



CIRCUIT BREAKER 3VA1 IEC FRAME 160 BREAKING CAPACITY
CLASS N ICU=25KA @ 415 V 3-POLE, LINE PROTECTION
TM210, FTFM, IN=160A OVERLOAD PROTECTION IR=160A
FIXED SHORT CIRCUIT PROTECTION II=10 X IN CABLE
CONNECTION UNDERVOLTAGE RELEASE 208-230 V AC 50/60
HZ 1 AUXILIARY SWITCH 1 TRIP ALARM SWITCH

Model	
product brandname	SENTRON
Product designation	Molded case circuit breaker
Design of the product	Line protection
Design of the overcurrent release	TM210
Protective function of the overcurrent release	LI
Number of poles	3
Design of the auxiliary release	Undervoltage release (UVR)
Design of the auxiliary switch	1 auxiliary switch + 1 trip alarm switch HQ
General technical data	
Tension assignée d'isolement Ui	800 V
Max. rated operational voltage Ue with AC 50/60Hz	690 V
Max. rated operational voltage Ue with DC	500 V
Active power loss / for rated value of the current / at AC / in hot operating state / per device	40 W
Mechanical service life (switching cycles) / typical	15 000
Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz	8 000

Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz	8 000
Neutral conductors / upgradeable/retrofitable	No
Ground fault monitoring version	Without
Product function	
• communication function	No
• Phase failure detection	No
• other measurement function	No
Net weight	900 g

Electricity

Max. rated operational voltage of the size of the circuit-breaker	160 A
Courant permanent assigné Iu	160 A
Operating current	
• at 40 °C	160 A
• at 45 °C	160 A
• at 50 °C	160 A
• at 55 °C	155.2 A
• at 60 °C	152 A
• at 65 °C	147.2 A
• at 70 °C	140.8 A

Switching capacity according to IEC 60947

Switching capacity class of the circuit breaker	N
Maximum short-circuit current breaking capacity (Icu)	
• at 240 V	36 kA
• at 415 V	25 kA
• at 440 V	16 kA
• at 500 V	8 kA
• at 690 V	5 kA
Operational short-circuit current breaking capacity (Ics)	
• at 240 V	36 kA
• at 415 V	25 kA
• at 440 V	16 kA
• at 500 V	8 kA
• at 690 V	5 kA
Short-circuit current making capacity (Icm)	
• at 240 V	75.6 kA
• at 415 V	52.5 kA
• at 440 V	32 kA
• at 500 V	13.6 kA
• at 690 V	7.5 kA

Adjustable parameters	
Adjustable response value current / I _g min.	1 A
Adjustable response value current / I _g min.	1 A
Adjustable response value current / I _g min.	1
Adjustable response value current / I _g min.	1
Short-term delayed / tripping switchable / I _{2t} =ON/OFF	No
Adjustable response value current / I _i min.	10 A
Ground fault protection / tripping switchable / I _{2t} =ON/OFF	No

Mechanical Design	
Height	130 mm
Width	76.2 mm
Depth	70 mm

Connections	
Arrangement of electrical connectors / for main current circuit	Front terminal
Type of electrical connection / for main current circuit	box terminal
Type of connectable conductor cross-section, round conductor terminal, stranded	1 x (1.5 - 70 mm²)

Auxiliary circuit	
Product component	
• undervoltage release	Yes
• Voltage trigger	No
• undervoltage release with leading contact	No
• Trip indicator	Yes
Number of CO contacts / for auxiliary contacts	2

Accessories	
Product extension / optional / motor drive	Yes
Manufacturer's article number	
• of the supplied basic switch	3VA1116-3ED36-0AA0
• of the integrated auxiliary switch/alarm switch	3VA9988-0AA12
• of the integrated auxiliary switch/alarm switch	3VA9988-0AB12
• of the integrated auxiliary trip	3VA9608-0BB25

Environmental conditions	
Protection class IP / on the front	IP40
Ambient temperature	
• during operation / minimum	-25 °C
• during operation / maximum	70 °C
• during storage / minimum	-40 °C
• during storage / maximum	80 °C

Certificates

Equipment marking / acc. to DIN EN 81346-2

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General Product Approval

EMC

Declaration of Conformity



CCC



VDE



[sonstig](#)



RCM



EG-Konf.

Test Certificates

Shipping Approval

[Typprüfbescheinigung/Werkszeugnis](#)

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ABS



BUREAU
VERITAS



GL



LRS

Shipping Approval

other

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RMRS

Further information

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

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

Industry Mall (Online ordering system)

<https://eb.automation.siemens.com/mall/en/WW/Catalog/Product/3VA1116-3ED36-0DF0>

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

<http://support.automation.siemens.com/WW/view/en/3VA1116-3ED36-0DF0/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA1116-3ED36-0DF0

CAX-Online-Generator

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

Tender specifications

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

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