



circuit breaker 3VA4 UL Frame 125 breaking capacity class H 65 kA @ 277 V 1-pole, line protection TM210, FTFM,  $I_n=90$  A overload protection  $I_r=90$  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	1
General technical data	
operating voltage / at AC / rated value	480 V
power loss [W] / maximum	5.9 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	5.9 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	0.28 kg
Current	
marking / according to UL 489 / 100%-rated breaker	No
operational current	
• at 40 °C	90 A
• at 45 °C	88 A
• at 50 °C	86 A
• at 55 °C	84 A
• at 60 °C	81 A
• at 65 °C	79 A
• at 70 °C	77 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
<b>Switching capacity according to UL 489</b>	
current breaking capacity	
• at 120 V	150 kA
• at 277 V	65 kA
• at 347 V	25 kA
<b>Adjustable parameters</b>	
adjustable response value delay time (tr) / for L-tripping / with I2t characteristic	
• minimum	1 s
• maximum	1 s
product function / grounding protection	No
<b>Mechanical Design</b>	
product component	
• undervoltage release	No
• voltage trigger	No
• trip indicator	No
height [in]	5.09 in
height	129.4 mm
width [in]	1 in
type of connectable conductor cross-sections / of the round conductor terminal / stranded	1 x (8 AWG - 3/0)
width	25.4 mm
depth [in]	2.96 in
depth	75.1 mm
<b>Connections</b>	
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
<b>Auxiliary circuit</b>	
number of CO contacts / for auxiliary contacts	0
<b>Accessories</b>	
product extension / optional / motor drive	No
<b>Environmental conditions</b>	
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
<b>Further information</b>	
<b>Information on the packaging</b> <a href="https://support.industry.siemens.com/cs/ww/en/view/109813875">https://support.industry.siemens.com/cs/ww/en/view/109813875</a>	
<b>Information for data generation and storage</b> <a href="https://support.industry.siemens.com/cs/ww/en/view/109995012">https://support.industry.siemens.com/cs/ww/en/view/109995012</a>	
<b>Information- and Downloadcenter (Catalogs, Brochures,...)</b> <a href="https://www.siemens.com/lowvoltage/catalogs">https://www.siemens.com/lowvoltage/catalogs</a>	
<b>Industry Mall (Online ordering system)</b> <a href="https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3VA4190-6ED14-3AA0">https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3VA4190-6ED14-3AA0</a>	
<b>Service&amp;Support (Manuals, Certificates, Characteristics, FAQs,...)</b> <a href="https://support.industry.siemens.com/cs/ww/en/ps/3VA4190-6ED14-3AA0">https://support.industry.siemens.com/cs/ww/en/ps/3VA4190-6ED14-3AA0</a>	
<b>Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)</b> <a href="https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA4190-6ED14-3AA0">https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA4190-6ED14-3AA0</a>	
<b>CAX-Online-Generator</b> <a href="https://www.siemens.com/cax">https://www.siemens.com/cax</a>	
<b>Tender specifications</b> <a href="https://www.siemens.com/specifications">https://www.siemens.com/specifications</a>	
<b>Characteristic curves</b> <a haupt"&gt;&lt;="" href="https://curves.simaris.siemens.com/curves/&lt;mmp_prod_noCOMP=" mmp_prod_no&gt;"="">https://curves.simaris.siemens.com/curves/&lt;mmp_prod_noCOMP="HAUPT"&gt;&lt;/mmp_prod_no&gt;</a>	



last modified:

4/3/2025 

