

**PAYDAR
PARTO.CO**

*Knowledge & Validity
Constant Creativity*

پایدار پرتو سپهر



WHO

WE ARE 

Knowledge & Validity

Constant Creativity

We are a team of industry specialists within a privately owned company, effectively serving a Iran market with a focus on local presence and long-term relationships.

Paydar Parto Sepehr Company is trying to be a reliable and strong business partner with its employers by using its domestic organizations and experts in Iran as well as its facilities and resources in its overseas office located in Turkey.

We understand project supply and we look to tailor our business and supply solutions to meet your specific requirements.

Paydar Parto believes that the most profitable relationships are based on mutual understanding, knowledge of our customer requirements and delivering a first-class customer service to ensure those requirements are met.

ما تیمی از متخصصین صنعت برق در شرکت پایدار پرتو سپهر (سهامی خاص) هستیم که به طور موثر به صنایع کشور با تمرکز بر رفع نیازهای کوتاه و بلند مدت خدمت می‌کنیم.

شرکت پایدار پرتو سپهر با بهره‌گیری از تشکیلات و کارشناسان داخلی خود در ایران و همچنین امکانات و منابع خود در دفتر خارج از کشور واقع در ترکیه در تلاش است به عنوان یک شریک تجاری مطمئن و قوی در کنار کارفرمایان سهم خود را در پایداری و رونق صنایع میهن عزیزمان ایفا نماید.

پایدار پرتو معتقد است که سودآورترین روابط مبتنی بر درک متقابل، آگاهی از نیازهای مشتریان و ارائه خدمات درجه یک به مشتریان برای اطمینان از برآورده شدن این نیازهاست.

Constant Creativity

- *Dedicated Supply Management Team
- *Innovative Supply Chain Solutions
- *Bespoke Transport Services
- *Bespoke Assembly Services

