



Figure similar

CIRCUIT BREAKER 3VA1 IEC FRAME 160 BREAKING CAPACITY CLASS S ICU=36KA @ 415 V 4-POLE, LINE PROTECTION TM240, ATAM, IN=20A OVERLOAD PROTECTION IR=14A ...20A SHORT CIRCUIT PROTECTION II=5...10 X IN NEUTRAL UNPROTECTED CABLE CONNECTION

Model	
product brand name	SENTRON
Product designation	Molded case circuit breaker
Design of the product	Line protection
Product variations	General Applications
Ground fault monitoring version	Without
Design of the auxiliary release	Without auxiliary release
Design of the auxiliary switch	Without
Design of the operating mechanism	toggle handle
Type of the driving mechanism / motor drive	No
Design of the overcurrent release	TM240

General technical data	
Number of poles	4
Trip class / of the L-trip / with I²t characteristic / initial value	1
Trip class / of the L-trip / with I²t characteristic / Full-scale value	1
Electrical endurance (switching cycles)	
• at AC-1 / at 380/415 V / at 50/60 Hz	8 000
circuit-breaker / Design	3VA
Mechanical service life (switching cycles) / typical	15 000

Voltage	
Insulation voltage / Rated value	V 800

Protection class	
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Protection class IP		IP40
Protection class IP / on the front		IP40
Protective function of the overcurrent release		LI

Switching capacity

Switching capacity class of the circuit breaker		S
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Dissipation

Active power loss		
• maximum	W	12

Electricity

Continuous current / Rated value / maximum	A	160
Continuous current / Rated value	A	20
Adjustable response value current		
• of the current-dependent overload release / Full-scale value	A	1
• of the instantaneous short-circuit release / initial value	A	5

Main circuit

Operating voltage		
• with AC / at 50/60 Hz / Rated value	V	690
• for DC / Rated value	V	600
Operating current		
• at 40 °C / Rated value	A	20
• at 50 °C / Rated value	A	20
• at 55 °C / Rated value	A	20
• at 60 °C / Rated value	A	19
• at 65 °C / Rated value	A	19
• at 70 °C / Rated value	A	19

Auxiliary circuit

Number of CO contacts / for auxiliary contacts		0
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Suitability

Suitability for use		system protection
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Adjustable parameters

Adjustable response value current		
• of I-trip / Full-scale value	A	10
• for N-conductor protection / initial value	A	0
• for N-conductor protection / Full-scale value	A	0
Adjustable response value current / of the current-dependent overload release / initial value	A	0.7

Product details

Product component		
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<ul style="list-style-type: none">• Trip indicator		No
<ul style="list-style-type: none">• display		No
<ul style="list-style-type: none">• Voltage trigger		No
<ul style="list-style-type: none">• undervoltage release		No
<ul style="list-style-type: none">• undervoltage release with leading contact		No
Product property <ul style="list-style-type: none">• for neutral conductors / upgradeable/retrofitable / Short-circuit and overload proof		No
Product expansion / optional / motor drive		Yes

Product function

Product function <ul style="list-style-type: none">• Intrinsic device protection• communication function• Phase failure detection• other measurement function		Yes
		No
		No
		No

Accessories

Manufacturer article number / of the supplied basic switch		3VA1120-4EF46-0AA0
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Short circuit

Operational short-circuit current breaking capacity (Ics) <ul style="list-style-type: none">• at 240 V / Rated value• at 415 V / Rated value• at 440 V / Rated value• at 500 V / Rated value• at 690 V / Rated value	kA	55
	kA	36
	kA	25
	kA	15
	kA	5
Maximum short-circuit current breaking capacity (Icu) <ul style="list-style-type: none">• at 240 V / Rated value• at 415 V / Rated value• at 440 V / Rated value• at 500 V / Rated value• at 690 V / Rated value	kA	55
	kA	36
	kA	25
	kA	16
	kA	7
Short-circuit current making capacity (Icm) <ul style="list-style-type: none">• at 240 V / Rated value• at 415 V / Rated value• at 690 V / Rated value	kA	121
	kA	75.6
	kA	7.5

