3VA5120-5EC41-0AA0

## **Data sheet**



circuit breaker 3VA5 UL frame 125 breaking capacity class M 35kA @ 480 V 4-pole, line protection TM230, FTAM, In=20A overload protection Ir=20A fixed short-circuit protection Ii=7.5...15 x In N conductor unprotected without connection

Model	
product brand name	SENTRON
product designation	Molded-case circuit breaker
product designation / according to UL file	MEAS
Product version	System protection
design of the load switch / acc. to UL 489 / Heating, Air Conditioning, and Refrigeration circuit breaker (HACR Type)	Yes
design of the overcurrent release	TM230
protection function of the overcurrent release	Ц
number of poles	4
General technical data	
Tension assignée d'isolement Ui	800 V
Max. rated operational voltage Ue with AC 50/60Hz	690 V
Max. rated operational voltage Ue with DC	600 V
power loss [W] / maximum	12 W
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	4 W
mechanical service life (switching cycles) / typical	15 000
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	
<ul> <li>communication function</li> </ul>	No
<ul> <li>other measurement function</li> </ul>	No
Current	
marking / acc. to UL 489 / 100%-rated breaker	No
Max. rated operational current of the frame size	125 A
Courant permanent assigné lu	20 A
operational current	
• at 40 °C	20 A
• at 45 °C	20 A
• at 50 °C	19.3 A
● at 55 °C	19 A

a at 60 °C	18.7 A
at 60 °C     at 65 °C	18.3 A
• at 70 °C	18.1 A
	10:1 A
Switching capacity according to IEC 60947	
switching capacity class of the circuit breaker	M
breaking capacity maximum short-circuit current (Icu)	OF ItA
• at 240 V	85 kA
• at 415 V	55 kA
• at 690 V	7 kA
breaking capacity operating short-circuit current (lcs)  • at 240 V	85 kA
• at 415 V	55 kA
• at 690 V	5 kA
short-circuit current making capacity (Icm)	Jim
• at 240 V	187 kA
• at 415 V	121 kA
• at 690 V	11.9 kA
design of short-circuit protection	For switching power values in DC networks, see the 3VA molded case
design of orion official protection	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 240 V	85 kA
● at 480 V	35 kA
● at 600 Y/347 V	18 kA
Adjustable parameters	
Adjustable response value current / lg min.	20 A
Adjustable response value current / lg min.	20 A
Adjustable response value current / li min.	150 A
Adjustable response value current / li max.	300 A
design of the N-conductor protection	Without
Ground fault protection / tripping switchable / I2t=ON/OFF	No
Mechanical Design	
height [in]	5.5 in
Height	140 mm
width [in]	4 in
Width	101.6 mm
depth [in]	3 in
depth	76.5 mm
Connections	
arrangement of electrical connectors / for main current circuit	Without connection
type of electrical connection / for main current circuit	Without
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	
during operation / minimum	-25 °C
during operation / maximum	70 °C
during storage / minimum	-40 °C
during storage / maximum	80 °C
Certificates	
reference code / acc. to IEC 81346-2	Q
certificate of suitability / as approval for NAVAL (no	No
combat vessels) / supplement SB	

## **General Product Approval**











**Miscellaneous** 

General Product Approval

EMC

**Declaration of Conformity** 

**Test Certificates** 

**Shipping Approval** 







**Miscellaneous** 

Special Test Certificate



Shipping Approval

other



**Miscellaneous** 

## **Further information**

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=3VA5120-5EC41-0AA0

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

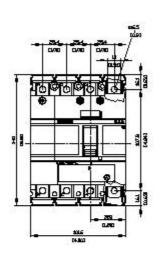
https://support.industry.siemens.com/cs/ww/en/ps/3VA5120-5EC41-0AA0

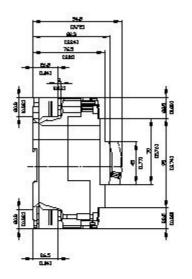
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

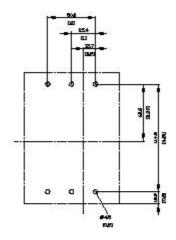
http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VA5120-5EC41-0AA0

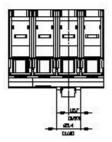
**Tender specifications** 

http://www.siemens.com/specifications









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