مدیران Management



حسابداری و مالی Accounting Clerical



فروش Sales



پشتیبانی فروش Sales Support



انبار و لجستیک Warehousing Logistics



فنی و مهندسی Technical Speciality





Oil Gas &
Petrochemical



Commercial



Pharmaceutical



Marine



Industrial



Nuclear



Rail



Renewables

نفت، گازو
پتروشیمی

بازرگانی



پزشکی و دارویی



دریایی



صنایع



مراکز نظامی

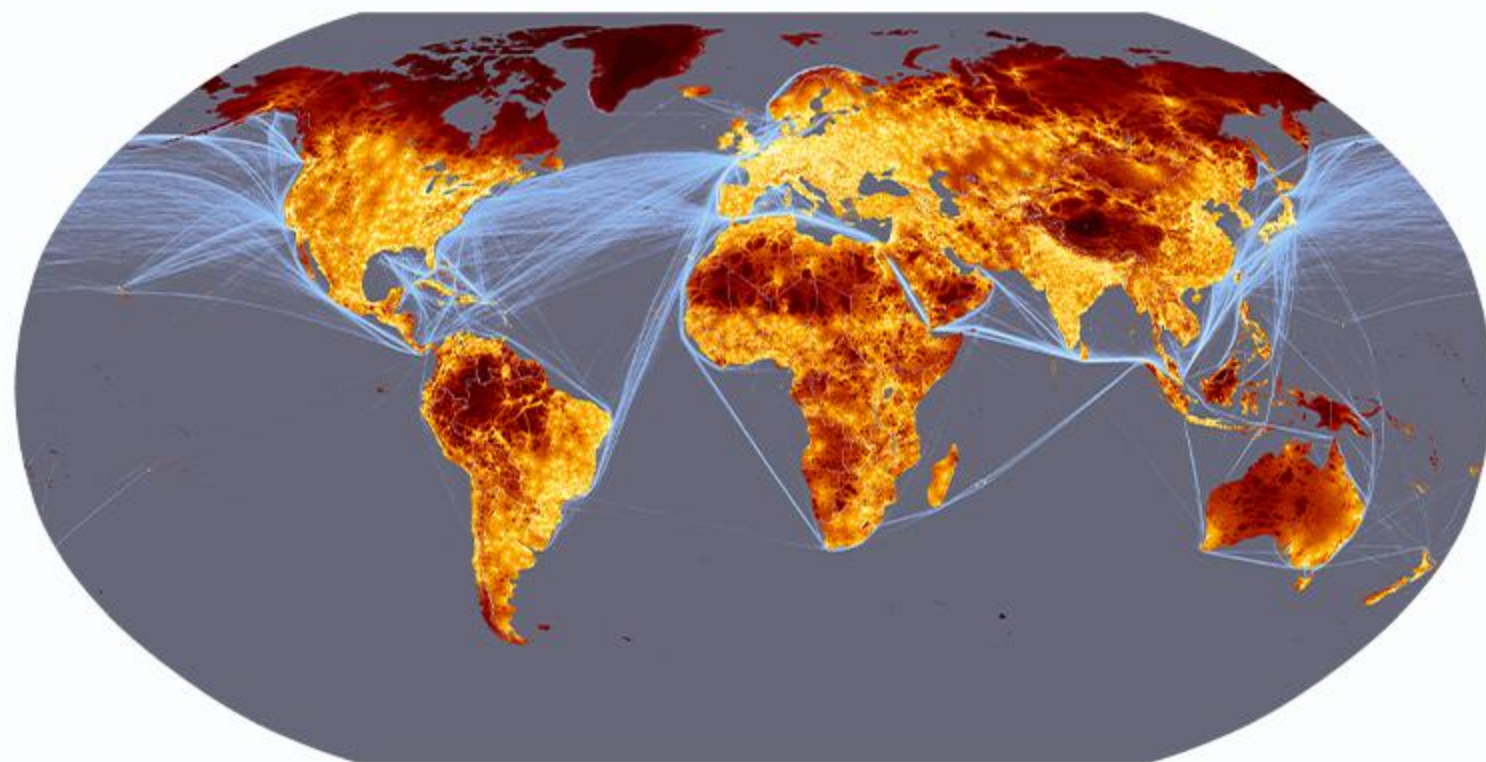


مترو و حمل و نقل

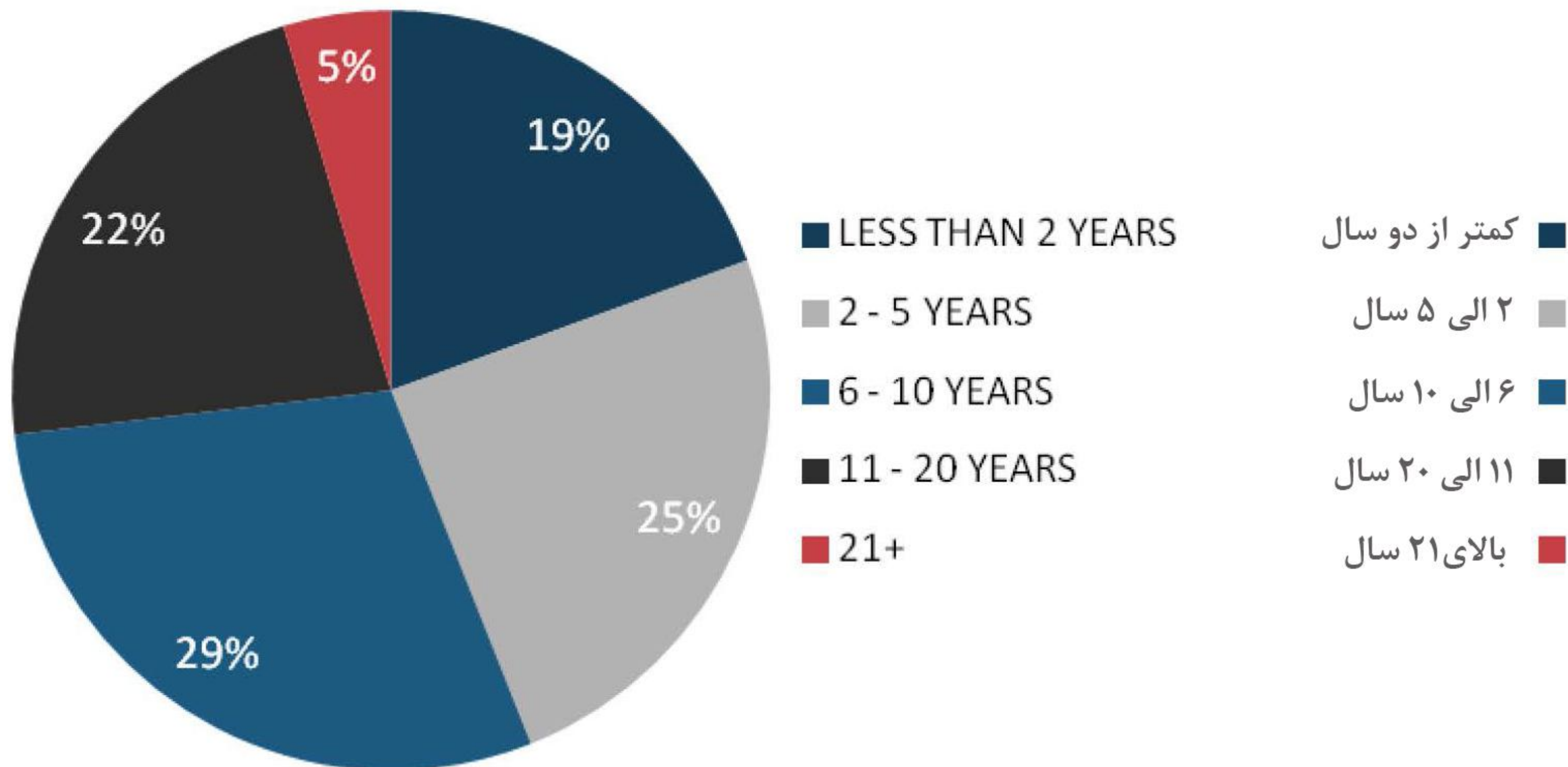


انرژی های تجدیدپذیر

- ✓ *Wide range of products*
- ✓ *Extensive Electrical and Instrumentation Inventory*
- ✓ *Industrial Distribution Board Fix and Draw out (MV, LV)*
- ✓ *Supply Of Cable Tray and Ladder*
- ✓ *Experienced and Knowledgeable Staff*
- ✓ *Industry and Supply Specialists*
- ✓ *Dedicated Project and Supply Management Team*
- ✓ *Dedicated Documentation Team*
- ✓ *Dedicated Bid Team*
- ✓ *Innovative Supply Chain Solutions*
- ✓ *Nationwide Delivery Service / Fleet of Vehicles*
- ✓ *International Logistic Solutions*



