SIEMENS

Data sheet



circuit breaker 3VA1 IEC frame 100 breaking capacity class N Icu=25kA @ 415V 3-pole, line protection TM210, FTFM, In=16A overload protection Ir=16A fixed short-circuit protection Ii=20 x In nut keeper kit

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	3
eneral technical data	
insulation voltage / rated value	800 V
operating voltage / at DC / rated value	500 V
operating voltage / at AC / rated value	690 V
power loss [W] / maximum	10.6 W
mechanical service life (operating cycles) / typical	20 000
electrical endurance (operating cycles) / at AC-1 / at 380/415 V	9 000
electrical endurance (operating cycles) / at AC-1 / at 690 V	6 300
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	951 g
urrent	
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	15 A
• at 70 °C	15 A
witching capacity according to IEC 60947	
switching capacity class of the circuit breaker	N
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
● at 690 V	5 kA

• at 240 V	36 kA
• at 415 V	25 kA
• at 440 V	16 kA
● at 500 V	5 kA
• at 690 V	5 kA
short-circuit current making capacity (lcm)	
• at 240 V	75.6 kA
● at 415 V	52.5 kA
• at 440 V	32 kA
● at 500 V	7.5 kA
● at 690 V	7.5 kA
design of short-circuit protection	For switching power values in DC networks, see the 3VA molded case circuit breaker device manual; link to be found 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	
12t characteristic	
• minimum	16 A
• maximum	16 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	320 A
• maximum	320 A
adjustable setting current (InN) / for N-tripping	
• minimum	0 A
• maximum	0 A
product function / grounding protection	No
Mechanical Design	
product component	
undervoltage release	No
voltage trigger	No
• trip indicator	No .
height [in]	5.12 in 130 mm
height	130 mm
1.101 51.7	
width [in]	3 in
width	3 in 76.2 mm
width depth [in]	3 in 76.2 mm 2.76 in
width depth [in] depth	3 in 76.2 mm
width depth [in] depth Connections	3 in 76.2 mm 2.76 in 70 mm
width depth [in] depth Connections arrangement of electrical connectors / for main current circuit	3 in 76.2 mm 2.76 in 70 mm Front terminal
width depth [in] depth Connections arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit	3 in 76.2 mm 2.76 in 70 mm Front terminal 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	3 in 76.2 mm 2.76 in 70 mm Front terminal nut keeper kit on both ends 12 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	3 in 76.2 mm 2.76 in 70 mm Front terminal nut keeper kit on both ends 12 x 1 mm 17 x 6,5 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)	3 in 76.2 mm 2.76 in 70 mm Front terminal nut keeper kit on both ends 12 x 1 mm 17 x 6,5 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)	3 in 76.2 mm 2.76 in 70 mm Front terminal nut keeper kit on both ends 12 x 1 mm 17 x 6,5 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 switch (N, 2, 4, 6) Auxiliary circuit	3 in 76.2 mm 2.76 in 70 mm Front terminal nut keeper kit on both ends 12 x 1 mm 17 x 6,5 mm Silver Tin
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	3 in 76.2 mm 2.76 in 70 mm Front terminal nut keeper kit on both ends 12 x 1 mm 17 x 6,5 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 number of CO contacts / for auxiliary contacts Accessories	3 in 76.2 mm 2.76 in 70 mm Front terminal nut keeper kit on both ends 12 x 1 mm 17 x 6,5 mm Silver Tin
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	3 in 76.2 mm 2.76 in 70 mm Front terminal nut keeper kit on both ends 12 x 1 mm 17 x 6,5 mm Silver Tin
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	3 in 76.2 mm 2.76 in 70 mm Front terminal nut keeper kit on both ends 12 x 1 mm 17 x 6,5 mm Silver Tin
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	3 in 76.2 mm 2.76 in 70 mm Front terminal nut keeper kit on both ends 12 x 1 mm 17 x 6,5 mm Silver Tin
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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 ambient temperature	3 in 76.2 mm 2.76 in 70 mm Front terminal nut keeper kit on both ends 12 x 1 mm 17 x 6,5 mm Silver Tin

• during storage / maximum

80 °C

Certificates

reference code / according to IEC 81346-2

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General Product Approval

EMC



Confirmation



Miscellaneous





Declaration of Conformity

Test Certificates

Marine / Shipping





Type Test Certificates/Test Report

Miscellaneous

Special Test Certificate



Marine / Shipping





CCS / China Classification Society

Miscellaneous

other

Confirmation

other

Environment

Miscellaneous

Environmental Confirmations

Further information

Siemens has decided to exit the Russian market (see here).

https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

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/3VA1096-3ED32-0AA0

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

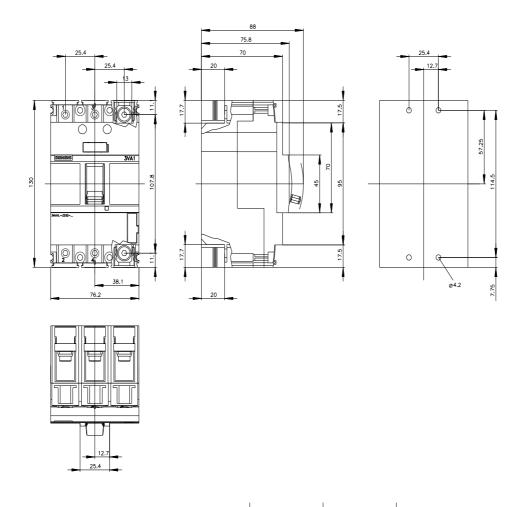
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA1096-3ED32-0AA0

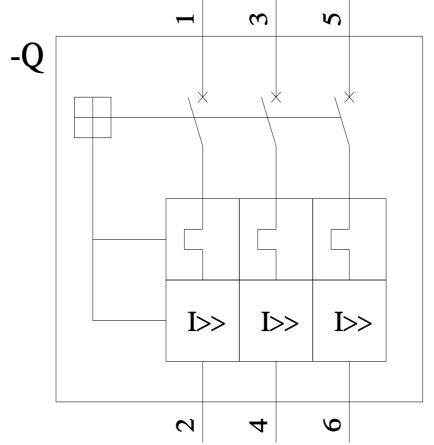
CAx-Online-Generator

http://www.siemens.com/cax

Tender specifications

http://www.siemens.com/specifications





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