



circuit breaker 3VA4 UL Frame 125 breaking capacity class S 25 kA @ 480 V 3-pole, line protection TM210, FTFM, $I_n=20$ A overload protection $I_r=20$ A permanently set short-circuit protection $I_i=15 \times I_n$ terminal 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)	Yes
design of the load switch / according to UL 489 / Switching Duty circuit breaker (SWD Type)	Yes
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	600 V
power loss [W] / maximum	8.5 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	2.83 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	20 A
• at 45 °C	20 A
• at 50 °C	19 A
• at 55 °C	19 A
• at 60 °C	18 A
• at 65 °C	18 A
• at 70 °C	17 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 (14 AWG - 8 AWG)

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
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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](#)



[Confirmation](#)

other

Environment

[Miscellaneous](#)

[Environmental Con-
firmations](#)

Further information

Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

Information for data generation and storage

<https://support.industry.siemens.com/cs/ww/en/view/109995012>

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=3VA4120-4ED34-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA4120-4ED34-0AA0>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA4120-4ED34-0AA0

CAX-Online-Generator

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

Tender specifications

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





