



circuit breaker 3VA4 UL Frame 125 breaking capacity class H 65 kA @ 480 V 3-pole, line protection TM210, FTFM, $I_n=80$ A overload protection $I_r=80$ A permanently set short-circuit protection $I_i=10 \times I_n$

Model	
product brand name	SETRON
product designation	Molded-case circuit breaker
product designation / according to UL file	HEAB
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	H
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	100 kA		
• at 480 Y/277 V	65 kA		
• at 480 V	65 kA		
• at 600 Y/347 V	25 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			
<table> <tr> <td>General Product Approval</td><td>Test Certificates</td></tr> </table>		General Product Approval	Test Certificates
General Product Approval	Test Certificates		



[Confirmation](#)



[Type Test Certificates/Test Report](#)

Test Certificates	other	Environment
Special Test Certificate	Confirmation	Environmental Confirmations

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=3VA4180-6ED34-3AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA4180-6ED34-3AA0>

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

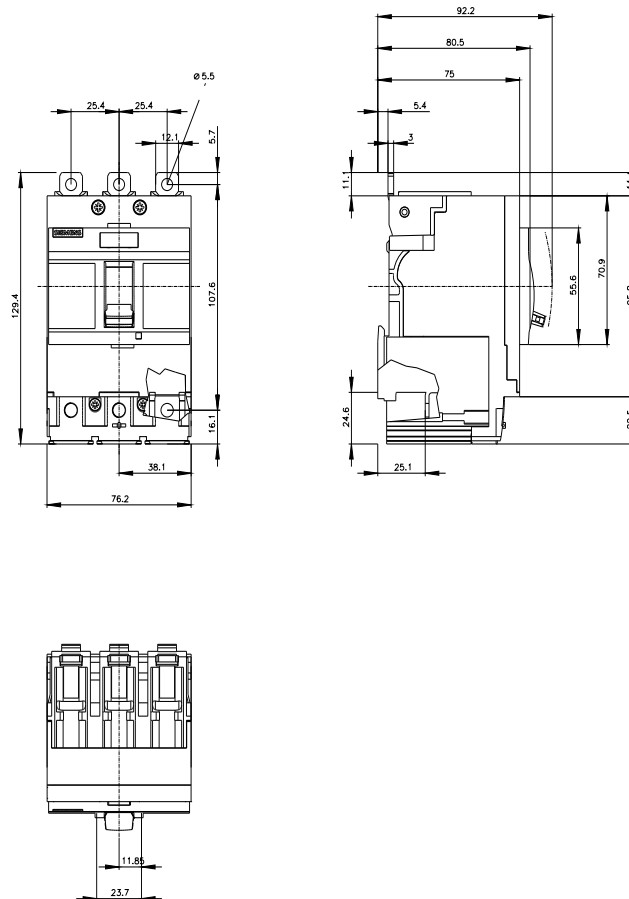
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA4180-6ED34-3AA0

CAX-Online-Generator

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

Tender specifications

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



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