

3VT3 Molded Case Circuit Breakers up to 630 A

Circuit breakers · Switch disconnectors

Technical specifications

Specifications Type	3VT3 763-2AA36/46/56-0AA0, 3VT3 763-3AA36/46/56-0AA0 Circuit breakers			Switch disconnectors
Standards	EN 60 947-2, IEC 947-2			EN 60 947-3, IEC 947-3
Approval marks	CE			
Number of poles	3, 4			
Rated current I_n	A	250, 315, 400, 500, 630		--
Rated uninterrupted current I_U	A	630		--
Rated operational current I_e	A	--		630
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		A		--
• selectivity AC 690 V		--		AC-23 B
• switching mode AC 690 V DC 440 V		--		DC-23 B
Rated short-time withstand current $U_e = AC 690 V I_{cw}/t$		8 kA/50 ms, 7 kA/300 ms, 6.5 kA/1 s		7,5 kA/5 s
Series U_e		3VT3 N	3VT3 H	U_e
Rated ultimate short-circuit breaking capacity (rms value) ¹⁾ I_{cu}		60 kA 36 kA 20 kA 15 kA	100 kA 65 kA 35 kA 20 kA	AC 230 V AC 415 V AC 500 V AC 690 V
Rated short-circuit breaking capacity (rms value) I_{cs}/U_e		40 kA 18 kA 10 kA 8 kA	75 kA 36 kA 20 kA 15 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
Off-time at I_{cu}	ms	10		--
Losses per pole at $I_n = 250 A$	W	75		--
Mechanical endurance	cycles	20000		--
Electrical endurance ($U_e = AC 415 V$)	cycles	5000		--
Switching frequency	cycles/hr	120		--
Operating force	N	110		--
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		--
Degree of pollution		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 trip/with signal switch		✓		--
Undervoltage release/with leading switch, with signal switch		✓/✓		--
Front man. oper. mechanism/ lateral oper. mech. ri./left		✓/✓		--
Mechanical interlocking to the man.oper. mechanism, by Bowden wire		✓/✓		--
Motorized oper. mechanism with operations counter		✓/✓		--
Locking-type lever		✓		--
Bolt sealing insert/additional cover for overcurrent release		✓/✓		--

✓ available,
-- unavailable,
+ in preparation

¹⁾ In case circuit breaker connection is reversed (input terminals 2, 4, 6 output terminals 1, 3, 5), I_{cu} does not change.