



CIRCUIT BREAKER 3VA2 IEC FRAME 100 BREAKING CAPACITY CLASS M ICU=55KA @ 415 V 3-POLE, LINE PROTECTION ETU560, LSIG, IN=100A OVERLOAD PROTECTION IR=40A ...100A SHORT CIRCUIT PROTECTION ISD=0,6..10X IN, II=1,5..12X IN NEUTRAL PROTECTION OPTIONAL WITH EXT. CT GROUND-FAULT, SWITCHABLE IG=0,2... 1 X IN, TG=0,05-0,8S BUSBAR CONNECTION SHUNT TRIP (STL) 12-30 V DC; 24 V AC 50/60 HZ 2 AUXILIARY SWITCH HQ 1 TRIP ALARM SWITCH HQ

Model	
product brandname	SENTRON
Product designation	Molded case circuit breaker
Design of the product	Line protection
Design of the overcurrent release	ETU560
Protective function of the overcurrent release	LSIG
Number of poles	3
Design of the auxiliary release	Shunt trip (STL)
Design of the auxiliary switch	2 auxiliary switches + 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
Active power loss / for rated value of the current / at AC / in hot operating state / per device	13.5 W
Mechanical service life (switching cycles) / typical	20 000
Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz	12 000
Neutral conductors / upgradeable/retrofitable	Yes
Ground fault monitoring version	Summation current formation L-conductor

Product function	
• communication function	Yes
• Phase failure detection	No
• other measurement function	No
Net weight	2.47 kg

Electricity

Max. rated operational voltage of the size of the circuit-breaker	100 A
Courant permanent assigné Iu	100 A
Operating current	
• at 40 °C	100 A
• at 45 °C	100 A
• at 50 °C	100 A
• at 55 °C	96.25 A
• at 60 °C	92.5 A
• at 65 °C	88.75 A
• at 70 °C	85 A

Switching capacity according to IEC 60947

Switching capacity class of the circuit breaker	M
Maximum short-circuit current breaking capacity (Icu)	
• at 240 V	85 kA
• at 415 V	55 kA
• at 440 V	55 kA
• at 500 V	36 kA
• at 690 V	2 kA
Operational short-circuit current breaking capacity (Ics)	
• at 240 V	85 kA
• at 415 V	55 kA
• at 440 V	55 kA
• at 500 V	36 kA
• at 690 V	2 kA
Short-circuit current making capacity (Icm)	
• at 240 V	187 kA
• at 415 V	121 kA
• at 440 V	121 kA
• at 500 V	79 kA
• at 690 V	3.4 kA

Adjustable parameters

Adjustable response value current / I _g min.	40 A
Adjustable response value current / I _g min.	100 A

Adjustable response value current / I _g min.	0.5
Adjustable response value current / I _g min.	25
Adjustable response value current / I _g min.	60 A
Adjustable response value current / I _g min.	1 000 A
Short-term delayed / tripping switchable / I _{2t} =ON/OFF	Yes
Adjustable response value current / I _g min.	0.05 s
Adjustable response value current / I _g min.	0.5 s
Adjustable response value current / I _g min.	0.05 s
Adjustable response value current / I _g min.	0.5 s
Adjustable response value current / I _i min.	150 A
Adjustable response value current / I _i max.	1 200 A
Ground fault protection can be switched ON/OFF	Yes
Adjustable response value current / I _g min.	20 A
Adjustable response value current / I _g max.	100 A
Adjustable response value current / for G-tripping / with I _{2t} characteristic / min.	0.2 A
Adjustable response value current / for G-tripping / with I _{2t} characteristic / max.	1 A

Mechanical Design

Height	181 mm
Width	105 mm
Depth	86 mm

Connections

Arrangement of electrical connectors / for main current circuit	Front terminal
Type of electrical connection / for main current circuit	Lug terminal
Type of connectable conductor cross-section, connection screw, width x thickness , min.	13 x 1 mm
Type of connectable conductor cross-section, connection screw, width x thickness , max.	25 x 8.5

Auxiliary circuit

Product component	
• undervoltage release	No
• Voltage trigger	Yes
• undervoltage release with leading contact	No
• Trip indicator	Yes
Number of CO contacts / for auxiliary contacts	3

Accessories

Product extension / optional / motor drive	Yes
Manufacturer's article number	
• of the supplied basic switch	3VA2010-5JQ32-0AA0

- of the integrated auxiliary switch/alarm switch
- of the integrated auxiliary switch/alarm switch
- of the integrated auxiliary trip

[3VA9988-0AA12](#)
[3VA9988-0AB12](#)
 3VA9688-0BL30

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	Q
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General Product Approval	EMC	Declaration of Conformity
 CCC  VDE  EAC sonstig	 RCM	 EG-Konf.

Test Certificates	Shipping Approval
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Typprüfbescheinigung/Werkszeugnis sonstig	 ABS  BUREAU VERITAS  GL  LRS
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Shipping Approval	other
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 RMRS sonstig	
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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/3VA2010-5JQ32-0HH0>

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

<http://support.automation.siemens.com/WW/view/en/3VA2010-5JQ32-0HH0/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2010-5JQ32-0HH0

CAX-Online-Generator

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

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