



circuit breaker 3VT1 standard breaking capacity $I_{cu}=25\text{kA}$, 415V AC 4-pole, line protection trip unit TM, LI $I_n=80\text{A}$ rated current $I_R=80\text{A}$ overload protection $I_l=320\text{A}$, short-circuit prot. N conductor unprotected without auxiliary release without auxiliary/alarm switch

Model	
product brand name	SENTRON
product designation	3VT1_5 molded case circuit breakers
design of the actuating element	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
mechanical service life (operating cycles) typical	20 000
electrical endurance (operating cycles) typical	6 000
utilization category	A
performance class for circuit breaker	N
operating frequency maximum	120 1/h
Voltage	
surge voltage resistance rated value	8 kV
Protection class	
protection class IP	IP40
protection function of the overcurrent release	LI
Dissipation	
power loss [W] for rated value of the current at AC in hot operating state per pole	2.33 W
Current	
operational current	
• at 40 °C rated value	80 A
• at 45 °C rated value	73 A
• at 50 °C rated value	73 A
derating temperature for the rated value of the continuous current	40 °C
adjustable current response value current	
• of the current-dependent overload release full-scale value	80 A
• of instantaneous short-circuit trip unit minimum	252 A
• of instantaneous short-circuit trip unit maximum	252 A
Main circuit	
operating frequency	
• 1 rated value	50 Hz
• 2 rated value	60 Hz
operational current rated value	80 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 current response value current of the current-dependent overload release initial value	80 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	
• grounding protection	No	
• for neutral conductors short-circuit and overload proof	No	
• phase failure detection	No	
• overload protection	Yes	
Short circuit		
operating 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 terminal	
Mechanical Design		
height	130 mm	
width	100 mm	
depth	80 mm	
fastening method	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	
Environmental conditions		
ambient temperature during operation		
• minimum	-40 °C	
• maximum	55 °C	
ambient temperature during storage		
• minimum	-40 °C	
• maximum	55 °C	
Certificates		
reference code		
• according to EN 61346-2	Q	
• according to IEC 81346-2	Q	
General Product Approval	Declaration of Conformity	Test Certificates



Confirmation



Type Test Certificates/Test Report

other

[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=3VT1708-2EA46-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VT1708-2EA46-0AA0>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VT1708-2EA46-0AA0

CAX-Online-Generator

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

Tender specifications

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





