



CIRCUIT BREAKER 3VT1 STANDARD BREAKING CAPACITY
 ICU=25KA, 415V AC 3-POLE, SYSTEM PROTECTION
 OVERCURRENT RELEASE TM, LI IN= 160A RATED CURRENT
 IR= 125... 160A OVERLOAD PROT. II= 800... 1600A, SHORT-
 CIRCUIT 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	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	LI
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	800 A
of instantaneous short-circuit trip unit / Full-scale value	1 600 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	250 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	125 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	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	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	1.083 kg

Environmental conditions

Ambient temperature	
• during operation / minimum	-40 °C
• during operation / maximum	55 °C

- 40 °C
55 °C

Equipment marking

- Q
- Q

<u>Typprüfbescheinigung/Werkszeugnis</u>	<u>sonstig</u>	<u>Umweltbestätigung</u>

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

Industry Mall (Online ordering system)

Industry Mall (Online ordering system)

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

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

CAX-Online-Generator

Tender specifications

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



