



circuit breaker 3VT1 standard breaking capacity $I_{cu}=25\text{kA}$, 415V AC 3-pole, motor protection trip unit TM, LI $I_n=50\text{A}$ rated current $I_R=40\ldots 50\text{A}$ overload protection $I_L=500\text{A}$, short-circuit prot. without auxiliary release without auxiliary/alarm switch with front terminals

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	3
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	1.66 W
Main circuit	
operating frequency	
• 1 rated value	50 Hz
• 2 rated value	60 Hz
operating power at AC-3	
• at 230 V rated value	9.2 kW
operational current rated value	50 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
suitability for use disconnecting means	Yes
Adjustable parameters	
adjustable current response value current of the current-dependent overload release initial value	40 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	
● 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		screw-type terminals	
Mechanical Design			
height		130 mm	
width		75 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		0.834 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	
reference code according to IEC 81346-2		Q	
Approvals Certificates			
Environment	General Product Approval	Test Certificates	other

[Environmental Con-
firmations](#)



[Confirmation](#)

[Type Test Certi-
ficates/Test Report](#)

[Confirmation](#)



other

[Miscellaneous](#)

Further information

Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

Information for data generation and storage

<https://support.industry.siemens.com/cs/ww/en/view/109995012>

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

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

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3VT1705-2DM35-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VT1705-2DM35-0AA0>

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

https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VT1705-2DM35-0AA0

CAX-Online-Generator

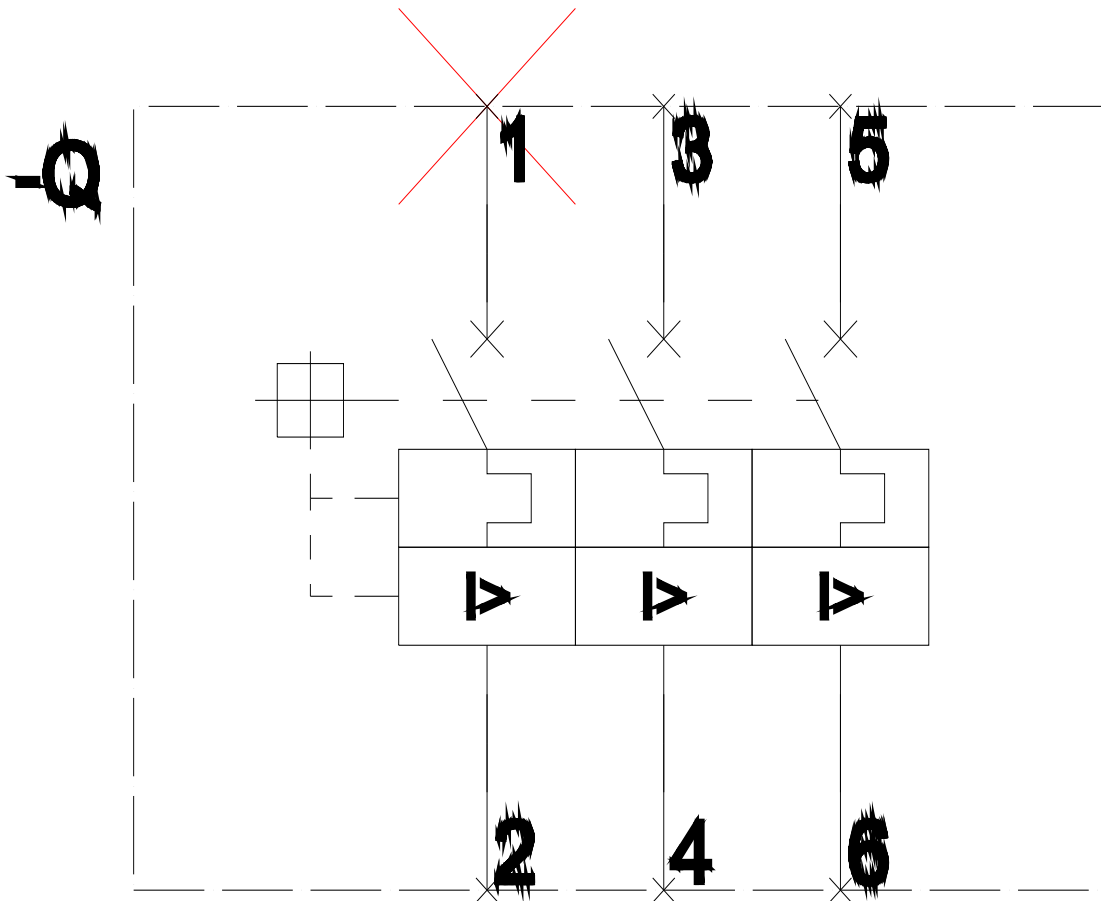
<https://www.siemens.com/cax>

Tender specifications

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

Characteristic curves

[https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP="HAUPT"></mmp_prod_no>](https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP=)



last modified:

6/15/2025

