

circuit breaker 3VA1 IEC frame 1000 breaking capacity class C
Icu=110kA @ 415V 3-pole, starter protection TM120M, AM, In=800A
without overload protection short-circuit protection Ii=6...12 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	TM120M
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	210 W
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	70 W
mechanical service life (switching cycles) / typical	10 000
Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz	4 600
Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz	3 200
Neutral conductors / upgradeable/retrofitable	No
ground fault monitoring version	Without
product function	
• communication function	No
• phase failure detection	No
• other measurement function	No

Current	
Max. rated operational current of the frame size	1 000 A
Courant permanent assigné Iu	800 A
operating current	
• at 40 °C	800 A
• at 45 °C	800 A
• at 50 °C	800 A
• at 55 °C	780 A
• at 60 °C	761 A
• at 65 °C	741 A

- at 70 °C

722 A

Switching capacity according to IEC 60947

switching capacity class of the circuit breaker	C
maximum short-circuit current breaking capacity (Icu)	
• at 240 V	200 kA
• at 415 V	110 kA
• at 440 V	110 kA
• at 500 V	70 kA
• at 690 V	35 kA
operational short-circuit current breaking capacity (Ics)	
• at 240 V	150 kA
• at 415 V	85 kA
• at 440 V	70 kA
• at 500 V	65 kA
• at 690 V	19 kA
short-circuit current making capacity (Icm)	
• at 240 V	440 kA
• at 415 V	242 kA
• at 440 V	242 kA
• at 500 V	147 kA
• at 690 V	74 kA

Adjustable parameters

Adjustable response value current / li min.	4 800 A
Adjustable response value current / li max.	9 600 A
Ground fault protection / tripping switchable / I2t=ON/OFF	No

Mechanical Design

height [in]	12.6 in
Height	320 mm
width [in]	8.3 in
Width	210 mm
depth [in]	4.7 in
depth	120 mm

Connections

arrangement of electrical connectors / for main current circuit	Front terminal
Type of connectable conductor cross-section, connection screw, width x thickness , min.	20 x 4 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	Shipping Approval
Miscellaneous 	 RCM	 EG-Konf.	Miscellaneous 	 LRS

other

[Manufacturer Declaration](#) [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=3VA1580-7MH32-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA1580-7MH32-0AA0>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA1580-7MH32-0AA0

CAX-Online-Generator

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

Tender specifications

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

last modified:

10/30/2020