3VA1110-3EE42-0AA0

## **Data sheet**



circuit breaker 3VA1 IEC frame 160 breaking capacity class N Icu=25kA @ 415V 4-pole, line protection TM220, ATFM, In=100A overload protection Ir=70A...100A short-circuit protection Ii=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	TM220	
protection function of the overcurrent release	Ц	
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	25 W	
mechanical service life (operating cycles) / typical	20 000	
electrical endurance (operating cycles) / at AC-1 / at 380/415 V	9 000	
electrical endurance (operating cycles) / at AC-1 / at 690 V	6 300	
product feature / for neutral conductors / upgradable/retrofittable / short-circuit and overload proof	No	
ground-fault monitoring version	Without	
product function		
<ul> <li>communication function</li> </ul>	No	
<ul> <li>other measurement function</li> </ul>	No	
Net Weight	1.199 kg	
Current		
operational current		
• at 40 °C	100 A	
• at 45 °C	100 A	
• at 50 °C	100 A	
• at 55 °C	98 A	
• at 60 °C	96 A	
• at 65 °C	94 A	
• at 70 °C	91 A	
Switching capacity according to IEC 60947		
switching capacity class of the circuit breaker	N	
maximum short-circuit current breaking capacity (lcu)		
• at 240 V	36 kA	
• at 415 V	25 kA	
• at 440 V	16 kA	
• at 500 V	7 kA	
• at 690 V	7 kA	
operating short-circuit current breaking capacity (Ics)		

• at 240 V	36 kA
• at 415 V	25 kA
• at 440 V	16 kA
● at 500 V	5 kA
• at 690 V	5 kA
short-circuit current making capacity (Icm)	
● at 240 V	75.6 kA
• at 415 V	52.5 kA
● at 440 V	32 kA
● at 500 V	11.9 kA
● at 690 V	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	
12t characteristic	
• minimum	70 A
• maximum	100 A
adjustable response value delay time (tr) / for L-tripping / with I2t characteristic	
• minimum	1 s
• maximum	1 s
adjustable response value setting current (li) / for I-tripping	4 000 A
• minimum	1 000 A
• maximum	1 000 A
adjustable setting current (InN) / for N-tripping	
• minimum	0 A
• maximum	0 A
design of the N-conductor protection	without
product function / grounding protection	No
Mechanical Design	
Mechanical Design product component	
Mechanical Design  product component  • undervoltage release	No No
Mechanical Design  product component  • undervoltage release  • voltage trigger	No
Mechanical Design  product component  • undervoltage release  • voltage trigger  • trip indicator	No No
Mechanical Design  product component  • undervoltage release  • voltage trigger  • trip indicator  height [in]	No No 5.12 in
Mechanical Design  product component  • undervoltage release  • voltage trigger  • trip indicator  height [in]  height	No No 5.12 in 130 mm
Mechanical Design  product component  • undervoltage release  • voltage trigger  • trip indicator  height [in]  height  width [in]	No No 5.12 in 130 mm 4 in
Mechanical Design  product component  • undervoltage release  • voltage trigger  • trip indicator  height [in]  height  width [in]	No No 5.12 in 130 mm 4 in 101.6 mm
Mechanical Design  product component  • undervoltage release  • voltage trigger  • trip indicator  height [in]  height  width [in]  width  depth [in]	No No 5.12 in 130 mm 4 in 101.6 mm 2.76 in
Mechanical Design  product component  • undervoltage release  • voltage trigger  • trip indicator  height [in]  height  width [in]  width  depth [in]  depth	No No 5.12 in 130 mm 4 in 101.6 mm
Mechanical Design  product component  • undervoltage release  • voltage trigger  • trip indicator  height [in]  height  width [in]  width  depth [in]  depth  Connections	No No 5.12 in 130 mm 4 in 101.6 mm 2.76 in 70 mm
Mechanical Design  product component  • undervoltage release  • voltage trigger  • trip indicator  height [in]  height  width [in]  width  depth [in]  depth  Connections  arrangement of electrical connectors / for main current circuit	No No S.12 in 130 mm 4 in 101.6 mm 2.76 in 70 mm
Mechanical Design  product component  • undervoltage release  • voltage trigger  • trip indicator  height [in]  height  width [in]  width  depth [in]  depth  Connections  arrangement of electrical connectors / for main current circuit  type of electrical connection / for main current circuit	No No S.12 in 130 mm 4 in 101.6 mm 2.76 in 70 mm  Front terminal nut keeper kit on both ends
mechanical Design  product component  undervoltage release  voltage trigger  trip indicator  height [in]  height  width [in]  width  depth [in]  depth  Connections  arrangement of electrical connectors / for main current circuit  type of electrical connection / for main current circuit  type of connectable conductor cross-sections / for flat-bar terminal connection / minimum	No No S.12 in 130 mm 4 in 101.6 mm 2.76 in 70 mm  Front terminal nut keeper kit on both ends 12 x 1 mm
product component	No No 5.12 in 130 mm 4 in 101.6 mm 2.76 in 70 mm  Front terminal nut keeper kit on both ends 12 x 1 mm  17 x 6,5 mm
product component	No No S.12 in 130 mm 4 in 101.6 mm 2.76 in 70 mm  Front terminal nut keeper kit on both ends 12 x 1 mm  17 x 6,5 mm  Silver
product component	No No 5.12 in 130 mm 4 in 101.6 mm 2.76 in 70 mm  Front terminal nut keeper kit on both ends 12 x 1 mm  17 x 6,5 mm
product component	No No 5.12 in 130 mm 4 in 101.6 mm 2.76 in 70 mm  Front terminal nut keeper kit on both ends 12 x 1 mm  17 x 6,5 mm  Silver  Tin
product component	No No 5.12 in 130 mm 4 in 101.6 mm 2.76 in 70 mm  Front terminal nut keeper kit on both ends 12 x 1 mm  17 x 6,5 mm  Silver
product component	No No S.12 in 130 mm 4 in 101.6 mm 2.76 in 70 mm  Front terminal nut keeper kit on both ends 12 x 1 mm  17 x 6,5 mm  Silver  Tin
product component	No No 5.12 in 130 mm 4 in 101.6 mm 2.76 in 70 mm  Front terminal nut keeper kit on both ends 12 x 1 mm  17 x 6,5 mm  Silver  Tin
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product component	No No 5.12 in 130 mm 4 in 101.6 mm 2.76 in 70 mm  Front terminal nut keeper kit on both ends 12 x 1 mm  17 x 6,5 mm  Silver  Tin
product component	No 5.12 in 130 mm 4 in 101.6 mm 2.76 in 70 mm  Front terminal nut keeper kit on both ends 12 x 1 mm  17 x 6,5 mm  Silver  Tin  0  Yes

