



circuit breaker 3VA1 IEC frame 160 breaking capacity class M Icu=55kA @ 415V 3-pole, line protection TM220, ATFM, In=125A overload protection Ir=88A...125A short-circuit protection Ii=10 x In nut keeper kit

Model	
product brand name	SENTRON
product designation	Molded case circuit breaker
Product version	Line protection
design of the overcurrent release	TM220
protection function of the overcurrent release	LI
number of poles	3
General technical data	
rated insulation voltage Ui	800 V
Max. rated operational voltage Ue with DC	500 V
power loss [W] / maximum	28.1 W
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	9.37 W
mechanical service life (switching cycles) / typical	20 000
Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz	9 000
Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz	6 300
Neutral conductors / upgradeable/retrofitable	No
ground-fault monitoring version	Without
product function	
• communication function	No
• other measurement function	No
net weight	0.996 kg
Current	
Max. rated operational current of the frame size	160 A
Courant permanent assigné Iu	125 A
operational current	
• at 40 °C	125 A
• at 45 °C	125 A
• at 50 °C	125 A
• at 55 °C	122 A
• at 60 °C	120 A
• at 65 °C	117 A
• at 70 °C	114 A
Switching capacity according to IEC 60947	
switching capacity class of the circuit breaker	M
breaking capacity maximum short-circuit current (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 	36 kA 10 kA 10 kA
breaking capacity operating short-circuit current (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 36 kA 5 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 75.6 kA 17 kA 17 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 current / li min.	1 250 A
Adjustable response value current / li max.	1 250 A
Ground fault protection / tripping switchable / I2t=ON/OFF	No
Mechanical Design	
height [in]	5.12 in
Height	130 mm
width [in]	3 in
Width	76.2 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-section, connection screw, width x thickness , min.	12 x 1 mm
Type of connectable conductor cross-section, connection screw, width x thickness , max.	17 x 6.5 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)	Tin
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 • during storage / maximum 	-25 °C 70 °C -40 °C 80 °C
Certificates	
reference code / acc. to IEC 81346-2	Q
General Product Approval	EMC



[Miscellaneous](#)

[KC](#)



Declaration of Conformity	Test Certificates				Marine / Shipping
 EG-Konf.	UK Declaration of Conformity	Miscellaneous	Type Test Certificates/Test Report	Special Test Certificate	 ABS

Marine / Shipping	other				
 BUREAU VERITAS	 DNV	 LRS	 RMRS	CCS / China Classification Society	Miscellaneous

other

[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=3VA1112-5EE32-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA1112-5EE32-0AA0>

