SIEMENS

Data sheet

3VA4145-6ED24-1AA0



circuit breaker 3VA4 UL frame 125 breaking capacity class H 65kA @ 480 V 2-pole, line protection TM210, FTFM, In=45A overload protection Ir=45A fixed short-circuit protection Ii=10 x In UL489 SB (naval), 50 deg. cel. clamp connection

Model	
product brand name	SENTRON
product designation	Molded-case circuit breaker
product designation / according to UL file	HEAM
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	2
General technical data	
operating voltage / at AC / rated value	415 V
power loss [W] / maximum	7 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	3.5 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/retrofittable / short-circuit and overload proof	No
ground-fault monitoring version	Without
product function	
 communication function 	No
 other measurement function 	No
Net Weight	0.514 kg
Current	
marking / according to UL 489 / 100%-rated breaker	No
operational current	
• at 40 °C	45 A
● at 45 °C	45 A
● at 50 °C	45 A
● at 55 °C	44 A
● at 60 °C	43 A
● at 65 °C	43 A
• at 70 °C	42 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	
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]	2 in
type of connectable conductor cross-sections / of the round conductor terminal / stranded	1 x (8 AWG - 3/0)
width	50.8 mm
depth [in]	2.96 in
depth	75.1 mm
Connections	70.1 mm
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	Tin
switch (N, 2, 4, 6)	
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 other
	Confirmation
other	
Miscellaneous Miscellaneous	

Further information

Siemens has decided to exit the Russian market (see here).

https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

Information on the packaging https://support.industry.siemens.com/cs/ww/en/view/109813875

Information- and Downloadcenter (Catalogs, Brochures,...)

http://www.siemens.com/lowvoltage/catalog

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3VA4145-6ED24-1AA0

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

https://support.industry.siemens.com/cs/ww/en/ps/3VA4145-6ED24-1AA0

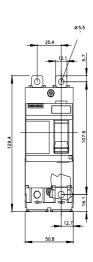
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA4145-6ED24-1AA0

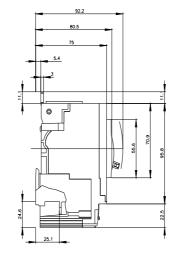
CAx-Online-Generator

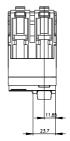
http://www.siemens.com/cax

Tender specifications

http://www.siemens.com/specifications







last modified:

4/20/2023

8/15/2023

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Siemens: 3VA41456ED241AA0