



circuit breaker 3VA1 IEC frame 250 breaking capacity class S Icu=36kA @ 415V 4-pole, line protection TM240, ATAM, In=250A overload protection Ir=175A...250A short-circuit protection Ii=5...10 x In N conductor unprotected nut keeper kit

Model	
product brand name	SENTRON
product designation	Molded case circuit breaker
design of the product	Line protection
design of the overcurrent release	TM240
protection function of the overcurrent release	LI
number of poles	4
General technical data	
insulation voltage / rated value	800 V
operating voltage / at DC / rated value	600 V
operating voltage / at AC / rated value	690 V
power loss [W] / maximum	57 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	19 W
mechanical service life (operating cycles) / typical	20 000
electrical endurance (operating cycles) / at AC-1 / at 380/415 V	8 000
electrical endurance (operating cycles) / at AC-1 / at 690 V	5 400
product feature / for neutral conductors / upgradable/retrofitable / short-circuit and overload proof	No
ground-fault monitoring version	Without
product function	
• communication function	No
• other measurement function	No
Net Weight	2.061 kg
Current	
operational current	
• at 40 °C	250 A
• at 45 °C	250 A
• at 50 °C	250 A
• at 55 °C	243 A
• at 60 °C	237 A
• at 65 °C	230 A
• at 70 °C	223 A
Switching capacity according to IEC 60947	
switching capacity class of the circuit breaker	S
maximum short-circuit current breaking capacity (Icu)	
• at 240 V	55 kA
• at 415 V	36 kA
• at 440 V	25 kA
• at 500 V	10 kA
• at 690 V	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 	55 kA 36 kA 25 kA 10 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 	121 kA 75.6 kA 52.5 kA 17 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

product feature / for L-tripping / can be switched on/off	No
adjustable response value setting current (Ir) / of the L-trip / with I2t characteristic	
<ul style="list-style-type: none"> • minimum • maximum 	175 A 250 A
adjustable response value delay time (tr) / for L-tripping / with I2t characteristic	
<ul style="list-style-type: none"> • minimum • maximum 	1 s 1 s
adjustable response value setting current (Ii) / for I-tripping	
<ul style="list-style-type: none"> • minimum • maximum 	1 250 A 2 500 A
adjustable setting current (InN) / for N-tripping	
<ul style="list-style-type: none"> • minimum • maximum 	0 A 0 A
design of the N-conductor protection	without
product function / grounding protection	No

Mechanical Design

product component	
<ul style="list-style-type: none"> • undervoltage release • voltage trigger • trip indicator 	No No No
height [in]	6.22 in
height	158 mm
width [in]	5.51 in
width	140 mm
depth [in]	2.76 in
depth	70 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	13 x 1 mm
type of connectable conductor cross-sections / for flat-bar terminal connection / maximum	25 x 8 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
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Accessories

product extension / optional / motor drive	Yes
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Environmental conditions

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

- during operation / maximum
- during storage / minimum
- during storage / maximum

70 °C
-40 °C
80 °C

reference code / according to IEC 81346-2

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Approvals / Certificates

General Product Approval



[Confirmation](#)



[Miscellaneous](#)

[KC](#)



EMC

Declaration of Conformity

Test Certificates



RCM



EG-Konf.



[Type Test Certificates/Test Report](#)

[Miscellaneous](#)

[Special Test Certificate](#)

Marine / Shipping

other



ABS



BUREAU VERITAS



DNV



LRS



RMRS

[Miscellaneous](#)

other

Environment

[Confirmation](#)

[Miscellaneous](#)

[Environmental Confirmations](#)

Further information

Siemens has decided to exit the Russian market (see here).

