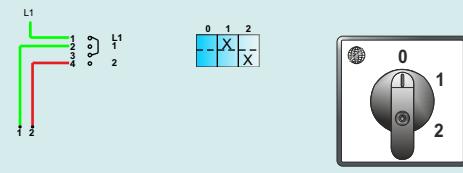
YPT3 A2 016/020/025/032

BAĞLANTI ŞEMASI  
CONNECTION DIAGRAMÖN GÖRÜNÜŞ  
FRONTÇERÇEVE  
FRAMEALT KAPAK  
BOTTOMYANDAN GÖRÜNÜŞ  
SIDE6.1-MİNİK BOY (6A/8A/10A) 1 FAZ 2 KADEMELİ ŞALTER  
MINI SIZE (6A/8A/10A) 1 PHASE 2 STEPS SWITCH

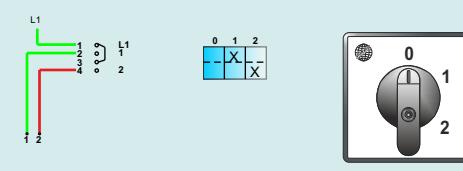
YPM1 12 006/008/010

6.2-KÜÇÜK BOY (10A) 1 FAZ 2 KADEMELİ ŞALTER  
SMALL SIZE (10A) 1 PHASE 2 STEPS SWITCH

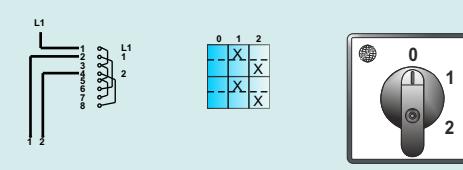
YPT1 12 010

6.3-ORTA BOY (16A/20A/25A/32A) 1 FAZ 2 KADEMELİ ŞALTER  
MEDIUM SIZE (16A/20A/25A/32A) 1 PHASE 2 STEPS SWITCH

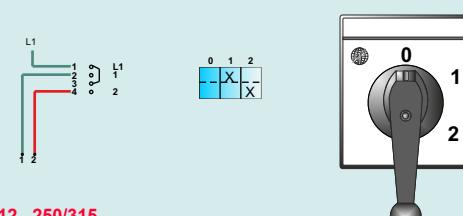
YPT1 12 016/020/025/032

6.4-BÜYÜK BOY (40A/50A/63A/80A) 1 FAZ 2 KADEMELİ ŞALTER  
LARGE SIZE (40A/50A/63A/80A) 1 PHASE 2 STEPS SWITCH

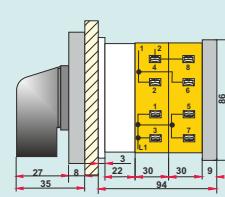
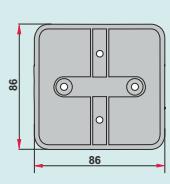
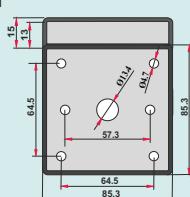
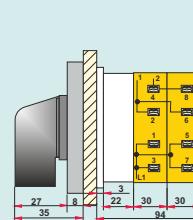
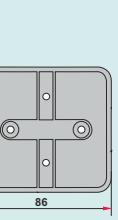
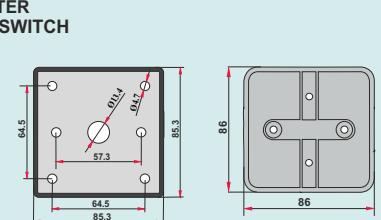
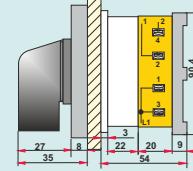
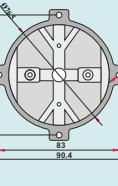
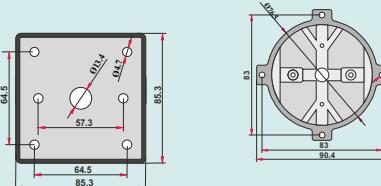
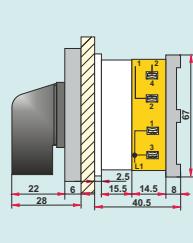
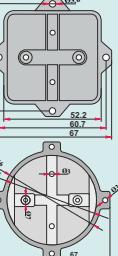
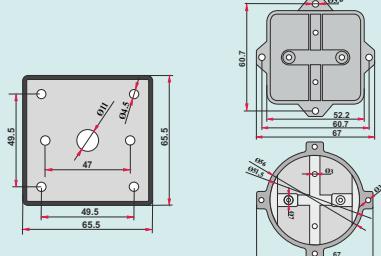
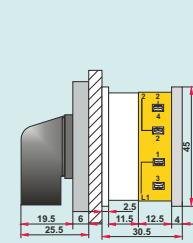
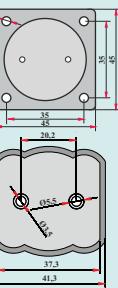
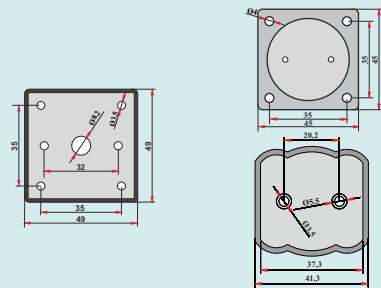
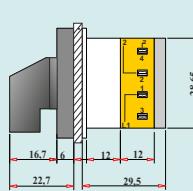
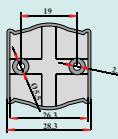
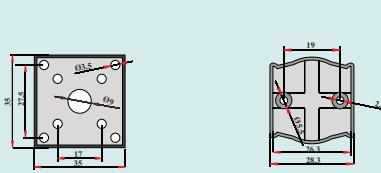
YPT1 12 040/050/063/080

6.5-BÜYÜK KARE TİP (100A/125A/160A/200A) 1 FAZ 2 KADEMELİ ŞALTER  
LARGE SQUARE TYPE (100A/125A/160A/200A) 1 PHASE 2 STEPS SWITCH

YPT1 12 100/125/160/200

6.6-BÜYÜK KARE TİP (250A/315A) 1 FAZ 2 KADEMELİ ŞALTER  
LARGE SQUARE TYPE (250A/315A) 1 PHASE 2 STEPS SWITCH

YPT1 12 250/315





## KADEMELİ ŞALTERLER

## MULTI-STEP SWITCHES

### KADEMELİ ŞALTERLER MULTISTEP SWITCHES

#### BAĞLANTI ŞEMASI CONNECTION DIAGRAM

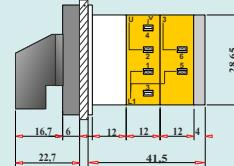
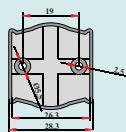
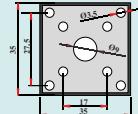
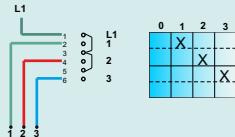
#### ÖN GÖRÜNÜŞ FRONT

#### ÇERÇEVE FRAME

#### ALT KAPAK BOTTOM

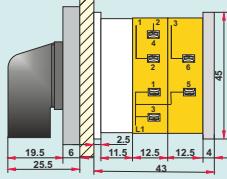
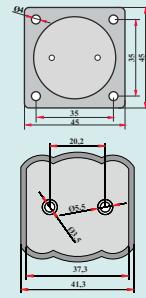
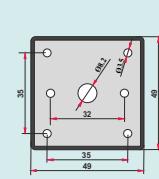
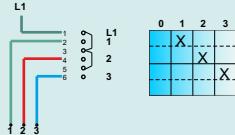
#### YANDAN GÖRÜNÜŞ SIDE

**6.7-MİNİK BOY (6A/8A/10A) 1 FAZ 3 KADEMELİ ŞALTER  
MINI SIZE (6A/8A/10A) 1 PHASE 3 STEPS SWITCH**



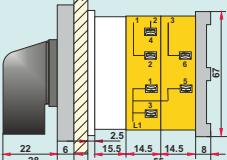
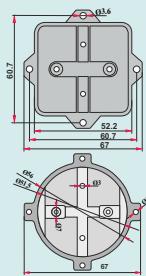
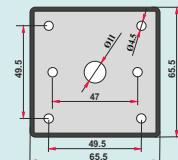
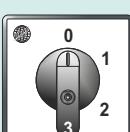
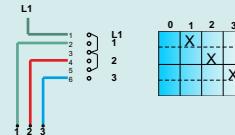
YPM1 13 006/008/010

**6.8-KÜÇÜK BOY (10A) 1 FAZ 3 KADEMELİ ŞALTER  
SMALL SIZE (10A) 1 PHASE 3 STEPS SWITCH**



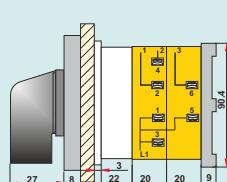
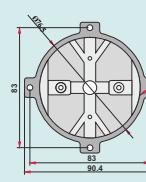
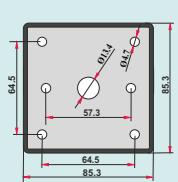
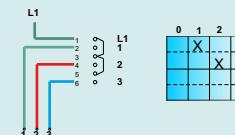
YPT1 13 010

**6.9-ORTA BOY (16A/20A/25A/32A) 1 FAZ 3 KADEMELİ ŞALTER  
MEDIUM SIZE (16A/20A/25A/32A) 1 PHASE 3 STEPS SWITCH**



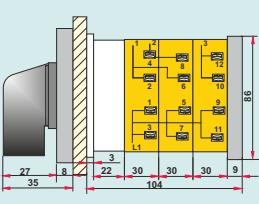
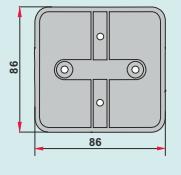
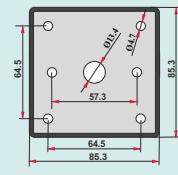
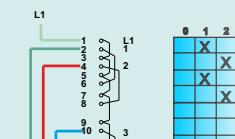
YPT1 13 016/020/025/032

**6.10-BÜYÜK BOY (40A/50A/63A/80A) 1 FAZ 3 KADEMELİ ŞALTER  
LARGE SIZE (40A/50A/63A/80A) 1 PHASE 3 STEPS SWITCH**



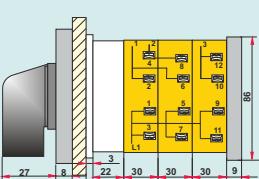
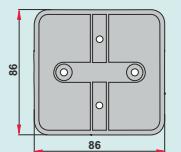
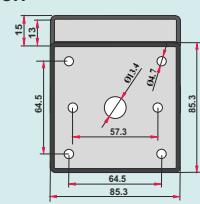
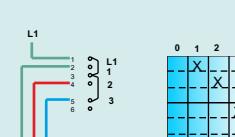
YPT1 13 040/050/063/080

**6.11-BÜYÜK KARE TİP (100A/125A/160A/200A) 1 FAZ 3 KADEMELİ ŞALTER  
LARGE SQUARE TYPE (100A/125A/160A/200A) 1 PHASE 3 STEPS SWITCH**

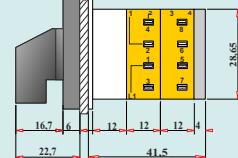
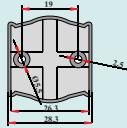
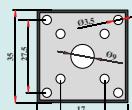
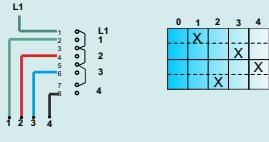


YPT1 13 100/125/160/200

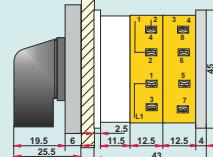
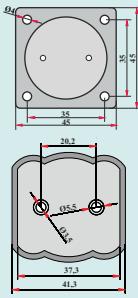
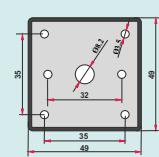
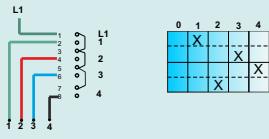
**6.12-BÜYÜK KARE TİP (250A/315A) 1 FAZ 3 KADEMELİ ŞALTER  
LARGE SQUARE TYPE (250A/315A) 1 PHASE 3 STEPS SWITCH**



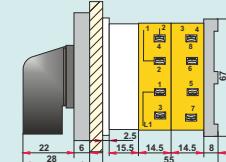
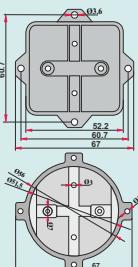
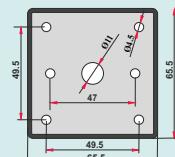
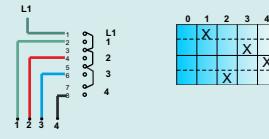
YPT1 13 250/315

