SIEMENS

Data sheet

3VA5150-4ED31-0AA0



circuit breaker 3VA5 UL frame 125 breaking capacity class S 25kA @ 480V 3-pole, line protection TM210, FTFM, In=50A overload protection Ir=50A fixed short-circuit protection Ii=10 x In without connection

Model	
product brand name	SENTRON
product designation	Molded-case circuit breaker
product designation / according to UL file	SEAS
design of the product	System protection
design of the load switch / according to UL 489 / Heating, Air Conditioning, and Refrigeration circuit breaker (HACR Type)	Yes
design of the load switch / according to UL 489 / High-Intensity- Discharge circuit breaker (HID Type)	Yes
design of the load switch / according to UL 489 / Switching Duty circuit breaker (SWD Type)	No
design of the overcurrent release	TM210
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	12 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	4 W
mechanical service life (operating cycles) / typical	20 000
electrical endurance (operating cycles) / at AC-1 / at 380/415 V	8 000
electrical endurance (operating cycles) / at AC-1 / at 690 V	4 000
electrical endurance (operating cycles) / at 480 V	8 000
electrical endurance (operating cycles) / at 600 V	4 000
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	942 g
Current	
marking / according to UL 489 / 100%-rated breaker	No
operational current	
• at 40 °C	50 A
● at 45 °C	49 A
• at 50 °C	48 A
• at 55 °C	47 A
● at 60 °C	46 A
• at 65 °C	45 A

• at 70 °C	44 A
Switching capacity according to IEC 60947	
switching capacity class of the circuit breaker	S
maximum short-circuit current breaking capacity (Icu)	
• at 240 V	55 kA
● at 415 V	36 kA
• at 690 V	5 kA
operating short-circuit current breaking capacity (lcs)	
• at 240 V	85 kA
• at 415 V	36 kA
• at 690 V	5 kA
short-circuit current making capacity (Icm)	
• at 240 V	121 kA
● at 415 V	75.6 kA
• at 690 V	7.5 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
Switching capacity according to UL 489	
current breaking capacity	
• at 240 V	65 kA
• at 480 V	25 kA
• at 600 Y/347 V	14 kA
Adjustable parameters	
adjustable response value setting current (Ir) / of the L-trip / with I2t characteristic	
• minimum	50 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	500 A
• minimum • maximum	500 A 500 A
adjustable absolute value setting current (InN) / for N-tripping	
minimum	0 A
• maximum	0 A
adjustable current response value current / of the current- dependent overload release	35 50 A
product function / grounding protection	No
Mechanical Design	
product component	
undervoltage release	No
voltage trigger	No
trip indicator	No
height [in]	5.51 in
height	140 mm
width [in]	3 in
width	76.2 mm
depth [in]	3.01 in
depth	76.5 mm
Connections	
arrangement of electrical connectors / for main current circuit	Without connection
type of electrical connection / for main current circuit	Without
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	

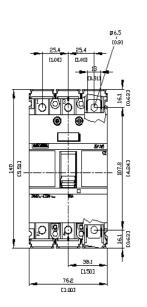
 during operation / during operation / 	/ maximum	-25 °C 70 °C				
 during storage / n during storage / n 		-40 °C 80 °C	;			
Certificates	naximum	80 C				
reference code / accord	ing to IEC 81346-2	Q				
General Product Appr						
Confirmation	CCC			UDE VDE	<u>Miscellaneous</u>	
General Product Approval	EMC	Declaration of Conform	nity	Test Certificates		
EHC	RCM	UK CA	CE EG-Konf.	Type Test Certific- ates/Test Report	Special Test Certific- ate	
Marine / Shipping					other	
ABS	B U R E A U VERITAS		Lloyd's Register urs	RMRS	<u>Miscellaneous</u>	
other						
<u>Confirmation</u>	<u>Miscellaneous</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,) <u>http://www.siemens.com/lowvoltage/catalogs</u> Industry Mall (Online ordering system)						
https://mall.industry.sier	nens.com/mall/en/en/Cat	alog/product?mlfb=3VA515	50-4ED31-0AA0			
	uals, Certificates, Char siemens.com/cs/ww/en/p	acteristics, FAQs,) s/3VA5150-4ED31-0AA0				

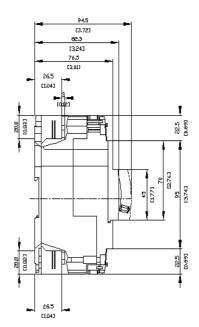
п Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA5150-4ED31-0AA0

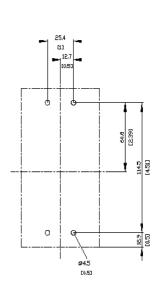
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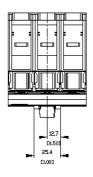
http://www.siemens.com/cax

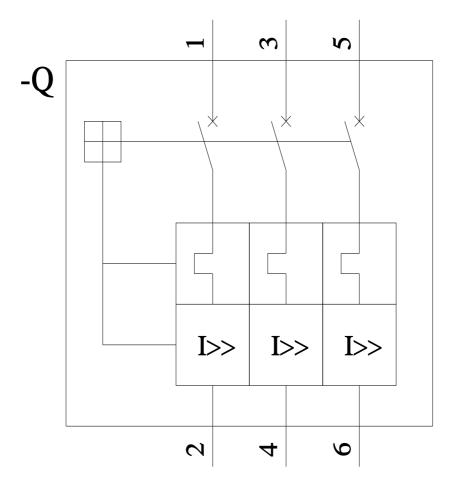
Tender specifications http://www.siemens.com/specifications

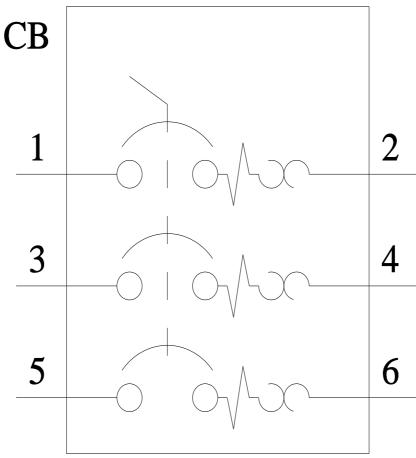












last modified:

7/15/2022 🖸