



circuit breaker 3VA1 IEC frame 400 breaking capacity class M Icu=55kA @ 415V 3-pole, starter protection TM120M, AM, In=250A without overload protection short-circuit protection Ii=8...16 x In nut keeper kit

Model	
product brand name	SENTRON
product designation	Molded case circuit breaker
design of the product	Starter protection
design of the overcurrent release	TM120M
protection function of the overcurrent release	I
number of poles	3
General technical data	
insulation voltage / rated value	800 V
operating voltage / at AC / rated value	690 V
power loss [W] / maximum	30 W
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	10 W
mechanical service life (operating cycles) / typical	20 000
Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz	6 000
Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz	4 200
product feature / for neutral conductors / upgradable/retrofitable / short-circuit and overload proof	No
ground-fault monitoring version	Without
product function	
• communication function	No
• phase failure detection	No
• other measurement function	No
Net Weight	4.93 kg
Current	
continuous current / rated value / maximum	400 A
Courant permanent assigné Iu	250 A
operational current	
• at 40 °C	250 A
• at 45 °C	250 A
• at 50 °C	250 A
• at 55 °C	245 A
• at 60 °C	239 A
• at 65 °C	234 A
• at 70 °C	228 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

<ul style="list-style-type: none"> • at 440 V • at 500 V • at 690 V 	55 kA
	36 kA
	7 kA
operating short-circuit current breaking capacity (Ics)	
<ul style="list-style-type: none"> • at 240 V • at 415 V • at 440 V • at 500 V • at 690 V 	85 kA
	55 kA
	55 kA
	36 kA
	5 kA
short-circuit current making capacity (Icm)	
<ul style="list-style-type: none"> • at 240 V • at 415 V • at 440 V • at 500 V • at 690 V 	187 kA
	121 kA
	121 kA
	75.6 kA
	11.9 kA
design of short-circuit protection	For switching power values in DC networks, see the 3VA molded case circuit breaker device manual; link to be found under Service & Support in the last chapter

Adjustable parameters

adjustable response value setting current (Ii) / for I-tripping	
<ul style="list-style-type: none"> • minimum • maximum 	2 000 A
	4 000 A
adjustable absolute value setting current (InN) / for N-tripping	
<ul style="list-style-type: none"> • minimum • maximum 	250 A
	250 A
adjustable current response value current / of instantaneous short-circuit trip unit	
<ul style="list-style-type: none"> • minimum • maximum 	2 000 A
	4 000 A
Ground fault protection / tripping switchable / I2t=ON/OFF	No

Mechanical Design

product component	
<ul style="list-style-type: none"> • undervoltage release • voltage trigger • trip indicator 	No
	No
	No
height [in]	9.76 in
height	248 mm
width [in]	5.43 in
width	138 mm
depth [in]	4.33 in
depth	110 mm

Connections

arrangement of electrical connectors / for main current circuit	Front terminal
type of electrical connection / for main current circuit	nut keeper kit on both ends
Type of connectable conductor cross-section, connection screw, width x thickness , min.	20 x 1 mm
Type of connectable conductor cross-section, connection screw, width x thickness , max.	35 x 10 mm
design of the surface / of the connections / on the top of the switch (N, 1, 3, 5)	Silver
design of the surface / of the connections / on the bottom of the switch (N, 2, 4, 6)	Silver

Auxiliary circuit

number of CO contacts / for auxiliary contacts	0
--	---

Accessories

product extension / optional / motor drive	Yes
--	-----

Environmental conditions

protection class IP / on the front	IP40
ambient temperature	
<ul style="list-style-type: none"> • during operation / minimum • during operation / maximum • during storage / minimum 	-25 °C
	70 °C
	-40 °C

• during storage / maximum

80 °C

Certificates

reference code / according to IEC 81346-2

Q

General Product Approval

EMC



[Confirmation](#)



[Miscellaneous](#)



Declaration of Conformity

Test Certificates

Marine / Shipping



EG-Konf.



