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Datasheet 3VA1150-4ED46-0AA0

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CIRCUIT BREAKER 3VA1 IEC FRAME 160 BREAKING CAPACITY CLASS S ICU=36KA @ 415 V 4-POLE, LINE PROTECTION TM210, FTFM, IN=50A OVERLOAD PROTECTION IR=50A FIXED SHORT CIRCUIT PROTECTION II=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		TM210

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

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Protection class		
Protective function of the overcurrent release		LI
Switching capacity		
Switching capacity class of the circuit breaker		S
Dissipation		
Active power loss		
• maximum	W	14.6
Electricity		
Operating current / at 45 °C / Rated value	A	50
Continuous current / Rated value / maximum	A	160
Continuous current		
• Rated value	A	50
Adjustable response value current		
• of the current-dependent overload release / Full-scale value	A	1
• of the instantaneous short-circuit release / initial value	A	10
Net weight	g	1 200
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	50
• at 50 °C / Rated value	A	50
• at 55 °C / Rated value	A	49
• at 60 °C / Rated value	A	48
• at 65 °C / Rated value	A	46
• at 70 °C / Rated value	A	45
Auxiliary circuit		
Number of CO contacts		
• for auxiliary contacts		0
Suitability		
• **Suitability for use**		system protection
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

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Adjustable response value current / of the current-dependent overload release / initial value	A	1

Appearance

Product details

Product component		
• Trip indicator		No
• display		No
• Voltage trigger		No
• undervoltage release		No
• undervoltage release with leading contact		No
Product property		
• for neutral conductors / upgradeable/retrofittable / Short-circuit and overload proof		No
Product expansion		
• optional		
— motor drive		Yes

Product function

Product function		
• Intrinsic device protection		Yes
• communication function		No
• Phase failure detection		No
• other measurement function		No

Accessories

Manufacturer article number / of the supplied basic switch		3VA1150-4ED46-0AA0

Short circuit

Operational short-circuit current breaking capacity (Ics)		
• at 240 V / Rated value	kA	55
• at 415 V / Rated value	kA	36
• at 440 V / Rated value	kA	25
• at 500 V / Rated value	kA	15
• at 690 V / Rated value	kA	5
Maximum short-circuit current breaking capacity (Icu)		
• at 240 V / Rated value	kA	55
• at 415 V / Rated value	kA	36
• at 440 V / Rated value	kA	25
• at 500 V / Rated value	kA	16
• at 690 V / Rated value	kA	7
Short-circuit current making capacity (Icm)		

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• at 240 V / Rated value	kA	121
• at 415 V / Rated value	kA	75.6
• at 690 V / Rated value	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 mm²)
Design of the 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

Reference code		
• acc. to DIN EN 61346-2		Q
• acc. to DIN EN 81346-2		Q

General Product Approval	EMC	Declaration of Conformity	Shipping Approval	other
EAC	other	CE EG-Konf.	GL GL	other

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/3VA11504ED460AA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
http://support.automation.siemens.com/WW/view/en/3VA11504ED460AA0/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA11504ED460AA0

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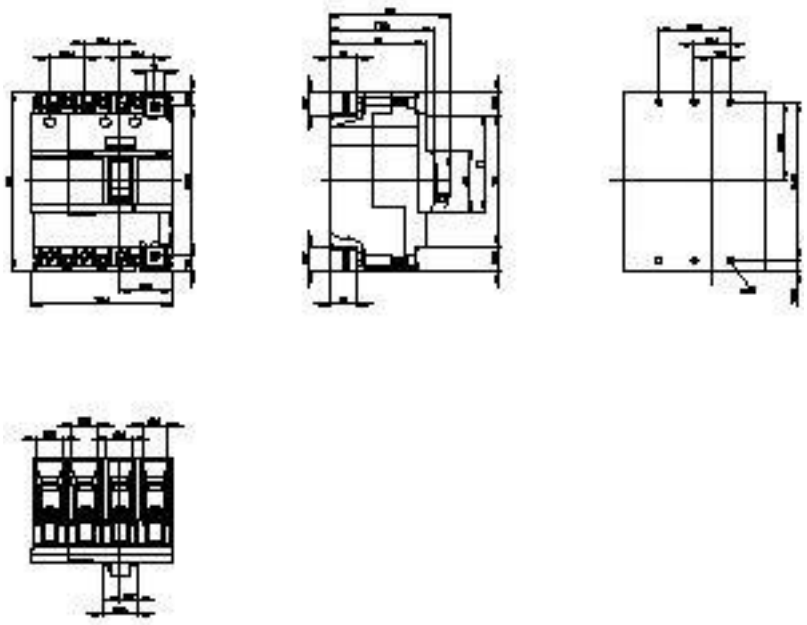

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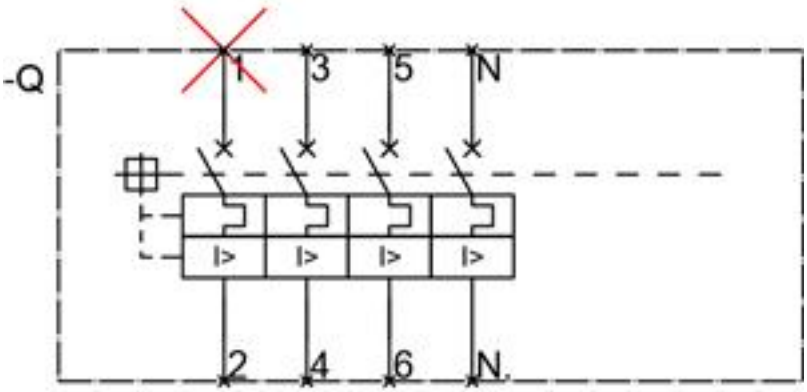

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