



CIRCUIT BREAKER 3VA1 IEC FRAME 160 BREAKING CAPACITY CLASS H ICU=70KA @ 415 V 3-POLE,MOTOR STARTER PROTECTION TM120M, AM, IN=125A WITHOUT OVERLOAD PROTECTION SHORT CIRCUIT PROTECTION II=5...15 X IN CABLE CONNECTION UNDERVOLTAGE RELEASE (UVR) 120-127 V AC 50/60 HZ

Model	
product brandname	SETRON
Product designation	Molded case circuit breaker
Design of the product	Starter protection
Design of the overcurrent release	TM120M
Protective function of the overcurrent release	I
Number of poles	3
Design of the auxiliary release	Undervoltage release (UVR)
Design of the auxiliary switch	Without
General technical data	
Tension assignée d'isolement Ui	800 V
Max. rated operational voltage Ue with AC 50/60Hz	690 V
Max. rated operational voltage Ue with DC	500 V
Operating power / at AC-3 / at 400 V	0 W
Operating power / at AC-3 / at 230 V	0 W
Active power loss / for rated value of the current / at AC / in hot operating state / per device	23.2 W
Mechanical service life (switching cycles) / typical	15 000

Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz	8 000
Neutral conductors / upgradeable/retrofitable	No
Ground fault monitoring version	Without
Product function	
• communication function	No
• Phase failure detection	No
• other measurement function	No
Net weight	0.9 kg

Electricity

Max. rated operational voltage of the size of the circuit-breaker	160 A
Courant permanent assigné Iu	125 A
Operating current	
• at 40 °C	125 A
• at 45 °C	125 A
• at 50 °C	125 A
• at 55 °C	122 A
• at 60 °C	120 A
• at 65 °C	117 A
• at 70 °C	114 A

Switching capacity according to IEC 60947

Switching capacity class of the circuit breaker	H
Maximum short-circuit current breaking capacity (Icu)	
• at 240 V	100 kA
• at 415 V	70 kA
• at 440 V	36 kA
• at 690 V	5 kA
Operational short-circuit current breaking capacity (Ics)	
• at 240 V	100 kA
• at 415 V	70 kA
• at 440 V	36 kA
• at 690 V	5 kA
Short-circuit current making capacity (Icm)	
• at 240 V	220 kA
• at 415 V	154 kA
• at 440 V	75.6 kA
• at 690 V	8.5 kA

Adjustable parameters

Adjustable response value current / I _g min.	0 A
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Adjustable response value current / Ig min.	0 A
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Adjustable response value current / Ig min.	0 A
Adjustable response value current / Ii min.	0 A
Adjustable response value current / Ii max.	0 A

Mechanical Design

Height	130 mm
Width	76.2 mm
Depth	70 mm

Connections

Arrangement of electrical connectors / for main current circuit	Front terminal
Type of electrical connection / for main current circuit	box terminal
Type of connectable conductor cross-section, round conductor terminal, stranded	1 x (1.5 - 70 mm²)

Auxiliary circuit

Product component	
• undervoltage release	Yes
• Voltage trigger	No
• undervoltage release with leading contact	No
• Trip indicator	No

Accessories

Product extension / optional / motor drive	Yes
Manufacturer's article number	
• of the supplied basic switch	3VA1112-6MH36-0AA0
• of the integrated auxiliary trip	3VA9608-0BB24

Environmental conditions

Protection class IP / on the front	IP40
Ambient temperature	
• during operation / minimum	-25 °C
• during operation / maximum	70 °C
• during storage / minimum	-40 °C
• during storage / maximum	80 °C

Certificates

Equipment marking / acc. to DIN EN 81346-2	Q
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