SIEMENS

Data sheet



circuit breaker 3VM1 IEC frame 400 breaking capacity class N Icu=36kA @ 415V 4-pole, line protection TM210, FTFM, In=400A overload protection short-circuit protection Ii=10 x In N conductor protection 100% 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	Ц
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	92 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	30.7 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	6.408 kg
Current	
operational current	
• at 40 °C	400 A
● at 45 °C	400 A
● at 50 °C	400 A
• at 55 °C	392 A
• at 60 °C	384 A
• at 65 °C	376 A
• at 70 °C	367 A
Switching capacity according to IEC 60947	
switching capacity class of the circuit breaker	S
maximum short-circuit current breaking capacity (lcu)	
• at 240 V	55 kA
• at 415 V	36 kA
• at 440 V	36 kA
• at 500 V	25 kA
operating short-circuit current breaking capacity (Ics)	

● at 240 V	41 kA
● at 415 V	27 kA
● at 440 V	27 kA
● at 500 V	18 kA
short-circuit current making capacity (Icm)	
● at 240 V	121 kA
● at 415 V	76 kA
● at 440 V	76 kA
● at 500 V	53 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	Chapter
	Na
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	400 A
• maximum	400 A
adjustable response value delay time (tr) / for L-tripping / with l2t characteristic	
• minimum	1 s
maximum	1 s
adjustable response value setting current (li) / for I-tripping	
• minimum	4 000 A
• maximum	4 000 A
adjustable setting current (InN) / for N-tripping	
• minimum	400 A
maximum	400 A
adjustable current response value current / of instantaneous short-circuit trip unit	
• maximum	4 000 A
design of the N-conductor protection	100%
product function / grounding protection	No
Mechanical Design	
product component	
 undervoltage release 	No
 voltage trigger 	No
trip indicator	No
height [in]	9.76 in
height	248 mm
width [in]	7.24 in
	1.24
width	184 mm
width	184 mm
width depth [in]	184 mm 4.33 in
width depth [in] depth	184 mm 4.33 in
width depth [in] depth Connections	184 mm 4.33 in 110 mm
width depth [in] depth Connections arrangement of electrical connectors / for main current circuit	184 mm 4.33 in 110 mm Front connection
width depth [in] depth Connections arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit type of connectable conductor cross-sections / for flat-bar terminal connection / minimum type of connectable conductor cross-sections / for flat-bar	184 mm 4.33 in 110 mm Front connection nut keeper kit on both ends
width depth [in] depth Connections arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit type of connectable conductor cross-sections / for flat-bar terminal connection / minimum type of connectable conductor cross-sections / for flat-bar terminal connection / maximum design of the surface / of the connections / on the top of the	184 mm 4.33 in 110 mm Front connection nut keeper kit on both ends 20 x 1 mm
width depth [in] depth Connections arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit type of connectable conductor cross-sections / for flat-bar terminal connection / minimum type of connectable conductor cross-sections / for flat-bar terminal connection / maximum	184 mm 4.33 in 110 mm Front connection nut keeper kit on both ends 20 x 1 mm 35 x 10 mm
width depth [in] depth Connections arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit type of connectable conductor cross-sections / for flat-bar terminal connection / minimum type of connectable conductor cross-sections / for flat-bar terminal connection / maximum design of the surface / of the connections / on the top of the switch (N, 1, 3, 5) design of the surface / of the connections / on the bottom of the	184 mm 4.33 in 110 mm Front connection nut keeper kit on both ends 20 x 1 mm 35 x 10 mm Silver
width depth [in] depth Connections arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit type of connectable conductor cross-sections / for flat-bar terminal connection / minimum type of connectable conductor cross-sections / for flat-bar terminal connection / maximum design of the surface / of the connections / on the top of the switch (N, 1, 3, 5) design of the surface / of the connections / on the bottom of the switch (N, 2, 4, 6)	184 mm 4.33 in 110 mm Front connection nut keeper kit on both ends 20 x 1 mm 35 x 10 mm Silver
width depth [in] depth Connections arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit type of connectable conductor cross-sections / for flat-bar terminal connection / minimum type of connectable conductor cross-sections / for flat-bar terminal connection / maximum design of the surface / of the connections / on the top of the switch (N, 1, 3, 5) design of the surface / of the connections / on the bottom of the switch (N, 2, 4, 6) Auxiliary circuit	184 mm 4.33 in 110 mm Front connection nut keeper kit on both ends 20 x 1 mm 35 x 10 mm Silver Silver
width depth [in] depth Connections arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit type of connectable conductor cross-sections / for flat-bar terminal connection / minimum type of connectable conductor cross-sections / for flat-bar terminal connection / maximum design of the surface / of the connections / on the top of the switch (N, 1, 3, 5) design of the surface / of the connections / on the bottom of the switch (N, 2, 4, 6) Auxiliary circuit number of CO contacts / for auxiliary contacts	184 mm 4.33 in 110 mm Front connection nut keeper kit on both ends 20 x 1 mm 35 x 10 mm Silver Silver
width depth [in] depth Connections arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit type of connectable conductor cross-sections / for flat-bar terminal connection / minimum type of connectable conductor cross-sections / for flat-bar terminal connection / maximum design of the surface / of the connections / on the top of the switch (N, 1, 3, 5) design of the surface / of the connections / on the bottom of the switch (N, 2, 4, 6) Auxiliary circuit number of CO contacts / for auxiliary contacts Accessories	184 mm 4.33 in 110 mm Front connection nut keeper kit on both ends 20 x 1 mm 35 x 10 mm Silver Silver
width depth [in] depth Connections arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit type of connectable conductor cross-sections / for flat-bar terminal connection / minimum type of connectable conductor cross-sections / for flat-bar terminal connection / maximum design of the surface / of the connections / on the top of the switch (N, 1, 3, 5) design of the surface / of the connections / on the bottom of the switch (N, 2, 4, 6) Auxiliary circuit number of CO contacts / for auxiliary contacts Accessories product extension / optional / motor drive	184 mm 4.33 in 110 mm Front connection nut keeper kit on both ends 20 x 1 mm 35 x 10 mm Silver Silver
width depth [in] depth Connections arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit type of connectable conductor cross-sections / for flat-bar terminal connection / minimum type of connectable conductor cross-sections / for flat-bar terminal connection / maximum design of the surface / of the connections / on the top of the switch (N, 1, 3, 5) design of the surface / of the connections / on the bottom of the switch (N, 2, 4, 6) Auxiliary circuit number of CO contacts / for auxiliary contacts Accessories product extension / optional / motor drive Environmental conditions	184 mm 4.33 in 110 mm Front connection nut keeper kit on both ends 20 x 1 mm 35 x 10 mm Silver O
width depth [in] depth Connections arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit type of connectable conductor cross-sections / for flat-bar terminal connection / minimum type of connectable conductor cross-sections / for flat-bar terminal connection / maximum design of the surface / of the connections / on the top of the switch (N, 1, 3, 5) design of the surface / of the connections / on the bottom of the 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	184 mm 4.33 in 110 mm Front connection nut keeper kit on both ends 20 x 1 mm 35 x 10 mm Silver O

