## SIEMENS

## Data sheet

## 3VA4160-4ED24-0AA0



circuit breaker 3VA4 UL Frame 125 breaking capacity class S 25 kA @ 480 V 2-pole, line protection TM210, FTFM, In=60 A overload protection Ir=60 A permanently set short-circuit protection Ii=10 x In terminal connection

Model	
product brand name	SENTRON
product designation	Molded-case circuit breaker
product designation / according to UL file	SEAB
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	2
General technical data	
operating voltage / at AC / rated value	415 V
power loss [W] / maximum	9.3 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	4.65 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	
<ul> <li>communication function</li> </ul>	No
<ul> <li>other measurement function</li> </ul>	No
Net Weight	0.514 kg
Current	
marking / according to UL 489 / 100%-rated breaker	No
operational current	
● at 40 °C	60 A
● at 45 °C	59 A
• at 50 °C	58 A
● at 55 °C	56 A
● at 60 °C	55 A
● at 65 °C	54 A
● at 70 °C	53 A
Switching capacity according to IEC 60947	
switching capacity class of the circuit breaker	S
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	65 kA
• at 480 Y/277 V	25 kA
• at 480 V	25 kA
• at 600 Y/347 V	14 kA
Adjustable parameters	
adjustable response value delay time (tr) / for L-tripping / with I2t characteristic	
• minimum	1s
• maximum	1s
product function / grounding protection	No
Mechanical Design	
product component	
undervoltage release	No
-	No
<ul> <li>voltage trigger</li> <li>trip indicator</li> </ul>	
	No 5.09 in
height [in]	129.4 mm
height	
width [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	
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 $({\rm N},2,4,6)$	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	
<ul> <li>during operation / minimum</li> </ul>	-25 °C
during operation / maximum	70 °C
during storage / minimum	-40 °C
during storage / maximum	80 °C
Approvals / Certificates	
General Product Approval	EMV other
	LERE RCM Confirmation
other Environment	
Miscellaneous Miscellaneous Environmental firmations	

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=3VA4160-4ED24-0AA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3VA4160-4ED24-0A

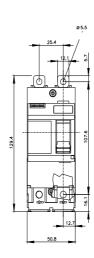
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VA4160-4ED24-0AA0

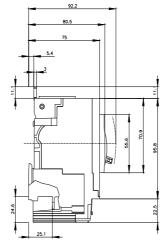
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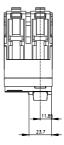
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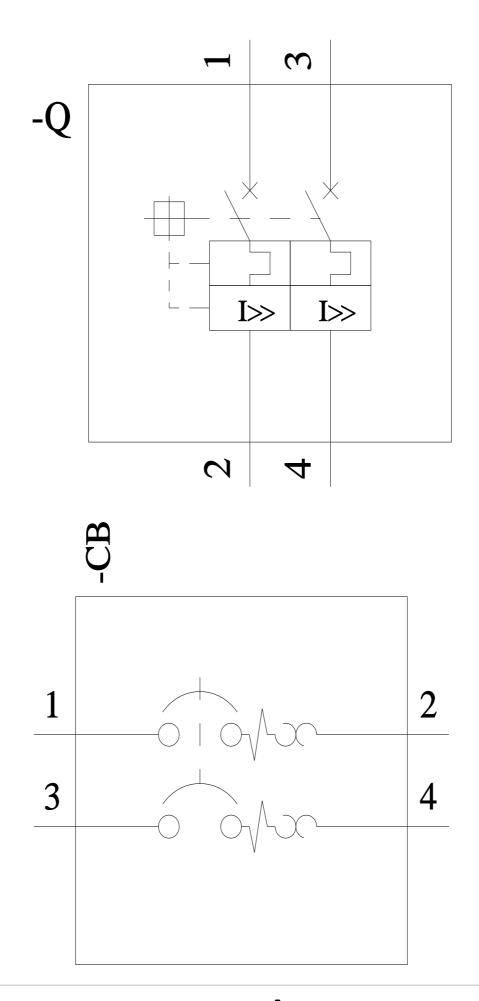
Tender specifications

http://www.siemens.com/specifications









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