SIEMENS

Data sheet

3VA1125-3GE42-0AA0



circuit breaker 3VA1 IEC Frame 160 breaking capacity class N Icu=25 kA @ 415 V 4-pole, line protection TM220, ATFM, In=25 A overload protection Ir=18 A...25 A short-circuit protection Ii=12.8 x In neutral 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	TM220		
protection function of the overcurrent release	LI		
number of poles	4		
neral 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	8.5 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	1.251 kg		
Current			
operational current			
• at 40 °C	25 A		
● at 45 °C	25 A		
• at 50 °C	25 A		
● at 55 °C	24 A		
• at 60 °C	24 A		
• at 65 °C	23 A		
• at 70 °C	23 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	7 kA		
• at 690 V	7 kA		
operating short-circuit current breaking capacity (lcs)			

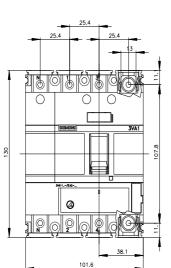
• at 240 V	36 kA		
• at 415 V	25 kA		
• at 440 V	16 kA		
● at 500 V	5 kA		
• at 690 V	5 kA		
short-circuit current making capacity (Icm)			
• at 240 V	75.6 kA		
● at 415 V	52.5 kA		
• at 440 V	32 kA		
● at 500 V	11.9 kA		
• at 690 V	11.9 kA		
design of short-circuit protection	For switching power values 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	18 A		
• maximum	25 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	320 A		
• maximum	320 A		
adjustable setting current (InN) / for N-tripping			
• minimum	25 A		
maximum	25 A		
design of the N-conductor protection	100% No		
product function / grounding protection	NU		
Machanical Design			
Mechanical Design			
product component	No		
product component undervoltage release 	No		
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] height width [in] width [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		
product component • undervoltage release • voltage trigger • trip indicator height [in] height width [in] width depth [in] depth Connections	No 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		
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	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 12 x 1 mm		
product component	No 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 [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)	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 12 x 1 mm 17 x 6,5 mm Silver		
product component	No 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 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	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 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	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 12 x 1 mm 17 x 6,5 mm Silver		
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	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	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 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 product extension / optional / motor drive Environmental conditions	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 Tin 0 Yes		
product component	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 [in] width depth Connections arrangement of electrical connectors / for main current circuit type of electrical connection / 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 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 Ves IP40		
product component	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 Tin 0 Yes		

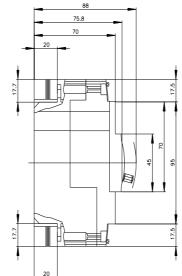
 during storage / r 	ninimum		-40 °C			
 during storage / r 	maximum		80 °C			
Environmental footprint	t					
Environmental Product Declaration(EPD)		Yes				
Global Warming Potential [CO2 eq] / total		190 kg	190 kg			
Global Warming Potential [CO2 eq] / during manufacturing		4.67 kg				
Global Warming Potential [CO2 eq] / during operation		186 kg				
Global Warming Potential [CO2 eq] / after end of life		-0.826 kg				
reference code / according to IEC 81346-2		Q	Q			
Approvals / Certificates	Approvals / Certificates					
General Product Appr	roval					
CE EG-Konf.	UK CA	<u>Confirmatio</u>	n		VDE	<u>Miscellaneous</u>
General Product Ap- proval	EMV	Test Certificate	es			Marine / Shipping
EHC	RCM	<u>Type Test Cer</u> ates/Test Rep		<u>Miscellaneous</u>	Special Test Certific- ate	ABS
Marine / Shipping						other
		Lloyds Register urs		RMRS RMRS	<u>CCS (China Classifica-</u> tion Society)	Confirmation
other		Environment				
<u>Miscellaneous</u>	<u>Miscellaneous</u>	EPD		EPD	Environmental Con- firmations	Environmental Con- firmations

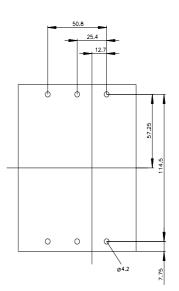
Further information

- Information on the packaging
- https://support.industry.siemens.com/cs/ww/en/view/109813875
- Information- and Downloadcenter (Catalogs, Brochures,...)
- http://www.siemens.com/lowvoltage/catalogs
- Industry Mall (Online ordering system)
- https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3VA1125-3GE42-0AA0

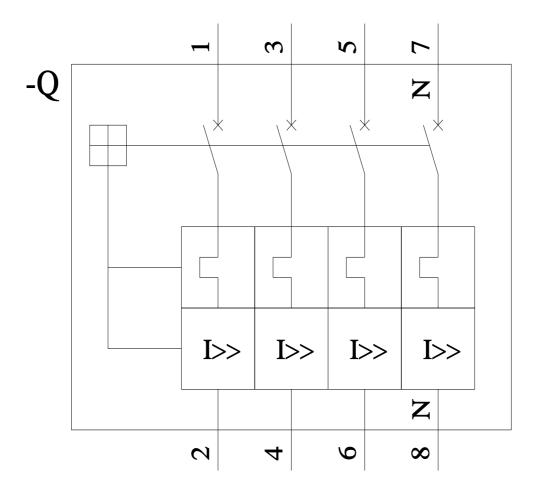
- Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3VA1125-3GE42-0AA0 Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
- http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA1125-3GE42-0AA0
- CAx-Online-Generator
- http://www.siemens.com/cax
- **Tender specifications**
- http://www.siemens.com/specifications







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