



Figure similar

CIRCUIT BREAKER 3VT1 STANDARD BREAKING CAPACITY
ICU=25KA, 415V AC 4-POLE, SYSTEM PROTECTION
OVERCURRENT RELEASE TM, LIN IN= 160A RATED CURRENT
IR= 160A OVERLOAD PROTECT. II= 640A, SHORT-CIRC. PROT.
N CONDUCTOR W/PROTECTION WITHOUT AUXILIARY
RELEASE WITHOUT AUXILIARY/ALARM SWITCH

Model	
product brandname	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	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	LIN
Dissipation	
Power loss [W]	
for rated value of the current / at AC / in hot operating state / per pole	5 W
maximum	15 W
Electricity	
Continuous current / rated value	160 A
Derating temperature / for the rated value of the continuous current	40 °C
Adjustable pick-up value current	
of the current-dependent overload release / Full-scale value	160 A
of instantaneous short-circuit trip unit / initial value	640 A
of instantaneous short-circuit trip unit / Full-scale value	640 A
Main circuit	
Operating frequency	
1 / rated value	50 Hz
2 / rated value	60 Hz
Operating voltage	
rated value / maximum	690 V
for main current circuit / at AC / at 50 Hz / maximum	690 V
for main current circuit / at AC / at 60 Hz / maximum	690 V
for main current circuit / at DC / maximum	440 V
Operating current	
at 40 °C / rated value	160 A
at 50 °C / rated value	145 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	160 A
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	fixed
• Ground fault protection	No
• for neutral conductors / Short-circuit and overload proof	Yes
• Phase failure detection	No
• Overload protection	No

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	box terminals

Mechanical Design

Height	130 mm
Width	100 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	1.336 kg

Environmental conditions

Ambient temperature	
• during operation / minimum	-40 °C

- during operation / maximum
- during storage / minimum
- during storage / maximum

55 °C
-40 °C
55 °C

Certificates

Equipment marking

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

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General Product Approval	Declaration of Conformity	Test Certificates	other
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CCC



EG-Konf.

[Typprüfbescheinigung/Werkszeugnis](#)

[Umweltbestätigung](#)

[sonstig](#)

Further information

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

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

Industry Mall (Online ordering system)

<https://eb.automation.siemens.com/mall/en/WW/Catalog/Product/3VT1716-2EH46-0AA0>

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

<http://support.automation.siemens.com/WW/view/en/3VT1716-2EH46-0AA0/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VT1716-2EH46-0AA0

CAX-Online-Generator

<http://www.siemens.com/cax>

Tender specifications

<http://www.siemens.com/specifications>

