SIEMENS

Data sheet



circuit breaker 3VA4 UL Frame 125 breaking capacity class S 25 kA @ 277 V 1-pole, line protection TM210, FTFM, In=80 A overload protection Ir=80 A permanently set short-circuit protection Ii=10 x In terminal connection

Model			
product brand name	SENTRON		
product designation	Molded-case circuit breaker		
product designation / according to UL file	SEAB		
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)	No		
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	Ц		
number of poles	1		
General technical data			
operating voltage / at AC / rated value	415 V		
power loss [W] / maximum	5.5 W		
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	5.5 W		
mechanical service life (operating cycles) / typical	15 000		
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	0.426 kg		
Current			
marking / according to UL 489 / 100%-rated breaker	No		
operational current			
• at 40 °C	80 A		
● at 45 °C	78 A		
● at 50 °C	77 A		
● at 55 °C	75 A		
• at 60 °C	74 A		
● at 65 °C	72 A		
● at 70 °C	70 A		
Switching capacity according to IEC 60947			
switching capacity class of the circuit breaker	S		
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 120 V	65 kA			
• at 277 V	25 kA			
• at 347 V	14 kA			
Adjustable parameters				
adjustable response value delay time (tr) / for L-tripping / with I2t characteristic				
• minimum	1 s			
• maximum	1 s			
product function / grounding protection	No			
Mechanical Design				
product component				
undervoltage release	No			
 voltage trigger 	No			
trip indicator	No			
height [in]	5.09 in			
height	129.4 mm			
width [in]	2 in			
type of connectable conductor cross-sections / of the round conductor terminal / stranded	1 x (8 AWG - 3/0)			
width	50.8 mm			
depth [in]	2.96 in			
depth	75.1 mm			
Connections				
arrangement of electrical connectors / for main current circuit	output side: circular conductor	connection		
type of electrical connection / for main current circuit	Infeed side: Low tab			
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	No			
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			
Approvals / Certificates				
General Product Approval		EMV	other	





Miscellaneous





Miscellaneous

other Environment

<u>Confirmation</u> <u>Miscellaneous</u> <u>Environmental Confirmations</u>

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=3VA4180-4ED54-0AA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3VA4180-4ED54-0AA0

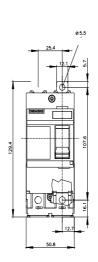
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA4180-4ED54-0AA0

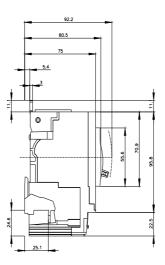
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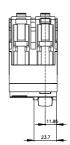
http://www.siemens.com/cax

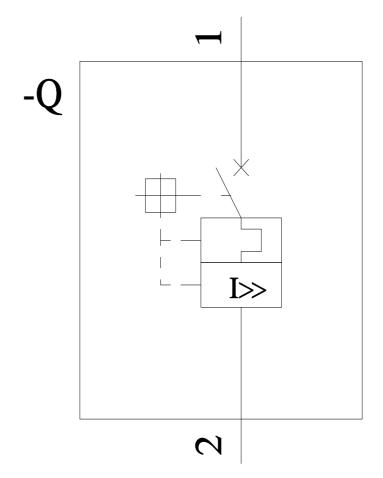
Tender specifications

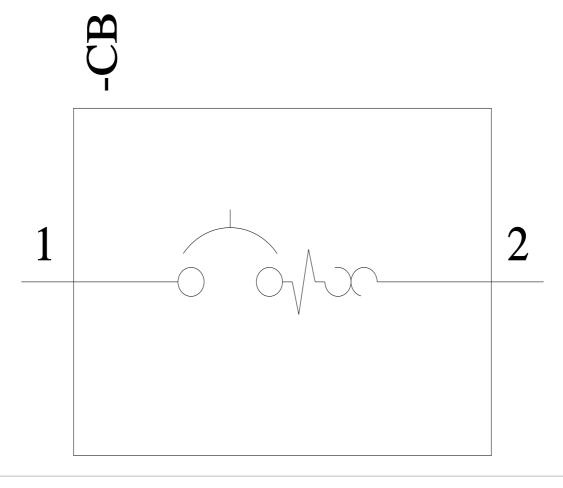
http://www.siemens.com/specifications











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