BAĞLANTI ŞEMASI  
CONNECTION DIAGRAMÖN GÖRÜNÜŞ  
FRONTÇERÇEVE  
FRAMEALT KAPAK  
BOTTOMYANDAN GÖRÜNÜŞ  
SIDE6.13-MİNİK BOY (6A/8A/10A) 1 FAZ 4 KADEMELİ ŞALTER  
MINI SIZE (6A/8A/10A) 1 PHASE 4 STEPS SWITCH

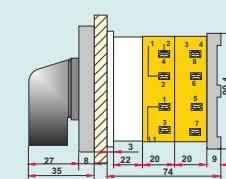
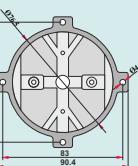
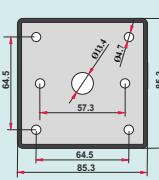
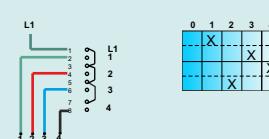
YPM1 14 006/008/010

6.14-KÜÇÜK BOY (10A) 1 FAZ 4 KADEMELİ ŞALTER  
SMALL SIZE (10A) 1 PHASE 4 STEPS SWITCH

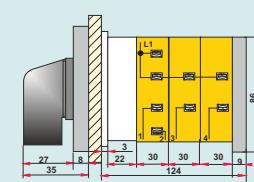
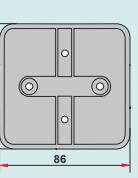
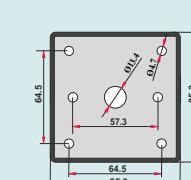
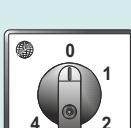
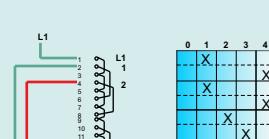
YPT1 14 010

6.15-ORTA BOY (16A/20A/25A/32A) 1 FAZ 4 KADEMELİ ŞALTER  
MEDIUM SIZE (16A/20A/25A/32A) 1 PHASE 4 STEPS SWITCH

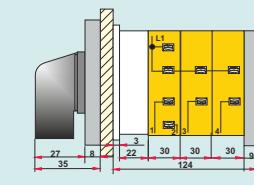
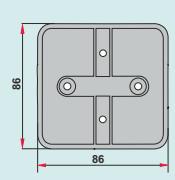
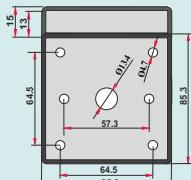
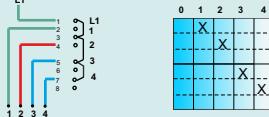
YPT1 14 016/020/025/032

6.16-BÜYÜK BOY (40A/50A/63A/80A) 1 FAZ 4 KADEMELİ ŞALTER  
LARGE SIZE (40A/50A/63A/80A) 1 PHASE 4 STEPS SWITCH

YPT1 14 040/050/063/080

6.17-BÜYÜK KARE TİP (100A/125A/160A/200A) 1 FAZ 4 KADEMELİ ŞALTER  
LARGE SQUARE TYPE (100A/125A/160A/200A) 1 PHASE 4 STEPS SWITCH

YPT1 14 100/125/160/200

6.18-BÜYÜK KARE TİP (160A/200A) 1 FAZ 4 KADEMELİ ŞALTER  
LARGE SQUARE TYPE (160A/200A) 1 PHASE 4 STEPS SWITCH

YPT1 14 160/200



## KADEMELİ ŞALTERLER

## MULTI-STEP SWITCHES

### KADEMELİ ŞALTERLER MULTISTEP SWITCHES

#### BAĞLANTI ŞEMASI CONNECTION DIAGRAM

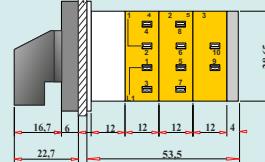
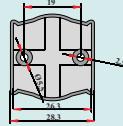
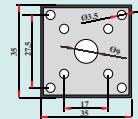
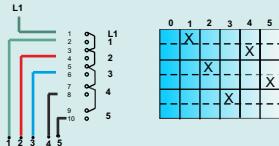
#### ÖN GÖRÜNÜŞ FRONT

#### ÇERÇEVE FRAME

#### ALT KAPAK BOTTOM

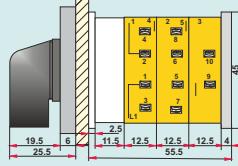
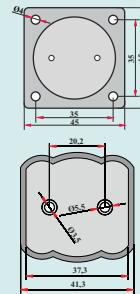
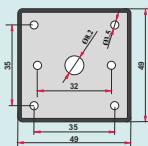
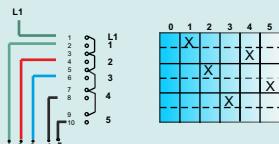
#### YANDAN GÖRÜNÜŞ SIDE

**6.19-MİNİK BOY (6A/8A/10A) 1 FAZ 5 KADEMELİ ŞALTER  
MINI SIZE (6A/8A/10A) 1 PHASE 5 STEPS SWITCH**



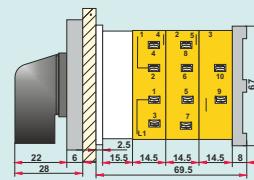
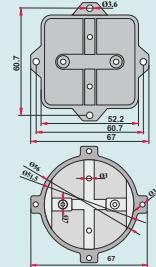
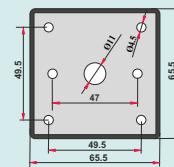
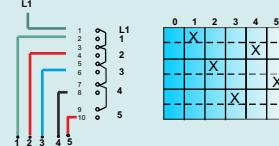
YPM1 15 006/008/010

**6.20-KÜÇÜK BOY (10A) 1 FAZ 5 KADEMELİ ŞALTER  
SMALL SIZE (10A) 1 PHASE 5 STEPS SWITCH**



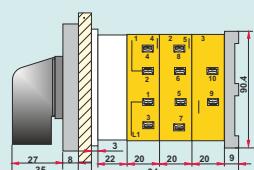
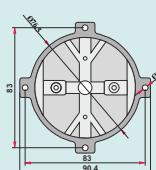
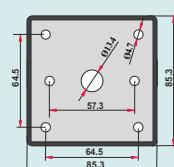
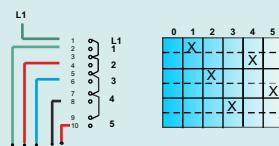
YPT1 15 010

**6.21-ORTA BOY (16A/20A/25A/32A) 1 FAZ 5 KADEMELİ ŞALTER  
MEDIUM SIZE (16A/20A/25A/32A) 1 PHASE 5 STEPS SWITCH**



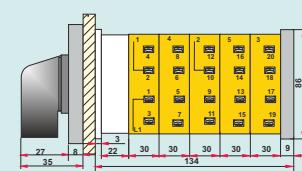
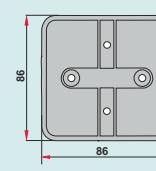
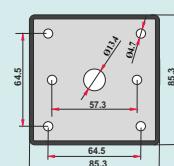
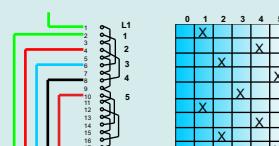
YPT1 15 016/020/025/032

**6.22-BÜYÜK BOY (40A/50A/63A/80A) 1 FAZ 5 KADEMELİ ŞALTER  
LARGE SIZE (40A/50A/63A/80A) 1 PHASE 5 STEPS SWITCH**



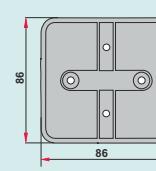
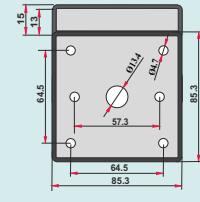
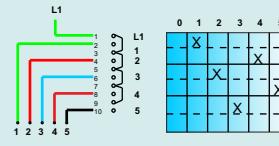
YPT1 15 040/050/063/080

**6.23-BÜYÜK KARE TİP (100A/125A/160A/200A) 1 FAZ 5 KADEMELİ ŞALTER  
LARGE SQUARE TYPE (100A/125A/160A/200A) 1 PHASE 5 STEPS SWITCH**

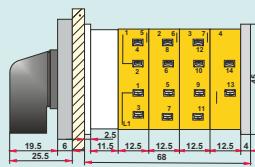
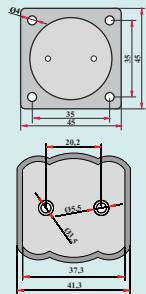
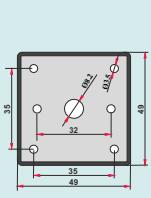
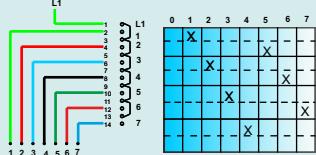


YPT1 15 100/125/160/200

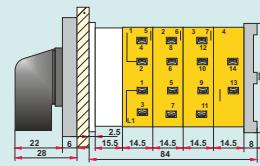
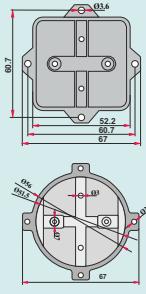
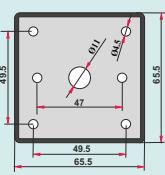
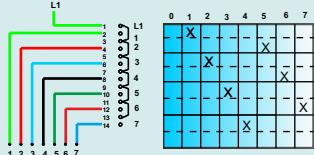
**6.24-BÜYÜK KARE TİP (250A/315A) 1 FAZ 5 KADEMELİ ŞALTER  
LARGE SQUARE SIZE (250A/315A) 1 PHASE 5 STEPS SWITCH**



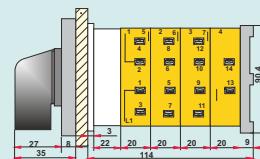
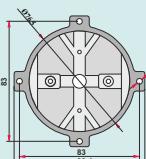
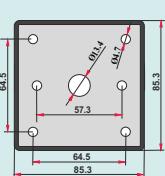
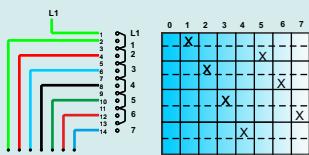
YPT1 15 250/315

BAĞLANTI ŞEMASI  
CONNECTION DIAGRAMÖN GÖRÜNÜŞ  
FRONTÇERÇEVE  
FRAMEALT KAPAK  
BOTTOMYANDAN GÖRÜNÜŞ  
SIDE6.25-KÜCÜK BOY (10A) 1 FAZ 7 KADEMELİ ŞALTER  
SMALL SIZE (10A) 1 PHASE 7 STEPS SWITCH

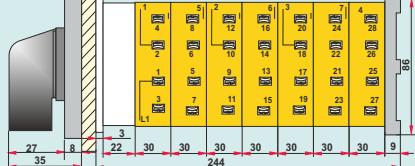
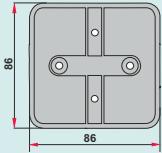
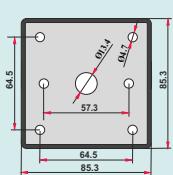
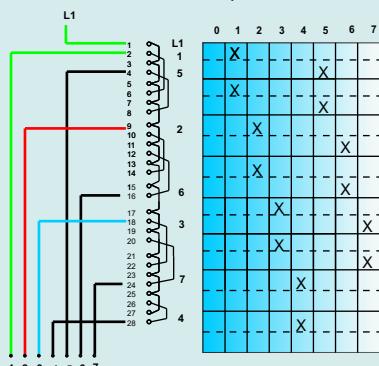
YPT1 17 010

6.26-ORTA BOY (16A/20A/25A/32A) 1 FAZ 7 KADEMELİ ŞALTER  
MEDIUM SIZE (16A/20A/25A/32A) 1 PHASE 7 STEPS SWITCH

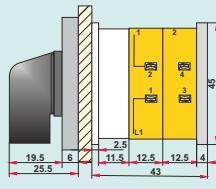
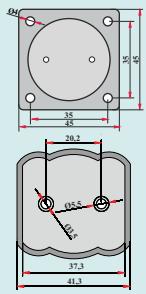
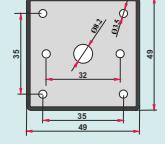
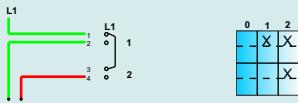
YPT1 17 016/020/025/032

