SIEMENS

Data sheet

3VA1220-5MH32-0AA0



circuit breaker 3VA1 IEC frame 250 breaking capacity class M Icu=55kA @ 415V 3-pole, starter protection TM120M, AM, In=200A without overload protection short-circuit protection Ii=6...14 x In nut keeper kit

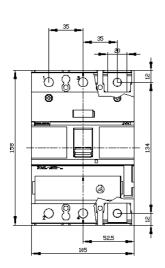
Model					
product brand name	SENTRON				
product designation	Molded case circuit breaker				
Product version	Starter protection				
design of the overcurrent release	TM120M				
protection function of the overcurrent release	1				
number of poles	3				
General technical data					
rated insulation voltage Ui	800 V				
power loss [W] / maximum	42 W				
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	14 W				
mechanical service life (switching cycles) / typical	20 000				
Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz	8 000				
Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz	5 400				
Neutral conductors / upgradeable/retrofittable	No				
ground-fault monitoring version	Without				
product function					
 communication function 	No				
 phase failure detection 	No				
 other measurement function 	No				
net weight	1.8 kg				
Current					
Max. rated operational current of the frame size	250 A				
Courant permanent assigné lu	200 A				
operational current					
• at 40 °C	200 A				
● at 45 °C	200 A				
● at 50 °C	200 A				
● at 55 °C	194 A				
● at 60 °C	188 A				
● at 65 °C	182 A				
● at 70 °C	176 A				
Switching capacity according to IEC 60947					
switching capacity class of the circuit breaker	Μ				
breaking capacity maximum short-circuit current (Icu)					

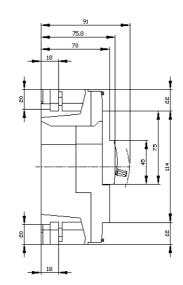
Accessories product extension / optional / motor drive Environmental conditions protection class IP / on the front ambient temperature • during operation / minimum • during operation / maximum • during storage / minimum • during storage / maximum Certificates reference code / acc. to IEC 81346-2 General Product Approval $\widetilde{\text{ccc}}$	Miscellaneo		с С	EHC	EMC EMC EMC RCM
product extension / optional / motor drive Environmental conditions protection class IP / on the front ambient temperature • during operation / minimum • during operation / maximum • during storage / minimum • during storage / maximum Certificates reference code / acc. to IEC 81346-2	Miscellaneo	IP40 -25 °C 70 °C -40 °C 80 °C	<u>C</u>	EHC	EMC
product extension / optional / motor drive Environmental conditions protection class IP / on the front ambient temperature • during operation / minimum • during operation / maximum • during storage / minimum • during storage / maximum Certificates reference code / acc. to IEC 81346-2	Miscellaneo	IP40 -25 °C 70 °C -40 °C 80 °C	C		EMC
product extension / optional / motor drive Environmental conditions protection class IP / on the front ambient temperature • during operation / minimum • during operation / maximum • during storage / minimum • during storage / maximum Certificates reference code / acc. to IEC 81346-2		IP40 -25 °C 70 °C -40 °C 80 °C			EMC
product extension / optional / motor drive Environmental conditions protection class IP / on the front ambient temperature • during operation / minimum • during operation / maximum • during storage / minimum • during storage / maximum Certificates reference code / acc. to IEC 81346-2		IP40 -25 °C 70 °C -40 °C 80 °C			
product extension / optional / motor drive Environmental conditions protection class IP / on the front ambient temperature • during operation / minimum • during operation / maximum • during storage / minimum • during storage / maximum Certificates		IP40 -25 °C 70 °C -40 °C 80 °C			
product extension / optional / motor drive Environmental conditions protection class IP / on the front ambient temperature • during operation / minimum • during operation / maximum • during storage / minimum • during storage / maximum		IP40 -25 °C 70 °C -40 °C			
product extension / optional / motor drive Environmental conditions protection class IP / on the front ambient temperature • during operation / minimum • during operation / maximum • during storage / minimum		IP40 -25 °C 70 °C -40 °C			
product extension / optional / motor drive Environmental conditions protection class IP / on the front ambient temperature • during operation / minimum • during operation / maximum		IP40 -25 °C 70 °C			
product extension / optional / motor drive Environmental conditions protection class IP / on the front ambient temperature • during operation / minimum		IP40 -25 °C			
product extension / optional / motor drive Environmental conditions protection class IP / on the front					
product extension / optional / motor drive Environmental conditions					
product extension / optional / motor drive		Yes			
		Yes			
Accessories					
number of CO contacts / for auxiliary contacts	S	0			
Auxiliary circuit					
screw, width x thickness , max.		25 x 8 mm			
	Type of connectable conductor cross-section, connection				
Type of connectable conductor cross-section, connection screw, width x thickness, min.		13 x 1 mm			
type of electrical connection / for main current circuit		nut keeper kit or	both ends		
circuit					
arrangement of electrical connectors / for ma	in current	Front terminal			
Connections					
depth [in] depth		2.76 m 70 mm			
Width depth [in]		105 mm 2.76 in			
width [in]		4.13 in			
Height		158 mm			
height [in]		6.22 in			
Mechanical Design					
Ground fault protection / tripping switchable /	I2t=ON/OFF	No			
Adjustable response value current / li max.		2 800 A			
Adjustable response value current / li min.		1 200 A			
Adjustable parameters					
• at 690 V		4.5 kA			
• at 500 V		30 kA			
• at 440 V		75.6 kA			
• at 240 V		121 kA			
 short-circuit current making capacity (Icm) at 240 V 		187 kA			
		3 KA			
● at 500 V ● at 690 V		10 kA 3 kA			
• at 440 V		36 kA			
• at 415 V		55 kA			
• at 240 V		85 kA			
breaking capacity operating short-circuit curre	ent (Ics)				
• at 690 V		3 kA			
• at 500 V		15 kA			
● at 440 V		36 kA			
		55 kA			
 at 240 V at 415 V 		85 kA			