during storage / minimum	-40 °C		
<ul><li>during storage / maximum</li></ul>	80 °C		
Environmental footprint			
Environmental Product Declaration(EPD)	Yes		
Global Warming Potential [CO2 eq] / total	190 kg		
Global Warming Potential [CO2 eq] / during manufacturing	4.67 kg		
Global Warming Potential [CO2 eq] / during operation	186 kg		
global warming potential [CO2 eq] / after end of life	-0.826 kg		
reference code / according to IEC 81346-2	Q		
Approvals / Certificates			
General Product Approval		EMC	

Confirmation





**Miscellaneous** 





**Declaration of Conformity** 

**Test Certificates** 

Marine / Shipping





**Miscellaneous** 

Type Test Certificates/Test Report

Special Test Certificate



Marine / Shipping

other









CCS / China Classification Society

Confirmation

other Environment

<u>Miscellaneous</u> <u>Miscellaneous</u> <u>Environmental Confirmations</u>

## **Further informatior**

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=3VA1110-3EE42-0AA0

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

https://support.industry.siemens.com/cs/ww/en/ps/3VA1110-3EE42-0AA0

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

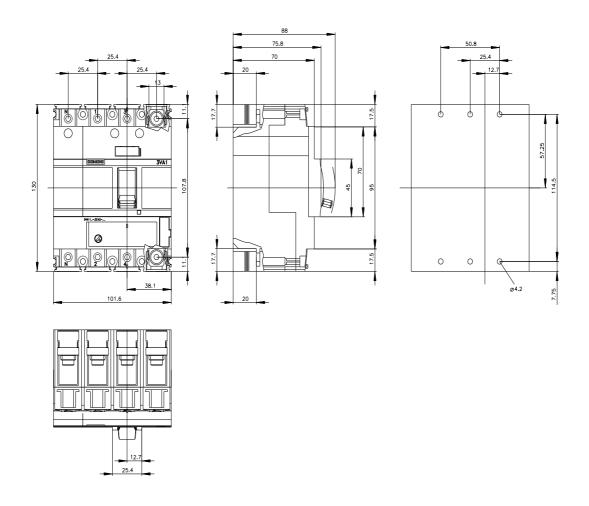
http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VA1110-3EE42-0AA0

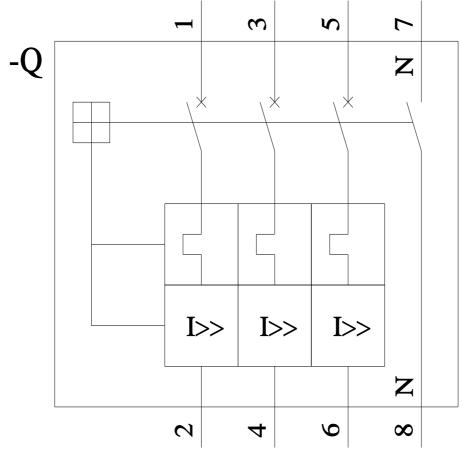
**CAx-Online-Generator** 

http://www.siemens.com/cax

**Tender specifications** 

http://www.siemens.com/specifications





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