6.27-BÜYÜK BOY (40A/50A/63A/80A) 1 FAZ 7 KADEMELİ ŞALTER  
LARGE SIZE (40A/50A/63A/80A) 1 PHASE 7 STEPS SWITCH

YPT1 17 040/050/063/080

6.28-BÜYÜK KARE TİP (100A/125A/160A/200A) 1 FAZ 7 KADEMELİ ŞALTER  
LARGE SQUARE TYPE (100A/125A/160A/200A) 1 PHASE 7 STEPS SWITCH

YPT1 17 100/125/160/200

6.29-KÜCÜK BOY (10A) 1 FAZ 2 KADEMELİ KOMUTATÖR ŞALTER  
SMALL SIZE (10A) 1 PHASE 2 STEPS COMMUTATOR SWITCH

YPT1 12 K010



# KADEMELİ ŞALTERLER

# MULTI-STEP SWITCHES

## BAĞLANTI ŞEMASI CONNECTION DIAGRAM

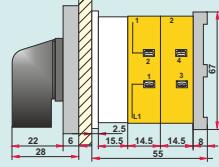
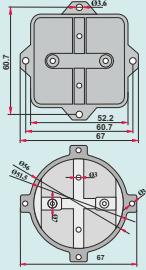
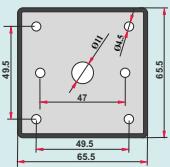
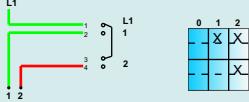
## ÖN GÖRÜNÜŞ FRONT

## ÇERÇEVE FRAME

## ALT KAPAK BOTTOM

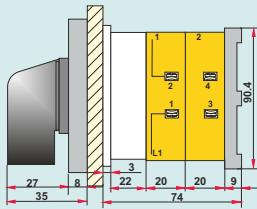
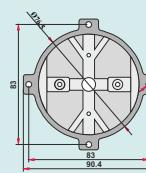
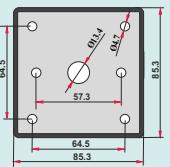
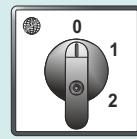
## YANDAN GÖRÜNÜŞ SIDE

**6.30-ORTA BOY (16A/20A/25A/32A) 1 FAZ 2 KADEMELİ KOMUTATÖR ŞALTER  
MEDIUM SIZE (16A/20A/25A/32A) 1 PHASE 2 STEPS COMMUTATOR SWITCH**



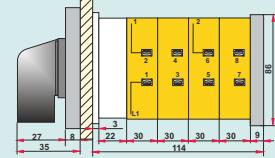
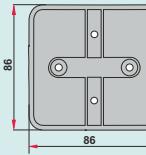
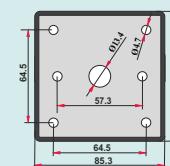
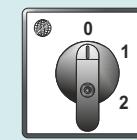
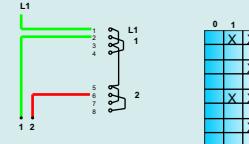
YPT1 12 K016/020/025/032

**6.31-BÜYÜK BOY (40A/50A/63A/80A) 1 FAZ 2 KADEMELİ KOMUTATÖR ŞALTER  
LARGE SIZE (40A/50A/63A/80A) 1 PHASE 2 STEPS COMMUTATOR SWITCH**



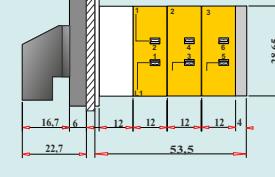
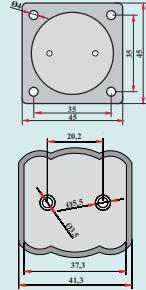
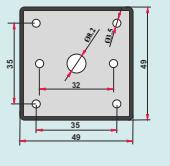
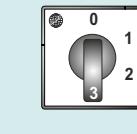
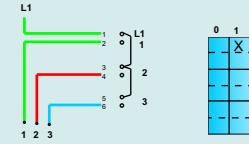
YPT1 12 K040/050/063/080

**6.32-BÜYÜK KARE TİP (100A/125A/160A/200A) 1 FAZ 2 KADEMELİ KOMUTATÖR ŞALTER  
LARGE SQUARE TYPE (100A/125A/160A/200A) 1 PHASE 2 STEPS COMMUTATOR SWITCH**



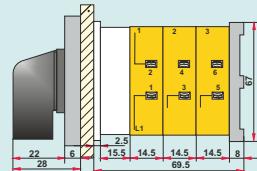
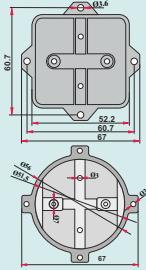
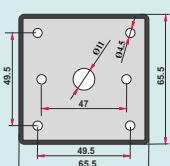
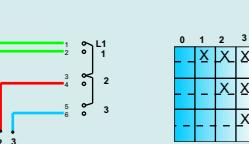
YPT1 12 K100/125/160/200

**6.33- KÜÇÜK BOY (10A) 1 FAZ 3 KADEMELİ KOMUTATÖR ŞALTER  
SMALL SIZE (10A) 1 PHASE 3 STEPS COMMUTATOR SWITCH**



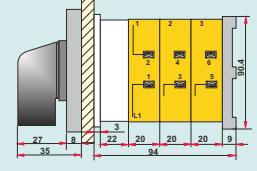
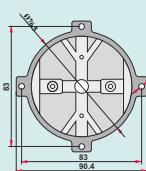
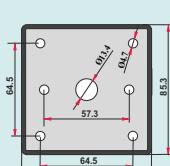
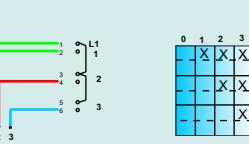
YPT1 12 K010

**6.34- ORTA BOY (16A/20A/25A/32A) 1 FAZ 3 KADEMELİ KOMUTATÖR ŞALTER  
MEDIUM SIZE (16A/20A/25A/32A) 1 PHASE 3 STEPS COMMUTATOR SWITCH**

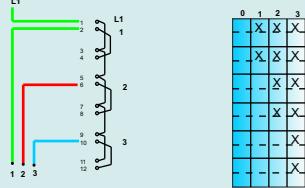


YPT1 13 K016/020/025/032

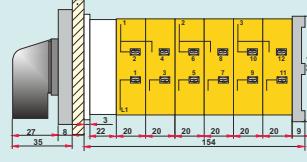
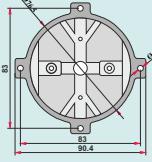
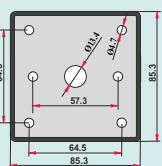
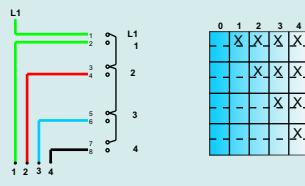
**6.35- BüYÜK BOY (40A/50A/63A/80A) 1 FAZ 3 KADEMELİ KOMUTATÖR ŞALTER  
LARGE SIZE (40A/50A/63A/80A) 1 PHASE 3 STEPS COMMUTATOR SWITCH**



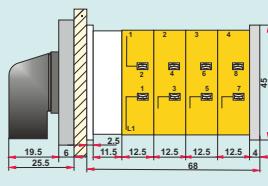
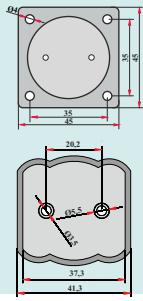
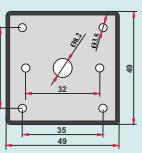
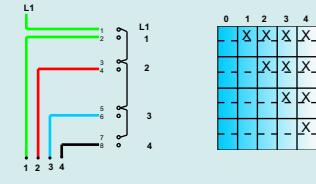
YPT1 13 K040/050/063/080

BAĞLANTI ŞEMASI  
CONNECTION DIAGRAMÖN GÖRÜNÜŞ  
FRONTÇERÇEVE  
FRAMEALT KAPAK  
BOTTOMYANDAN GÖRÜNÜŞ  
SIDE6.36- BÜYÜK BOY (100A/125A/160A/200A) 1 FAZ 3 KADEMELİ KOMUTATÖR ŞALTER  
LARGE SIZE (100A/125A/160A/200A) 1 PHASE 3 STEPS COMMUTATOR SWITCH

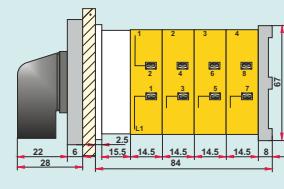
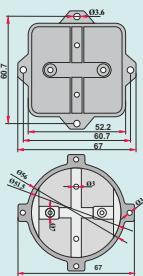
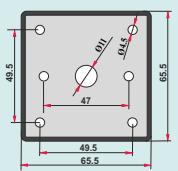
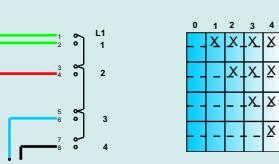
YPT1 13 K100/125/160/200

6.37- KÜÇÜK BOY (10A) 1 FAZ 4 KADEMELİ KOMUTATÖR ŞALTER  
SMALL SIZE (10A) 1 PHASE 4 STEPS COMMUTATOR SWITCH

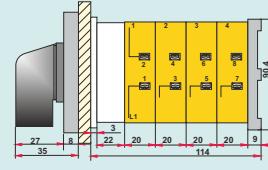
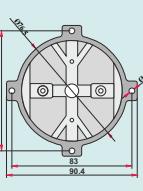
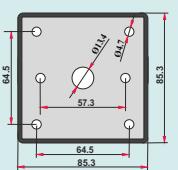
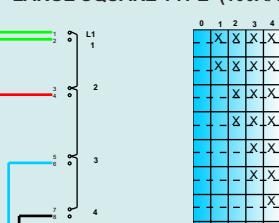
YPT1 14 K010

6.38- ORTA BOY (16A/20A/25A/32A) 1 FAZ 4 KADEMELİ KOMUTATÖR ŞALTER  
MEDIUM SIZE (16A/20A/25A/32A) 1 PHASE 4 STEPS COMMUTATOR SWITCH

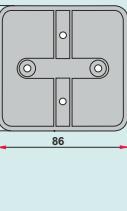
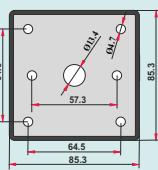
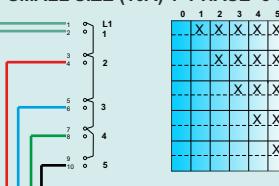
YPT1 14 K016/020/025/032

6.39- BÜYÜK BOY (40A/50A/63A/80A) 1 FAZ 4 KADEMELİ KOMUTATÖR ŞALTER  
LARGE SIZE (40A/50A/63A/80A) 1 PHASE 4 STEPS COMMUTATOR SWITCH

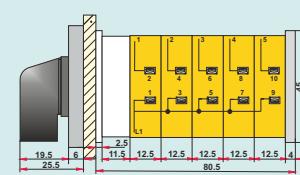
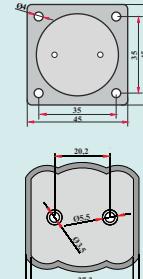
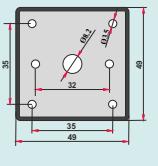
YPT1 14 K040/050/063/080

6.40- BÜYÜK KARE TİP (100A/125A/160A/200A) 1 FAZ 4 KADEMELİ KOMUTATÖR ŞALTER  
LARGE SQUARE TYPE (100A/125A/160A/200A) 1 PHASE 4 STEPS COMMUTATOR SWITCH

YPT1 14 K100/125/160/200

6.41- KÜÇÜK BOY (10A) 1 FAZ 5 KADEMELİ KOMUTATÖR ŞALTER  
SMALL SIZE (10A) 1 PHASE 5 STEPS COMMUTATOR SWITCH

YPT1 15 K010





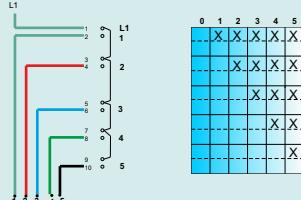
## KADEMELİ ŞALTERLER

## MULTI-STEP SWITCHES

### KADEMELİ ŞALTERLER MULTISTEP SWITCHES

#### BAĞLANTI ŞEMASI CONNECTION DIAGRAM

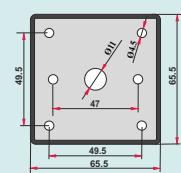
**6.42-ORTA BOY (16A/20A/25A/32A) 1 FAZ 5 KADEMELİ KOMUTATÖR  
MEDIUM SIZE (16A/20A/25A/32A) 1 PHASE 5 STEPS COMMUTATOR SWITCH**



