

CIRCUIT BREAKER 3VT1 STANDARD BREAKING
CAPACITY ICU=25KA,
415V AC 4-POLE,
SYSTEM PROTECTION ELECTRONIC TRIP UNIT TM,
LI IN= 50A RATED CURRENT IR= 40... 50A OVERLOAD
PROT. II= 250... 500A,
SHORT-CIRCUIT PROTECTION N CONDUCTOR W/O
PROTECTION W/O AUXILIARY TRIP UNIT W/O
AUXILIARY/ALARM SWITCH WITHOUT AUXILIARY
RELEASE WITHOUT AUXILIARY/ALARM SWITCH

Technical data:		
Width	mm	100
Height	mm	130
Depth	mm	80
Acceptability for application		system protection
Design of the overcurrent release		TM
Product function / ground-fault protection		No
Continuous current / rated value	A	50
Operating voltage / for main current circuit		
• at 50 Hz / for AC / maximum	V	690
• at 60 Hz / for AC / maximum	V	690
• for DC / maximum	V	440
Impulse voltage resistance / rated value	kV	8
Number of poles		4
Active power loss / maximum	W	5
Operating cycles / maximum	1/h	120
Operating frequency		
• 1 / rated value	Hz	50
• 2 / rated value	Hz	60
Breaking capacity limit short-circuit current (Icu)		
• at 240 V / rated value	kA	40
• at 415 V / rated value	kA	25
• at 500 V / rated value	kA	12
• at 690 V / rated value	kA	6
Breaking capacity operating short-circuit current (Ics)		
• at 240 V / rated value	kA	20
• at 415 V / rated value	kA	13

• at 500 V / rated value	kA	6
• at 690 V / rated value	kA	3
Ultimate short-circuit current making capacity (I_{cm}) / at 415 V / rated value	kA	52
Adjustable response current / of the current-dependent overload release		
• initial value	A	40
• final value	A	50
Adjustable response current / of the non-delayed short-circuit release		
• initial value	A	250
• final value	A	500
Type of mounting		fixed mounting
Design of the electrical connection / for main current circuit		box terminals
Arrangement of electrical connectors / for main current circuit		front side
Number of NC contacts / for auxiliary contacts		0
Number of NO contacts / for auxiliary contacts		0
Number of change-over switches / for auxiliary contacts		0
Product component		
• undervoltage release mechanism		No
• Voltage trigger		No
• undervoltage release with leading contact		No
Suitability for use / circuit breaker		Yes
Item designation		
• according to DIN EN 61346-2		Q
Ambient temperature		
• during operating		
• minimum	°C	-40
• maximum	°C	55
• during storage		
• minimum	°C	-40
• maximum	°C	55
Derating temperature / for the rated value of the continuous current	°C	40
Protection class IP		IP40
Product function		
• overload protection		No
• for zero conductors / short-circuit and overload protection		No
• of the thermal overload release		adjustable
mounting position		with vertical mounting surface +/-180° rotatable, with vertical mounting surface +/- 30° tiltable to the front and back

Mechanical operating cycles as operating time / typical	20,000
Electrical operating cycles as operating time / typical	6,000

Certificates/approvals:

General Product Approval

other



CCC



GOST

[other](#)

Further information:

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

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

Industry Mall (Online ordering system)

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

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

<http://support.automation.siemens.com/WW/view/en/3VT1705-2EC46-0AA0/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VT1705-2EC46-0AA0

CAX-Online-Generator

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

last change:

Feb 11, 2013