## **Data sheet**



circuit breaker 3VM1 IEC frame 160 breaking capacity class M Icu=55kA @ 415V 3-pole, starter protection TM120M, AM, In=50A without overload protection short-circuit protection Ii=7...16 x In nut keeper kit

Model	
product brand name	SENTRON
product designation	Molded case circuit breaker
design of the product	Startetptotection
design of the overcurrent release	TM120M
protection function of the overcurrent release	I
number of poles	3
General technical data	
insulation voltage / rated value	800 V
operating voltage / at AC / at 50/60 Hz / rated value	500 V
operating voltage / at DC / rated value	500 V
operating voltage / at AC / rated value	690 V
power loss [W] / maximum	6 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	1.87 W
mechanical service life (operating cycles) / typical	15 000
electrical endurance (operating cycles) / at AC-1 / at 380/415 V	6 000
product feature / for neutral conductors / upgradable/retrofittable / short-circuit and overload proof	No
ground-fault monitoring version	Without
product function	
<ul> <li>communication function</li> </ul>	No
<ul> <li>phase failure detection</li> </ul>	No
other measurement function	No
Net Weight	0.936 kg
Current	
operational current	
• at 40 °C	50 A
• at 45 °C	50 A
• at 50 °C	50 A
• at 55 °C	49 A
• at 60 °C	48 A
• at 65 °C	46 A
• at 70 °C	45 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

operating short-circuit current breaking capacity (lcs)	
● at 240 V	63 kA
● at 415 V	41 kA
• at 440 V	27 kA
● at 500 V	5 kA
short-circuit current making capacity (lcm)	
• at 240 V	187 kA
• at 415 V	121 kA
• at 440 V	76 kA
● at 500 V	17 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 setting current (li) / for l-tripping	
• minimum	350 A
• maximum	800 A
adjustable setting current (InN) / for N-tripping	
• minimum	50 A
• maximum	50 A
adjustable current response value current / of instantaneous short-circuit trip unit	
• maximum	800 A
product function / grounding protection	No
Mechanical Design	
product component	
undervoltage release	No
voltage trigger	No
• trip indicator	No
height [in]	5.12 in
height	130 mm
width [in]	3 in
width	76.2 mm
depth [in]	2.76 in
depth	70 mm
Connections	
arrangement of electrical connectors / for main current circuit	Front connection
type of electrical connection / for main current circuit	nut keeper kit on both ends
type of connectable conductor cross-sections / for flat-bar	12 x 1 mm
terminal connection / minimum  type of connectable conductor cross-sections / for flat-bar	17 x 6.5 mm
terminal connection / maximum	
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	
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
<ul> <li>during operation / maximum</li> </ul>	70 °C
during storage / minimum	-40 °C
during storage / maximum	80 °C
Approvals / Certificates	
General Product Approval	









**Miscellaneous** 

**General Product Ap**proval

**Test Certificates** 

Marine / Shipping

other

**Environment** 

Miscellaneous



Confirmation

**Miscellaneous** 

Environmental Con**firmations** 

## **Environment**

**Environmental Confirmations** 

## Further information

Information on the packaging https://support.industry.siemens.com/cs/ww/en/view/109813875

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=3VM1150-5MH32-0AA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3VM1150-5MH32-0AA0

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

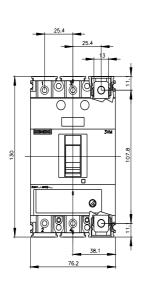
http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VM1150-5MH32-0AA0

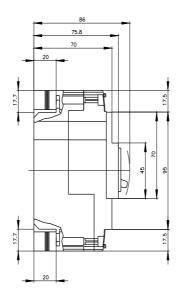
**CAx-Online-Generator** 

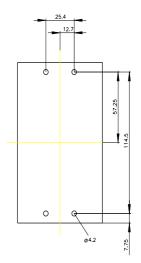
http://www.siemens.com/cax

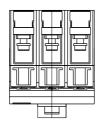
**Tender specifications** 

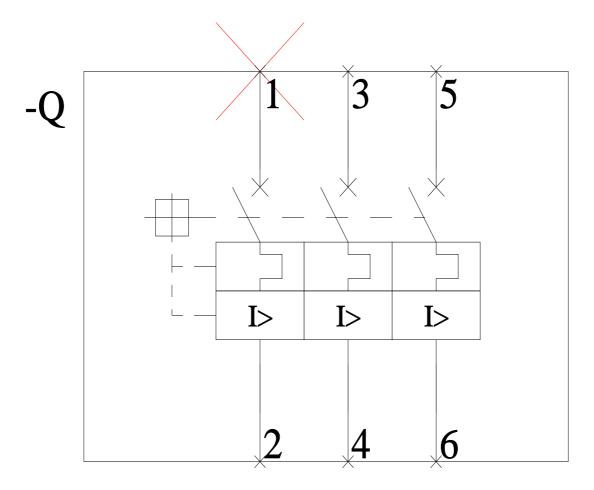
http://www.siemens.com/specifications











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