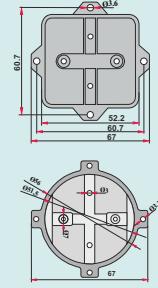
#### ÖN GÖRÜNÜŞ FRONT



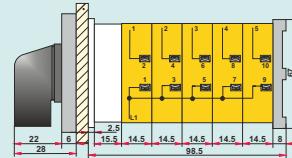
#### ÇERÇEVE FRAME



#### ALT KAPAK BOTTOM

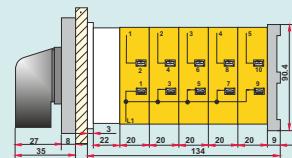
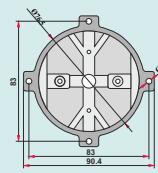
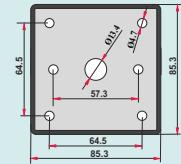
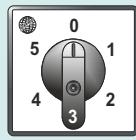
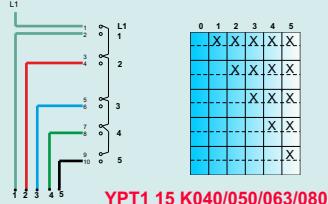


#### YANDAN GÖRÜNÜŞ SIDE



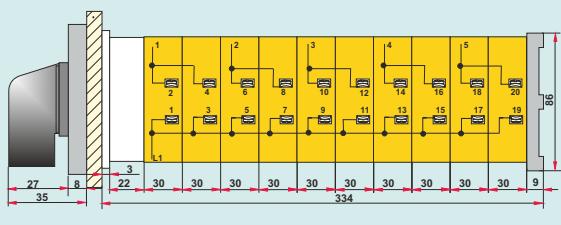
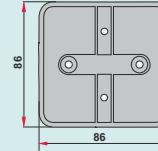
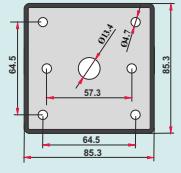
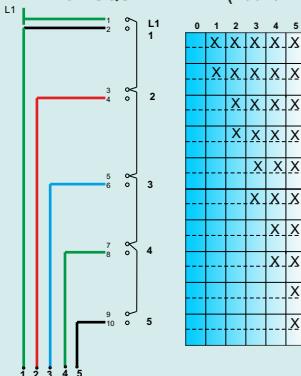
YPT1 15 K016/020/025/032

**6.43-BÜYÜK BOY (40A/50A/63A/80A) 1 FAZ 5 KADEMELİ KOMUTATÖR  
LARGE SIZE (40A/50A/63A/80A) 1 PHASE 5 STEPS COMMUTATOR SWITCH**



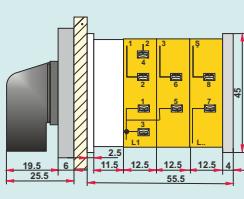
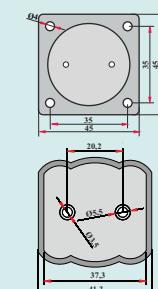
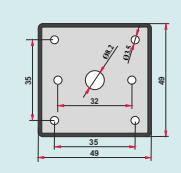
YPT1 15 K040/050/063/080

**6.44-BÜYÜK KARE BOY (100A/125A/160A/200A) 1 FAZ 5 KADEMELİ KOMUTATÖR  
LARGE SQUARE TYPE (100A/125A/160A/200A) 1 PHASE 5 STEPS COMMUTATOR SWITCH**



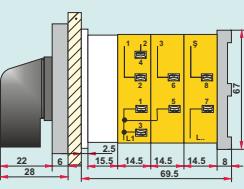
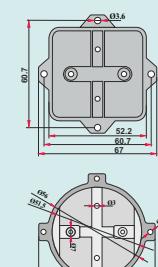
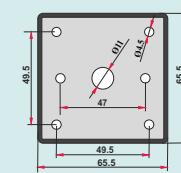
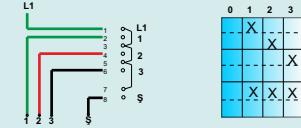
YPT1 15 100/125/160/200

**6.45-KÜÇÜK BOY (10A) 1 FAZ 3 KADEMELİ ŞEBEKELİ  
SMALL SIZE (10A) 1 PHASE 3 STEPS WITH AUXILIARY WINDING**



YPT1 13 \$010

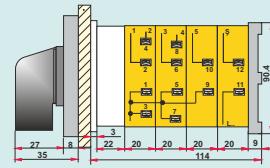
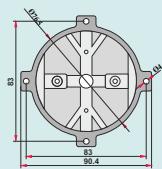
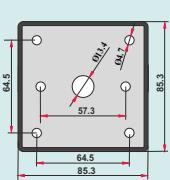
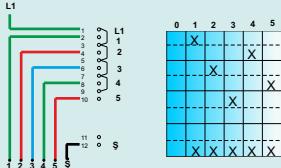
**6.46-ORTA BOY (16A/20A/25A/32A) 1 FAZ 3 KADEMELİ ŞEBEKELİ  
MEDIUM SIZE (16A/20A/25A/32A) 1 PHASE 3 STEPS WITH AUXILIARY WINDING**



YPT1 13 \$016/020/025/032

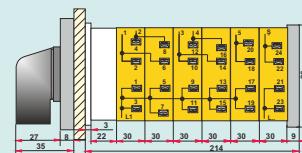
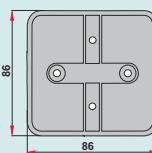
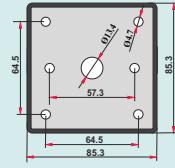
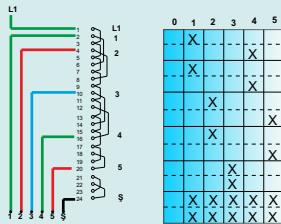
BAĞLANTI ŞEMASI  
CONNECTION DIAGRAMÖN GÖRÜNÜŞ  
FRONTÇERÇEVE  
FRAMEALT KAPAK  
BOTTOMYANDAN GÖRÜNÜŞ  
SIDE

**6.47-BÜYÜK BOY (40A/50A/63A/80A) 1 FAZ 5 KADEMELİ ŞEBEKELİ**  
LARGE SIZE (40A/50A/63A/80A) 1 PHASE 5 STEPS WITH AUXILIARY WINDING



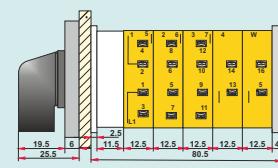
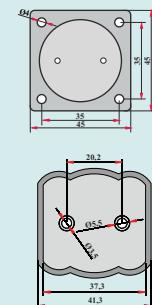
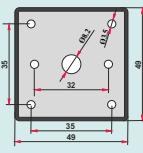
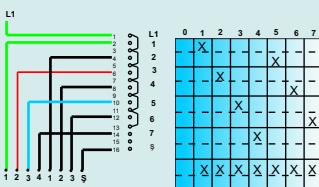
YPT1 15 \$040/050/063/080

**6.48-BÜYÜK KARE TİP (100A/125A/160A/200A) 1 FAZ 5 KADEMELİ ŞEBEKELİ**  
LARGE SQUARE TYPE (100A/125A/160A/200A) 1 PHASE 5 STEPS WITH AUXILIARY WINDING



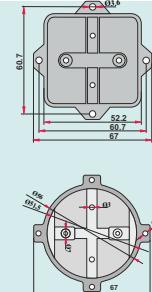
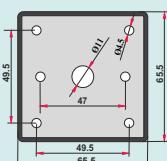
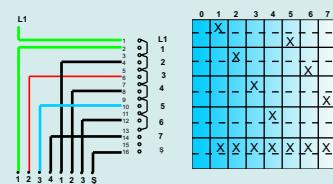
YPT1 15 \$100/125/160/200

**6.49- KÜÇÜK BOY (10A) 1 FAZ 7 KADEMELİ ŞEBEKELİ**  
SMALL SIZE (10A) 1 PHASE 7 STEPS WITH AUXILIARY WINDING



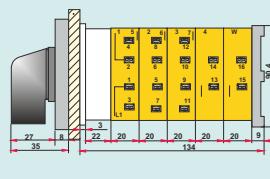
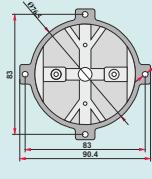
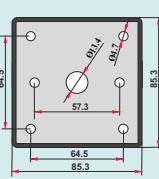
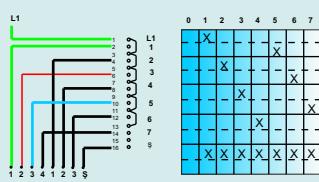
YPT1 17 \$010

**6.50- ORTA BOY (16A/20A/25A/32A) 1 FAZ 7 KADEMELİ ŞEBEKELİ**  
MEDIUM SIZE (16A/20A/25A/32A) 1 PHASE 7 STEPS WITH AUXILIARY WINDING



YPT1 17 016/020/025/032

**6.51- BÜYÜK BOY (40A/50A/63A/80A) 1 FAZ 7 KADEMELİ ŞEBEKELİ**  
LARGE SIZE (40A/50A/63A/80A) 1 PHASE 7 STEPS WITH AUXILIARY WINDING



YPT1 17 \$040/050/063/080



## KADEMELİ ŞALTERLER

## MULTI-STEP SWITCHES

### KADEMELİ ŞALTERLER MULTISTEP SWITCHES

#### BAĞLANTI ŞEMASI CONNECTION DIAGRAM

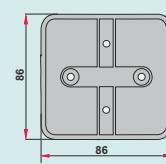
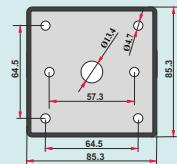
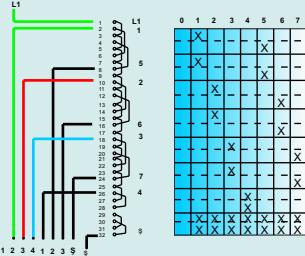
#### ÖN GÖRÜNÜŞ FRONT

#### ÇERÇEVE FRAME

#### ALT KAPAK BOTTOM

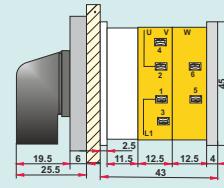
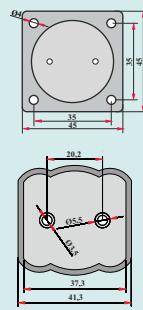
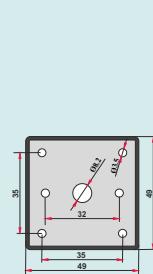
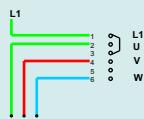
#### YANDAN GÖRÜNÜŞ SIDE

**6.52- BÜYÜK KARE TİP (100A/125A/160A/200A) 1 FAZ 7 KADEMELİ ŞEBEKELİ**  
LARGE SQUARE TYPE (100A/125A/160A/200A) 1 PHASE 7 STEPS WITH AUXILIARY WINDING



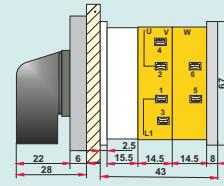
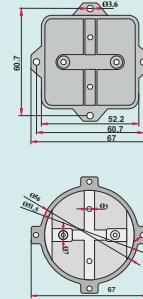
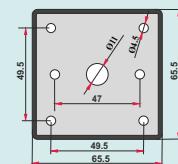
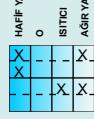
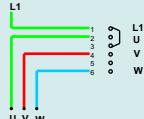
YPT1 17 §100/125/160/200

**6.53- KÜÇÜK BOY (10A) 1 FAZ BRULÖR YAĞ ŞALTERİ**  
SMALL SIZE (10A) 1 PHASE BURNER OIL SWITCH



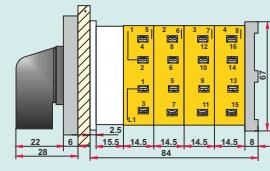
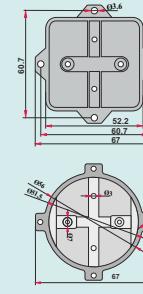
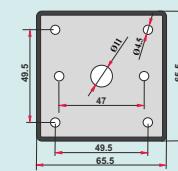
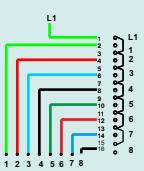
YPT1 13 Y010

