

CIRCUIT BREAKER 3VA1 IEC FRAME 160 BREAKING CAPACITY CLASS N ICU=25KA @ 415 V 4-POLE, LINE PROTECTION TM220, ATFM, IN=160A OVERLOAD PROTECTION IR=112A ...160A SHORT CIRCUIT PROTECTION II=10 X IN NEUTRAL UNPROTECTED BUSBAR CONNECTION



Model	
product brand name	SENTRON
Product designation	Molded case circuit breaker
Design of the product	Line protection
Design of the overcurrent release	TM220
Protective function of the overcurrent release	LI
Number of poles	4

General technical data	
Tension assignée d'isolement U_i	800 V
Max. rated operational voltage U_e with AC 50/60Hz	690 V
Max. rated operational voltage U_e with DC	600 V
Active power loss / for rated value of the current / at AC / in hot operating state / per device	38 W
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	12.67 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
Neutral conductors / upgradeable/retrofitable	No

Ground fault monitoring version	Without
Net weight	1.2 kg
Electricity	
Max. rated operational voltage of the size of the circuit-breaker	160 A
Courant permanent assigné lu	160 A
Operating current	
• at 40 °C	160 A
• at 45 °C	160 A
• at 50 °C	160 A
• at 55 °C	158 A
• at 60 °C	155 A
• at 65 °C	153 A
• at 70 °C	150 A
Switching capacity	
Switching capacity class of the circuit breaker	N
Maximum short-circuit current breaking capacity (I _{cu})	
• at 240 V	36 kA
• at 415 V	25 kA
• at 440 V	16 kA
• at 500 V	8 kA
• at 690 V	7 kA
Operational short-circuit current breaking capacity (I _{cs})	
• 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 (I _{cm})	
• 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.	112 A
Adjustable response value current / I _g min.	160 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.	1 600 A
Adjustable response value current / I _i max.	1 600 A
Ground fault protection / tripping switchable / I _{2t} =ON/OFF	No

Mechanical Design

Height	130 mm
Width	101.6 mm
Depth	70 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.	12 x 0
Type of connectable conductor cross-section, connection screw, width x thickness , max.	17 x 6.5

Auxiliary circuit

Number of CO contacts / for auxiliary contacts	0
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Accessories




Product extension / optional / motor drive	Yes
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Environmental conditions

Protection class IP / on the front	IP40
Ambient temperature	
<ul style="list-style-type: none"> • during operation / minimum • during operation / maximum • during storage / minimum • during storage / maximum 	<ul style="list-style-type: none"> -25 °C 70 °C -40 °C 80 °C

Certificates

Equipment marking / acc. to DIN EN 81346-2	Q
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General Product Approval			EMC	Test Certificates
 CCC	 VDE		sonstig	RCM Typprüfbescheinigung/Werkszeugnis

Test Certificates	Shipping Approval				
sonstig	 ABS	 BUREAU VERITAS	 GL	 LRS	 RMRS

other
sonstig

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/3VA1116-3EE42-0AA0>

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

<http://support.automation.siemens.com/WW/view/en/3VA1116-3EE42-0AA0/all>

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

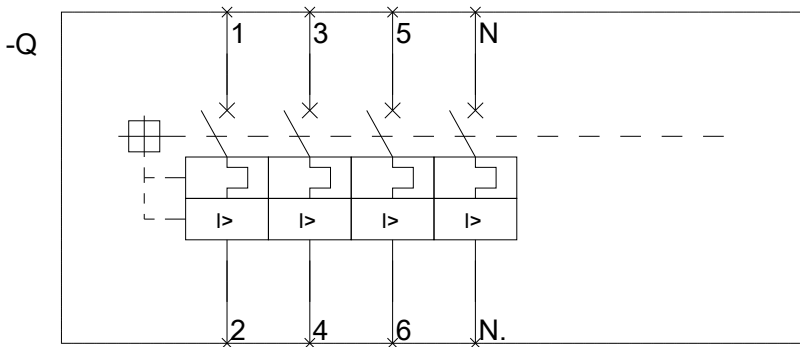
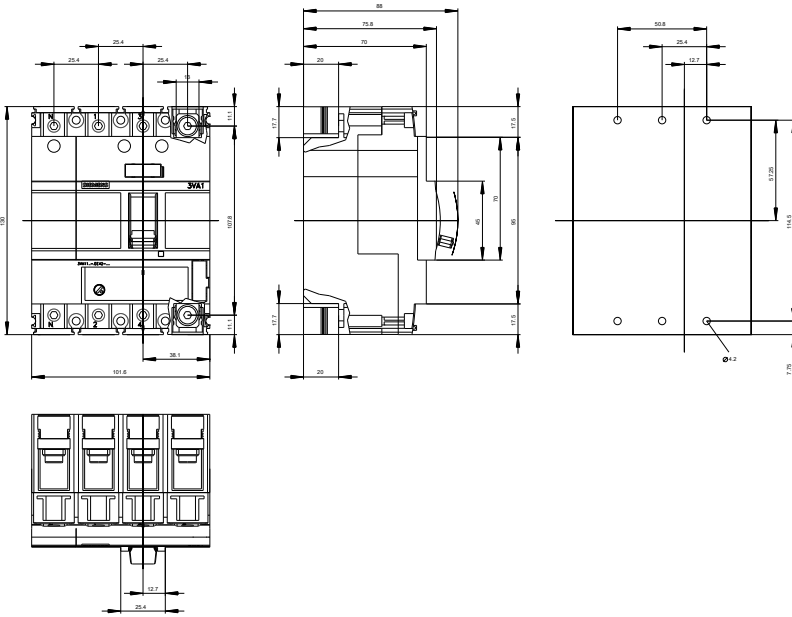
http://www.automation.siemens.com/bilddb/cax_en.aspx?mfb=3VA1116-3EE42-0AA0

CAX-Online-Generator

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

Tender specifications

<http://ausschreibungstexte.siemens.com/tiplv>



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