Data sheet



circuit breaker 3VT1 standard breaking capacity Icu=25kA, 415V AC 4-pole, line protection trip unit TM, LI In=32A rated current IR=25...32A overload protection II=160...320A, short-circuit protection N conductor unprotected without auxiliary release without auxiliary/alarm switch with front terminals

Model		
Product brand name	SENTRON	
Product designation	3VT1_5 molded case circuit breakers	
Design of the operating mechanism	toggle handle	
Type of the driving mechanism / motor drive	No	
Design of the overcurrent release	TM	
General technical data		
Number of poles	4	
Size of the circuit-breaker	3VT1	
Electrical endurance (switching cycles) / typical	6 000	
Usage category	Α	
Performance class for circuit breaker	N	
Mechanical service life (switching cycles) / typical	20 000	
Operating frequency / maximum	120 1/h	
Voltage		
Insulation voltage / rated value	690 V	
Surge voltage resistance / rated value	8 kV	
Protection class		

Protection class IP	IP40
Protective function of the overcurrent release	U
Dissipation	
Power loss [W] / for rated value of the current / at AC	1.33 W
/ in hot operating state / per pole	
Current	
Operating current / at 45 °C / rated value	29 A
Continuous current / rated value	32 A
Derating temperature / for the rated value of the	40 °C
continuous current	
Adjustable pick-up value current	
 of the current-dependent overload release / Full-scale value 	32 A
 of instantaneous short-circuit trip unit / initial value 	160 A
 of instantaneous short-circuit trip unit / Full- scale value 	320 A
Main circuit	
Operating frequency	
• 1 / rated value	50 Hz
• 2 / rated value	60 Hz
Operating current	
• at 40 °C / rated value	32 A
• at 50 °C / rated value	29 A
Auxiliary circuit	
Number of CO contacts / for auxiliary contacts	0
Number of NC contacts / for auxiliary contacts	0
Number of NO contacts / for auxiliary contacts	0
Suitability	
Suitability for use	system protection
Disconnecting means	Yes
Adjustable parameters	
Adjustable pick-up value current / of the current-	25 A
dependent overload release / initial value	
Product details	
Product component	
Trip indicator	No
Auxiliary switch	No
 Voltage trigger 	No
 undervoltage release 	No

undervoltage release with leading contact	No
Product extension / optional / motor drive	Yes
Product function	
Product function	
of thermal overload trip unit	adjustable
Ground fault protection	No
 for neutral conductors / Short-circuit and overload proof 	No
Phase failure detection	No
Overload protection	Yes
Short circuit	
Operational short-circuit current breaking capacity (Ics)	
• at 240 V / rated value	20 kA
• at 415 V / rated value	13 kA
• at 500 V / rated value	6 kA
• at 690 V / rated value	3 kA
Maximum short-circuit current breaking capacity (Icu)	
• at 240 V / rated value	40 kA
• at 415 V / rated value	25 kA
• at 500 V / rated value	12 kA
• at 690 V / rated value	6 kA
Connections	
Arrangement of electrical connectors / for main current circuit	front side
Type of electrical connection / for main current circuit	screw-type terminals
Mechanical Design	
Height	130 mm
Width	100 mm
Depth	80 mm
Mounting type	fixed mounting
Mounting position	with vertical mounting surface +/-180° rotatable, with vertical mounting surface +/- 30° tiltable to the front and back
Net weight	1.336 kg
during operation	-40 +55 °C
• during storage	-40 +55 °C
Certificates	
Reference code	
● acc. to DIN EN 61346-2	Q
● acc. to DIN EN 81346-2	Q

Test Certificates other

Type Test Certificates/Test Report

Miscellaneous

Manufacturer Declaration

Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

http://www.siemens.com/lowvoltage/catalogs

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3VT1703-2EC45-0AA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

https://support.industry.siemens.com/cs/ww/en/ps/3VT1703-2EC45-0AA0

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VT1703-2EC45-0AA0

CAx-Online-Generator

http://www.siemens.com/cax

Tender specifications

http://www.siemens.com/specifications