**6.54- ORTA BOY (16A/20A/25A/32A) 1 FAZ BRULÖR YAĞ ŞALTERİ**  
MEDIUM SIZE (16A/20A/25A/32A) 1 PHASE BURNER OIL SWITCH



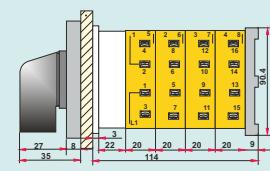
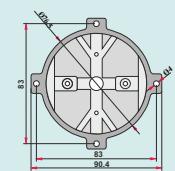
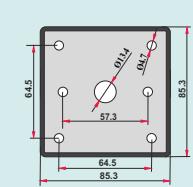
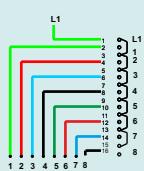
YPT1 13 Y016/020/025/032

**6.55-ORTA BOY (16A/20A/25A/32A) 1 FAZ 8 KADEMELİ ŞALTER**  
MEDIUM SIZE (16A/20A/25A/32A) 1 PHASE 8 STEPS SWITCH



YPT1 18 016/020/025/032

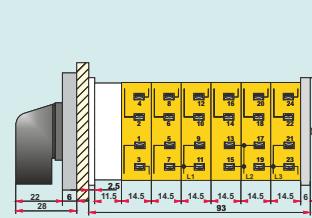
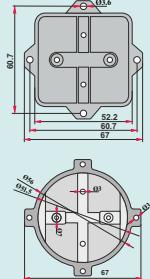
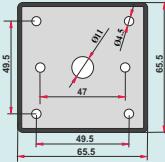
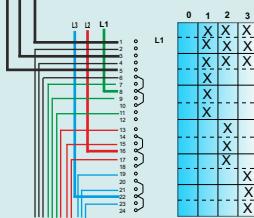
**6.56-BÜYÜK BOY (40A/50A/63A/80A) 1 FAZ 8 KADEMELİ ŞALTER**  
LARGE SIZE (40A/50A/63A/80A) 1 PHASE 8 STEPS SWITCH



YPT1 18 040/050/063/080

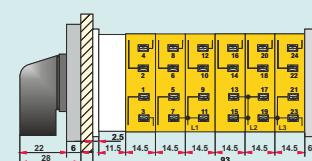
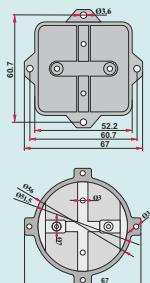
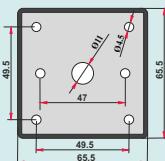
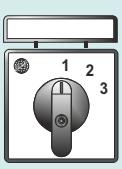
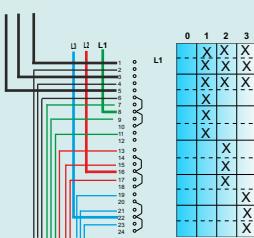
**BAĞLANTI ŞEMASI**  
**CONNECTION DIAGRAM**
**ÖN GÖRÜNÜŞ**  
**FRONT**
**ÇERÇEVE**  
**FRAME**
**ALT KAPAK**  
**BOTTOM**
**YANDAN GÖRÜNÜŞ**  
**SIDE**

7.1 - ORTA BOY (16A/20A/25A/32A) 3 FAZ 3 KADEMELİ GAZALTI ŞALTER  
 MEDIUM SIZE (16A/20A/25A/32A) 3 PHASE MIG/MAG WELDING 3 STEPS SWITCH



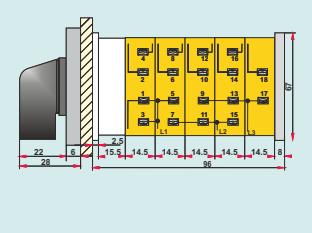
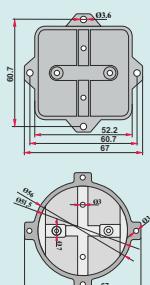
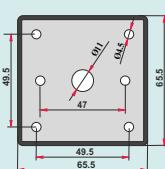
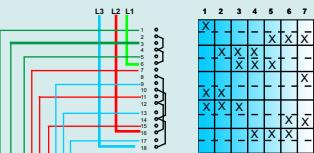
YPT3 G1 016/020/025/032

7.2 - BÜYÜK BOY (40A/50A) 3 FAZ 3 KADEMELİ GAZALTI ŞALTER  
 LARGE SIZE (40A/50A) 3 PHASE MIG/MAG WELDING 3 STEPS SWITCH



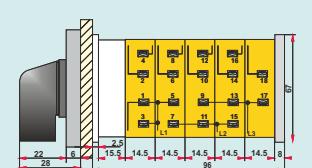
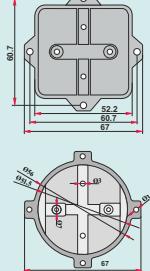
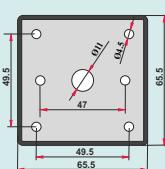
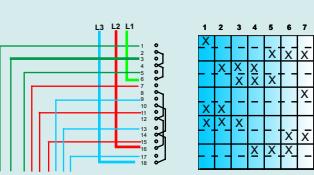
YPT3 G1 040/050

7.3 - ORTA BOY (16A/20A/25A/32A) 3 FAZ 7 KADEMELİ GAZALTI ŞALTER  
 MEDIUM SIZE (16A/20A/25A/32A) 3 PHASE MIG/MAG WELDING 7 STEPS SWITCH



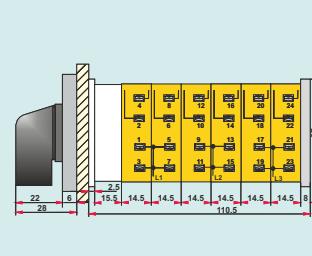
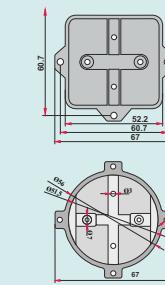
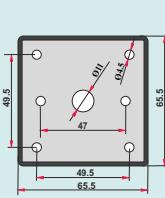
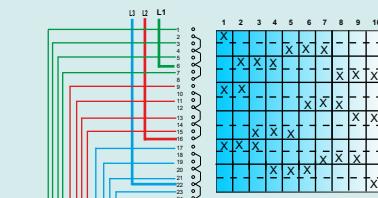
YPT3 G2 016/020/025/032

7.4 - BÜYÜK BOY (40A/50A) 3 FAZ 7 KADEMELİ GAZALTI ŞALTER  
 LARGE SIZE (40A/50A) 3 PHASE MIG/MAG WELDING 7 STEPS SWITCH



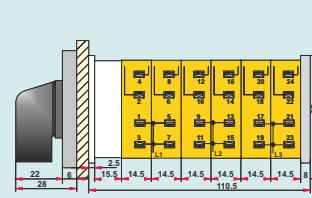
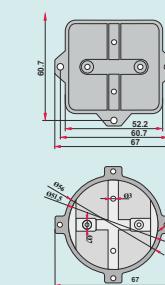
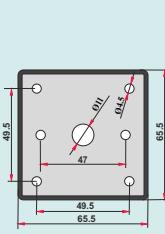
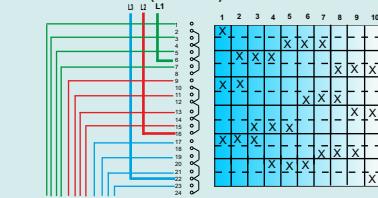
YPT3 G2 040/050

7.5 - ORTA BOY (16A/20A/25A/32A) 3 FAZ 10 KADEMELİ GAZALTI ŞALTER  
 MEDIUM SIZE (16A/20A/25A/32A) 3 PHASE MIG/MAG WELDING 10 STEPS SWITCH

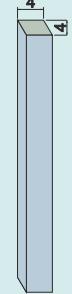
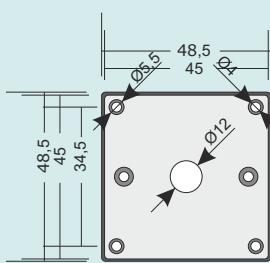
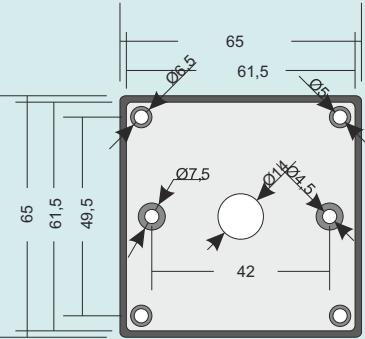
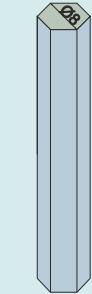
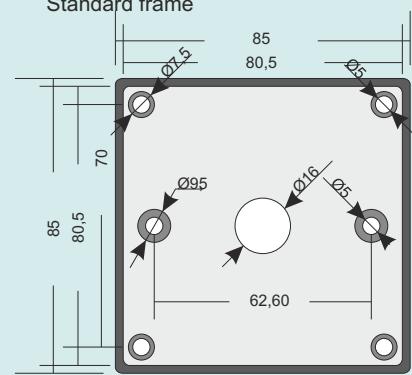
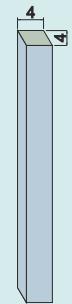
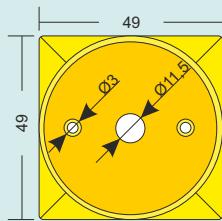
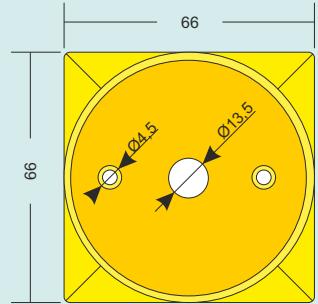
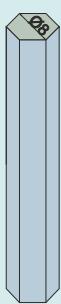
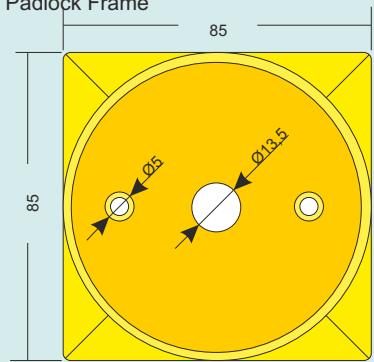
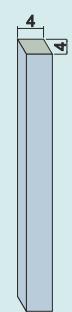
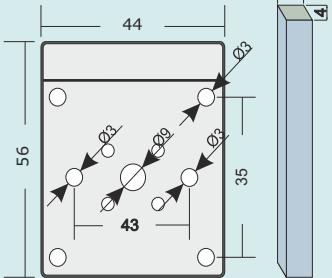
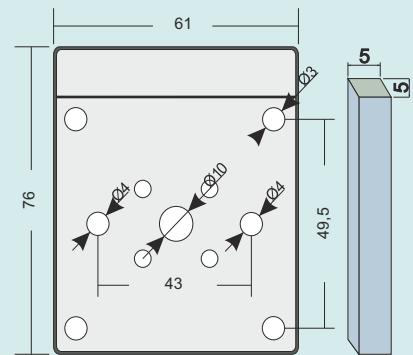
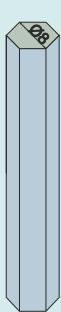
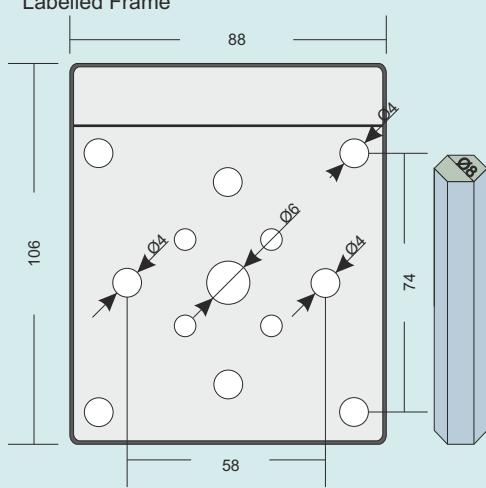
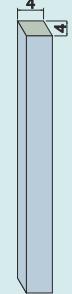
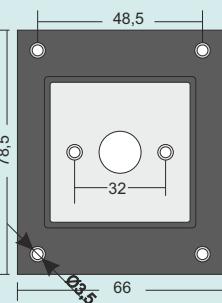
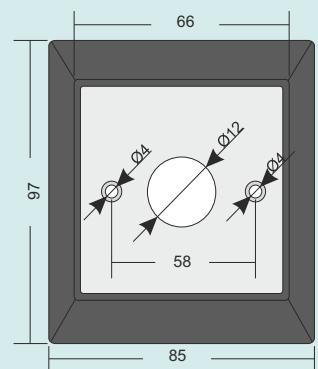
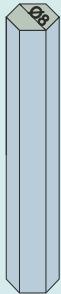
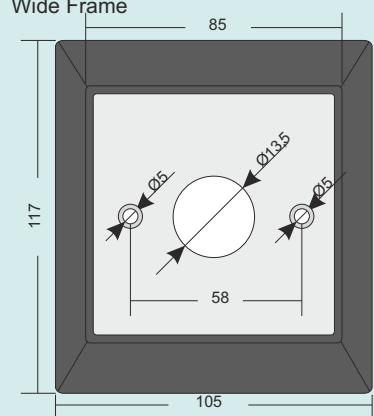


