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 (lcs)	
• 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

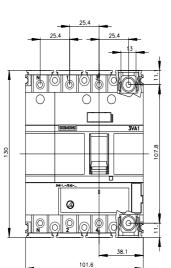
 during operation / maximum 	70 °C
during storage / minimum	-40 °C
 during storage / maximum 	80 °C
Environmental footprint	
Environmental Product Declaration(EPD)	Yes
Global Warming Potential [CO2 eq] / total	190 kg
Global Warming Potential [CO2 eq] / during manufacturing	4.67 kg
Global Warming Potential [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
Approvals / Certificates	

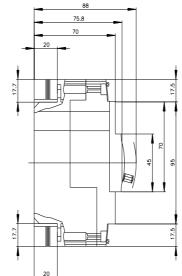
General Product Approval

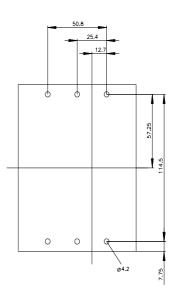
C C EG-Konf.	UK CA	<u>Confirmation</u>			<u>Miscellaneous</u>
General Product Ap- proval	EMV	Test Certificates			Marine / Shipping
EAC	RCM	<u>Special Test Certific-</u> <u>ate</u>	Type Test Certific- ates/Test Report	<u>Miscellaneous</u>	ABS
Marine / Shipping					other
B U R E A U VERITAS		Lloyd's Register urs	KMRS	<u>CCS (China Classifica-</u> <u>tion Society)</u>	<u>Miscellaneous</u>
other		Environment			
<u>Confirmation</u>	<u>Miscellaneous</u>	EPD	EPD	Environmental Con- firmations	Environmental Con- firmations

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rmation on the packaging	
s://support.industry.siemens.com/cs/ww/en/view/109813875 rmation- and Downloadcenter (Catalogs, Brochures,)	
://www.siemens.com/lowvoltage/catalogs	
ustry Mall (Online ordering system)	
s://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3VA1150-6GE42-0AA0 vice&Support (Manuals, Certificates, Characteristics, FAQs,)	
s://support.industry.siemens.com/cs/ww/en/ps/3VA1150-6GE42-0AA0	
ge database (product images, 2D dimension drawings, 3D models, device circuit diagrams,) ://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA1150-6GE42-0AA0	
c-Online-Generator	
://www.siemens.com/cax	
der specifications	

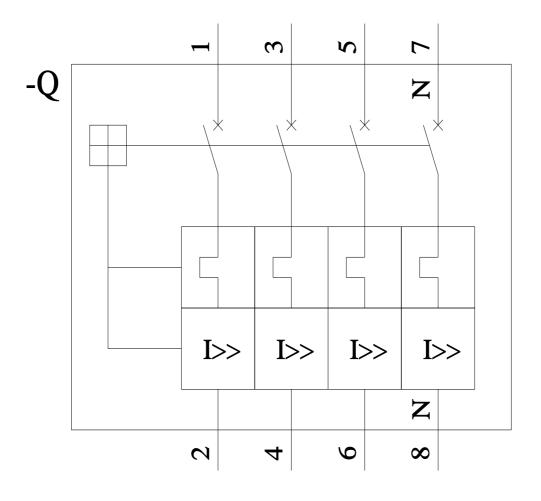
http://www.siemens.com/specifications







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