

L.V. POWER DISTRIBUTION, CONTROL AND MEASUREMENT EQUIPMENTS

Moulded Case Circuit Breakers

MCCBs are electrical switch devices designed to protect electrical circuits from overload, short circuits, and other electrical faults. It combines the functions of a circuit breaker and a thermal-magnetic trip unit within a single molded case.

- 3 and 4 pole options, up to 1600A
- 25, 36, 50, 70 kA lcu short-circuit breaking capacities
- Current limiter function
- Thermal magnetic adjustable and fixed types



Air Circuit Breakers

Sigma ACBs are predominantly designed to function as primary circuit breakers for applications including supply, distribution, coupling, and output switching. They are tailored to safeguard electrical equipment against overcurrents, short-circuit currents, overvoltages, undervoltages, and ground faults. These switches find applicability in energized power plants, factories, mines (for 690V AC), and notably in contemporary high-rise buildings for smart building distribution systems.

- LSI and LSI6 protections available
- 3-pole withdrawable type, rated at 6300A
- 3-pole fixed type, rated at 6300A
- 3-pole withdrawable type, rated at 6300A
- 4-pole fixed type, rated at 6300A
- 4-pole withdrawable type, rated at 6300A



Contactors

Contactors are used in electrical circuits for switching the connected line. They perform the switching operation by applying voltage to the coil terminals, which allows them to closed open contacts and open closed contacts. When used with thermal relays, it protects connected devices and facilities against overload currents.

- Available in 3 and 4 poles
- Rated between 6 and 800A
- Options include modular, mini, standard and reversing contactor types
- Equipped with dual coil supply
- Auxiliary contact: 1NO+1NC and over 100A; 2NO+2NC





Modular Type Contactors

- Rated current between 25A and 100A
- Modular type contactors with quiet operation feature are suitable for use in hospitals, schools, and workplaces.
- Their working principle is the same as power contactors, they operate silently thanks to the special mechanism and inner casing structure.



Motor Protection Switch

Motor protection switch is an electrical control, command, and protection device designed to safeguard electric motors against overcurrent (thermal current), short-circuit current, and phase faults. Additionally, it enables manual operation of the electric motor, allowing for both activation and deactivation of the circuit.

- The use of an enclosure box prevents physical damage to the motor protection switch, while the IP55 protection class ensures protection against dust and moisture.
- The contactor combination block enables remote control of the motor circuit.





Vertical Type Fuse Switch Disconnectors

It facilitates the safe disconnection of rated currents under load in three-phase AC circuits, in accordance with the appropriate usage category and operating voltage, thereby ensuring protection against overcurrents and short circuits.

- Up to 630A
- Supported NH types: NH00 NH1 NH2 NH3
- Types that can be opened separately or simultaneously and with current transformer type
- The body material is made of flame-retardant and resistant up to 960 C° BMC material, known for its high mechanical and electrical insulation properties.



Horizontal Type Fuse Switch Disconnectors

Sigma horizontal type fuse switch disconnectors, when paired with NH fuses, serve as electrical circuit protection and control elements. They allow for manual circuit opening and closing, as well as safe circuit interruption in case of any short circuit or overcurrent occurrence.

- Up to 400A
- Supported NH types: NH00 NH1 NH2 NH3
- Lockout feature for maintenance and repair safety

NH Fuses

NH fuses belong to the group of melting wire fuses and provide protection against overcurrents (both overload currents and short-circuit currents) by cutting off the circuit through the melting of the wire inside due to heat effects.

- NH00 NH1 NH2 NH3 sizes
- From 6A to 630A
- Short-circuit breaker capacity of 100kA
- Double indicator assembly





Current Transformers

CTs are devices that allow a certain proportion of the current passing through the connected circuit to be transmitted to the secondary circuits, ensuring the isolation of measuring instruments from high voltage. In current transformers, the phase difference between primary and secondary currents is close to zero.

Direct measurement of high voltages with measuring instruments is not only costly but also highly dangerous and challenging. Therefore, it is necessary to reduce the current passing through the circuit to a certain value in order to measure it accurately. This is where current transformers come into play.

- 0,2s 0,2 0,5s 0,5 1 3 accuracy classes, up to 5000A
- Tailor-made solutions with wide range of products
- Ability of production in powers from 1.5VA to 30VA
- With and without busbar types
- Mini, split core, round and narrow types



Automatic Transfer Switches

ATS devices fulfill transferring functions between network and generator. When the network voltage is interrupted, ATS puts the generator into the service and provides the working of the system through generator. When the network voltage comes back, ATS deactivates the generator and put the network into service.

- With MCB, with MCCB, motorised switch disconnector
- Automatic transfering between network and generator
- Easy installation, reliable protection and economic solution





SİGMA ELEKTRİK serves both Turkish and global markets with its domestic production since 1993.

Thanks to the power that comes from its expert staff, SiGMA ELEKTRiK serves Low Voltage Switchgear Products sector, mainly with LV Circuit Breakers, Miniature Circuit Breakers, Residual Current Circuit Breakers, LV Current Transformers, Fuse Switch Disconnectors, NH Fuses, Automatic Transfer Switches, LV Contactors and with other various LV Protection and Measurement Devices in seven regions of Türkiye through its dealership network. Besides, with a commitment to quality and competitive pricing, it has secured significant market shares through its distributors in more than 50 countries in Europe, South America, Africa, Asia, Australia and the Middle East.

SİGMA ELEKTRİK has also many government approvals for projects in and abroad, participating and being granted with approval certificates.



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