# Data sheet



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

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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	ТМ		
General technical data			
Number of poles	3		
Size of the circuit-breaker	3VT1		
Electrical endurance (switching cycles) / typical	6 000		
Usage category	A		
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 / in hot operating state / per pole	1.33 W
Electricity	
Operating current / at 45 °C / rated value	29 A
Continuous current / rated value	32 A
Derating temperature / for the rated value of the continuous current	40 °C
Adjustable pick-up value current	
<ul> <li>of the current-dependent overload release / Full-scale value</li> </ul>	32 A
<ul> <li>of instantaneous short-circuit trip unit / initial value</li> </ul>	160 A
<ul> <li>of instantaneous short-circuit trip unit / Full- scale value</li> </ul>	320 A
Main circuit	
Operating frequency	
• 1 / rated value	50 Hz
• 2 / rated value	60 Hz
Operating voltage	
• rated value / maximum	690 V
<ul> <li>for main current circuit / at AC / at 50 Hz / maximum</li> </ul>	690 V
<ul> <li>for main current circuit / at AC / at 60 Hz / maximum</li> </ul>	690 V
• for main current circuit / at DC / maximum	250 V
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- dependent overload release / initial value	25 A

Product details	
Product component	
Trip indicator	No
Auxiliary switch	No
<ul> <li>Voltage trigger</li> </ul>	No
<ul> <li>undervoltage release</li> </ul>	No
<ul> <li>undervoltage release with leading contact</li> </ul>	No
Product extension / optional / motor drive	Yes

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adjustable • of thermal overload trip unit

No Ground fault protection

• for neutral conductors / Short-circuit and No

overload proof

No • Phase failure detection

 Overload protection Yes

Operational short-circuit current breaking capacity (lcs)

20 kA • at 240 V / rated value

13 kA • at 415 V / rated value

• at 500 V / rated value 6 kA

3 kA • at 690 V / rated value

Maximum short-circuit current breaking capacity (Icu)

40 kA • at 240 V / rated value

• 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 front side current circuit

Type of electrical connection / for main current circuit

box terminal

	$\Delta$	II O O I	-100	CIMA
B 144		1070		sign
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Height	130 mm
Width	75 mm
Depth	80 mm
Mounting position	with vertical mounting surface +/-180° rotatable, with vertical mounting surface +/- 30° tiltable to the front and back
Mounting type	fixed mounting
Net weight	1.059 kg

Ambient temperature	
<ul><li>during operation / minimum</li></ul>	-40 °C
<ul><li>during operation / maximum</li></ul>	55 °C
• during storage / minimum	-40 °C
during storage / maximum	55 °C

### Certificates

Reference code

Q • acc. to DIN EN 61346-2 • acc. to DIN EN 81346-2 Q

General	Declaration of	Test Certific-	other
Product Ap-	Conformity	ates	
proval			





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=3VT1703-2DC36-0AA0

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

https://support.industry.siemens.com/cs/ww/en/ps/3VT1703-2DC36-0AA0

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

http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VT1703-2DC36-0AA0

**CAx-Online-Generator** 

http://www.siemens.com/cax

**Tender specifications** 

http://www.siemens.com/specifications









