## Data sheet



CIRCUIT BREAKER 3VT1 STANDARD BREAKING CAPACITY ICU=25KA, 415V AC 3-POLE, SYSTEM PROTECTION OVERCURRENT RELEASE TM, LI IN= 100A RATED CURRENT IR= 80... 100A OVERLOAD PROT. II= 500... 1000A, SHORT-CIRCUIT PROTECTION WITHOUT AUXILIARY RELEASE WITHOUT AUXILIARY/ALARM SWITCH

Figure similar

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	3
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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	LI
Dissipation	
Power loss [W]	
<ul> <li>for rated value of the current / at AC / in hot operating state / per pole</li> </ul>	3.33 W
• maximum	10 W
Electricity	
Operating current / at 45 °C / rated value	91 A
Continuous current / rated value	100 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>	100 A
<ul> <li>of instantaneous short-circuit trip unit / initial value</li> </ul>	500 A
<ul> <li>of instantaneous short-circuit trip unit / Full-scale value</li> </ul>	1 000 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	100 A
• at 50 °C / rated value	91 A
Suitability	
Suitability for use	system protection
Disconnecting means	Yes
Adjustable parameters	
Adjustable pick-up value current / of the current- dependent overload release / initial value	80 A
Product details	

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

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Product function	
<ul> <li>of thermal overload trip unit</li> </ul>	adjustable
<ul> <li>Ground fault protection</li> </ul>	No
<ul> <li>for neutral conductors / Short-circuit and overload proof</li> </ul>	No
Phase failure detection	No
Overload protection	Yes

Short Gircuit
Operational short-circuit current breaking capacity
(lcs)

• 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

	Connections	
Arrangement of electrical connectors / for main		front side
	current circuit	
	Type of electrical connection / for main current circuit	box terminals

Mechanical Design				
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	1.05 kg			

⊢nvironmen	tal conditions
	iai conunitorio

Ambient temperature

during operation / minimum
 during operation / maximum
 55 °C
 during storage / minimum
 during storage / maximum
 55 °C

#### Certificates

### **Equipment marking**

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

General Product Declaration of Test Certificates other
Approval Conformity

Q

Q





Type Test
Certificates/Test Report

Miscellaneous

### 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=3VT1710-2DC36-0AA0

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

https://support.industry.siemens.com/cs/ww/en/ps/3VT1710-2DC36-0AA0

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

http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VT1710-2DC36-0AA0

**CAx-Online-Generator** 

http://www.siemens.com/cax

**Tender specifications** 

http://www.siemens.com/specifications