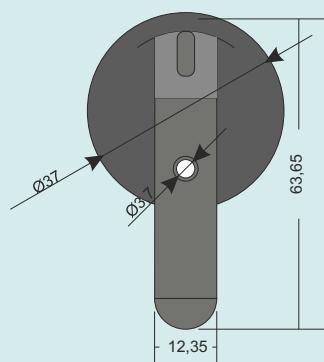
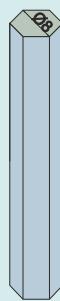
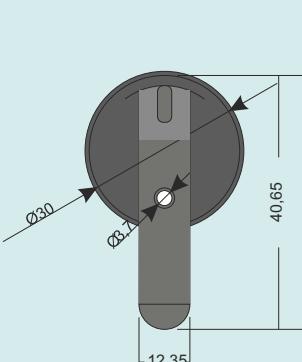
YPT3 G3 016/020/025/032

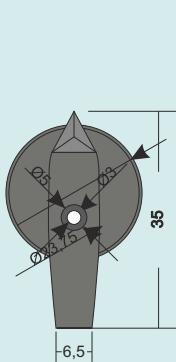
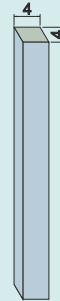
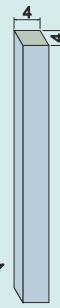
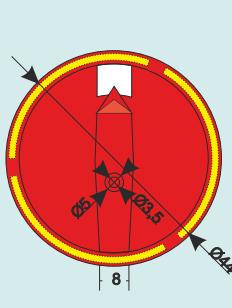
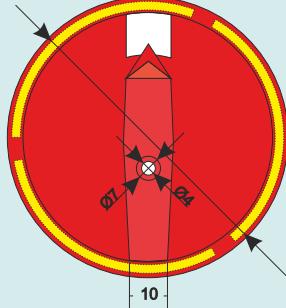
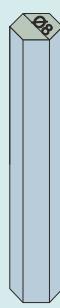
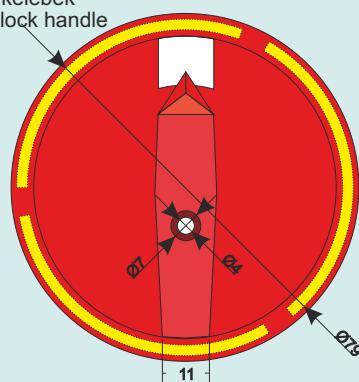
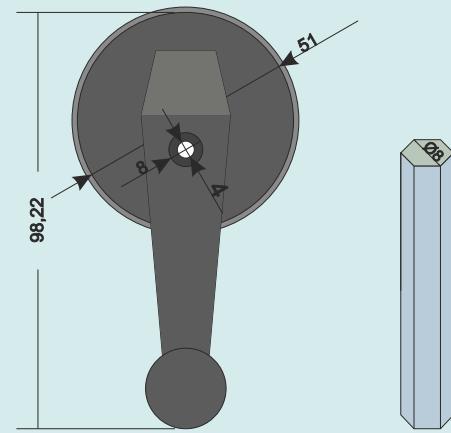
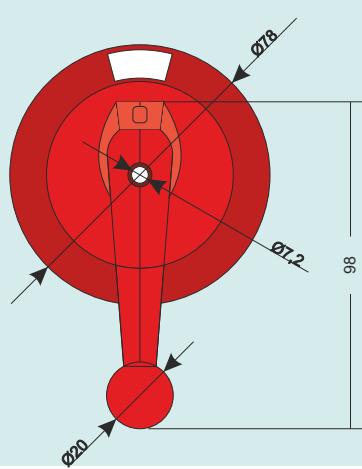
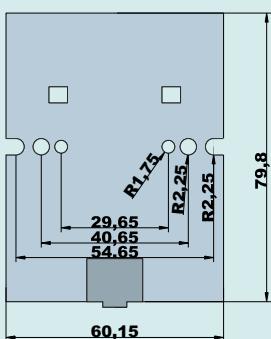
7.6 - BÜYÜK BOY (40A/50A) 3 FAZ 10 KADEMELİ GAZALTI ŞALTER  
 LARGE SIZE (40A/50A) 3 PHASE MIG/MAG WELDING 10 STEPS SWITCH



NPT3 G3 040/050

BÜYÜK BOY  
LARGE SIZEMİL BOYU  
SHAFT DIMENSIONSORTA BOY  
MEDIUM SIZEMİL BOYU  
SHAFT DIMENSIONSKÜÇÜK BOY  
SMALL SIZEMİL BOYU  
SHAFT DIMENSIONS8.1 -Standart Çerçeve  
Standard frame8.2 -Kilitli Çerçeve  
Padlock Frame8.3 -Etiketli Çerçeve  
Labelled Frame8.4 -Geniş Çerçeve  
Wide Frame

**BÜYÜK BOY**  
 LARGE SIZE
8.5 -Standart kelebek  
Standard handle
**MİL BOYU**  
 SHAFT DIMENSIONS

**ORTA BOY**  
 MEDIUM SIZE

**MİL BOYU**  
 SHAFT DIMENSIONS

**KÜÇÜK BOY**  
 SMALL SIZE

**MİL BOYU**  
 SHAFT DIMENSIONS
8.6 -Kilitli kelebek  
Padlock handle8.7 -Topuz kelebek  
Knob latch8.8 -Kilitli topuz kelebek  
Knob lock8.9 - Ray Klemens Aparatı  
Rail Clip Apparatus

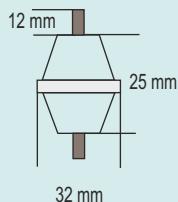
Tabandan şalterin tabanına vida takılmak suretiyle montaj edilir.  
Ordan da ray klemensine takılabilir.

The rail clip is assembled to the base of the switch with a screw and so, the switch can be assembled to the rail.



9.1 - METRİK 5 ÇİFT CIVATALI İZOLATÖR  
METRIC 5 DOUBLE SCREW INSULATOR

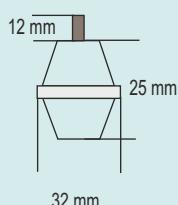
ÇİZİM  
DRAWING



OPA 1N 005



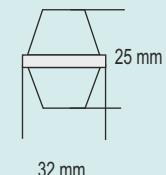
9.2 - METRİK 5 CIVATA + SOMUN İZOLATÖR  
METRIC 5 SCREW + NUT INSULATOR



OPA 1N 015



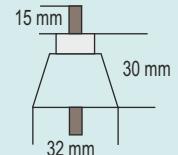
9.3 - METRİK 5 ÇİFT SOMUNLU İZOLATÖR  
METRIC 5 DOUBLE NUT INSULATOR



OPA 1N 115



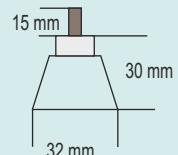
9.4 - METRİK 6 ÇİFT CIVATALI İZOLATÖR  
METRIC 6 DOUBLE SCREW INSULATOR



OPA 1N 006



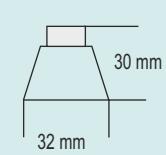
9.5 - METRİK 6 CIVATA + SOMUN İZOLATÖR  
METRIC 6 SCREW + NUT INSULATOR



OPA 1N 016



9.6 - METRİK 6 ÇİFT SOMUNLU İZOLATÖR  
METRIC 6 DOUBLE NUT INSULATOR

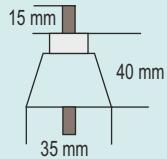


OPA 1N 116



**ÇİZİM**  
DRAWING

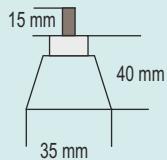
9.7 - METRİK 8 ÇİFT CIVATALI İZOLATÖR  
METRIC 8 DOUBLE SCREW INSULATOR



OPA 1N 008



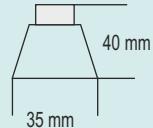
9.8 - METRİK 8 CIVATA + SOMUN İZOLATÖR  
METRIC 8 SCREW + NUT INSULATOR



OPA 1N 018



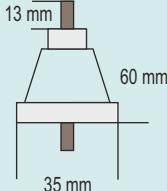
9.9 - METRİK 8 ÇİFT SOMUNLU İZOLATÖR  
METRIC 8 DOUBLE NUT INSULATOR



OPA 1N 118



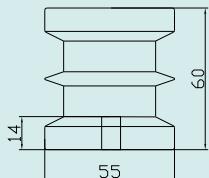
9.10 - METRİK 6 ÇİFT CIVATALI İZOLATÖR (65 mm)  
METRIC 6 DOUBLE SCREW INSULATOR (65 mm)



OPA 2N 006



9.11 - 1N 500 İZOLATÖR  
1N 500 INSULATOR



OPA 1N 500



İZOLATÖR  
INSULATOR



## MUHAFAZA KUTULARI

## CAM SWITCH ENCLOSURES

**YANDAN GÖRÜNÜŞ  
SIDE**

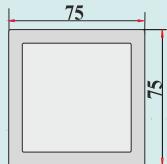
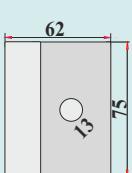
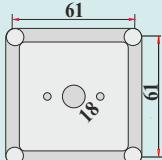
**ÜST GÖRÜNÜŞ  
TOP**

**ALT KAPAK  
BOTTOM**

**SON ÜRÜN  
FINAL PRODUCT**

**UYGUN ŞALTERLER  
SUITABLE SWITCHES**

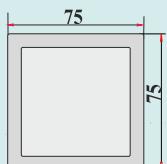
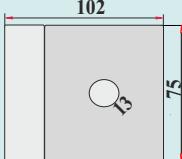
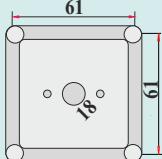
**10.1 - IP 65 MİNİK BOY KISA ŞALTER KUTUSU  
IP 65 MINI SIZE SHORT ENCLOSURE BOX**



1-2-3-4 FAZ / Phase 10A. PAKO (AÇ-KAPA) / On - Off  
1-2 FAZ / Phase 10A. KUTUP DEĞİŞİTRİCİ / Changeover  
1 FAZ / Phase 10A. 2-3-4 KADEMELİ / Steps  
1-2 FAZ / Phase 10A. ENVERSÖR / Reversing

**KUT IP 6501**

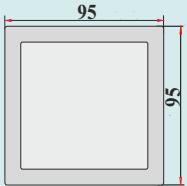
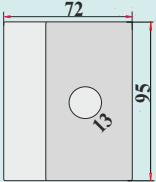
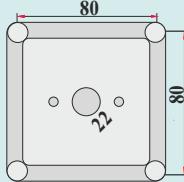
**10.2 - IP 65 MİNİK BOY UZUN ŞALTER KUTUSU  
IP 65 MINI SIZE LONG ENCLOSURE BOX**



1-2-3-4 FAZ / Phase 10 A. AÇ-KAPA / On - Off  
1-2-3-4 FAZ / Phase 10 A. KUTUP DEĞİŞİTRİCİ / Changeover  
1-2-3-4 FAZ / Phase 10 A. 1-2-3-4-5-6-7 KADEMELİ / Steps

**KUT IP 6502**

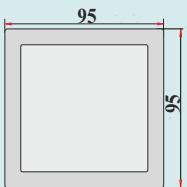
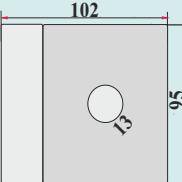
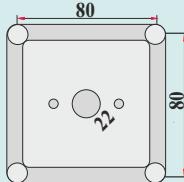
**10.3 - IP 65 ORTA BOY KISA ŞALTER KUTUSU  
IP 65 MEDIUM SIZE SHORT ENCLOSURE BOX**



1-2-3-4 FAZ / Phase 16-20-25-32A. AÇ-KAPA / On - Off  
1-2 FAZ / Phase 16-20-25-32A. KUTUP DEĞİŞİTRİCİ / Changeover  
1-2 FAZ / Phase 16-20-25-32A. ENVERSÖR / Reversing