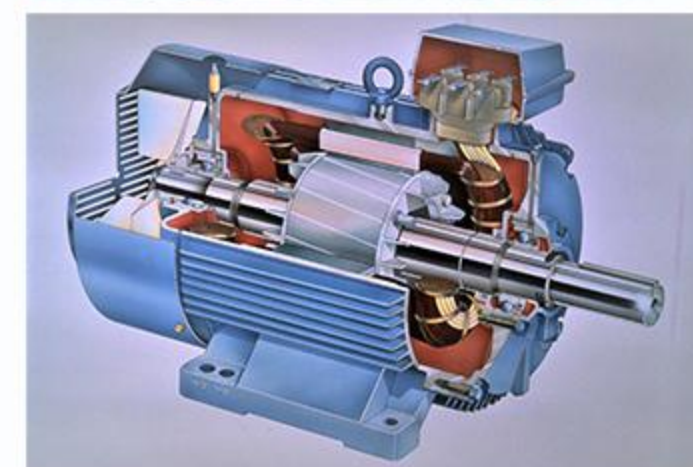
- ✓ طیف گسترده ای از محصولات
- ✓ موجودی گسترده تجهیزات برق و ابزار دقیق
- ✓ انواع تابلوهای برق صنعتی فیکس و کشویی فشار ضعیف و متوسط
- ✓ تامین سینی کابل و نردبان
- ✓ کادری مجرب و آگاه
- ✓ متخصصان صنعت و تامین
- ✓ تیم اختصاصی مدیریت پروژه و تامین
- ✓ تیم اختصاصی اسناد
- ✓ تیم پیشنهادی اختصاصی
- ✓ راه حل های نوآورانه زنجیره تامین
- ✓ خدمات ارسال به سراسر کشور / ناوگان حمل و نقل
- ✓ راه حل های لجستیک بین المللی



WHAT

WE OFFER OUR CUSTOMERS 

- Low Voltage Equipment
- Medium Voltage Equipment
- MV and LV Switchgear
- Generation and Transmission Equipment
- Instrumentation
- Protection, Safety and Security systems
- Electrical Motors



- تجهیزات فشار ضعیف
- تجهیزات فشار متوسط
- انواع تابلوهای برق فشار ضعیف و فشار متوسط
- تجهیزات تولید و انتقال برق
- ابزار دقیق
- سیستم های حفاظتی و امنیتی
- انواع موتورهای الکتریکی



● Air Circuit Breaker

● کلید اتوماتیک هوایی

An air Circuit Breaker (ACB) is an electrical device used to provide Overcurrent and short circuit protection for electric circuits over 630 Amps to 10K Amps. These are usually used in low voltage applications below 450V. We can find these systems in Distribution Panels (below 450V). Here in this article, we will discuss the working of Air Circuit Breaker. Air circuit breaker is circuit operation breaker that operates in the air as an arc extinguishing medium, at a given atmospheric pressure. There are several types of Air circuit breakers and switching gears available in the market today that is durable, high-performing, easy to install and maintain. The air circuit breakers have completely replaced oil circuit breakers.



● Moulded Case Circuit Breaker

● کلید اتوماتیک کامپکت

The molded case circuit breaker (MCCB) is a device that protects low voltage power distribution systems against overloads and short circuits. A molded case circuit breaker allows a circuit to be reactivated quickly after a short circuit or overload is cleared.

An MCCB (molded case circuit breaker) can easily recognize the difference between an overcurrent and a short circuit. It allows a slight overcurrent for a while, but as the current level increases, it opens faster. MCCB is available to accomplish protection and disconnection functions.

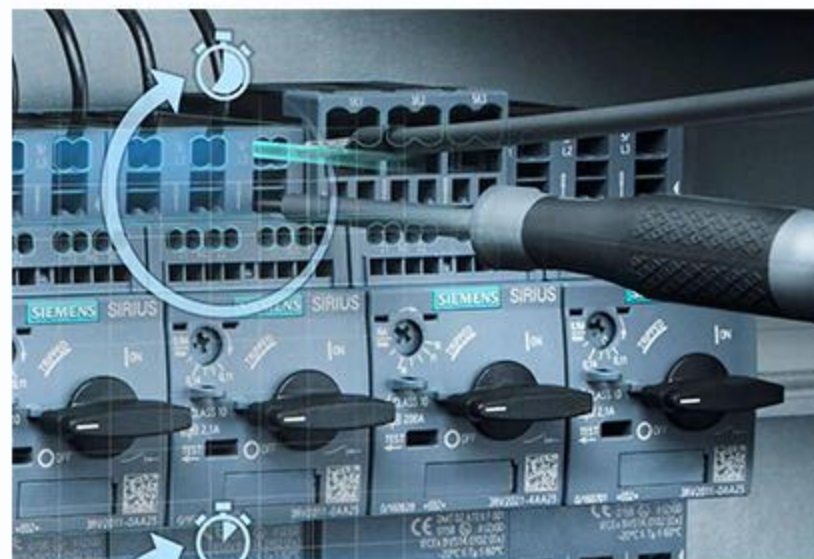


● Motor Protection Circuit Breaker

● کلید حفاظت موتور

The MPCB is a protection device that integrates circuit breaker and overload relay functions. It protects the electrical motor from overload, short-circuit, and phase-loss. It can be used as a disconnecter by using its handle and isolates the motor from the main supply.

After detecting an overload or short circuit, the manual motor starter disconnects all phases from the supply and isolates the motor from the supply. In addition, manual motor starters increase the device's reliability by reacting very quickly. It protects load-side circuits against damage.



● Miniature Circuit Breaker

● کلید مینیاتوری

A miniature circuit breaker (MCB) is an Electrical Switch which automatically switches off the electrical circuit during an abnormal condition of the network means in overload condition as well as faulty condition. Nowadays we use an MCB in a low voltage electrical network instead of a fuse. The fuse may not sense it but the miniature circuit breaker does it in a more reliable way. MCB is much more sensitive to overcurrent than a fuse.

● Contactor

کنتاکتور ●

A contactor is an electromechanical switch whose function is to make or break the connection between the power supply and the load. The contactor is electrically controlled and usually powered at a much lower level than the switched circuit. For example, you would have a -24volt coil electromagnet that controls a -230volt motor switch.

