



circuit breaker 3VA1 IEC frame 1000 breaking capacity class C Icu=110kA @ 415V 3-pole, starter protection TM120M, AM, In=630A without overload protection short-circuit protection li=8...15 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	132 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	44 W
mechanical service life (operating cycles) / typical	10 000
electrical endurance (operating cycles) / at AC-1 / at 380/415 V	4 600
electrical endurance (operating cycles) / at AC-1 / at 690 V	3 200
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	12.921 kg
Current	
continuous current / rated value / maximum	1 000 A
continuous current / rated value	630 A
operational current	
• at 40 °C	630 A
• at 45 °C	630 A
• at 50 °C	630 A
• at 55 °C	618 A
• at 60 °C	607 A
• at 65 °C	595 A
• at 70 °C	583 A
Switching capacity according to IEC 60947	
switching capacity class of the circuit breaker	C
maximum short-circuit current breaking capacity (Icu)	
• at 240 V	200 kA
• at 415 V	110 kA
• at 440 V	110 kA

• at 500 V • at 690 V	70 kA
operating short-circuit current breaking capacity (Ics)	35 kA
• at 240 V • at 415 V • at 440 V • at 500 V • at 690 V	150 kA
	85 kA
	70 kA
	65 kA
	19 kA
short-circuit current making capacity (Icm)	
• at 240 V • at 415 V • at 440 V • at 500 V • at 690 V	440 kA
	242 kA
	242 kA
	154 kA
	73.5 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	
• minimum • maximum	5 040 A
	9 450 A
adjustable absolute value setting current (InN) / for N-tripping	
• minimum • maximum	630 A
	630 A
adjustable current response value current / of instantaneous short-circuit trip unit	
• minimum • maximum	5 040 A
	9 450 A
product function / grounding protection	No

Mechanical Design

product component	
• undervoltage release • voltage trigger • trip indicator	No
	No
	No
height [in]	12.6 in
height	320 mm
width [in]	8.27 in
width	210 mm
depth [in]	4.72 in
depth	120 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-sections / for flat-bar terminal connection / minimum	20 x 4 mm
type of connectable conductor cross-sections / for flat-bar terminal connection / maximum	50 x 28 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	No
--	----

Environmental conditions

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

Certificates

reference code / according to IEC 81346-2

Q

General Product Approval

EMC

[Confirmation](#)



[Miscellaneous](#)



Declaration of Conformity

Test Certificates

Marine / Shipping



[Miscellaneous](#)

[Special Test Certificate](#)



Marine / Shipping

other



[Miscellaneous](#)

[Confirmation](#)

[Environmental Confirmations](#)

[Miscellaneous](#)

Further information

Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

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=3VA1563-7MH32-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA1563-7MH32-0AA0>

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

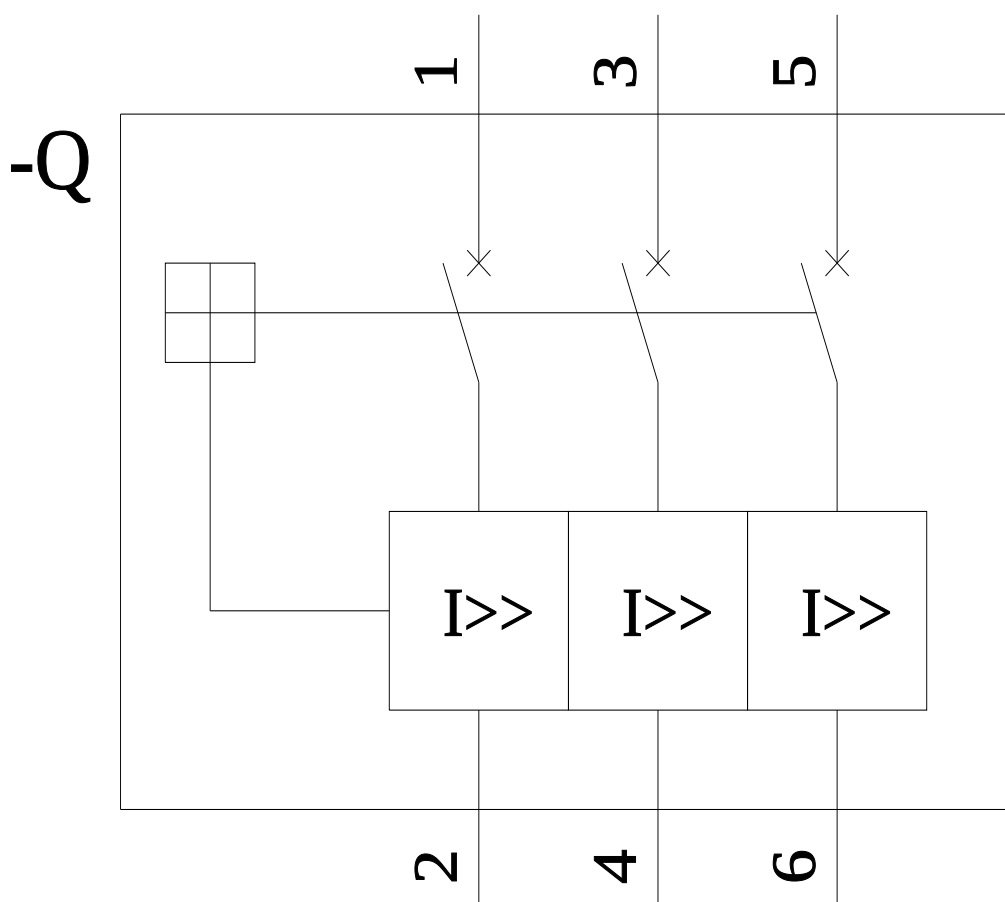
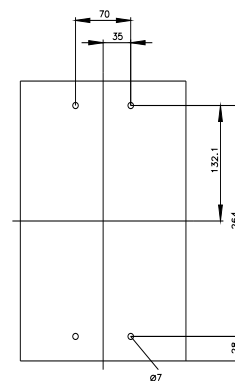
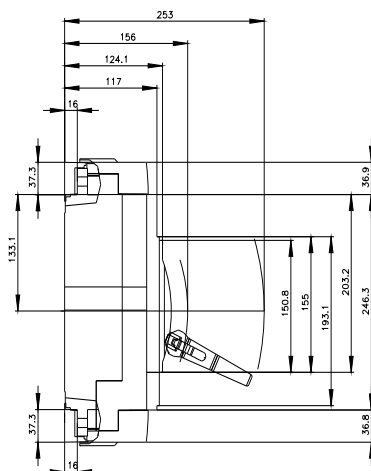
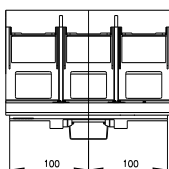
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA1563-7MH32-0AA0

CAX-Online-Generator

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

Tender specifications

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

10/22/2022

