

circuit breaker 3VT1 standard breaking capacity $I_{cu}=25\text{kA}$, 415V AC
3-pole, line protection trip unit TM, LI $I_n=80\text{A}$ rated current
 $I_R=63\ldots80\text{A}$ overload protection $I_t=400\ldots800\text{A}$, short-circuit
protection without auxiliary release without auxiliary/alarm switch with
front terminals



Model	
Product brand name	SETRON
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	2.33 W
Current	
Operating current / at 45 °C / rated value	73 A
Continuous current / rated value	80 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	80 A
• of instantaneous short-circuit trip unit / initial value	400 A
• of instantaneous short-circuit trip unit / Full-scale value	800 A
Main circuit	
Operating frequency	
• 1 / rated value	50 Hz
• 2 / rated value	60 Hz
Operating current	
• at 40 °C / rated value	80 A
• at 50 °C / rated value	73 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 pick-up value current / of the current-dependent overload release / initial value	63 A
Product details	
Product component	
• Trip indicator	No
• Auxiliary switch	No
• Voltage trigger	No
• undervoltage release	No

- undervoltage release with leading contact

No

Product function

Product function

- of thermal overload trip unit
- Ground fault protection
- for neutral conductors / Short-circuit and overload proof
- Phase failure detection
- Overload protection

adjustable

No

No

No

Yes

Short circuit

Operational short-circuit current breaking capacity (Ics)

- at 240 V / rated value
- at 415 V / rated value
- at 500 V / rated value
- at 690 V / rated value

20 kA

13 kA

6 kA

3 kA

Maximum short-circuit current breaking capacity (Icu)

- at 240 V / rated value
- at 415 V / rated value
- at 500 V / rated value
- at 690 V / rated value

40 kA

25 kA

12 kA

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

Mounting type

fixed mounting

Mounting position

with vertical mounting surface +/-180° rotatable, with vertical mounting surface +/- 30° tiltable to the front and back

Net weight

1.062 kg

Environmental conditions

Ambient temperature / during operation

- minimum
- maximum

-40 °C

55 °C

Ambient temperature / during storage

- minimum
- maximum

-40 °C

55 °C

Certificates

Reference code

- acc. to DIN EN 61346-2
- acc. to DIN EN 81346-2

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Test Certificates

other

[Type Test Certificates/Test Report](#)

[Miscellaneous](#)

[Manufacturer Declaration](#)

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=3VT1708-2DC35-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VT1708-2DC35-0AA0>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VT1708-2DC35-0AA0

CAX-Online-Generator

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

Tender specifications

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

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