A contactor's applications include controlling electric motors, thermal evaporators, lighting, capacitor banks, heating, and other electrical loads. Contactors range in size and capacity. You have those that you can easily lift with your hand to massive ones measuring about a meter on the side. You also have those with a breaking current ranging from a few amperes to thousands of amperes and those from 24V DC to many kilo volts.



● Over Load Relay

بیمتال ●

An overload relay can be defined as, it is an electrical device mainly designed for imitating the heating prototypes of the electric motor, as well as breakups the flow of current when the heat-detecting device in the relay attains a fixed temperature. The designing of an overload relay can be done with a heater coupled with generally closed connections that unlock when once the heater acquires too hot. The connections of this relay can be done in series as well as placed among the motor & contactor itself to avoid the motor from restarting when the overload trips.



● Residual Current Circuit Breaker with OverCurrent Protection

● کلید حفاظت نشت جریان ترکیبی

The residual current device (RCD) or residual current circuit breaker (RCCB) enables the rapid disconnection of electricity, thereby avoiding prolonged and potentially serious shocks. An RCD device complete with overcurrent protection is called an RCBO, or residual current circuit breaker with overcurrent protection.

The primary functions of RCBOs are to ensure protection against earth fault currents, overload, and short circuit currents. It is recommended that an RCBO be attached to each separate circuit, meaning that a fault in one circuit will not affect the functioning of the others. Such devices allow for disconnection of the circuit for the protection of people and equipment in the event that the current becomes unbalanced. They can be operated exclusively of other overcurrent protective devices within the rated short-circuit capacity.

Design and testing requirements for RCBOs are outlined in the set of standards: IEC/EN 61009: Residual current circuit-breakers with integral overload protection for household and similar uses (RCBO).



● Residual Current Circuit Breaker

● کلید حفاظت نشت جریان

While electricity has become an indispensable component of our lives, the fact is, it comes with its own hazards to human life and property. Electrocution and fire being the two major risks associated with electricity, one cannot afford to be negligent when it comes to insulating equipment.

A Residual Current Circuit Breaker (RCCB) is an important safety measure when it comes to protection of electrical circuits. It is a current sensing device, which can automatically measure and disconnect the circuit whenever a fault occurs in the connected circuit or the current exceeds the rated sensitivity.

● Variable Frequency Drive

درايو

A Variable Frequency Drive (VFD) is a type of motor controller that drives an electric motor by varying the frequency and voltage supplied to the electric motor. Other names for a VFD are variable speed drive, adjustable speed drive, adjustable frequency drive, AC drive, micro drive, and inverter.

Frequency (or hertz) is directly related to the motor's speed (RPMs). In other words, the faster the frequency, the faster the RPMs go. If an application does not require an electric motor to run at full speed, the VFD can be used to ramp down the frequency and voltage to meet the requirements of the electric motor's load. As the application's motor speed requirements change, the VFD can simply turn up or down the motor speed to meet the speed requirement.

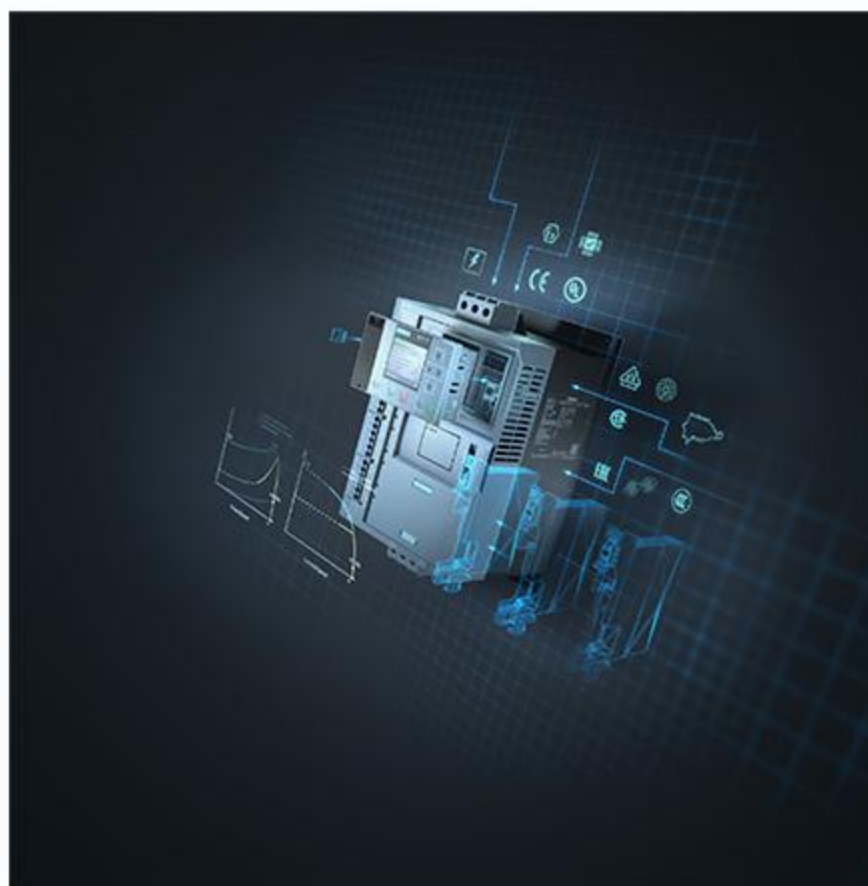


● Soft Starter

سافت استارتر

Essentially, a soft starter works by controlling the amount of voltage running through the motors circuits. It does this by limiting torque in the motor. This in turn allows the soft starter to reduce the voltage and allows it to gradually stop reducing the voltage to allow for a smooth progression of current.

