



CIRCUIT BREAKER 3VA2 IEC FRAME 160 BREAKING CAPACITY CLASS M ICU=55KA @ 415 V 3-POLE, LINE PROTECTION ETU850, LSI, IN=160A OVERLOAD PROTECTION IR=63A ...160A SHORT CIRCUIT PROTECTION ISD=0,6..10X IN, II=1,5..10X IN NEUTRAL PROTECTION OPTIONAL WITH EXT. CT BUSBAR CONNECTION SHUNT TRIP (STL) 220-250 V DC; 208-277 V AC 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	ETU850
Protective function of the overcurrent release	LSI
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	25.5 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	Without

Product function	
• communication function	Yes
• Phase failure detection	No
• other measurement function	Yes
Net weight	2.48 kg

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	154 A
• at 60 °C	148 A
• at 65 °C	142 A
• at 70 °C	136 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	2.5 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	2.5 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	4.25 kA

Adjustable parameters

Adjustable response value current / I _g min.	64 A
Adjustable response value current / I _g min.	160 A

Adjustable response value current / I _g min.	0.5
Adjustable response value current / I _g min.	20
Adjustable response value current / I _g min.	96 A
Adjustable response value current / I _g min.	1 600 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.	240 A
Adjustable response value current / I _i max.	1 600 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	3VA2116-5KP32-0AA0
• of the integrated auxiliary switch/alarm switch	3VA9988-0AA12
• of the integrated auxiliary switch/alarm switch	3VA9988-0AB12
• of the integrated auxiliary trip	3VA9688-0BL33

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



RMRS

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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/3VA2116-5KP32-0KH0>

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

<http://support.automation.siemens.com/WW/view/en/3VA2116-5KP32-0KH0/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2116-5KP32-0KH0

CAX-Online-Generator

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

Tender specifications

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



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