SIEMENS

Data sheet

3VA1180-5EF46-0AA0



CIRCUIT BREAKER 3VA1 IEC FRAME 160 BREAKING CAPACITY CLASS M ICU=55KA @ 415 V 4-POLE, LINE PROTECTION TM240, ATAM, IN=80A OVERLOAD PROTECTION IR=56A ...80A SHORT CIRCUIT PROTECTION II=5...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		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					

Protection class IP / on the front Protective function of the overcurrent release Switching capacity Switching capacity class of the circuit breaker		IP40 LI			
Switching capacity		LI			
Ownering capacity class of the circuit breaker		M			
		IVI			
Dissipation					
Active power loss					
• maximum	W	19.2			
Electricity					
Continuous current / Rated value / maximum	А	160			
Continuous current / Rated value	А	80			
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	А	80			
• at 50 °C / Rated value	А	80			
• at 55 °C / Rated value	А	78			
• at 60 °C / Rated value	А	77			
• at 65 °C / Rated value	А	75			
• at 70 °C / Rated value	А	74			
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	А	10			
 for N-conductor protection / initial value 	А	0			
 for N-conductor protection / Full-scale value 	А	0			
Adjustable response value current / of the current-	A	0.7			
dependent overload release / initial value					
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		<u>3VA1180-5EF46-0AA0</u>
switch		
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		

Type of connectable conductor cross-section

• of the round co	onductor terminal / str	randed		1 x (1.5 - 70 mm²)	
Type of electrical co	nnection / for main cu	urrent circuit		Box terminal	
Mechanical Design					
Height			mm	130	
Width			mm	101.6	
Depth			mm	70	
Mounting type				fixed mounting	
Environmental conc	litions				
Ambient temperature	e				
 during operation 	on / minimum		°C	-25	
 during operation 	on / maximum		°C	70	
 during storage 	/ minimum		°C	-40	
 during storage 	/ maximum		°C	80	
Certificates					
Equipment marking					
 acc. to DIN EN 	l 61346-2			Q	
 acc. to DIN EN 	V 81346-2			Q	
General Product Approval	EMC	Declaration Conformity		pping Approval	other
EHC	other	EG-Konf.			other

Further information

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

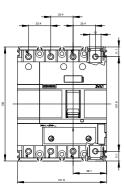
Industry Mall (Online ordering system) https://eb.automation.siemens.com/mall/en/WW/Catalog/Product/3VA11805EF460AA0

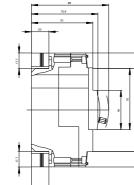
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA11805EF460AA0/all

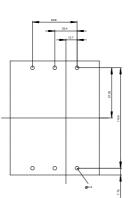
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA11805EF460AA0

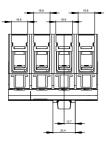
CAx-Online-Generator http://www.siemens.com/cax

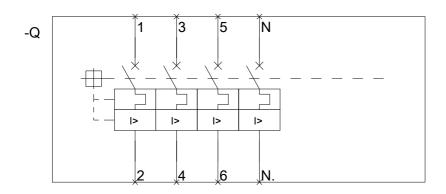
Tender specifications http://ausschreibungstexte.siemens.com/tiplv











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