



circuit breaker 3VA1 IEC frame 250 breaking capacity class H $I_{cu}=70kA @ 415V$ 3-pole, starter protection TM120M, AM, $I_n=160A$ without overload protection short-circuit protection $I_i=7...16 \times I_n$ nut keeper kit


Model	
product brand name	SENTRON
product designation	Molded case circuit breaker
Product version	Starter protection
design of the overcurrent release	TM120M
protection function of the overcurrent release	I
number of poles	3
General technical data	
rated insulation voltage U_i	800 V
power loss [W] / maximum	33 W
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	11 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
Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz	5 400
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	1.8 kg
Current	
Max. rated operational current of the frame size	250 A
Courant permanent assigné I_u	160 A
operational current	
• at 40 °C	160 A
• at 45 °C	160 A
• at 50 °C	160 A
• at 55 °C	156 A
• at 60 °C	151 A
• at 65 °C	147 A
• at 70 °C	142 A
Switching capacity according to IEC 60947	
switching capacity class of the circuit breaker	H
breaking capacity maximum short-circuit current (I_{cu})	

<ul style="list-style-type: none"> • at 240 V • at 415 V • at 440 V • at 500 V • at 690 V 	100 kA		
	70 kA		
	36 kA		
	15 kA		
	3 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 	100 kA		
	70 kA		
	36 kA		
	10 kA		
	3 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 	220 kA		
	154 kA		
	75.6 kA		
	30 kA		
	4.5 kA		
Adjustable parameters			
Adjustable response value current / li min.	1 120 A		
Adjustable response value current / li max.	2 560 A		
Ground fault protection / tripping switchable / I2t=ON/OFF	No		
Mechanical Design			
height [in]	6.22 in		
Height	158 mm		
width [in]	4.13 in		
Width	105 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.	13 x 1 mm		
Type of connectable conductor cross-section, connection screw, width x thickness , max.	25 x 8 mm		
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	Declaration of Conformity



[Miscellaneous](#)



Declaration of Conformity	Test Certificates			Marine / Shipping	
UK Declaration of Conformity	Miscellaneous	Special Test Certificate	Type Test Certificates/Test Report		

other		
Miscellaneous	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=3VA1216-6MH32-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA1216-6MH32-0AA0>

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

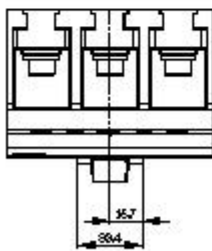
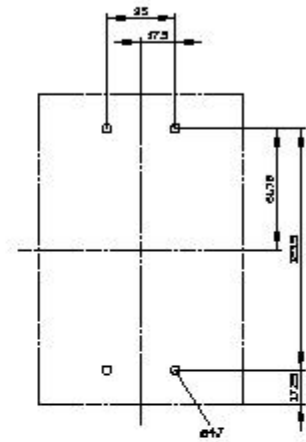
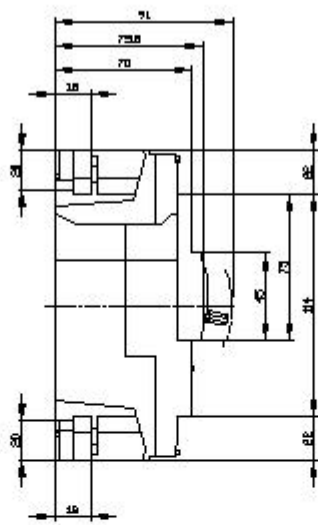
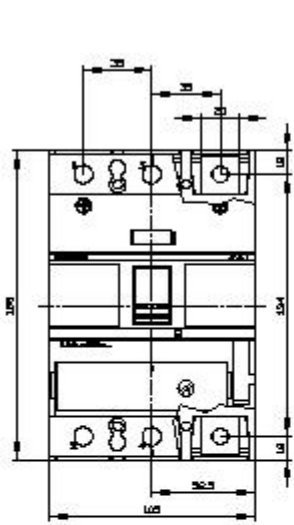
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA1216-6MH32-0AA0

CAX-Online-Generator

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

Tender specifications

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





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