SIEMENS

Data sheet

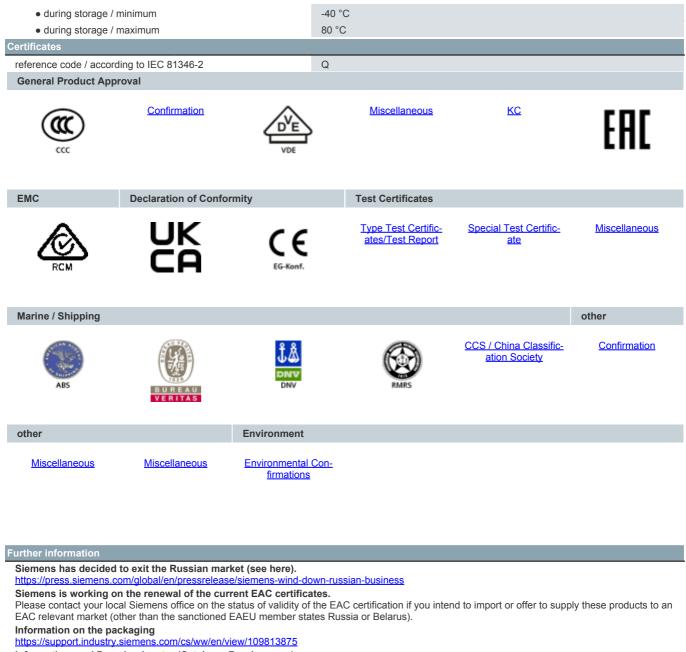
3VA1110-5FD42-0AA0



circuit breaker 3VA1 IEC frame 160 breaking capacity class M Icu=55kA @ 415V 4-pole, line protection TM210, FTFM, In=100A overload protection Ir=100A fixed short-circuit protection Ii=10 x In N conductor protection 50% 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 DC / rated value	600 V
operating voltage / at AC / rated value	690 V
power loss [W] / maximum	25 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	1.2 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	Μ
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
• at 690 V	10 kA
operating short-circuit current breaking capacity (lcs)	

• at 240 V	85 kA
• at 415 V	55 kA
• at 440 V	36 kA
• at 500 V	5 kA
• at 690 V	5 kA
short-circuit current making capacity (Icm)	
• at 240 V	187 kA
• at 415 V	121 kA
• at 440 V	75.6 kA
• at 500 V	17 kA
• at 690 V	17 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	
I2t characteristic	
• minimum	100 A
• maximum	100 A
adjustable response value delay time (tr) / for L-tripping / with I2t characteristic	
• minimum	1s
• 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	50 A
• maximum	50 A
design of the N-conductor protection	50%
product function / grounding protection	No
Mechanical Design	
Mechanical Design product component	
	No
product component	No No
product component undervoltage release 	
product component undervoltage release voltage trigger 	No
product component undervoltage release voltage trigger trip indicator 	No No
product component • undervoltage release • voltage trigger • trip indicator height [in]	No No 5.12 in
product component undervoltage release voltage trigger trip indicator height [in] height 	No No 5.12 in 130 mm
product component undervoltage release voltage trigger trip indicator height [in] height width [in] 	No No 5.12 in 130 mm 4 in
product component undervoltage release voltage trigger trip indicator height [in] height width [in] width 	No No 5.12 in 130 mm 4 in 101.6 mm
product component • undervoltage release • voltage trigger • trip indicator height [in] width [in] width depth [in]	No No 5.12 in 130 mm 4 in 101.6 mm 2.76 in
product component • undervoltage release • voltage trigger • trip indicator height [in] height width [in] width depth [in] depth	No No 5.12 in 130 mm 4 in 101.6 mm 2.76 in
product component	No No 5.12 in 130 mm 4 in 101.6 mm 2.76 in 70 mm
product component	No 5.12 in 130 mm 4 in 101.6 mm 2.76 in 70 mm
product component	No No 5.12 in 130 mm 4 in 101.6 mm 2.76 in 70 mm Front terminal nut keeper kit on both ends
product component undervoltage release voltage trigger trip indicator height [in] height width 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 type of connectable conductor cross-sections / for flat-bar	No No 5.12 in 130 mm 4 in 101.6 mm 2.76 in 2.76 in 70 mm Front terminal nut keeper kit on both ends 12 x 1 mm
product component • undervoltage release • voltage trigger • trip indicator height [in] height 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	No No 5.12 in 130 mm 4 in 101.6 mm 2.76 in 70 mm
product component	No 5.12 in 130 mm 4 in 101.6 mm 2.76 in 70 mm
product component	No 5.12 in 130 mm 4 in 101.6 mm 2.76 in 70 mm
product component • undervoltage release • voltage trigger • trip indicator height [in] height 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	No 5.12 in 130 mm 4 in 101.6 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
product component • undervoltage release • voltage trigger • trip indicator height [in] height 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	No 5.12 in 130 mm 4 in 101.6 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 0
product component • undervoltage release • voltage trigger • trip indicator height [in] height 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	No 5.12 in 130 mm 4 in 101.6 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
product component • undervoltage release • voltage trigger • trip indicator height [in] height width 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 / 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	No 5.12 in 130 mm 4 in 101.6 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 0 Yes
product component • undervoltage release • voltage trigger • trip indicator height [in] height width 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	No 5.12 in 130 mm 4 in 101.6 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 0
product component • undervoltage release • voltage trigger • trip indicator height [in] height width [in] 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	No S.12 in 130 mm 4 in 101.6 mm 2.76 in 70 mm Front terminal nut keeper kit on both ends 12 x 1 mm 17 x 6,5 mm Silver 0 Yes IP40
product component • undervoltage release • voltage trigger • trip indicator height [in] height width 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	No 5.12 in 130 mm 4 in 101.6 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 0 Yes



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=3VA1110-5FD42-0AA0

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

https://support.industry.siemens.com/cs/ww/en/ps/3VA1110-5FD42-0AA0

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

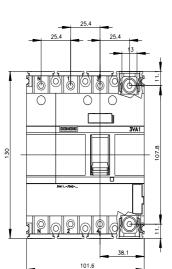
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA1110-5FD42-0AA0

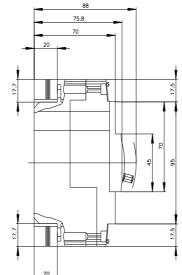
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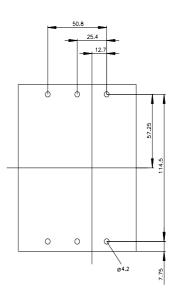
http://www.siemens.com/cax

Tender specifications

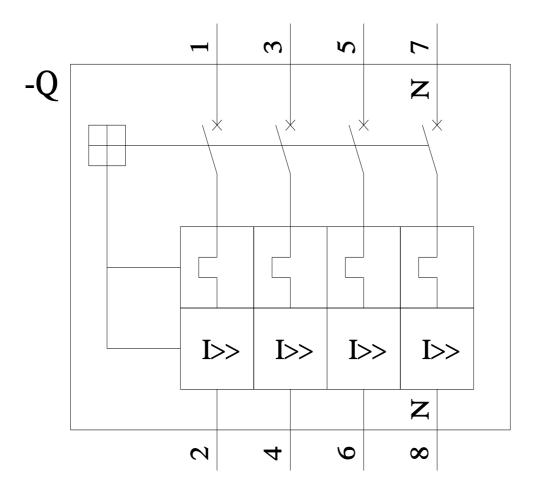
http://www.siemens.com/specifications







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