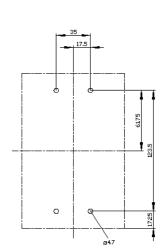
CE EG-Konf.	<u>UK Declaration of</u> <u>Conformity</u>	Special Test Certific- ate	<u>Type Test Certific-</u> ates/Test Report	<u>Miscellaneous</u>	Lloyds Register urs
Marine / Shipping	other				
DNV-GL	Confirmation	<u>Miscellaneous</u>	<u>Miscellaneous</u>		

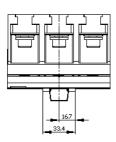
Further information

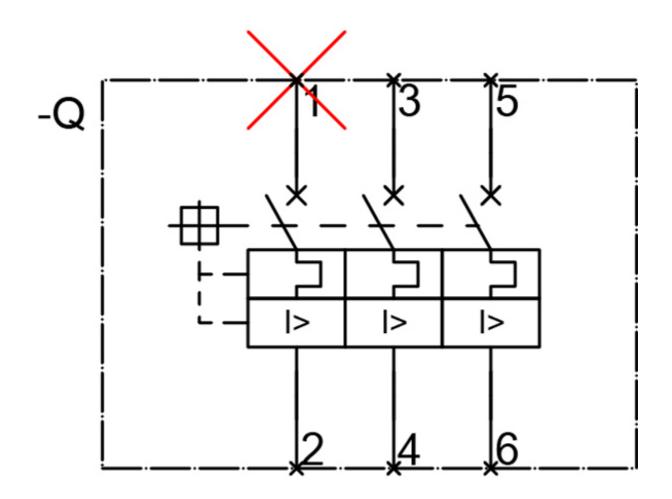
Information- and Downloadcenter (Catalogs, Brochures,...) http://www.siemens.com/lowvoltage/catalogs Industry Mall (Online ordering system) https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3VA1220-5MH32-0AA0 Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3VA1220-5MH32-0AA0 Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA1220-5MH32-0AA0 CAx-Online-Generator http://www.siemens.com/cax Tender specifications http://www.siemens.com/specifications











last modified:

8/10/2021 🖸