**KUT IP 6503**

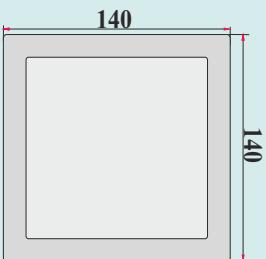
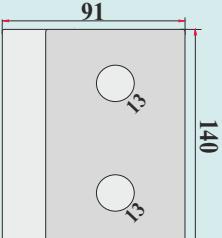
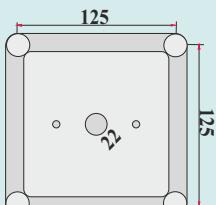
**10.4 - IP 65 ORTA BOY UZUN ŞALTER KUTUSU  
IP 65 MEDIUM SIZE LONG ENCLOSURE BOX**



1-2-3-4 FAZ / Phase 16-20-25-32 A. AÇ-KAPA / On - Off  
1-2-3-4 FAZ / Phase 16-20-25-32 A. KUTUP DEĞİŞİTRİCİ / On - Off  
1-2-3-4 FAZ / Phase 16-20-25-32 A. ENVERSÖR / Reversing  
1 FAZ / Phase 1-2-3-4-5-6-7 KADEMELİ / Steps

**KUT IP 6504**

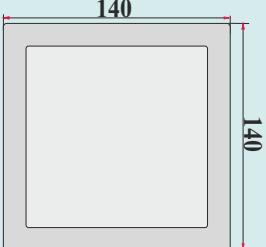
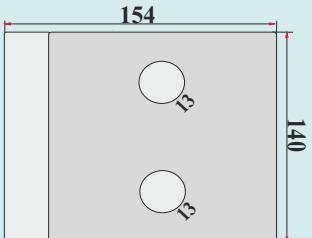
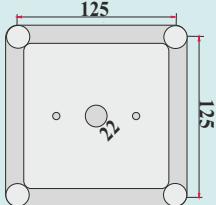
**10.5 - IP 65 BÜYÜK BOY KISA ŞALTER KUTUSU  
IP 65 LARGE SIZE SHORT ENCLOSURE BOX**



1-2-3-4 FAZ / Phase 40-50-63-80 A. AÇ-KAPA / On - Off  
1-2 FAZ / Phase 40-50-63-80 A. KUTUP DEĞİŞİTRİCİ / Changeover  
1-2 FAZ / Phase 40-50-63-80 A. ENVERSÖR / Reversing  
1-2 FAZ / Phase 40-50-63-80 A. 2-3-4 KADEMELİ / Steps

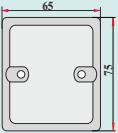
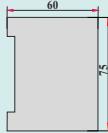
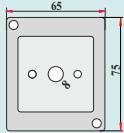
**KUT IP 6505**

**10.6 - IP 65 BÜYÜK BOY UZUN ŞALTER KUTUSU  
IP 65 LARGE SIZE LONG ENCLOSURE BOX**



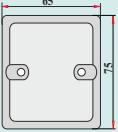
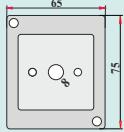
1-2-3-4 FAZ / Phase 40-50-63-80 A. AÇ-KAPA / On - Off  
1-2-3-4 FAZ / Phase 40-50-63-80 A. KUTUP DEĞİŞİTRİCİ / Changeover  
1-2-3-4 FAZ / Phase 40-50-63-80 A. ENVERSÖR / Reversing  
1-2-3-4 FAZ / Phase 40-50-63-80 A. YILDIZ ÜÇGEN VE ÇİFT DEVİR MOT.SALTER / Star Delta and Double Speed Motor Control  
1-2-3-4 FAZ / Phase 100-125 A. AÇ-KAPA / On - Off  
1-2 FAZ / Phase 100-125 A. KUTUP DEĞİŞİTRİCİ / Changeover  
1-2 FAZ / Phase 100-125 A. ENVERSÖR / Reversing

DUAH BÜYÜK ŞALTERLER İÇİN LÜTFEN  
POLYESTER VE ABS PANOLARIMIZI TERCİH EDİNİZ.  
YOU NEED TO USE OUR POLYESTER  
AND ABS ENCLOSURES FOR LARGER CAM SWITCHES.

ÖN GÖRÜNÜŞ  
FRONTYANDAN GÖRÜNÜŞ  
SIDEALT KAPAK  
BOTTOMSON ÜRÜN  
FINAL PRODUCTUYGUN ŞALTERLER  
SUITABLE SWITCHES10.7 - IP 54 MINİK BOY ŞALTER KUTUSU  
IP 54 MINI SIZE ENCLOSURE BOX

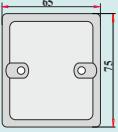
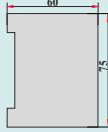
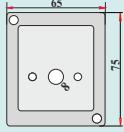
1-2-3-4 FAZ / Phase 10A. PAKO (AÇ-KAPA) / On - Off  
1-2 FAZ / Phase 10A. KUTUP DEĞİŞTİRİCİ / Changeover  
1 FAZ / Phase 10A. 2-3-4 KADEMELİ / Steps  
1-2 FAZ / Phase 10A. ENVERSÖR / Reversing

KUT M 00

10.8 - IP 54 BÜYÜK BOY ŞALTER KUTUSU  
IP 54 LARGE SIZE ENCLOSURE BOX

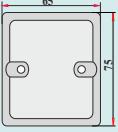
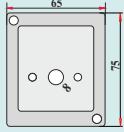
1-2-3-4 FAZ / Phase 10 A. AÇ-KAPA / On - Off  
1-2-3-4 FAZ / Phase 10 A. KUTUP DEĞİŞTİRİCİ / Changeover  
1-2-3-4 FAZ / Phase 10 A. 1-2-3-4-5-6-7 KADEMELİ / Steps

KUT M 01

10.9 - IP 54 MINİK BOY ETİKETLİ ŞALTER KUTUSU  
IP 54 MINI SIZE LABELED ENCLOSURE BOX

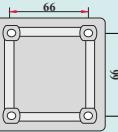
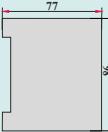
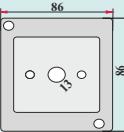
1-2-3-4 FAZ / Phase 10A. PAKO (AÇ-KAPA) / On - Off  
1-2 FAZ / Phase 10A. KUTUP DEĞİŞTİRİCİ / Changeover  
1 FAZ / Phase 10A. 2-3-4 KADEMELİ / Steps  
1-2 FAZ / Phase 10A. ENVERSÖR / Reversing

KUT ME 00

10.10 - IP 54 BÜYÜK BOY ETİKETLİ ŞALTER KUTUSU  
IP 54 LARGE SIZE LABELED ENCLOSURE BOX

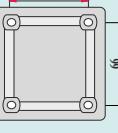
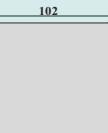
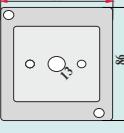
1-2-3-4 FAZ / Phase 10 A. AÇ-KAPA / On - Off  
1-2-3-4 FAZ / Phase 10 A. KUTUP DEĞİŞTİRİCİ / Changeover  
1-2-3-4 FAZ / Phase 10 A. 1-2-3-4-5-6-7 KADEMELİ / Steps

KUT ME 01

10.11 - IP 54 ORTA BOY KISA ŞALTER KUTUSU  
IP 54 MEDIUM SIZE SHORT ENCLOSURE BOX

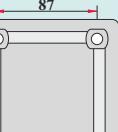
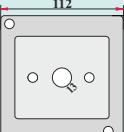
1-2-3-4 FAZ / Phase 16-20-25-32A. AÇ KAPA / On - Off  
1-2 FAZ / Phase 16-20-25-32A. KUTUP DEĞİŞTİRİCİ / Changeover  
1-2 FAZ / Phase 16-20-25-32A. ENVERSÖR / Reversing

KUT 00

10.12 - IP 54 ORTA BOY UZUN PAKET  
IP 54 MEDIUM SIZE LONG ENCLOSURE BOX

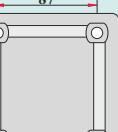
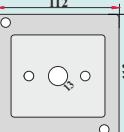
1-2-3-4 FAZ / Phase 16-20-25-32 A. AÇ KAPA / On - Off  
1-2-3-4 FAZ / Phase 16-20-25-32 A. KUTUP DEĞİŞTİRİCİ / On - Off  
1-2-3-4 FAZ / Phase 16-20-25-32 A. ENVERSÖR / Reversing  
1 FAZ / Phase 1-2-3-4-5-6-7 KADEMELİ / Steps

KUT 01

10.13 - IP 54 BÜYÜK BOY KISA ŞALTER KUTUSU  
IP 54 LARGE SIZE SHORT ENCLOSURE BOX

1-2-3-4 FAZ / Phase 40-50-63-80 A. AÇ-KAPA / On - Off  
1-2 FAZ / Phase 40-50-63-80 A. KUTUP DEĞİŞTİRİCİ / Changeover

KUT 02

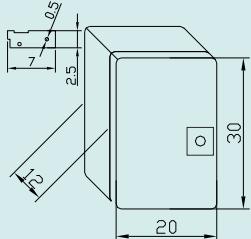
10.14 - IP 54 BÜYÜK BOY UZUN ŞALTER KUTUSU  
IP 54 LARGE SIZE LONG ENCLOSURE BOX

1-2-3-4 FAZ / Phase 40-50-63-80 A. KUTUP DEĞİŞTİRİCİ / Changeover  
1-2-3-4 FAZ / Phase 40-50-63-80 A. ENVERSÖR / Reversing  
1-2-3-4 FAZ / Phase 40-50-63-80 A. YILDIZ ÜÇGEN VE ÇİFT DEVİR MOT.ŞALTER / Star Delta and Double Speed Motor Control  
1-2 FAZ / Phase 100-125 A. AÇ KAPA / On - Off  
1-2 FAZ / Phase 100-125 A. KUTUP DEĞİŞTİRİCİ / Changeover  
1-2 FAZ / Phase 100-125 A. ENVERSÖR / Reversing

KUT 03

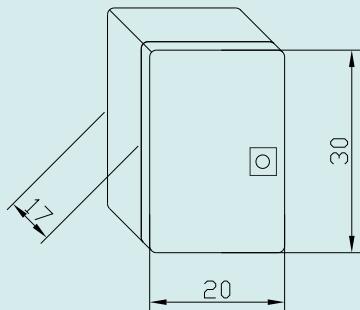
ÇİZİM  
DRAWINGİÇ GÖRÜNÜŞ  
INTERIOR VIEWDIŞ GÖRÜNÜŞ  
EXTERIOR VIEW

11.1 - 20cm X 30cm X 12cm TABAN SACLI POLYESTER PANO  
20cm X 30cm X 12cm POLYESTER ENCLOSURES WITH BASE PLATE



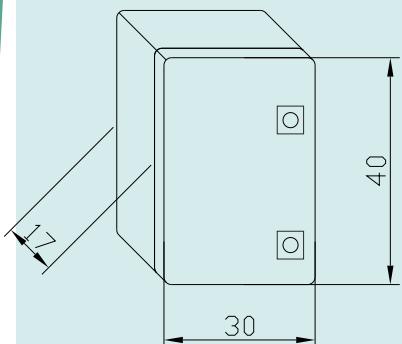
OPN 20x30x12

11.2 - 20cm X 30cm X 17cm TABAN SACLI POLYESTER PANO  
20cm X 30cm X 17cm POLYESTER ENCLOSURES WITH BASE PLATE



OPN 20x30x17

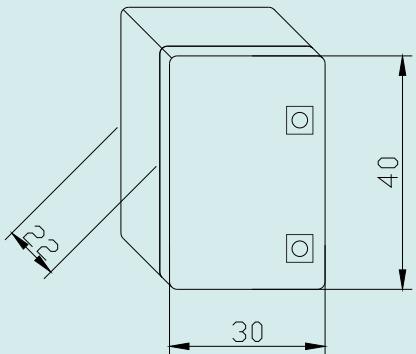
11.3 - 30cm X 40cm X 17cm TABAN SACLI POLYESTER PANO  
30cm X 40cm X 17cm POLYESTER ENCLOSURES WITH BASE PLATE



