SIEMENS

Data sheet

3VA1140-3EF32-0AA0



circuit breaker 3VA1 IEC frame 160 breaking capacity class N Icu=25kA @ 415V 3-pole, line protection TM240, ATAM, In=40A overload protection Ir=28A...40A short-circuit protection Ii=5...10 x In 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	TM240				
protection function of the overcurrent release	LI				
number of poles	3				
General 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	10.8 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	939 g				
Current					
operational current					
• at 40 °C	40 A				
● at 45 °C	40 A				
● at 50 °C	40 A				
● at 55 °C	39 A				
● at 60 °C	39 A				
● at 65 °C	38 A				
● at 70 °C	37 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	20.4
• minimum	28 A
maximum adjustable response value delay time (tr) / for L-tripping / with I2t	40 A
characteristic	
• minimum	1 s
• maximum	1 s
adjustable response value setting current (li) / for I-tripping	
• minimum	200 A
• maximum	400 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
undervoltage releasevoltage trigger	No
undervoltage releasevoltage triggertrip indicator	No No
undervoltage release voltage trigger trip indicator height [in]	No No 5.12 in
undervoltage release voltage trigger trip indicator height [in] height	No No 5.12 in 130 mm
undervoltage release voltage trigger trip indicator height [in] height width [in]	No No 5.12 in 130 mm 3 in
undervoltage release voltage trigger trip indicator height [in] height width [in] width	No No 5.12 in 130 mm 3 in 76.2 mm
undervoltage release voltage trigger trip indicator height [in] height width [in] width depth [in]	No No 5.12 in 130 mm 3 in 76.2 mm 2.76 in
undervoltage release voltage trigger trip indicator height [in] height width [in] width depth [in]	No No 5.12 in 130 mm 3 in 76.2 mm
undervoltage release voltage trigger trip indicator height [in] height width [in] width depth [in] depth Connections	No No 5.12 in 130 mm 3 in 76.2 mm 2.76 in 70 mm
undervoltage release voltage trigger trip indicator height [in] height width [in] width depth [in] depth Connections arrangement of electrical connectors / for main current circuit	No 5.12 in 130 mm 3 in 76.2 mm 2.76 in 70 mm
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	No No 5.12 in 130 mm 3 in 76.2 mm 2.76 in 70 mm Front terminal nut keeper kit on both ends
undervoltage release voltage trigger trip indicator height [in] height width [in] width depth [in] depth Connections arrangement of electrical connectors / for main current circuit	No 5.12 in 130 mm 3 in 76.2 mm 2.76 in 70 mm
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	No No 5.12 in 130 mm 3 in 76.2 mm 2.76 in 70 mm Front terminal nut keeper kit on both ends
• undervoltage release • voltage trigger • trip indicator height [in] height [in] width [in] width [in] depth [in] 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 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
undervoltage release voltage trigger trip indicator height [in] height [in] width [in] width [in] depth [in] 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 / 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)	No No 5.12 in 130 mm 3 in 76.2 mm 2.76 in 70 mm
• undervoltage release • voltage trigger • trip indicator height [in] height [in] height [in] width [in] 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	No S.12 in 130 mm 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
 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 connectors / 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) 	No No 5.12 in 130 mm 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
 undervoltage release voltage trigger trip indicator height [in] height [in] 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	No 5.12 in 130 mm 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 0
 undervoltage release voltage trigger trip indicator height [in] height [in] 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 	No S.12 in 130 mm 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
undervoltage release voltage trigger trip indicator height [in] height [in] height [in] width [in] 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	No 5.12 in 130 mm 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 0 Yes
 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 	No 5.12 in 130 mm 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 0
• 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 connectors / 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 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 Ves IP40
 undervoltage release voltage trigger trip indicator height [in] height width [in] width depth Connections arrangement of electrical connectors / for main current circuit type of electrical connectors / 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 / minimum 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 during operation / minimum 	No 5.12 in 130 mm 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 Yes IP40 -25 °C
• 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 connectors / 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 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 Ves IP40

 during storage / m 	aximum	٤	30 °C		
Environmental footprint					
Environmental Product Declaration(EPD)		`	Yes		
Global Warming Potential [CO2 eq] / total			190 kg		
Global Warming Potential [CO2 eq] / during manufacturing		ufacturing	ł.67 kg		
Global Warming Potential [CO2 eq] / during operation		ration	186 kg		
global warming potential [CO2 eq] / after end of life		life -	0.826 kg		
reference code / according to IEC 81346-2		(Q		
Approvals / Certificates					
General Product Appro	oval				EMC
CCC	<u>Confirmation</u>		<u>Miscellaneous</u>	EAC	RCM
Declaration of Conform	nity	Test Certificates			Marine / Shipping
CE EG-Konf.	UK CA	Special Test Certif ate	ic- <u>Type Test Certific-</u> ates/Test Report	<u>Miscellaneous</u>	ABS
Marine / Shipping					other
BUREAU VERITAS		Lloyds Kegister uts	RMRS	<u>CCS / China Classific-</u> ation Society	<u>Miscellaneous</u>
other		Environment			
<u>Confirmation</u>	<u>Miscellaneous</u>	<u>Environmental Co</u> <u>firmations</u>	<u>D-</u>		

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)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3VA1140-3EF32-0AA0

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

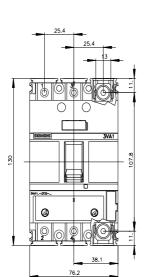
https://support.industry.siemens.com/cs/ww/en/ps/3VA1140-3EF32-0AA0

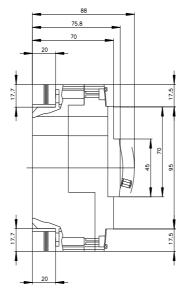
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) <u>http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA1140-3EF32-0AA0</u>

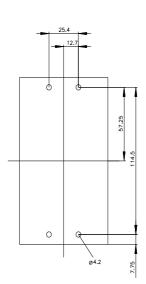
CAx-Online-Generator http://www.siemens.com/cax

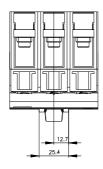
Tender specifications

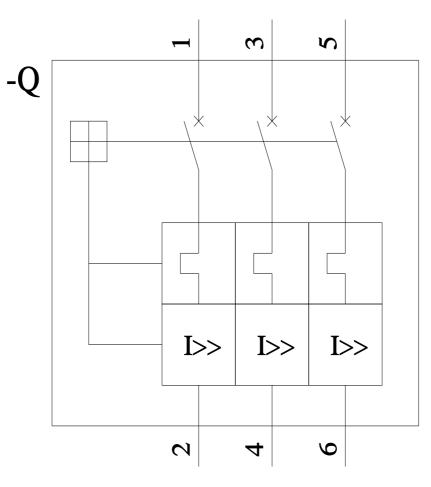
http://www.siemens.com/specifications











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