

circuit breaker 3VA1 IEC frame 160 breaking capacity class M
Icu=55kA @ 415V 3-pole, starter protection TM110M, FM, In=4A
without overload protection short-circuit protection Ii=15 x In nut
keeper kit

Model	
product brand name	SENTRON
product designation	Molded case circuit breaker
Product version	Starter protection
design of the overcurrent release	TM110M
protection function of the overcurrent release	I
number of poles	3

General technical data	
Tension assignée d'isolement Ui	800 V
Max. rated operational voltage Ue with AC 50/60Hz	690 V
power loss [W] / maximum	5.4 W
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	1.8 W
mechanical service life (switching cycles) / typical	15 000
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	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

Current	
Max. rated operational current of the frame size	160 A
Courant permanent assigné Iu	4 A
operating current	
• at 40 °C	4 A
• at 45 °C	4 A
• at 50 °C	4 A
• at 55 °C	4 A
• at 60 °C	4 A

- at 65 °C
- at 70 °C

4 A
4 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	30 kA
• at 500 V	5 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	30 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	63 kA
• at 500 V	7.5 kA
• at 690 V	7.5 kA

Adjustable parameters

Adjustable response value current / li min.	64 A
Adjustable response value current / li max.	64 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 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		
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	- 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		
General Product Approval	EMC	Declaration of Conformity	Test Certificates
 CCC	 EAC	 EG-Konf.	 RCM
Miscellaneous			Miscellaneous
Test Certificates	Shipping Approval	other	
Special Test Certificate	Type Test Certificates/Test Report	CCS / China Classification Society	Manufacturer Declaration
	 LRS		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=3VA1104-5MG32-0AA0			
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3VA1104-5MG32-0AA0			
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA1104-5MG32-0AA0			
CAX-Online-Generator http://www.siemens.com/cax			
Tender specifications http://www.siemens.com/specifications			

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