SIEMENS

Data sheet

3VA5170-6ED12-1AA0



circuit breaker 3VA5 UL frame 125 breaking capacity class H 50kA @ 277 V 1-pole, line protection TM210, FTFM, In=70A overload protection Ir=70A fixed short-circuit protection Ii=10 x In UL489 SB (naval), 50 deg. cel. nut keeper kit on both sides

Model	
product brand name	SENTRON
product designation	Molded-case circuit breaker
product designation / according to UL file	H5EAM
Product version	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	415 V
power loss [W] / maximum	6.1 W
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	6.1 W
mechanical service life (switching cycles) / typical	20 000
Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz	8 000
Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz	4 000
electrical endurance (switching cycles) / at 480 V	8 000
electrical endurance (switching cycles) / at 600 V	4 000
Neutral conductors / upgradeable/retrofittable	No
ground-fault monitoring version	without
product function	
 communication function 	No
 other measurement function 	No
Net Weight	0.404 kg
Current	
marking / according to UL 489 / 100%-rated breaker	No
operational current	
● at 40 °C	70 A
● at 45 °C	69 A
● at 50 °C	68 A
● at 55 °C	67 A
• at 60 °C	66 A

● at 65 °C	65 A
• at 70 °C	64 A
Switching capacity according to IEC 60947	
switching capacity class of the circuit breaker	Н
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	
breaking capacity current	
• at 120 V	100 kA
• at 277 V	50 kA
• at 347 V	18 kA
Adjustable parameters	
Adjustable response value current / Ig min.	70 A
Adjustable response value current / Ig min.	70 A
Ground fault protection / tripping switchable / I2t=ON/OFF	No
Mechanical Design	
height [in]	5.51 in
Height	140 mm
width [in]	1 in
Width	25.4 mm
depth [in]	3.01 in
depth	76.5 mm
Connections	
arrangement of electrical connectors / for main current circuit	Front connection
type of electrical connection / for main current circuit	nut keeper kit on both ends
Type of connectable conductor cross-section, connection screw, width x thickness , min.	12 x 1 mm
Type of connectable conductor cross-section, connection screw, width x thickness , max.	17 x 6.5 mm
Auxiliary circuit	
product component	
 undervoltage release 	No
 voltage trigger 	No
trip indicator	No
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
Certificates	
certificate of suitability / as approval for NAVAL (no combat vessels) / supplement SB	Yes
General Product Approval	EMC Marine / Shipping
CCC UL	UL RCM ABS
- 41	

other

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=3VA5170-6ED12-1AA0

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

https://support.industry.siemens.com/cs/ww/en/ps/3VA5170-6ED12-1AA0

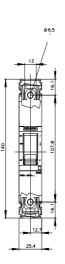
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA5170-6ED12-1AA0

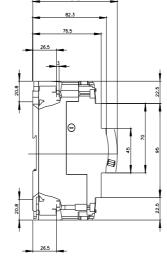
CAx-Online-Generator

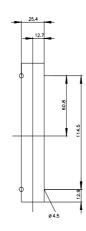
http://www.siemens.com/cax

Tender specifications

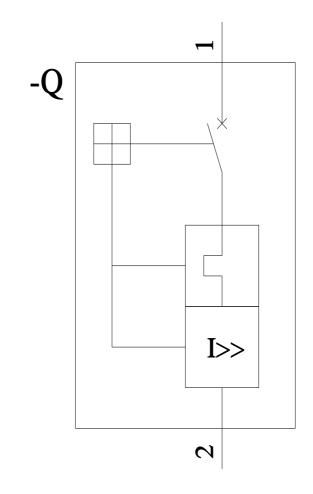
http://www.siemens.com/specifications

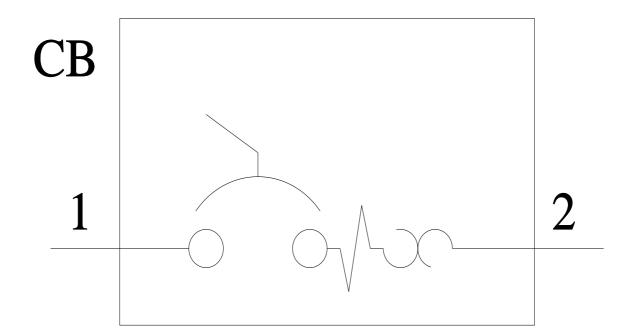












last modified:

7/15/2022 🖸

Subject to change without notice © Copyright Siemens