<https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business>

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

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=3VA1225-4EF42-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA1225-4EF42-0AA0>

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

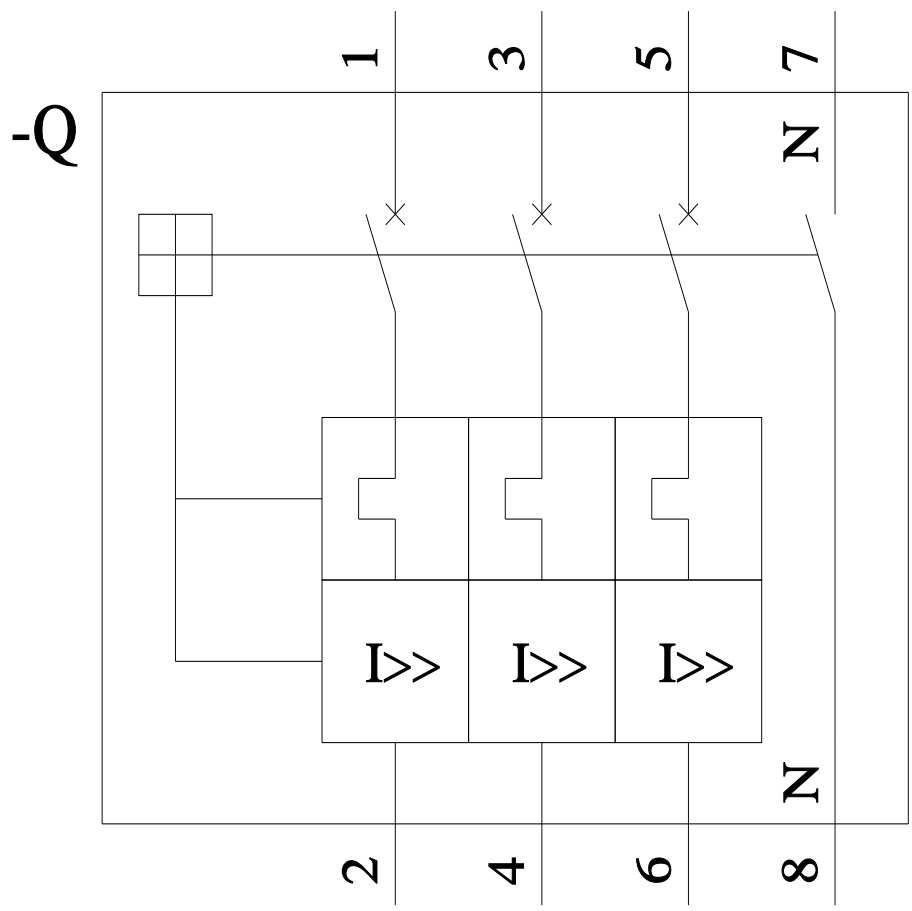
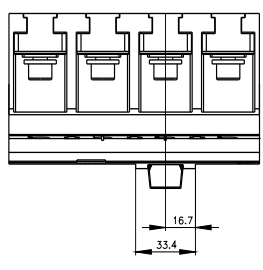
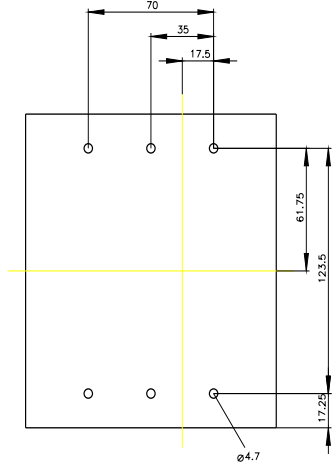
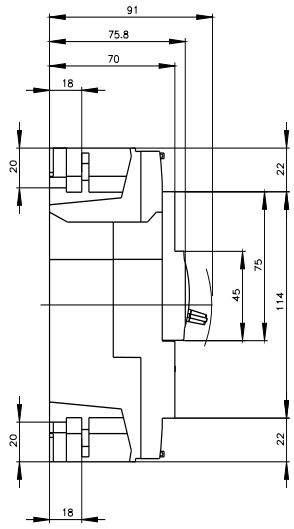
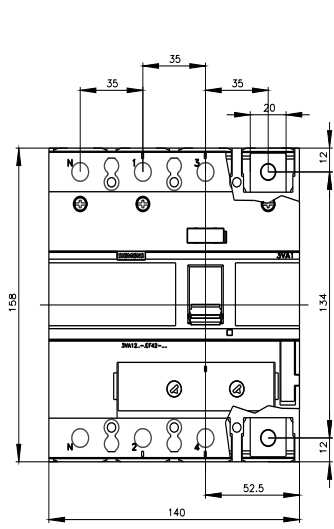
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA1225-4EF42-0AA0

CAX-Online-Generator

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

Tender specifications

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



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