SIEMENS

Datasheet

3VA1180-4EE46-0AA0



CIRCUIT BREAKER 3VA1 IEC FRAME 160 BREAKING CAPACITY CLASS S ICU=36KA @ 415 V 4-POLE, LINE PROTECTION TM220, ATFM, IN=80A OVERLOAD PROTECTION IR=56A ...80A SHORT CIRCUIT PROTECTION II=10 X IN NEUTRAL UNPROTECTED CABLE CONNECTION

Figure similar

Model		
product brand name	SENTRO	DN
Product designation	Molded o	case circuit breaker
Design of the product	Line prot	ection
Product variations	General A	Applications
Ground fault monitoring version	Without	
Design of the auxiliary release	Without a	auxiliary release
Design of the auxiliary switch	Without	
Design of the operating mechanism	toggle ha	andle
Type of the driving mechanism / motor drive	No	
Design of the overcurrent release	TM220	

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		
Protective function of the overcurrent release		Ц
Switching capacity	_	
Switching capacity class of the circuit breaker		S
Dissipation		
Active power loss	NA /	40.0
• maximum	W	19.2
Electricity		
Operating current / at 45 °C / Rated value	Α	80
Continuous current / Rated value / maximum	Α	160
Continuous current		
Rated value	Α	80
Adjustable response value current		
 of the current-dependent overload release / Full-scale value 	Α	1
• of the instantaneous short-circuit release / initial value	Α	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	Α	80
• at 50 °C / Rated value	Α	80
• at 55 °C / Rated value	Α	78
• at 60 °C / Rated value	Α	77
• at 65 °C / Rated value	Α	75
• at 70 °C / Rated value	Α	74
Auxiliary circuit		
Number of CO contacts		
• for auxiliary contacts		0
Suitability		
Suitability for use		system protection
Adjustable parameters		
Adjustable response value current	٨	10
of I-trip / Full-scale value	A	10
• for N-conductor protection / initial value	Α	0
• for N-conductor protection / Full-scale value	Α	0

Adjustable response value current / of the current- dependent overload release / initial value	А	0.7
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		3VA1180-4EE46-0AA0
Short circuit		
Operational short-circuit current breaking capacity		
(Ics)	I. A	
• 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)		

• 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

Approval

General

Product

other

EMC



Declaration of

Conformity



GL

Shipping

Approval

other

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/3VA11804EE460AA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA11804EE460AA0/all

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA11804EE460AA0

Tender specifications http://ausschreibungstexte.siemens.com/tiplv

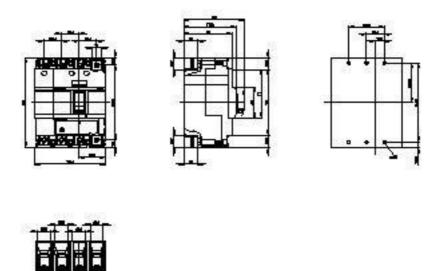


Figure similar

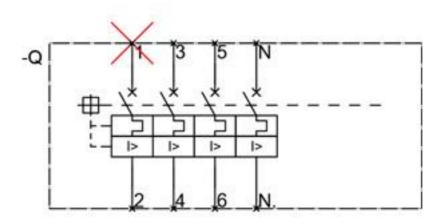


Figure similar

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