In addition to this, certain soft starter models may use solid-state devices. These devices are another means of controlling the amount of electrical current allowed to flow through the motor. This lets the soft starter control the current in three separate, distinct phases to allow for more precise levels of control.



● Vacuum Circuit Breaker

● کلید خلاء

The Vacuum interrupter technology was first introduced in the year of 1960. But still, it is a developing technology. As time goes on, the size of the vacuum interrupter has reduced from its early 1960's size due to different technical developments in this field of engineering. A Vacuum circuit breaker is a device that, interrupts an electric circuit to prevent unwarranted current, caused by a short circuit, typically resulting from an overload. Its basic functionality is to interrupt current flow after a fault is detected. Having detected the fault, the relay operates to close the trip circuit of the breaker. This results in the opening of the breaker and disconnection of the faulty circuit.

Medium Voltage Circuit Breaker



● SF6 Gas Circuit Breaker

● کلید گازی SF6

In SF6 circuit breakers, sulphur hexafluoride (SF6) gas is used as the arc quenching medium. The SF6 is an electro-negative gas and has a strong tendency to absorb free electrons. The contacts of the breaker are opened in a high-pressure flow of SF6 gas and an arc is struck between them. The conducting free electrons in the arc are rapidly captured by the gas to form relatively immobile negative ions. This loss of conducting electrons in the arc quickly builds up enough insulation strength to extinguish the arc. The SF6 circuit breakers have been found to be very effective for high power and high voltage service.



● Load Break Switch

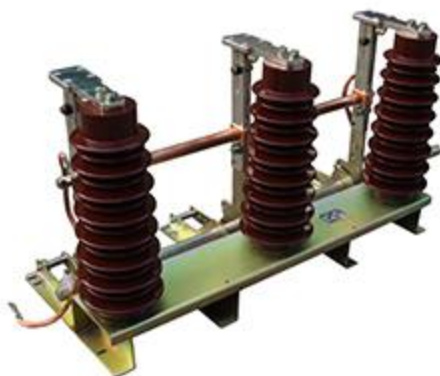
سکسیونر ●

A load break switch is a disconnect switch that has been designed to provide making or breaking of specified currents.

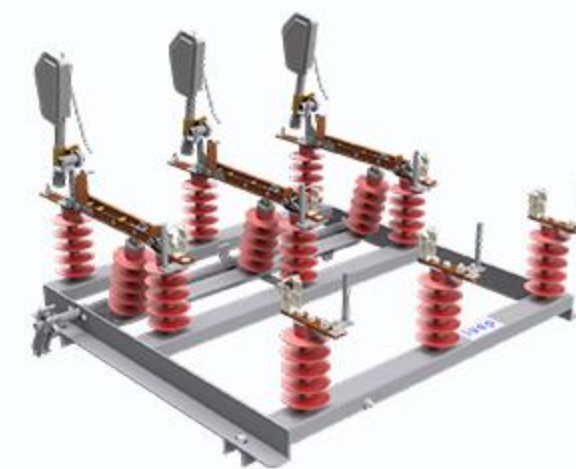
This is accomplished by addition of equipment that increases the operating speed of the disconnect switch blade and the addition of some type of equipment to alter the arcing phenomena and allow the safe interruption of the arc resulting when switching load currents.

Disconnect switches can be supplied with equipment to provide a limited load switching capability.

These switches are used to de-energize or energize a circuit that possesses some limited amount of magnetic or such as transformer exciting current or line charging currents.



SF6 load break switch(12kV 210mm)

