SIEMENS

Data sheet

3VA1150-6GE42-0AA0



circuit breaker 3VA1 IEC Frame 160 breaking capacity class H Icu=70 kA @ 415 V 4-pole, line protection TM220, ATFM, In=50 A overload protection Ir=35 A...50 A short-circuit protection li=10 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			
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	14.6 W			
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	4.87 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	1.237 kg			
Current				
operational current				
• at 40 °C	50 A			
• at 45 °C	50 A			
• at 50 °C	50 A			
• at 55 °C	49 A			
• at 60 °C	48 A			
• at 65 °C	46 A			
• at 70 °C	45 A			
Switching capacity according to IEC 60947				
switching capacity class of the circuit breaker	Н			
maximum short-circuit current breaking capacity (Icu)				
• at 240 V	100 kA			
• at 415 V	70 kA			
• at 440 V	55 kA			
• at 500 V	10 kA			
• at 690 V	10 kA			

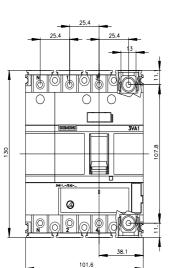
operating short-circuit current breaking capacity (Ics)	
• at 240 V	100 kA
• at 415 V	70 kA
• at 440 V	40 kA
• at 500 V	5 kA
• at 690 V	5 kA
short-circuit current making capacity (Icm)	
• at 240 V	220 kA
• at 415 V	154 kA
• at 440 V	121 kA
• at 500 V	17 kA
• at 690 V	17 kA
design of short-circuit protection	For switching power values in DC networks, see the 3VA molded case circuit

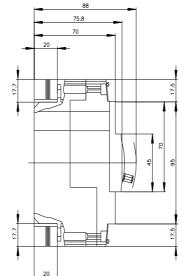
breaker device manual; link to be found under Service & Support in the last chapter

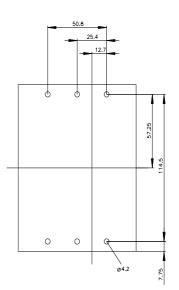
	chapter
Adjustable parameters	
product feature / for L-tripping / can be switched on/off	No
adjustable response value setting current (Ir) / of the L-trip / with I2t characteristic	
• minimum	35 A
• maximum	50 A
adjustable response value delay time (tr) / for L-tripping / with I2t characteristic	
• minimum	1 s
• maximum	1 s
adjustable response value setting current (li) / for I-tripping	
• minimum	500 A
• maximum	500 A
adjustable setting current (InN) / for N-tripping	
• minimum	50 A
• maximum	50 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]	5.12 in
height	130 mm
width [in]	4 in
width	101.6 mm
depth [in]	2.76 in
depth	70 mm
Connections	
arrangement of electrical connectors / for main current circuit	Front terminal
type of electrical connection / for main current circuit	nut keeper kit on both ends
type of connectable conductor cross-sections / for flat-bar terminal connection / minimum	12 x 1 mm
type of connectable conductor cross-sections / for flat-bar terminal connection / maximum	17 x 6,5 mm
design of the surface / of the connections / on the top of the switch (N, 1, 3, 5) $$	Silver
design of the surface / of the connections / on the bottom of the switch $(N,2,4,6)$	Tin
Auxiliary circuit	
number of CO contacts / for auxiliary contacts	0
Accessories	
product extension / optional / motor drive	Yes
Environmental conditions	
protection class IP / on the front	IP40
ambient temperature	
during operation / minimum	-25 °C

 during operation / ma 			70 °C			
during storage / minimum		-40 °C				
 during storage / max 	imum	_	80 °C			
Environmental footprint		_			_	
Environmental Product Dec			Yes			
Global Warming Potential [190 kg			
Global Warming Potential [4.67 kg			
Global Warming Potential [CO2 eq] / during operation			186 kg			
Global Warming Potential [CO2 eq] / after end of life		f life	-0.826 kg			
reference code / according to IEC 81346-2			Q			
Approvals / Certificates		_				
General Product Approva	al					
	CE EG-Konf.	UK CA	<u>Confirmation</u>		VDE	
General Product Approva	al	EMV	Test Certificates			
<u>Miscellaneous</u>	EAC	RCM	<u>Special Test Certific-</u> ate	<u>Type Test Certific-</u> ates/Test Report	<u>Miscellaneous</u>	
Marine / Shipping						
ABS	B UREAU VERITAS		Lloyd's Register urs	RMRS	CCS (China Classifica tion Society)	
other			Environment			
ottiel			Environment			
<u>Miscellaneous</u>	<u>Confirmation</u>	<u>Miscellaneous</u>	EPD	EPD	Environmental Con- firmations	
Environment						
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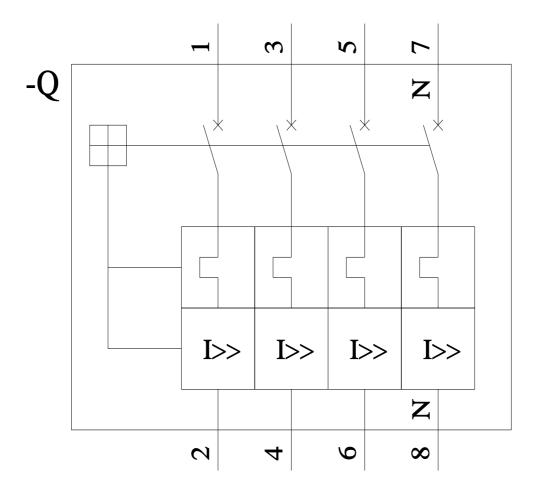
Information on the packaging https://support.industry.siemens.com/cs/ww/en/view/109813875 Information- and Downloadcenter (Catalogs, Brochures,...) http://www.siemens.com/lowvoltage/catalogs Industry Mall (Online ordering system) https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3VA1150-6GE42-0AA0 Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3VA1150-6GE42-0AA0 Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA1150-6GE42-0AA0 CAx-Online-Generator http://www.siemens.com/cax Tender specifications http://www.siemens.com/specifications







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