[Miscellaneous](#)

[Special Test Certificate](#)



ABS



BUREAU
VERITAS

Marine / Shipping

other



DNV

[Confirmation](#)

[Environmental Confirmations](#)

[Miscellaneous](#)

[Miscellaneous](#)

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=3VA1325-5MH32-0AA0>

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3VA1325-5MH32-0AA0>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

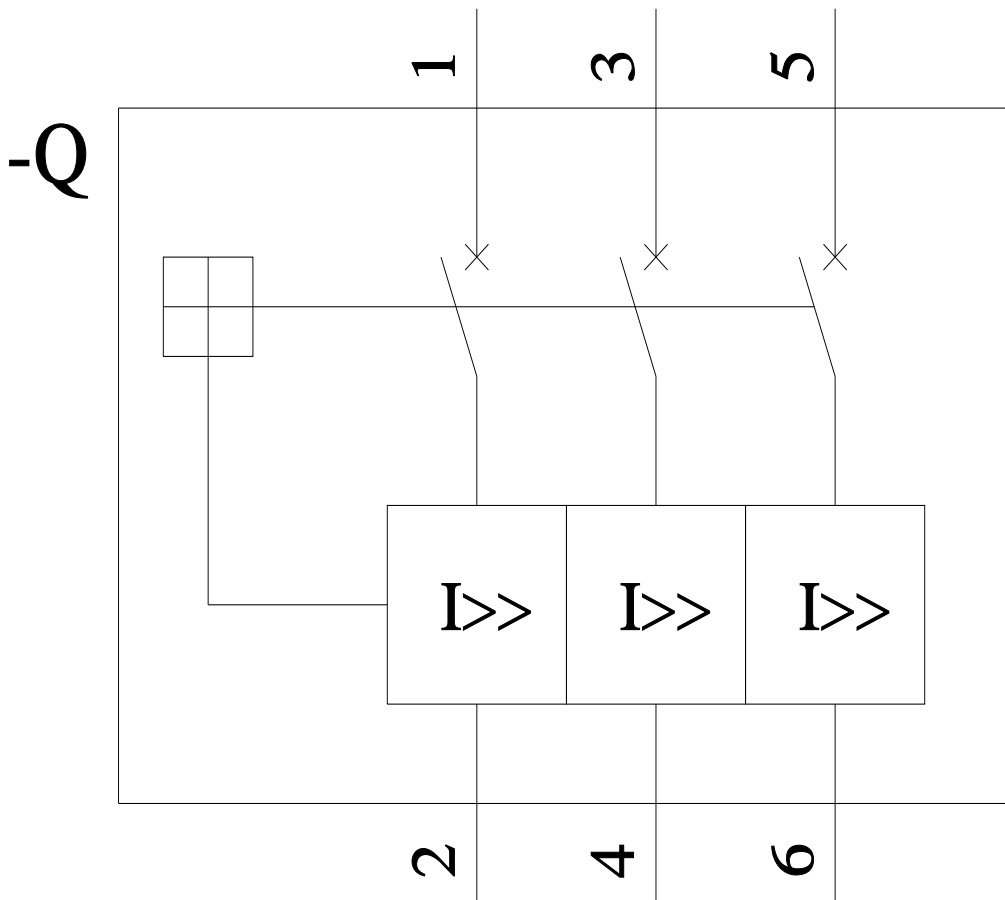
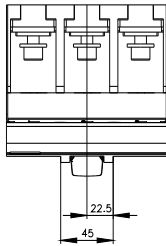
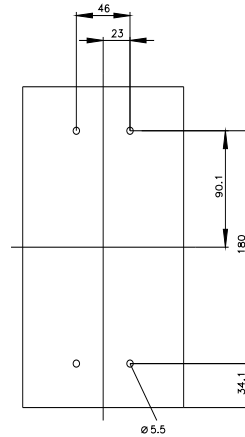
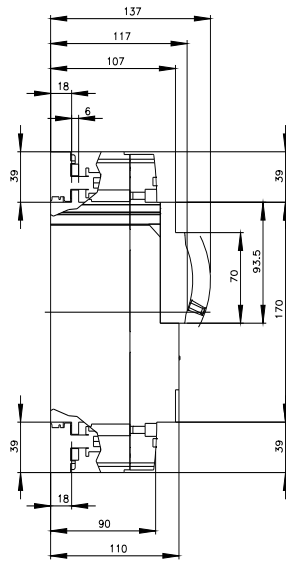
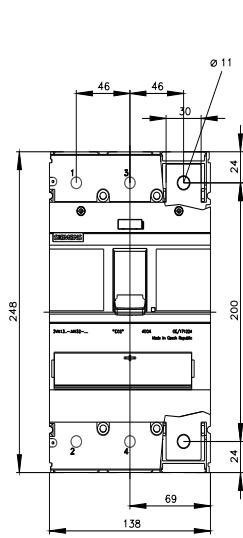
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA1325-5MH32-0AA0

CAX-Online-Generator

<http://www.siemens.com/cax>

Tender specifications

<http://www.siemens.com/specifications>



last modified:

10/22/2022

