



circuit breaker 3VA5 UL Frame 250 breaking capacity class H 65 kA @ 480 V 3-pole, line protection TM210, FTFM, In=30 A overload protection Ir=30 A permanently set short-circuit protection Ii=11.67 x In UL 489 SB (naval), 50 °C, cable connection on two sides

Model	
product brand name	SETRON
product designation	Molded-case circuit breaker
product designation / according to UL file	HFAM
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)	No
design of the overcurrent release	TM210
protection function of the overcurrent release	LI
number of poles	3
General technical data	
operating voltage / at DC / rated value	750 V
operating voltage / at AC / rated value	690 V
power loss [W] / maximum	18.5 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	6.2 W
mechanical service life (operating cycles) / typical	20 000
electrical endurance (operating cycles) / at AC-1 / at 380/415 V	8 000
electrical endurance (operating cycles) / at AC-1 / at 690 V	4 000
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
product function	
• communication function	No
• other measurement function	No
Net Weight	2 100 g
Current	
marking / according to UL 489 / 100%-rated breaker	No
operational current	
• at 40 °C	30 A
• at 45 °C	29.4 A
• at 50 °C	28.8 A
• at 55 °C	28.2 A
• at 60 °C	27.6 A
• at 65 °C	27 A
• at 70 °C	26.4 A

**Switching capacity according to IEC 60947**

switching capacity class of the circuit breaker	H
maximum short-circuit current breaking capacity (I <sub>cu</sub> ) <ul style="list-style-type: none"><li>• at 240 V</li><li>• at 415 V</li><li>• at 690 V</li></ul>	100 kA 70 kA 10 kA
operating short-circuit current breaking capacity (I <sub>cs</sub> ) <ul style="list-style-type: none"><li>• at 240 V</li><li>• at 415 V</li><li>• at 690 V</li></ul>	100 kA 70 kA 10 kA
short-circuit current making capacity (I <sub>cm</sub> ) <ul style="list-style-type: none"><li>• at 240 V</li><li>• at 415 V</li><li>• at 690 V</li></ul>	220 kA 154 kA 17 kA
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 <ul style="list-style-type: none"><li>• at 240 V</li><li>• at 480 V</li><li>• at 600 V</li></ul>	100 kA 65 kA 25 kA
--	--------------------------

**Adjustable parameters**

adjustable response value setting current (I <sub>r</sub> ) / of the L-trip / with I <sub>2t</sub> characteristic <ul style="list-style-type: none"><li>• minimum</li><li>• maximum</li></ul>	30 A 30 A
adjustable response value delay time (t <sub>r</sub> ) / for L-tripping / with I <sub>2t</sub> characteristic <ul style="list-style-type: none"><li>• minimum</li><li>• maximum</li></ul>	1 s 1 s
adjustable response value setting current (I <sub>i</sub> ) / for I-tripping <ul style="list-style-type: none"><li>• minimum</li><li>• maximum</li></ul>	400 A 400 A
product function / grounding protection	No

**Mechanical Design**

product component <ul style="list-style-type: none"><li>• undervoltage release</li><li>• voltage trigger</li><li>• trip indicator</li></ul>	No No No
height [in]	7.28 in
height	185 mm
width [in]	4.13 in
type of connectable conductor cross-sections / of the round conductor terminal / stranded	1 x (14 AWG - 1/0)
width	105 mm
depth [in]	3.27 in
depth	83 mm

**Connections**

arrangement of electrical connectors / for main current circuit	Front connection
type of electrical connection / for main current circuit	circular conductor terminal on both sides

**Auxiliary circuit**

number of CO contacts / for auxiliary contacts	0
--	---

**Accessories**

product extension / optional / motor drive	Yes
--	-----

**Environmental conditions**

protection class IP / on the front	IP40
ambient temperature <ul style="list-style-type: none"><li>• during operation / minimum</li><li>• during operation / maximum</li><li>• during storage / minimum</li><li>• during storage / maximum</li></ul>	-25 °C 70 °C -40 °C 80 °C

## Approvals / Certificates

## General Product Approval


[Miscellaneous](#)


EMV

Maritime application

other

Environment


[Confirmation](#)
[Miscellaneous](#)
[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=3VA5230-6ED36-1AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA5230-6ED36-1AA0>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA5230-6ED36-1AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA5230-6ED36-1AA0)

CAx-Online-Generator

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

Tender specifications

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