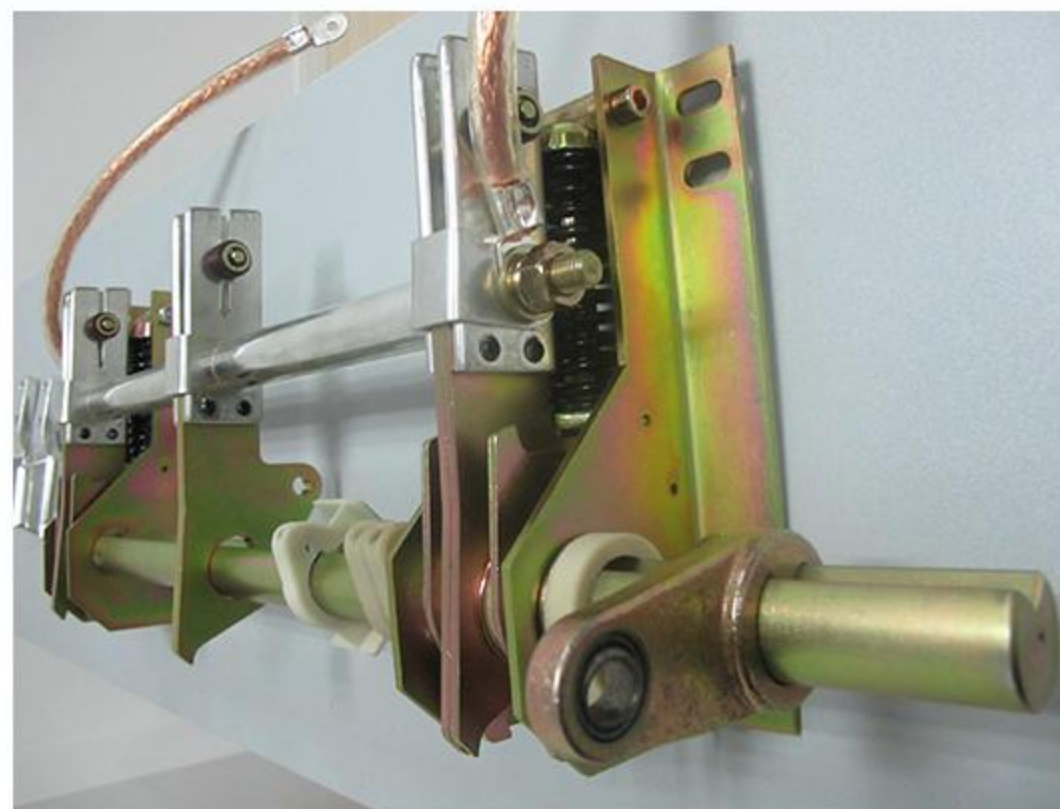


● Earth Switch

ارت سویچ ●

Earthing switches are made of 11 kV ,22 kV and 33 kV as per customer design. Earthing switches provided for earthing line / cable. Earthing switch is capable of carrying short time current 40 kA or 50 kA for 1 sec with 102 kA peak. The earthing switch is also capable of making 102 kA peak at 12 kV and 33 kV (full fault making capacity).

The switch operation is governed by spring and is independent of manual operation. Once the spring is released, closing operation is taken care by the spring and a very fast closing is achieved.



● Protection Relay

● رله های حفاظتی

The protective relay was invented more than 160 years ago. During the last 60 years, it has undergone considerable change, the most obvious of which is its reduction in size. A protective relay is a switchgear device that detects the fault and initiates the operation of the circuit breaker to isolate the defective element from the rest of the system. They are compact and self-contained devices which can detect abnormal conditions. Protective relays detect the abnormal conditions in the electrical circuits by constantly measuring the electrical quantities which are different under normal and fault conditions.

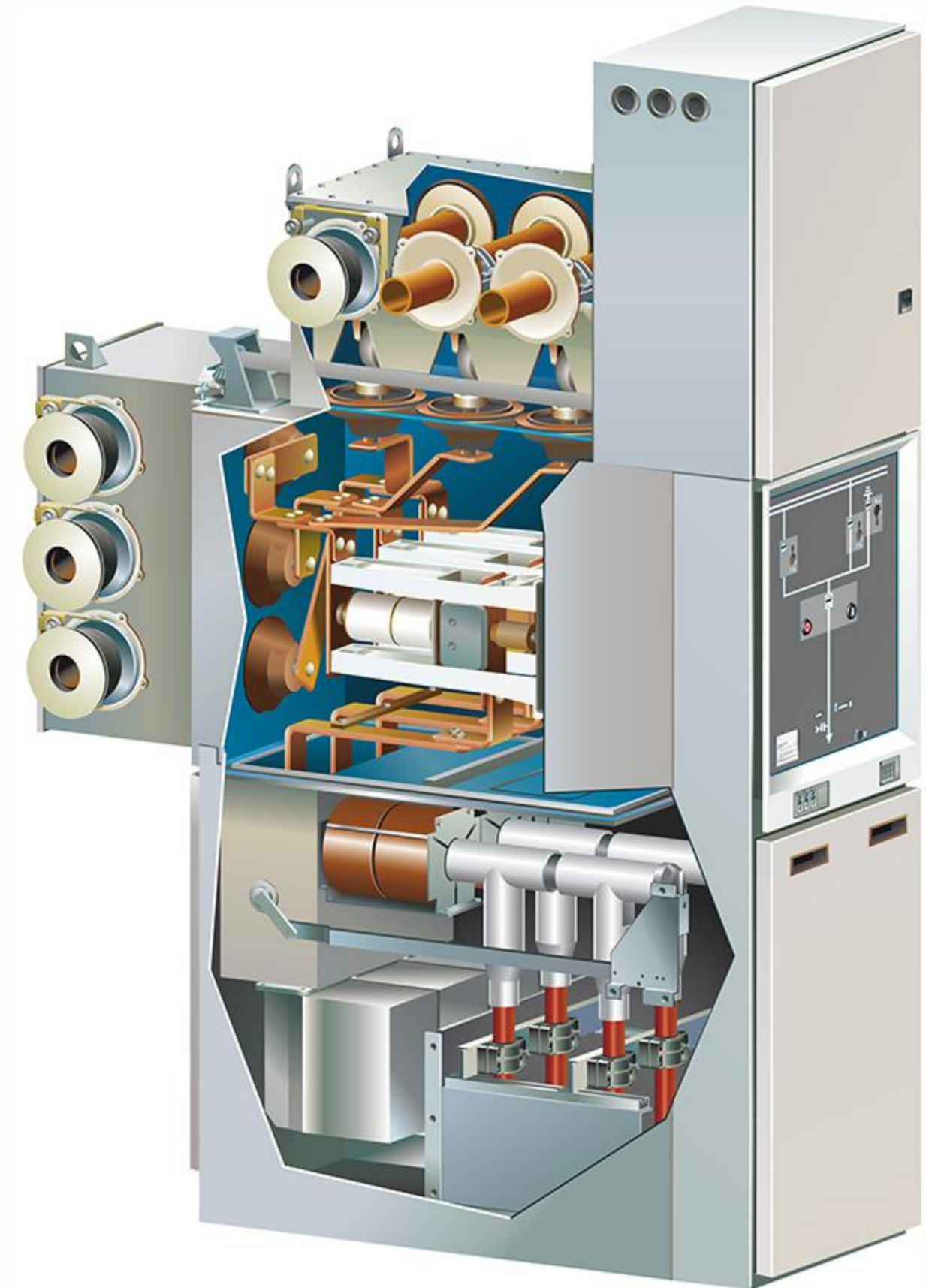
The electrical quantities which may change under fault conditions are voltage, current, frequency, and phase angle. Through the changes in one or more of these quantities, the faults signal their presence, type, and location to the protective relays.



