## SIEMENS

## Data sheet

## 3VM1010-3ED42-0AA0



circuit breaker 3VM1 IEC frame 100 breaking capacity class N Icu=25kA @ 415V 4-pole, line protection TM210, FTFM, In=100A overload protection Ir=100A, not adjustable short-circuit protection Ii=10 x In N conductor unprotected nut keeper kit

Model	
product brand name	SENTRON
product designation	Molded case circuit breaker
design of the product	Line protection
design of the overcurrent release	TM210
protection function of the overcurrent release	LI
number of poles	4
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	39 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	13 W
mechanical service life (operating cycles) / typical	12 000
electrical endurance (operating cycles) / at AC-1 / at 380/415 V	2 000
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>other measurement function</li> </ul>	No
Net Weight	1.164 kg
Current	
operational current	
• at 40 °C	100 A
● at 45 °C	100 A
• at 50 °C	100 A
● at 55 °C	98 A
• at 60 °C	96 A
• at 65 °C	94 A
• at 70 °C	91 A
Switching capacity according to IEC 60947	
switching capacity class of the circuit breaker	Ν
maximum short-circuit current breaking capacity (Icu)	
• at 240 V	36 kA
• at 415 V	25 kA
• at 440 V	16 kA
• at 500 V	5 kA
operating short-circuit current breaking capacity (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	76 kA
• at 415 V	53 kA
• at 440 V	32 kA
• at 500 V	8 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	
product feature / for L-tripping / can be switched on/off	No
adjustable response value setting current (Ir) / of the L-trip / with I2t characteristic	
• minimum	100 A
• maximum	100 A
adjustable response value delay time (tr) / for L-tripping / with I2t characteristic	
• minimum	1 s
• maximum	1 s
adjustable response value setting current (li) / for I-tripping	
• minimum	1 000 A
• maximum	1 000 A
adjustable setting current (InN) / for N-tripping	
• minimum	0 A
• maximum	0 A
adjustable current response value current / of instantaneous short-circuit trip unit	
• maximum	1 000 A
design of the N-conductor protection	Without
product function / grounding protection	No
Mechanical Design	
product component	
<ul> <li>undervoltage release</li> </ul>	No
<ul> <li>voltage trigger</li> </ul>	No
trip indicator	No
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
type of electrical connection / for main current circuit	nut keeper kit on both ends
type of connectable conductor cross-sections / for flat-bar terminal connection / minimum	12 x 1 mm
type of connectable conductor cross-sections / for flat-bar terminal connection / maximum	17 x 6.5 mm
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 $\left(N,2,4,6\right)$	Tin
Auxiliary circuit	
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

<ul> <li>during operation /</li> <li>during storage / n</li> <li>during storage / n</li> <li>Approvals / Certificates</li> </ul>	ninimum	70 °C -40 ° 80 °C	C		
General Product Appr	oval				
<u>Confirmation</u>	CE EG-Konf.	UK CA			<u>Miscellaneous</u>
General Product Ap- proval	Test Certificates	Marine / Shipping			
EHC	<u>Miscellaneous</u>	ABS	BUREAU VERITAS		Lloyd's Register urs
Marine / Shipping	other		Environment		
RMRS	<u>Confirmation</u>	<u>Miscellaneous</u>	EPD	Environmental Con- firmations	Environmental Con- firmations
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/ atalo

Industry Mall (Online ordering system) https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3VM1010-3ED42-0AA0

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

https://support.industry.siemens.com/cs/ww/en/ps/3VM1010-3ED42-0AA0

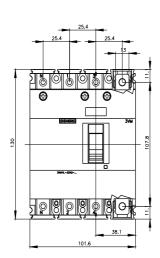
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VM1010-3ED42-0AA0

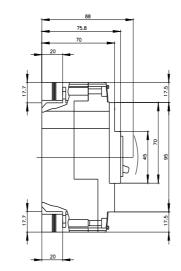
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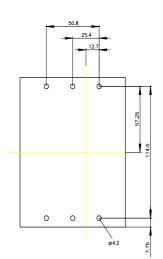
http://www.siemens.com/cax

**Tender specifications** 

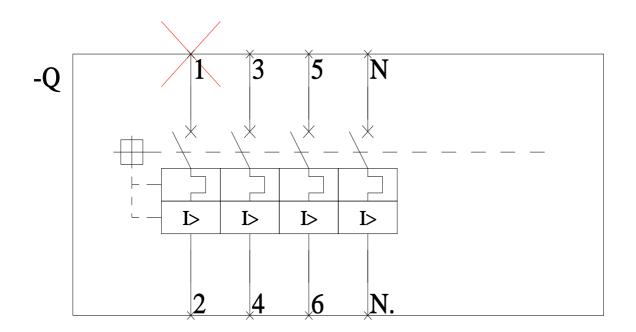
http://www.siemens.com/specifications







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