



circuit breaker 3VA4 UL frame 125 breaking capacity class S 25kA @ 480 V 3-pole, line protection TM210, FTFM, In=80A overload protection Ir=80A fixed short-circuit protection li=10 x In clamp connection

Model	
product brand name	SETRON
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	LI
number of poles	3
General technical data	
operating voltage / at AC / rated value	690 V
power loss [W] / maximum	16.5 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/retrofitable / short-circuit and overload proof	No
ground-fault monitoring version	Without
product function	
• communication function	No
• other measurement function	No
Net Weight	0.743 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 240 V	65 kA		
• at 480 Y/277 V	25 kA		
• at 480 V	25 kA		
• at 600 Y/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]	3 in		
type of connectable conductor cross-sections / of the round conductor terminal / stranded	1 x (8 AWG - 3/0)		
width	76.2 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		EMC	other



[Miscellaneous](#)



[Miscellaneous](#)

other

[Confirmation](#)

[Miscellaneous](#)

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=3VA4180-4ED34-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA4180-4ED34-0AA0>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA4180-4ED34-0AA0

CAX-Online-Generator

<http://www.siemens.com/cax>

Tender specifications

<http://www.siemens.com/specifications>