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

70 °C -40 °C 80 °C

Approvals / Certificates

General Product Approval







Confirmation



Miscellaneous

General Product Ap-

proval

Test Certificates

Marine / Shipping

other

Type Test Certificates/Test Report





<u>Miscellaneous</u>

Confirmation

Environment

Environmental Confirmations

Environmental Confirmations

Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

Information- and Downloadcenter (Catalogs, Brochures,...)

Industry Mall (Online ordering system)

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

https://support.industry.siemens.com/cs/ww/en/ps/3VM1340-4GD42-0AA0

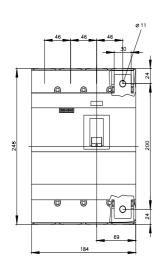
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

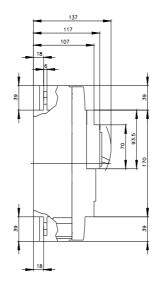
CAx-Online-Generator

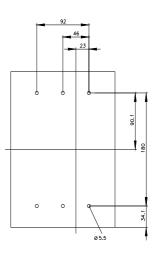
http://www.siemens.com/cax

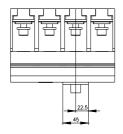
Tender specifications

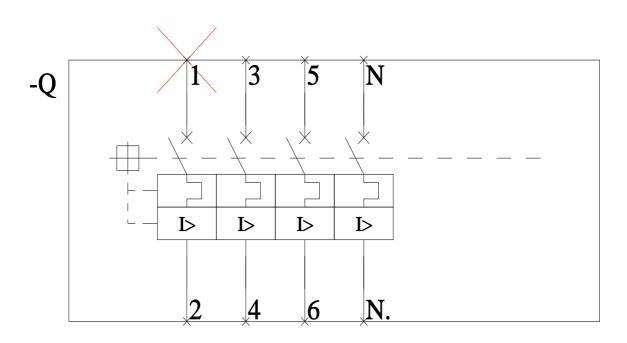
http://www.siemens.com/specifications











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