SIEMENS

Datasheet

3VA1180-5GE46-0AA0



CIRCUIT BREAKER 3VA1 IEC FRAME 160 BREAKING CAPACITY CLASS M ICU=55KA @ 415 V 4-POLE, LINE PROTECTION TM220, ATFM, IN=80A OVERLOAD PROTECTION IR=56A ...80A SHORT CIRCUIT PROTECTION II=10 X IN NEUTRAL PROTECTION 100% 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		M
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	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		40
● of I-trip / Full-scale value	A	10
• for N-conductor protection / initial value	Α	100
• for N-conductor protection / Full-scale value	Α	100

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		3VA1180-5GE46-0AA0
Short circuit		
Operational short-circuit current breaking capacity		
(Ics)		
● at 240 V / Rated value	kA	85
● at 415 V / Rated value	kA	55
• at 440 V / Rated value	kA	30
• 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	85
• at 415 V / Rated value	kA	55
• at 440 V / Rated value	kA	30
• at 500 V / Rated value	kA	20
• at 690 V / Rated value	kA	10
Short-circuit current making capacity (Icm)		

• at 240 V / Rated value	kA	187
● at 415 V / Rated value	kA	121
• at 690 V / Rated value	kA	17

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			

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

fixed mounting

С	ertificates					
	Reference code					
	• acc. to DIN EN	61346-2		Q		
	• acc. to DIN EN	81346-2		Q		
	General	FMC	Declaration of	Shinning	other	

General	EMC	Declaration of	Shipping	other
Product		Conformity	Approval	
Approval				



Mounting type

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/3VA11805GE460AA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA11805GE460AA0/all

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA11805GE460AA0

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

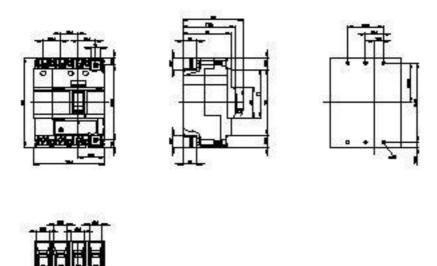


Figure similar

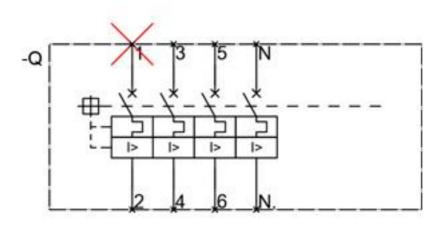


Figure similar

last modified: 21.10.2014