OPN 30x40x17

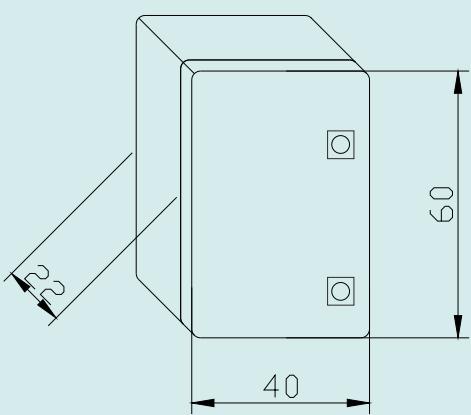
ÇİZİM  
DRAWINGİÇ GÖRÜNÜŞ  
INTERIOR VIEWDIŞ GÖRÜNÜŞ  
EXTERIOR VIEW

11.4 - 30cm X 40cm X 22cm TABAN SACLI POLYESTER PANO  
30cm X 30cm X 22cm POLYESTER ENCLOSURES WITH BASE PLATE



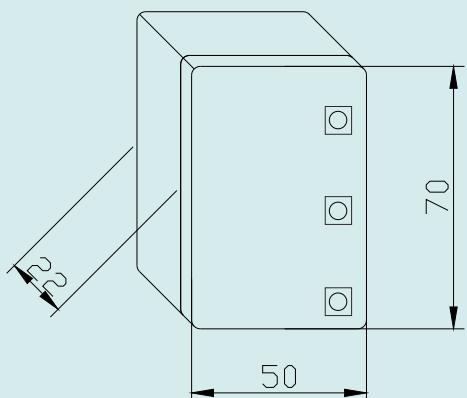
OPN 30x40x22

11.5 - 40cm X 60cm X 22cm TABAN SACLI POLYESTER PANO  
40cm X 60cm X 22cm POLYESTER ENCLOSURES WITH BASE PLATE



OPN 40x60x22

11.6 - 50cm X 70cm X 22cm POLYESTER TABAN SACLI PANO  
50cm X 70cm X 22cm POLYESTER ENCLOSURES WITH BASE PLATE



OPN 50x70x22



## POLYESTER PANOLAR IP 65

## POLYESTER ENCLOSURES IP 65

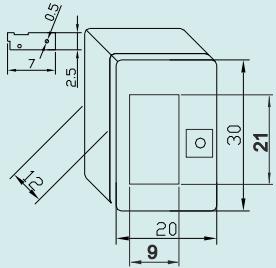
IP 65 POLYESTER PANOLAR  
IP 65 POLYESTER ENCLOSURES

ÇİZİM  
DRAWING

İÇ GÖRÜNÜŞ  
INTERIOR VIEW

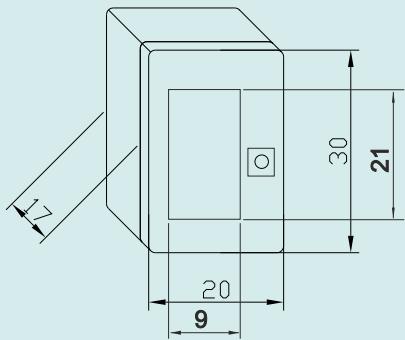
DIŞ GÖRÜNÜŞ  
EXTERIOR VIEW

11.7 - 20cm X 30cm X 12cm POLYESTER PLEKSİGLAS ŞEFFAF CAMLI PANO  
20cm X 30cm X 12cm POLYESTER ENCLOSURES WITH TRANSPARENT PLEXIGLASS WINDOW



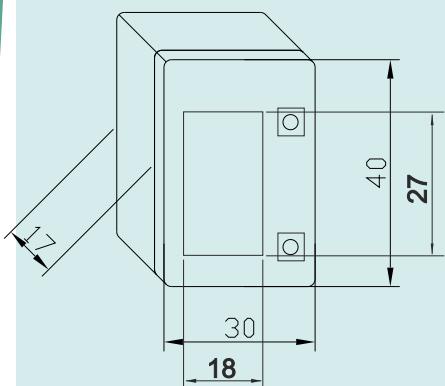
OPN 20x30x12

11.8 - 20cm X 30cm X 17cm POLYESTER PLEKSİGLAS ŞEFFAF CAMLI PANO  
20cm X 30cm X 17cm POLYESTER ENCLOSURES WITH TRANSPARENT PLEXIGLASS WINDOW



OPN 20x30x17

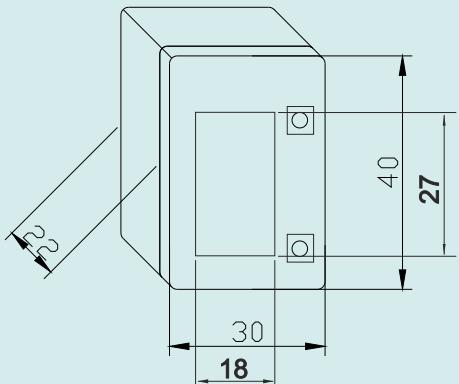
11.9 - 30cm X 40cm X 17cm POLYESTER PLEKSİGLAS ŞEFFAF CAMLI PANO  
30cm X 40cm X 17cm POLYESTER ENCLOSURES WITH TRANSPARENT PLEXIGLASS WINDOW



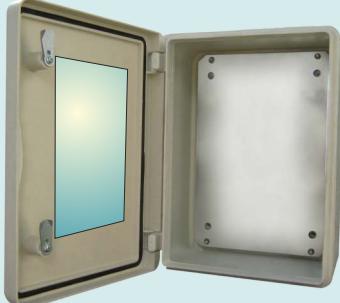
OPN 30x40x17

ÇİZİM  
DRAWINGİÇ GÖRÜNÜŞ  
INTERIOR VIEWDIŞ GÖRÜNÜŞ  
EXTERIOR VIEW

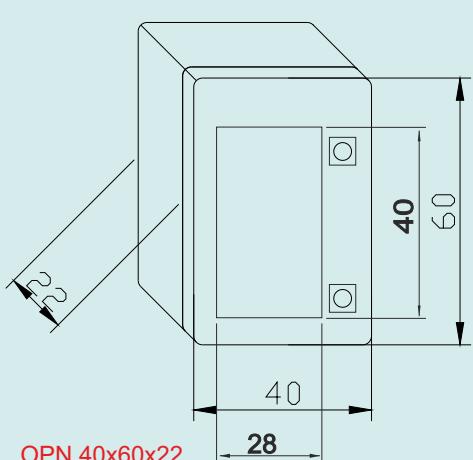
11.10 - 30cm X 40cm X 22cm POLYESTER PLEKSİGLAS ŞEFFAF CAMLI PANO  
 30cm X 30cm X 22cm POLYESTER ENCLOSURES WITH TRANSPARENT PLEXIGLASS WINDOW



OPN 30x40x22



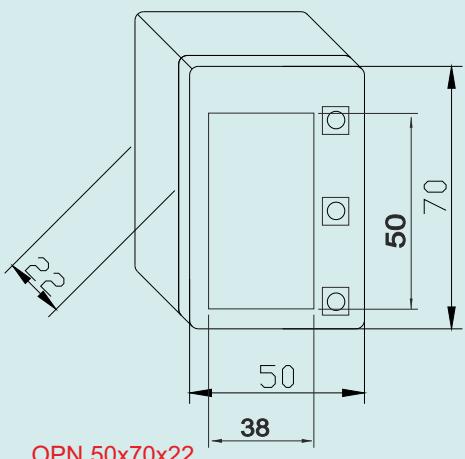
11.11 - 40cm X 60cm X 22cm POLYESTER PLEKSİGLAS ŞEFFAF CAMLI PANO  
 40cm X 60cm X 22cm POLYESTER ENCLOSURES WITH TRANSPARENT PLEXIGLASS WINDOW



OPN 40x60x22



11.12 - 50cm X 70cm X 22cm POLYESTER PLEKSİGLAS ŞEFFAF CAMLI PANO  
 50cm X 70cm X 22cm POLYESTER ENCLOSURES WITH TRANSPARENT PLEXIGLASS WINDOW

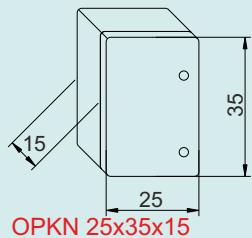


OPN 50x70x22

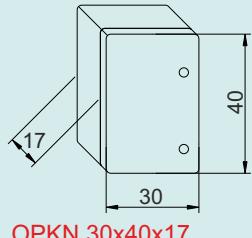


ÇİZİM  
DRAWINGİÇ GÖRÜNÜŞ  
INTERIOR VIEWDIŞ GÖRÜNÜŞ  
EXTERIOR VIEW

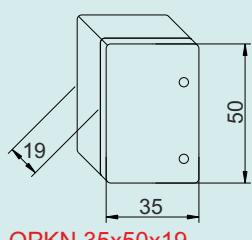
12.1 - 25cm X 35cm X 15cm OPAK KAPAKLI POLİKARBONAT / ABS PANO  
25cm X 35cm X 15cm POLYCARBONATE / ABS ENCLOSURES WITH OPAQUE DOOR



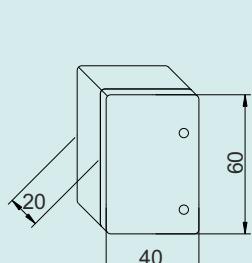
12.2 - 30cm X 40cm X 17cm OPAK KAPAKLI POLİKARBONAT / ABS PANO  
30cm X 40cm X 17cm POLYCARBONATE / ABS ENCLOSURES WITH OPAQUE DOOR



12.3 - 35cm X 50cm X 19cm OPAK KAPAKLI POLİKARBONAT / ABS PANO  
35cm X 50cm X 19cm POLYCARBONATE / ABS ENCLOSURES WITH OPAQUE DOOR

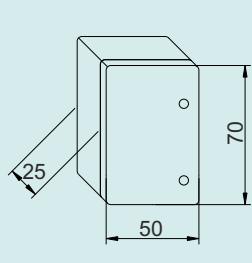


12.4 - 40cm X 60cm X 20cm OPAK KAPAKLI POLİKARBONAT / ABS PANO  
40cm X 60cm X 20cm POLYCARBONATE / ABS ENCLOSURES WITH OPAQUE DOOR



OPKN 40x60x20

12.5 - 50cm X 70cm X 25cm OPAK KAPAKLI POLİKARBONAT / ABS PANO  
50cm X 70cm X 25cm POLYCARBONATE / ABS ENCLOSURES WITH OPAQUE DOOR



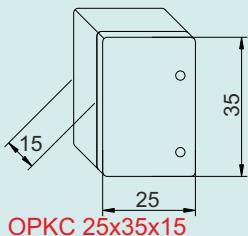
OPKN 50x70x25

**ÇİZİM**  
 DRAWING

**İÇ GÖRÜNÜŞ**  
 INTERIOR VIEW

**DIŞ GÖRÜNÜŞ**  
 EXTERIOR VIEW

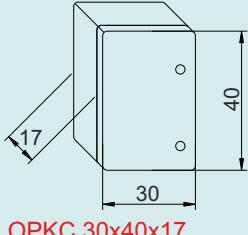
12.6 - 25cm X 35cm X 15cm CAM KAPAKLI POLİKARBONAT / ABS PANO  
 25cm X 35cm X 15cm POLYCARBONATE / ABS ENCLOSURES WITH TRANSPARENT DOOR



OPKC 25x35x15



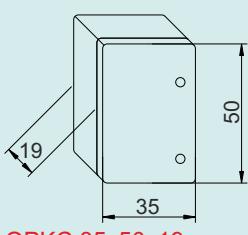
12.7 - 30cm X 40cm X 17cm CAM KAPAKLI POLİKARBONAT / ABS PANO  
 30cm X 40cm X 17cm POLYCARBONATE / ABS ENCLOSURES WITH TRANSPARENT DOOR



OPKC 30x40x17



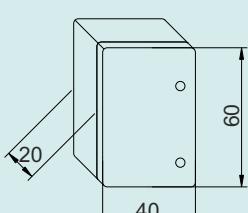
12.8 - 35cm X 50cm X 19cm CAM KAPAKLI POLİKARBONAT / ABS PANO  
 35cm X 50cm X 19cm POLYCARBONATE / ABS ENCLOSURES WITH TRANSPARENT DOOR



OPKC 35x50x19



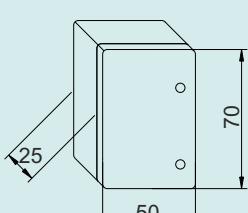
12.9 - 40cm X 60cm X 20cm CAM KAPAKLI POLİKARBONAT / ABS PANO  
 40cm X 60cm X 20cm POLYCARBONATE / ABS ENCLOSURES WITH TRANSPARENT DOOR



OPKC 40x60x20



12.10 - 50cm X 70cm X 25cm CAM KAPAKLI POLİKARBONAT / ABS PANO  
 50cm X 70cm X 25cm POLYCARBONATE / ABS ENCLOSURES WITH TRANSPARENT DOOR



OPKC 50x70x25



Tesislerimizde üretimini yaptığımız  
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kontrolleri yapılarak  
piyasaya sunulmaktadır.



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throughout the entire production  
cycle from design and construction  
to test on each component used in  
manufacturing and testing the final product.*

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**2010**

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