● Gas Insulated Switchgear (GIS)

● تابلوی فشار متوسط با عایق گاز

Gas insulated switchgear (GIS) has sealed enclosure(s) filled with insulating gas sulfur hexafluoride (SF6) or mixture of SF6 and other insulating gases recently released to the market. The gas-filled sealed enclosure facilitates a compact, low-profile installation. The use of gas as an insulating medium, when compared to similar air-insulated switchgear, allows for the distance between interrupting components to be reduced. Gas-insulated pad-mounted switchgear is design and test in accordance to with ANSI standard C37.60 and C37.72.



● MV Meta-clad Switchgear

● تابلوی فشار متوسط با محفظه های جدا

Metal-clad switchgear is defined by IEEE C37.20.2 and refers to the construction of medium-voltage electrical switchgear where all electrical components including the incoming bus, outgoing bus, instrumentation and main circuit breaker or switch, are enclosed in separate metal compartments to provide an additional level of safety, ruggedness and ease of maintenance. Rated voltage levels for metal-clad switchgear range from 5 kV to 38 kV. Metal-clad switchgear features draw-out circuit breakers for ease of maintenance and is often applied in industrial facilities and in electrical power generation and power transmission facilities.



● MV Meta-enclosed Switchgear

● تابلوی فشار متوسط با محفظه های یکپارچه

Metal-enclosed switchgear is defined by IEEE C37.20.3. Metal-enclosed switchgear contains circuit protection devices including circuit breakers, power fuses and fusible switches as well as control and metering equipment. These devices can be mounted in common compartments and do not require the separate barriers, or compartmentalization required in metal-clad switchgear.



● LV Switchgear

● تابلوی فشار ضعیف

Low-voltage switchgear is often found on the secondary (low-voltage) side of a power distribution transformer. This transformer and switchgear combination is known as a substation. Low-voltage switchgear is typically used to feed low-voltage motor control centers (LV-MCC), low-voltage switchboards and other branch and feeder circuits. It is used to supply electricity for critical power and critical process applications such as those found in heavy industry, manufacturing, mining and metals, petrochemical, pulp and paper, utility, water treatment as well as datacenter and healthcare.



● Cable

Electrical cables are used to connect two or more devices, enabling the transfer of electrical signals or power from one device to the other. Cables are used for a wide range of purposes, and each must be tailored for that purpose. Cables are used extensively in electronic devices for power and signal circuits. Long-distance communication takes place over undersea cables. Power cables are used for bulk transmission of alternating and direct current power, especially using high-voltage cable. Electrical cables are extensively used in building wiring for lighting, power and control circuits permanently installed in buildings. Since all the circuit conductors required can be installed in a cable at one time, installation labor is saved compared to certain other wiring methods.

● کابل



● Busduct

باسداکت ●

A key part of electrical power distribution is bus duct. Also called busway, bus duct provides an alternative means of conducting electricity. Bus duct is used in commercial and industrial settings to conduct electricity to power cables or cable bus. Structurally, a bus duct is a sheet metal duct containing either aluminum or copper busbars (metallic strips or bars that conduct a substantial electrical current) in a grounded metal enclosure. Bus duct is easy to maintain and flexible, helping to accommodate changing load requirements.

According to Electrical Construction & Maintenance Magazine, an online resource for the electrical design and maintenance industry, busway was first introduced in 1932 for use in the automotive industry. Since then this product has grown and now serves many other industries.



Cast Resin Busduct

● Power Transformer

● ترانسفورماتور قدرت

A transformer is an electrical apparatus designed to convert alternating current from one voltage to another. It can be designed to "step up" or "step down" voltages and works on the magnetic induction principle. A transformer has no moving parts and is a completely static solid state device, which insures, under normal operating conditions, a long and trouble-free life. It consists, in its simplest form, of two or more coils of insulated wire wound on a laminated steel core. When voltage is introduced to one coil, called the primary, it magnetizes the iron core. A voltage is then induced in the other coil, called the secondary or output coil. The change of voltage (or voltage ratio) between the primary and secondary depends on the turns ratio of the two coils.



● Diesel Generator

● دیزل ژنراتور

The diesel generator is an equipment whose use is indicated for applications that require more power and for continuous operation. They convert the fuel into electrical energy, through the combustion of diesel.

This type of fuel, compared to others like gasoline, for example, is burned at a higher temperature, hence more efficient and ensure greater power to the generator. Diesel generators require regular maintenance to function properly.

It should be noted that diesel generators can be used extensively, can be switched on for hours, weeks, or simply until the main power returns. For this you must make sure that it is properly stocked so that it can fulfill its function.

As this type of generator is in operation for longer periods, it necessarily entails regular maintenance so that it can verify that all the components are in full operation.

It is important to pay attention to the engine of the generator, to maintain it and to lubricate it, since it will run continuously for hours on end and needs this care to maintain its efficiency. Diesel generators are a type of generator that has announced the advantage of being more economical and are suitable for cases where the main premise is a power supply for failures and with high efficiency for high powers such as the case of large industries.



● Uninterruptible Power Supply (UPS)

An uninterruptible power supply (UPS), also known as a battery backup, provides backup power when your regular power source fails or voltage drops to an unacceptable level. A UPS allows for the safe, orderly shutdown of a computer and connected equipment. The size and design of a UPS determine how long it will supply power.

UPS Topologies

Different UPS topologies provide specific levels of power protection. A Cyber Power UPS will belong to one of these three topologies: standby, line interactive, and double-conversion

Standby is the most basic UPS topology. A standby UPS resorts to battery backup power in the event of common power problems such as a blackout, voltage sag, or voltage surge. When incoming utility power drops below or surges above safe voltage levels, the UPS switches to DC battery power and then inverts it to AC power to run connected equipment. These models are designed for consumer electronics, entry-level computers, POS systems, security systems, and other basic electronic equipment.



