



circuit breaker 3VT1 standard breaking capacity $I_{cu}=25\text{kA}$, 415V AC 4-pole, line protection trip unit TM, LI $I_n=50\text{A}$ rated current $I_R=40\ldots 50\text{A}$ overload protection $I_l=250\ldots 500\text{A}$, short-circuit protection N-conductor unprotected 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	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	1.66 W
Main circuit	
operating frequency	
• 1 rated value	50 Hz
• 2 rated value	60 Hz
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 • auxiliary switch • voltage trigger • undervoltage release • undervoltage release with leading contact	No		
	No		
	No		
	No		
	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	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	0.99 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 Certific- ates/Test Report
		Confirmation	
other			

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=3VT1705-2EC45-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VT1705-2EC45-0AA0>

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

https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VT1705-2EC45-0AA0

CAX-Online-Generator

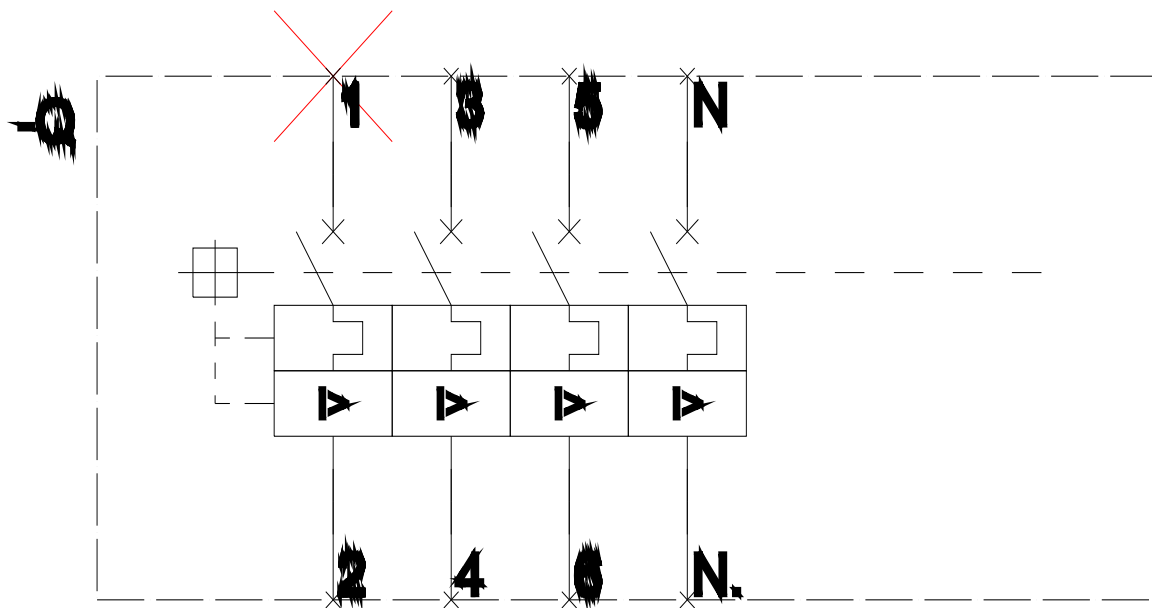
<https://www.siemens.com/cax>

Tender specifications

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

Characteristic curves

https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP='HAUPT'></mmp_prod_no>



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