Connections

Arrangement of electrical connectors / for main current circuit		Front terminal
Type of connectable conductor cross-section		

• of the round conductor terminal / stranded	1 x (1.5 - 70 mm ²)
Type of electrical connection / for main current circuit	Box terminal

Mechanical Design

Height	mm	130
Width	mm	101.6
Depth	mm	70
Mounting type		fixed mounting

Environmental conditions

Ambient temperature		
• during operation / minimum	°C	-25
• during operation / maximum	°C	70
• during storage / minimum	°C	-40
• during storage / maximum	°C	80

Certificates

Equipment marking	
• acc. to DIN EN 61346-2	Q
• acc. to DIN EN 81346-2	Q

General Product Approval	EMC	Declaration of Conformity	Shipping Approval	other
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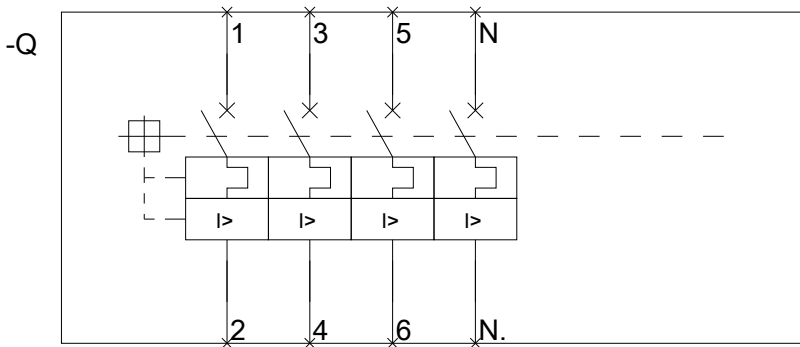
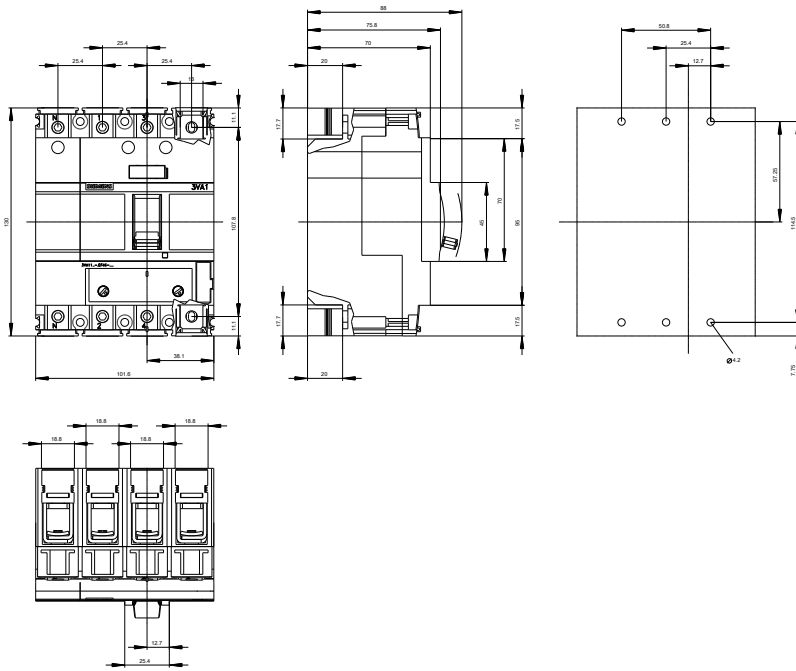


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Further information

- 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/3VA11204EF460AA0>
- Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**
<http://support.automation.siemens.com/WW/view/en/3VA11204EF460AA0/all>
- Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)**
http://www.automation.siemens.com/bilddb/cax_en.aspx?mfb=3VA11204EF460AA0
- CAX-Online-Generator**
<http://www.siemens.com/cax>
- Tender specifications**
<http://ausschreibungstexte.siemens.com/tiplv>



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