



CIRCUIT BREAKER 3VA1 IEC FRAME 250 BREAKING CAPACITY
CLASS M ICU=55KA @ 415 V 3-POLE, MOTOR STARTER PROT.
TM120M, AM, IN=160A WITHOUT OVERLOAD PROTECTION
SHORT CIRCUIT PROTECTION II=7...16 X IN BUSBAR
CONNECTION UNDERVOLTAGE RELEASE (UVR) 24 V DC 2
AUXILIARY SWITCH HQ 1 TRIP ALARM SWITCH HQ

Model	
product brandname	SENTRON
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	Shunt trip (STL)
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	55 W
Operating power / at AC-3 / at 230 V	0 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	1.98 kg

Electricity

Max. rated operational voltage of the size of the circuit-breaker	250 A
Courant permanent assigné lu	160 A
Operating current	
• at 40 °C	160 A
• at 45 °C	160 A
• at 50 °C	160 A
• at 55 °C	153.6 A
• at 60 °C	150.4 A
• at 65 °C	147.2 A
• at 70 °C	144 A

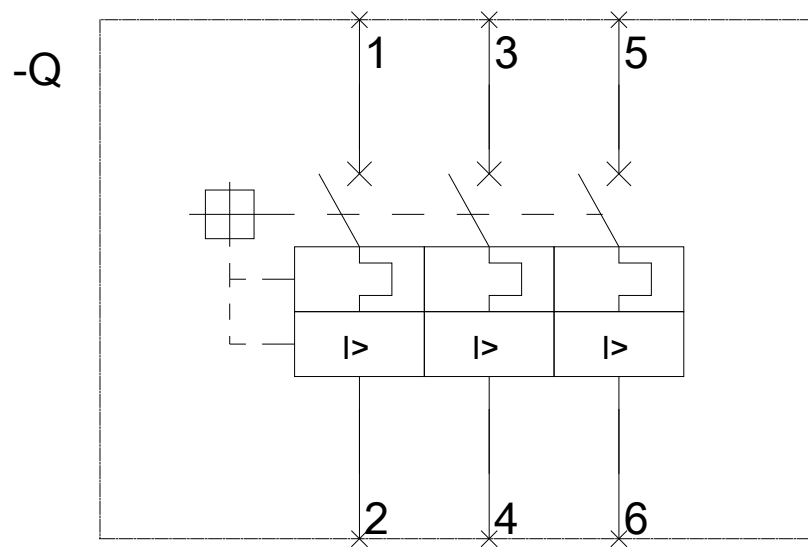
Switching capacity according to IEC 60947

Switching capacity class of the circuit breaker	M
Maximum short-circuit current breaking capacity (Icu)	
• at 240 V	85 kA
• at 415 V	55 kA
• at 440 V	30 kA
• at 690 V	10 kA
Operational short-circuit current breaking capacity (Ics)	
• at 240 V	85 kA
• at 415 V	55 kA
• at 440 V	30 kA
• at 690 V	5 kA
Short-circuit current making capacity (Icm)	
• at 240 V	187 kA
• at 415 V	121 kA
• at 690 V	17 kA

Adjustable parameters

Adjustable response value current / Ig min.	0 A
Adjustable response value current / Ig min.	0 A
Adjustable response value current / Ig min.	0 A
Adjustable response value current / Ig min.	0 A
Adjustable response value current / Ii min.	0 A

Adjustable response value current / I _n max.	0 A
Mechanical Design	
Height	158 mm
Width	105 mm
Depth	70 mm
Connections	
Arrangement of electrical connectors / for main current circuit	Front terminal
Type of electrical connection / for main current circuit	lug terminal
Auxiliary circuit	
Product component	
• undervoltage release	No
• Voltage trigger	Yes
• 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	3VA1216-5MH32-0AA0
• of the integrated auxiliary trip	3VA9688-0BL30
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



last modified:

10/24/2016