3VM1112-3ED42-0AA0

Data sheet



circuit breaker 3VM1 IEC frame 160 breaking capacity class N Icu=25kA @ 415V 4-pole, line protection TM210, FTFM, In=125A overload protection Ir=125A, 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	23 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	7.73 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	
 communication function 	No
other measurement function	No
Net Weight	1.254 kg
Current	
operational current	
• at 40 °C	125 A
• at 45 °C	125 A
• at 50 °C	125 A
• at 55 °C	122 A
• at 60 °C	120 A
• at 65 °C	117 A
• at 70 °C	114 A
Switching capacity according to IEC 60947	
switching capacity class of the circuit breaker	N
maximum short-circuit current breaking capacity (lcu)	
• at 240 V	36 kA
● at 415 V	25 kA
● at 440 V	16 kA
● at 500 V	7 kA
operating short-circuit current breaking capacity (Ics)	

• at 240 V	27 kA
● at 415 V	18 kA
• at 440 V	12 kA
• at 500 V	5 kA
short-circuit current making capacity (lcm)	
• at 240 V	76 kA
• at 415 V	53 kA
• at 440 V	32 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	
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	125 A
• maximum	125 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 l-tripping	
• minimum	1 250 A
maximum	1 250 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	4.050 A
• maximum	1 250 A
design of the N-conductor protection	Without
product function / grounding protection	No
Mechanical Design	
product component	No
undervoltage releasevoltage trigger	No No
	No
trip indicator height [in]	5.12 in
	130 mm
height width [in]	4 in
width [in]	101.6 mm
	2.76 in
depth [in]	70 mm
Connections	TV IIIII
arrangement of electrical connectors / for main current circuit	Front connection
	nut keeper kit on both ends
type of electrical connection / for main current circuit 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
1.1 60 6 1.20 0 1 0 1 0 1 0	
design of the surface / of the connections / on the bottom of the switch (N, 2, 4, 6)	Tin
switch (N, 2, 4, 6) Auxiliary circuit	
switch (N, 2, 4, 6) Auxiliary circuit number of CO contacts / for auxiliary contacts	Tin 0
switch (N, 2, 4, 6) Auxiliary circuit number of CO contacts / for auxiliary contacts Accessories	0
switch (N, 2, 4, 6) Auxiliary circuit number of CO contacts / for auxiliary contacts Accessories product extension / optional / motor drive	
switch (N, 2, 4, 6) Auxiliary circuit number of CO contacts / for auxiliary contacts Accessories product extension / optional / motor drive Environmental conditions	0 No
switch (N, 2, 4, 6) Auxiliary circuit number of CO contacts / for auxiliary contacts Accessories product extension / optional / motor drive Environmental conditions protection class IP / on the front	0
switch (N, 2, 4, 6) Auxiliary circuit number of CO contacts / for auxiliary contacts Accessories product extension / optional / motor drive Environmental conditions protection class IP / on the front ambient temperature	0 No IP40
switch (N, 2, 4, 6) Auxiliary circuit number of CO contacts / for auxiliary contacts Accessories product extension / optional / motor drive Environmental conditions protection class IP / on the front	0 No

- during operation / maximum
- during storage / minimum
- during storage / maximum

70 °C -40 °C 80 °C

Approvals / Certificates

General Product Approval





Confirmation





Miscellaneous

General Product Approval

Test Certificates

Marine / Shipping



Miscellaneous









Marine / Shipping

other

Environment



Confirmation

Miscellaneous

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)

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

https://support.industry.siemens.com/cs/ww/en/ps/3VM1112-3ED42-0AA0

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

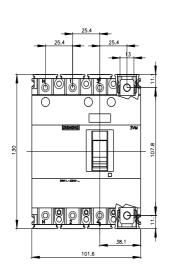
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VM1112-3ED42-0AA0

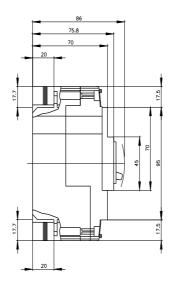
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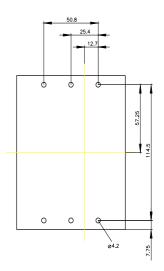
http://www.siemens.com/cax

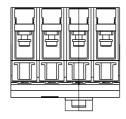
Tender specifications

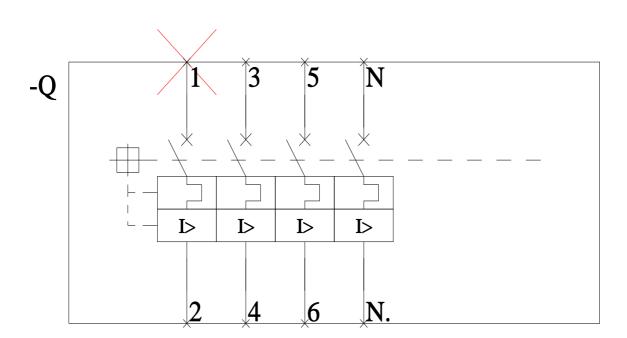
http://www.siemens.com/specifications











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