A double-conversion (online) UPS provides consistent, clean, and near perfect power regardless of the condition of incoming power. This UPS converts incoming AC power to DC, and then back to AC. UPS systems with this technology operate on isolated DC power 100 percent of the time and have a zero transfer time because they never need to switch to DC power. Double-conversion UPS systems are designed to protect mission-critical IT equipment, data center installations, high-end servers, large telecom installations and storage applications, and advanced network equipment from damage caused by a power blackout, voltage sag, voltage surge, over voltage, voltage spike, frequency noise, frequency variation, or harmonic distortion.

● منابع تغذیه و ups

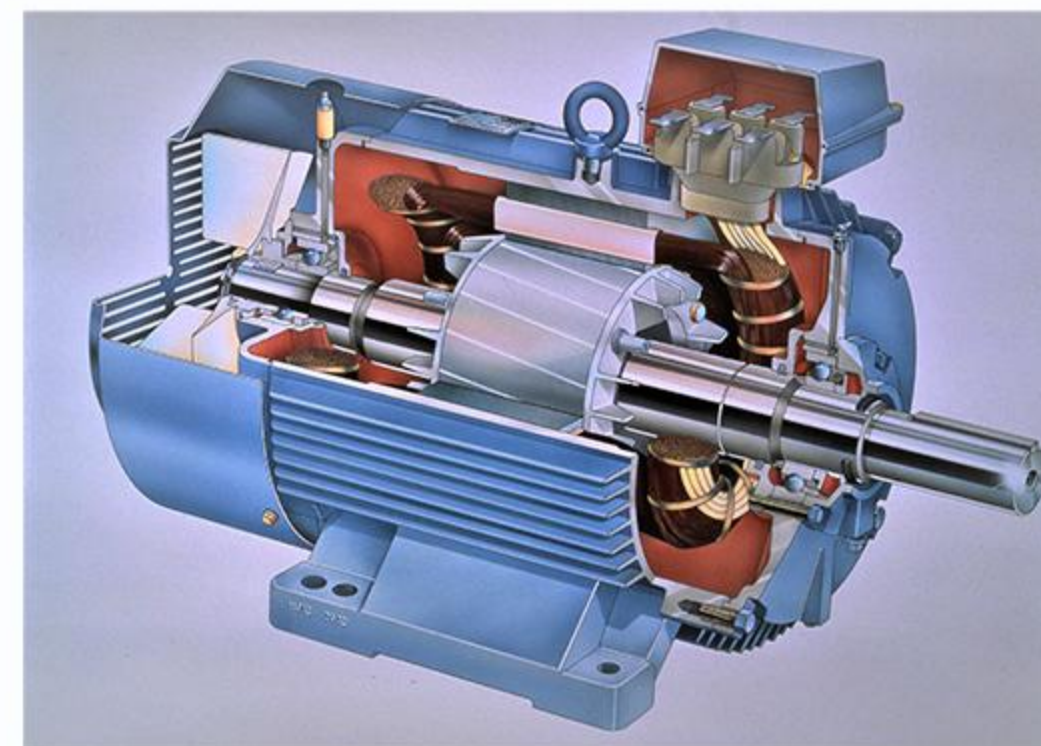
A line interactive UPS incorporates technology which allows it to correct minor power fluctuations (under-voltages and over voltages) without switching to battery. This type of UPS has an autotransformer that regulates low voltages (e.g., brownouts) and over voltages (e.g., swells) without having to switch to battery. Line interactive UPS models are typically used for consumer electronics, PCs, gaming systems, home theater electronics, network equipment, and entry-to-mid-range servers. They provide power during such events as a blackout, voltage sag, voltage surge, or over-voltage.



● Electrical Motors

An electric motor is an electrical machine that converts electrical energy into mechanical energy. Most electric motors operate through the interaction between the motor's magnetic field and electric current in a wire winding to generate force in the form of torque applied on the motor's shaft. Electric motors can be powered by direct current (DC) sources, such as from batteries, or rectifiers, or by alternating current (AC) sources, such as a power grid, inverters or electrical generators. Electric motors may be classified by considerations such as power source type, internal construction, application and type of motion output. In addition to AC versus DC types, motors may be brushed or brushless, may be of various phase (single-phase, two-phase, or three-phase), and may be either air-cooled or liquid-cooled.

● موتورهای الکتریکی



● Instrumentation

ابزار دقیق ●

Instrumentation is a collective term for measuring instruments that are used for indicating, measuring and recording physical quantities. The term has its origins in the art and science of scientific instrument-making.

Instrumentation can refer to devices as simple as direct-reading thermometers, or as complex as multi-sensor components of industrial control systems. Today, instruments can be found in laboratories, refineries, factories and vehicles, as well as in everyday household use. Instrumentation is used to measure many parameters (physical values). These parameters include:

Pressure, either differential or static

Flow

Temperature

Levels of liquids, etc.

Density

Viscosity



Resistivity

Chemical composition

Chemical properties

Position

Vibration

Weight



Frequency

Current

Voltage

Inductance

Capacitance



Our Products Brand





Sustainable
development

Improvement

Innovation


**GREEN
BUSINESS**

Technology

Environment

Growth

Ecology

Management

Success

کرج، گلشهر، ابتدای بلوار پونه، ساختمان آوا، طبقه پنجم
واحد ۹
تلفن: ۰۲۶۳۴۲۸۰۲۹۶



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Constant Creativity*

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