

3VT2 Molded Case Circuit Breakers up to 250 A

Circuit breakers · Switch disconnectors

Technical specifications

Specifications	Circuit breakers			Switch disconnectors
Standards	EN 60947-2, IEC 60947-2			EN 60947-3, IEC 60947-3
Approval marks	CE			
Number of poles	3, 4			
Rated current I_n	A	100, 160, 200, 250		--
Rated uninterrupted current I_U	A	250		
Rated operational current I_e	A	--		250
Rated operational voltage U_e	V	AC max. 690		AC max. 690 DC max. 440
Rated frequency f_n	Hz	50/60		
Rated impulse withstand voltage U_{imp}	kV	8		
Rated insulation voltage U_i	V	690		
Utilization category (selectivity) AC 690 V	A	--		
Utilization category (switching mode) AC 690 V	--			AC-23 B
DC 440 V	--			DC-23 B
Rated short-time withstand current $U_e = AC 690 V I_{cw}/t$		2,5 kA/1 s		3 kA/5 s
Series U_e		3VT2 N	3VT2 H	U_e
Rated ultimate short-circuit breaking capacity (rms value) ¹⁾ I_{cu}		60 kA 36 kA 16 kA 10 kA	100 kA 65 kA 25 kA 13 kA	AC 230 V AC 415 V AC 500 V AC 690 V
Rated short-circuit service breaking capacity (rms value) I_{cs}/U_e		30 kA 18 kA 8 kA 5 kA	50 kA 36 kA 13 kA 8 kA	AC 230 V AC 415 V AC 500 V AC 690 V
Rated short-circuit making capacity (peak value) I_{cm}/U_e		75 kA	140 kA	AC 415 V 4 kA/AC 15 V 4 kA/AC 440 V
Off-time at I_{cu}	ms	10		
Losses per pole at $I_n = 250 A$	W	18		
Mechanical endurance	cycles	30 000		
Electrical endurance ($U_e = AC 415 V$)	cycles	3 000		
Switching frequency	cycles /hr	120		
Operating force	N	80		
Front-side device protection		IP40		
Terminal protection		IP20		
Operating conditions				
Reference ambient temperature	°C	40		
Ambient temperature range	°C	-40 ... +55		
Working environment		dry and tropical climate		
Pollution degree		3		
Max. elevation	m	2000		
Seismic resistance	Hz	3g (8 ... 50)		
Design modifications				
Front/rear connection		✓/✓		
Plug-in design		✓/+		
Withdrawable design		✓/+		
Accessories				
Switches – auxiliary/relative/signal/leading		✓/✓/✓/✓		
Shunt release/with signal switch		✓		
Undervoltage release/with leading switch/with signal switch		✓/✓		
Front manual operating mechanism/lateral operating mechanism at the right/left hand side		✓/✓		
Mechanical interlocking of manual operating mechanisms, by Bowden wire		✓/✓		
Motorized operating mechanism/with operations counter		✓/✓		
Locking-type knob		✓		
Bolt sealing inset/additional cover for overcurrent release		✓/✓		

- ✓ available
- unavailable
- + in preparation