SIEMENS

Datasheet

3VA1180-3EE46-0AA0



CIRCUIT BREAKER 3VA1 IEC FRAME 160 BREAKING CAPACITY CLASS N ICU=25KA @ 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	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	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		N
Dissipation		
Active power loss	NA 7	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	Α	10
value	/ \	
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	A	0
• for N-conductor protection / Full-scale value	Α	0

Adjustable response value current / of the current- dependent overload release / initial value	Α	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		3VA1180-3EE46-0AA0
Short circuit		
Operational short-circuit current breaking capacity		
(Ics)		
● at 240 V / Rated value	kA	36
• at 415 V / Rated value	kA	25
• at 440 V / Rated value	kA	16
• at 500 V / Rated value	kA	8
• at 690 V / Rated value	kA	5
Maximum short-circuit current breaking capacity (Icu)		
• at 240 V / Rated value	kA	36
• at 415 V / Rated value	kA	25
• at 440 V / Rated value	kA	16
• at 500 V / Rated value	kA	8
• at 690 V / Rated value	kA	7
Short-circuit current making capacity (Icm)		

• at 240 V / Rated value	kA	75.6
• at 415 V / Rated value	kA	52.5
• at 690 V / Rated value	kA	7.5

• at 690 V / Rated Value		N/A		7.5		
Connections						
Arrangement of electrical connectors						
 for main current circuit 				Front terminal		
Type of connectable conductor cross-sect	ion					
 of the round conductor terminal / stra 	anded			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	Q	
• acc. to DIN EN 81346-2	● acc. to DIN EN 81346-2			Q		
General EMC	Declaration	n of	Ship	ping	other	

Product

Approval

Conformity



Approval

other

Further information

Information- and Downloadcenter (Catalogs, Brochures,...) http://www.siemens.com/lowvoltage/catalogs

other

Industry Mall (Online ordering system)

https://eb.automation.siemens.com/mall/en/WW/Catalog/Product/3VA11803EE460AA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA11803EE460AA0/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA11803EE460AA0

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

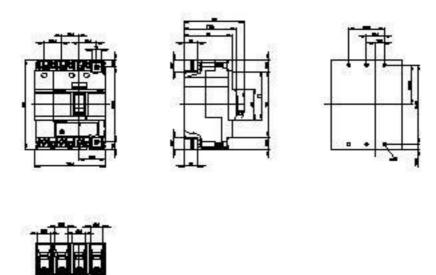


Figure similar

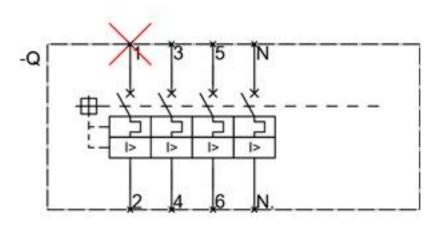


Figure similar

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