

SM12 Series Moulded Case Circuit Breaker

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 outgoing in power distribution boards. Additional device levels are 300A, the particularly compact 630A circuit-breaker.



SM12-125



SM12-250



SM12-400



SM12-630

2. Specification

Circuit-breaker	SM12-1	SM12-2	SM12-3
Short-circuit switching capacity $I_{cu}=I_{cs}$ at 415V			
25kA	X	X	X
36kA	X	X	X
50kA	X	X	X
100/150kA	X/-	X/-	X/-
Range 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
Range 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.

Highest level of performance in a compact space

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.

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.

57

max. 10°

102

