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Data sheet

circuit breaker 3VM1 IEC frame 100 breaking capacity class S Icu=36kA @ 415V 4-pole, line protection TM210, FTFM, In=16A overload protection Ir=16A, not adjustable short-circuit protection Ii=20 x In N conductor unprotected nut keeper kit

Model	
product brand name	SENTRON
product designation	Molded case circuit breaker
Product version	Line protection
design of the overcurrent release	TM210
protection function of the overcurrent release	LI
number of poles	4
General technical data	
rated insulation voltage Ui	800 V
Max. rated operational voltage Ue with AC 50/60Hz	500 V
Max. rated operational voltage Ue with DC	500 V
operating voltage / at AC / rated value	690 V
power loss [W] / maximum	11 W
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	3.53 W
mechanical service life (switching cycles) / typical	12 000
Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz	2 000
Neutral conductors / upgradeable/retrofittable	No
ground-fault monitoring version	Without
product function	
● communication function	No
● other measurement function	No
Net Weight	1.2 kg
Current	
operational current	
● at 40 °C	16 A
● at 45 °C	16 A
● at 50 °C	16 A
● at 55 °C	16 A
● at 60 °C	15 A
● at 65 °C	14 A
● at 70 °C	14 A
Switching capacity according to IEC 60947	
switching capacity class of the circuit breaker	S
breaking capacity maximum short-circuit current (Icu)	
● at 240 V	55 kA
● at 415 V	36 kA
● at 440 V	20 kA
● at 500 V	7 kA

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breaking capacity operating short-circuit current (Ics)	
● at 240 V	18 kA
● at 415 V	12 kA
● at 440 V	8 kA
● at 500 V	3 kA
short-circuit current making capacity (Icm)	
● at 240 V	121 kA
● at 415 V	76 kA
● at 440 V	40 kA
● at 500 V	12 kA
design of short-circuit protection	For switching capacity values in DC power systems, see the 3VA Molded Case Circuit Breaker Manual; link available under Service & Support in the last chapter

Adjustable parameters

Adjustable response value current / Ii max.	320 A
design of the N-conductor protection	Without
Ground fault protection / tripping switchable / I2t=ON/OFF	No

Mechanical Design

height [in]	5.12 in
Height	130 mm
width [in]	4 in
Width	101.6 mm
depth [in]	2.76 in
depth	70 mm

Connections

arrangement of electrical connectors / for main current circuit	Front connection
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

product component	
● undervoltage release	No
● voltage trigger	No
● trip indicator	No
number of CO contacts / for auxiliary contacts	0

Accessories

product extension / optional / motor drive	No

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 / according to IEC 81346-2	Q

General Product Approval			Declaration of Conformity
CCC	Confirmation	Miscellaneous	EAC CE EG-Konf.

Declaration of Conformity	Test Certificates	Marine / Shipping

Miscellaneous

ABS   BUREAU VERITAS   DNV   RMRS

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=3VM1096-4ED42-0AA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3VM1096-4ED42-0AA0

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VM1096-4ED42-0AA0

CAx-Online-Generator
http://www.siemens.com/cax

Tender specifications
http://www.siemens.com/specifications

last modified: 6/3/2022

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