

circuit breaker 3VA1 IEC frame 160 breaking capacity class M
 $I_{cu}=55kA @ 415 V$ 3-pole, motor starter protection $t_m=120m$, aM,
 $I_n=20A$ without overload protection short circuit protection $i_l=7...16 \times$
 In busbar connection



Model	
Product brand name	SENTRON
Product designation	Molded case circuit breaker
Design of the product	Starter protection
Design of the overcurrent release	TM120M
Protective function of the overcurrent release	I
Number of poles	3
General technical data	
Tension assignée d'isolement U_i	800 V
Max. rated operational voltage U_e with AC 50/60Hz	690 V
Active power loss / for rated value of the current / at AC / in hot operating state / per device	1.5 W
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	0.5 W
Mechanical service life (switching cycles) / typical	20 000
Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz	8 000
Neutral conductors / upgradeable/retrofitable	No
Ground fault monitoring version	Without

Product function	
• communication function	No
• Phase failure detection	No
• other measurement function	No
Net weight	0.9 kg

Electricity

Max. rated operational voltage of the size of the circuit-breaker	160 A
Courant permanent assigné Iu	20 A
Operating current	
• at 40 °C	20 A
• at 45 °C	20 A
• at 50 °C	20 A
• at 55 °C	19.4 A
• at 60 °C	19 A
• at 65 °C	18.4 A
• at 70 °C	17.6 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
• at 440 V	36 kA
• at 500 V	10 kA
• at 690 V	5 kA
Operational short-circuit current breaking capacity (Ics)	
• at 240 V	85 kA
• at 415 V	55 kA
• at 440 V	36 kA
• at 500 V	5 kA
• at 690 V	5 kA
Short-circuit current making capacity (Icm)	
• at 240 V	187 kA
• at 415 V	121 kA
• at 440 V	75 kA
• at 500 V	17 kA
• at 690 V	7.5 kA

Adjustable parameters

Short-term delayed / tripping switchable / I2t=ON/OFF	No
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Adjustable response value current / li min.	140 A
Adjustable response value current / li max.	320 A
Ground fault protection / tripping switchable / I2t=ON/OFF	No

Mechanical Design

Height [in]	5.1 in
Height	130 mm
Width [in]	3 in
Width	76.2 mm
Depth [in]	2.8 in
Depth	70 mm

Connections

Arrangement of electrical connectors / for main current circuit	Front terminal
Type of electrical connection / for main current circuit	lug terminal
Type of connectable conductor cross-section, connection screw, width x thickness , min.	12 x 1
Type of connectable conductor cross-section, connection screw, width x thickness , max.	17 x 6.5

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	
• during operation / minimum	-25 °C
• during operation / maximum	70 °C
• during storage / minimum	-40 °C
• during storage / maximum	80 °C

Certificates

Reference code / acc. to DIN EN 81346-2	Q
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General Product Approval	EMC	Declaration of Conformity
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CCC

[Miscellaneous](#)

[KC](#)



RCM



EG-Konf.

Test Certificates	other
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[Miscellaneous](#)

[Special Test Certificate](#)

[Confirmation](#)

[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=3VA1120-5MH32-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA1120-5MH32-0AA0>

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

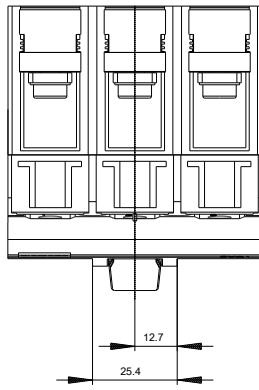
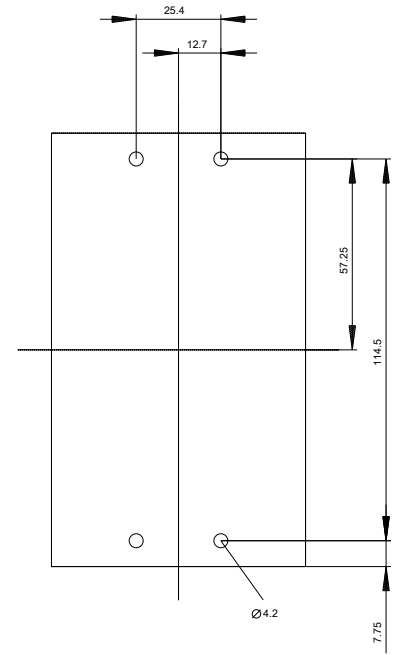
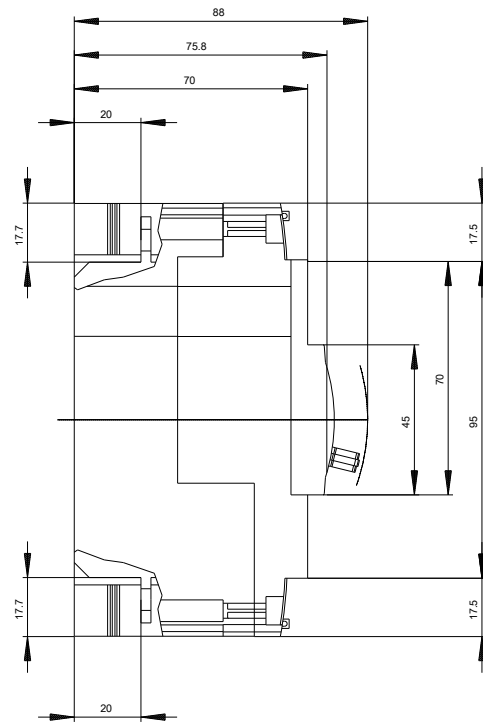
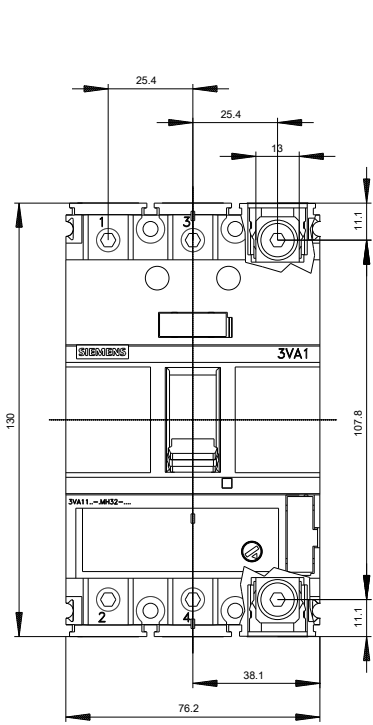
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA1120-5MH32-0AA0

CAX-Online-Generator

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

Tender specifications

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





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