SIEMENS

Data sheet



3VA2040-7HM46-0AA0

CIRCUIT BREAKER 3VA2 IEC FRAME 100 BREAKING CAPACITY CLASS C ICU=110KA @ 415 V 4POLE, LINE PROTECTION ETU330, LIG, IN=40A OVERLOAD PROTECTION IR=16A ...40A SHORT CIRCUIT PROTECTION II=1,5...12 X IN NEUTRAL PROTECTION ADJUSTABLE(OFF,100%) GROUNDFAULTPROTECTION IG=0,2... 1 X IN, TG=0,1/0,3MS CABLE CONNECTION

Model							
product brand name		SENTRON					
Product designation		Molded case circuit breaker					
Design of the product		Line protection					
Product variations		Selective Applications					
Ground fault monitoring version		Summation current formation L + N conductor					
Design of the auxiliary release		without auxiliaryrelease					
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		ETU330					
General technical data							
Number of poles		4					
Trip class / of the L-trip / with I2t characteristic / initial		0.5					
value							
Trip class / of the L-trip / with I2t characteristic / Full-		17					
scale value							
Electrical endurance (switching cycles)							
• at AC-1 / at 380/415 V / at 50/60 Hz		12 000					
Total disconnection time / for G-tripping / with	S	0.1					
standard characteristic / initial value							
Total disconnection time / for G-tripping / with	S	0.3					
standard characteristic / Full-scale value							
circuit-breaker / Design		3VA					
Mechanical service life (switching cycles) / typical		20 000					

Voltage		
Insulation voltage / Rated value	V	800
Protection class		
Protection class IP	_	IP40
Protection class IP / on the front	-	IP40
Protective function of the overcurrent release	-	LIG
Switching capacity		
Switching capacity class of the circuit breaker		С
Dissipation		
Active power loss		
• maximum	W	2.2
Electricity		
Continuous current / Rated value / maximum	A	100
Continuous current / Rated value	A	40
Adjustable response value current / of the	A	1.5
instantaneous short-circuit release / initial value		
Main circuit		
Operating voltage		
• with AC / at 50/60 Hz / Rated value	V	690
Operating current		
● at 40 °C / Rated value	А	40
● at 50 °C / Rated value	А	40
● at 60 °C / Rated value	A	40
• at 65 °C / Rated value	А	40
• at 70 °C / Rated value	А	40
Auxiliary circuit	_	
Number of NC contacts / for auxiliary contacts		0
Number of NO contacts / for auxiliary contacts		0
Suitability		
Suitability for use		system protection
Adjustable parameters		
Adjustable response value current		
• for G-tripping / with standard characteristic /	А	0.4
initial value		
 for G-tripping / with standard characteristic / 	А	1
Full-scale value		
 of I-trip / Full-scale value 	А	12
Adjustable response value current / of the current-	A	0.4
dependent overload release / initial value		

Product details		
Product component		
Trip indicator		No
• display		No
 undervoltage release 		No
Product property	-	
 of the circuit breaker with tripping unit / Tripping characteristic adjustable 		Yes
 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	_	3VA2040-7HM46-0AA0
Short circuit Operational short-circuit current breaking capacity	-	
(lcs)		
• at 240 V / Rated value	kA	150
• at 415 V / Rated value	kA	110
● at 440 V / Rated value	kA	110
● at 500 V / Rated value	kA	85
● at 690 V / Rated value	kA	2
Maximum short-circuit current breaking capacity (Icu)	_	
• at 240 V / Rated value	kA	150
• at 415 V / Rated value	kA	110
● at 440 V / Rated value	kA	110
• at 500 V / Rated value	kA	85
• at 690 V / Rated value	kA	2
Short-circuit current making capacity (Icm)		
• at 240 V / Rated value	kA	330
• at 415 V / Rated value	kA	242
• at 440 V / Rated value	kA	242
• at 500 V / Rated value	kA	187
• at 690 V / Rated value	kA	3

Connections						
Arrangement of electrical connectors / for main			Front termin	al		
current circuit						
Type of connectable conductor cross-section						
 of the round conductor terminal / stranded 			1 x (6-120 mm²)			
Type of electrical connection / for main current circuit			Box terminal			
Mechanical Design						
Height	mm		181			
Width	mm		140			
Depth	mm		107			
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						
Equipment marking						
• acc. to DIN EN 61346-2			Q			
• acc. to DIN EN 81346-2			Q			
General Product Approval		EMO	0	Declaration of Conformity	other	
			other	CE	other	
CCC VDE				EG-Konf.		

Further information

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

Industry Mall (Online ordering system)

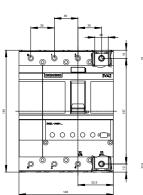
https://eb.automation.siemens.com/mall/en/WW/Catalog/Product/3VA20407HM460AA0

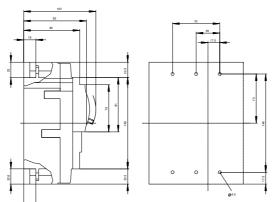
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA20407HM460AA0/all

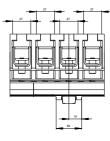
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA20407HM460AA0

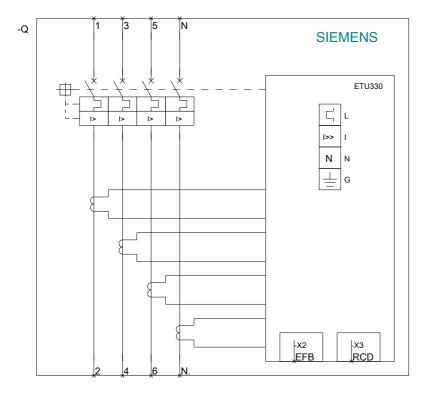
CAx-Online-Generator http://www.siemens.com/cax

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









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