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

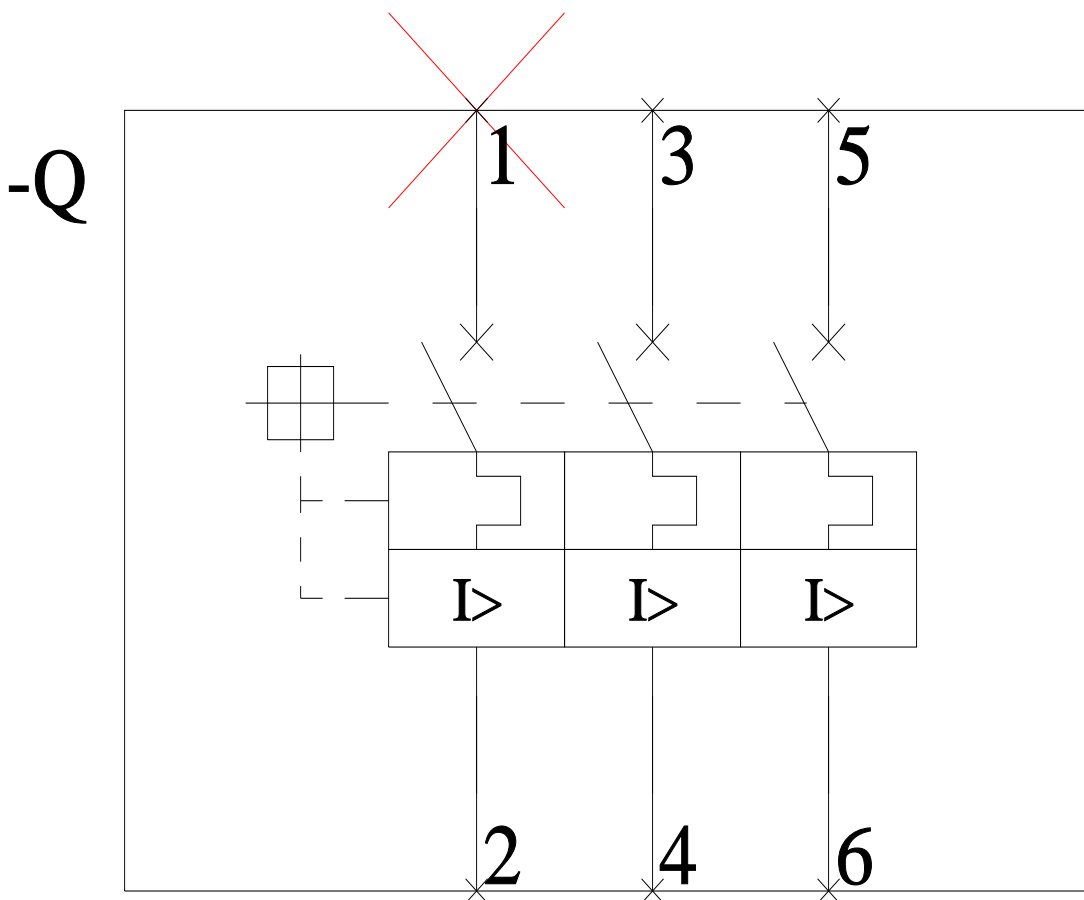
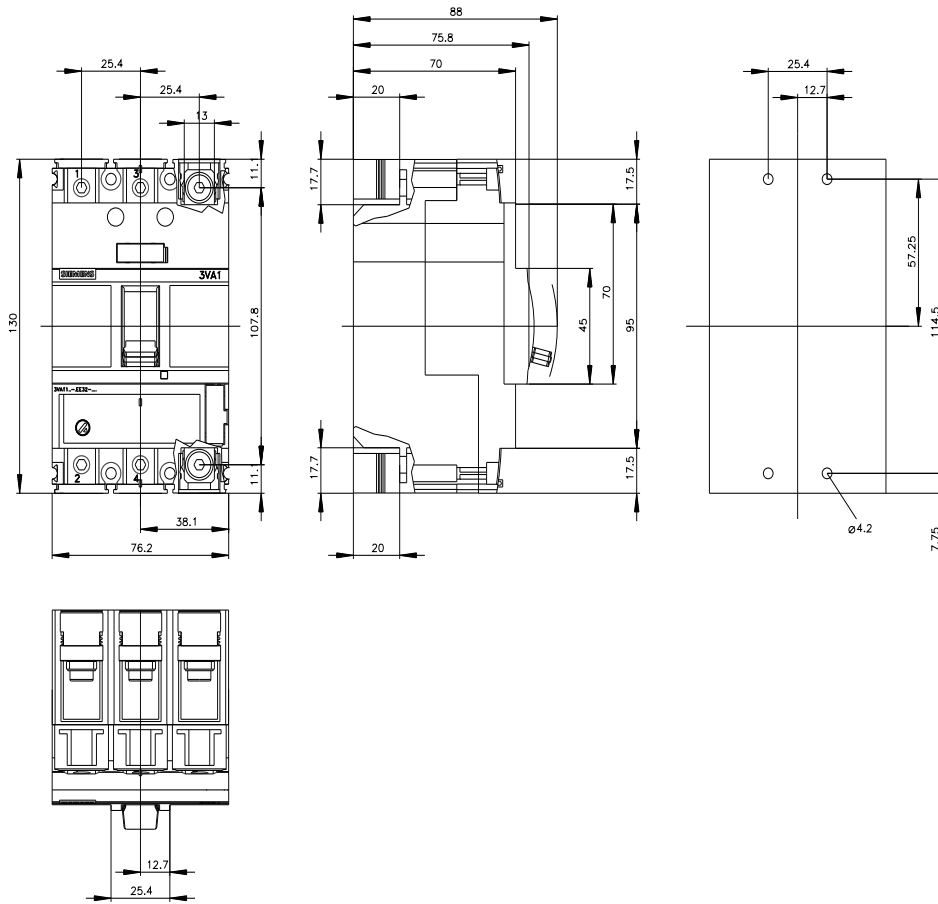
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA1112-5EE32-0AA0

CAX-Online-Generator

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

Tender specifications

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



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