ELECAL

SM12 Series Moulded Case Circuit Breaker

SM12-125

1. Application

The ELECAL principle of innovation and future security of investment has been implemented by the new circuit-breaker series up to 630A.

Four switches with four universal levels of switching capacity form a comprehensive range, from the competitively priced 25kA for small sub-distribution boards, up to 150kA switching capacity for complex high-power systems. The compact construction of the new small 160A switch saves space as a main switch in machine control schemes, as an incomer in service distribution boards or as an outgoer in power distribution boards. Additional device evels are 300A, the particularly compact 630A circuit-breaker.



SM12-250

2. Specification

| Circuit-breaker | SM12-1 | SM12-2 | SM12-3 |
|----------------------------------|--------|---------|---------|
| Short-circuit switching capatity | | | |
| la=la at 415V | | | |
| 25kA | X | X | X |
| 36kA | X | X | X |
| 50kA | X | X | X |
| 100/150kA | X/- | X/- | X/- |
| Ranges of application, in A | 25-160 | 32-300 | 125-630 |
| Number of poles | 3 | 3 | 3 |
| Rated voltage, in V | 690 | 690 | 690 |
| Overload releases | | | |
| Thermomagnetic | X | X | X |
| Electronic | | X | X |
| Switch-disconnector | PN1/N1 | PN2/N2 | PN3/N3 |
| Ranges of application, in A | 63-160 | 160-250 | 400-630 |
| Number of poles | 3 | 3 | 3 |
| Rated voltage, in V | 690 | 690 | 690 |
| Dimensions in mm | | | |
| Width | 90/120 | 105/140 | 140/165 |
| Height | 145 | 184 | 275 |
| Depth | 68 | 103 | 120.5 |

The new range with its compact mounting form features consistency, with the same function, mounting and operation for switches and accessories.

All have different, competitively priced releases with thermostatic bimetals or communication-capable digital electronics for a wide range of protective tasks: Both for AC and DC voltage networks ranging from cable protection and motor/generator protection to transformer protection. Applications such as main-, Emergency-Stop and coupling switches can be implemented via the switch-disconnectors up to 630A.



SM12-400

Highest level of performance in a compact spacel

The circuit-breakers SM12-1 and AM12-2 can be loaded with up to 160A/300A rated current and safely switch off short-circuit currents up to 150kA even with their narrowest design.



SM12-630

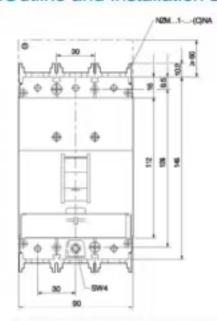
Ideas for greater performance-the contact system, for example

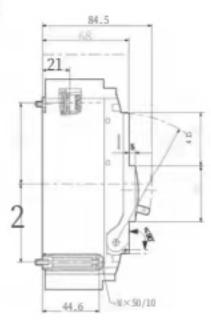
Innovative switching technology with a double-break contact system speed up the switching process. In the event of a short circuit, the special shape and materials selected produce repelling magnet power that pushes the contacts apart in a fraction of a sine wave. Switching capacities up to 150kA and operational voltages up to 690V can be managed without difficulty. The simultaneous reduction in heat dissipation creates benefits for use in control panels.

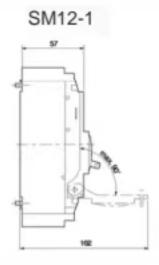
SM12

ELECAL

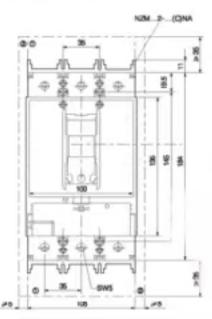
3. Outline and Installation Dimension

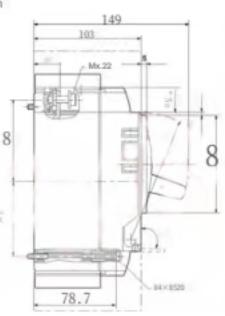






Blow out area, mnimum cearance to other parts60mm

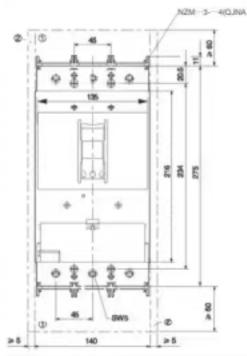




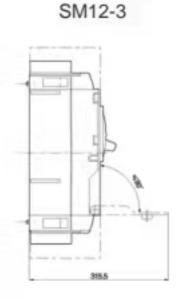
64

SM12-2

Biow out area, minimum dearance to other partsf 35mm 2 Minimum clearance from adjacent parts 5mm







Blow out area, minimum cearance to other partsf60mm Minimum cearance rrom adjacent pars 5mm