3VA5290-7EC31-1AA0

## **Data sheet**



circuit breaker 3VA5 UL frame 250 breaking capacity class C 100kA @ 480V 3-pole, line protection TM230, FTAM, In=90A overload protection Ir=90A fixed short-circuit protection Ii=5...10 x In UL 489 SB (naval), 50 °C without connection

Model	
product brand name	SENTRON
product designation	Molded-case circuit breaker
product designation / according to UL file	CFAM
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	LI
number of poles	3
General technical data	
power loss [W] / maximum	24.6 W
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	8.2 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	
<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	250 A
Courant permanent assigné lu	90 A
operational current	
● at 40 °C	90 A
Switching capacity according to IEC 60947	
switching capacity class of the circuit breaker	С
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	

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breaking capacity current	
• at 240 V	200 kA
• at 480 V	100 kA
• at 600 Y/347 V	35 kA
Adjustable parameters	
Adjustable response value current / lg min.	90 A
Adjustable response value current / lg min.	90 A
Adjustable response value current / li min.	450 A
Adjustable response value current / li max.	900 A
Ground fault protection / tripping switchable / I2t=ON/OFF	No
Mechanical Design	
height [in]	7.3 in
Height	185 mm
width [in]	4.1 in
Width	105 mm
depth [in]	3.3 in
depth	83 mm
Connections	
arrangement of electrical connectors / for main current	Without connection
circuit	
type of electrical connection / for main current circuit	Without
	Without
type of electrical connection / for main current circuit	Without 0
type of electrical connection / for main current circuit  Auxiliary circuit	
type of electrical connection / for main current circuit  Auxiliary circuit  number of CO contacts / for auxiliary contacts	
type of electrical connection / for main current circuit  Auxiliary circuit  number of CO contacts / for auxiliary contacts  Accessories	0
type of electrical connection / for main current circuit  Auxiliary circuit  number of CO contacts / for auxiliary contacts  Accessories  product extension / optional / motor drive	0
type of electrical connection / for main current circuit  Auxiliary circuit  number of CO contacts / for auxiliary contacts  Accessories  product extension / optional / motor drive  Environmental conditions	O Yes
type of electrical connection / for main current circuit  Auxiliary circuit  number of CO contacts / for auxiliary contacts  Accessories  product extension / optional / motor drive  Environmental conditions  protection class IP / on the front	O Yes
type of electrical connection / for main current circuit  Auxiliary circuit  number of CO contacts / for auxiliary contacts  Accessories  product extension / optional / motor drive  Environmental conditions  protection class IP / on the front ambient temperature	Ves
type of electrical connection / for main current circuit  Auxiliary circuit  number of CO contacts / for auxiliary contacts  Accessories  product extension / optional / motor drive  Environmental conditions  protection class IP / on the front  ambient temperature  • during operation / minimum	0 Yes IP40 -25 °C
type of electrical connection / for main current circuit  Auxiliary circuit  number of CO contacts / for auxiliary contacts  Accessories  product extension / optional / motor drive  Environmental conditions  protection class IP / on the front  ambient temperature  • during operation / minimum  • during operation / maximum	0 Yes IP40 -25 °C 70 °C
type of electrical connection / for main current circuit  Auxiliary circuit  number of CO contacts / for auxiliary contacts  Accessories  product extension / optional / motor drive  Environmental conditions  protection class IP / on the front  ambient temperature  • during operation / minimum  • during operation / maximum  • during storage / minimum	0 Yes IP40 -25 °C 70 °C -40 °C
type of electrical connection / for main current circuit  Auxiliary circuit  number of CO contacts / for auxiliary contacts  Accessories  product extension / optional / motor drive  Environmental conditions  protection class IP / on the front  ambient temperature  • during operation / minimum  • during storage / minimum  • during storage / maximum	0 Yes IP40 -25 °C 70 °C -40 °C
type of electrical connection / for main current circuit  Auxiliary circuit  number of CO contacts / for auxiliary contacts  Accessories  product extension / optional / motor drive  Environmental conditions  protection class IP / on the front  ambient temperature  • during operation / minimum  • during storage / minimum  • during storage / maximum  Certificates	0 Yes IP40 -25 °C 70 °C -40 °C 80 °C
type of electrical connection / for main current circuit  Auxiliary circuit  number of CO contacts / for auxiliary contacts  Accessories  product extension / optional / motor drive  Environmental conditions  protection class IP / on the front  ambient temperature  • during operation / minimum  • during storage / minimum  • during storage / maximum  Certificates  reference code / acc. to IEC 81346-2  certificate of suitability / as approval for NAVAL (no	0 Yes IP40 -25 °C 70 °C -40 °C 80 °C







**Miscellaneous** 

EAC EAC

**EMC** 

**Shipping Approval** 

other







**Miscellaneous** 

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

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

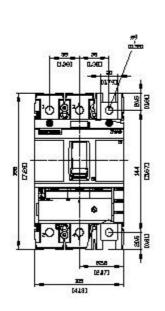
Industry Mall (Online ordering system)

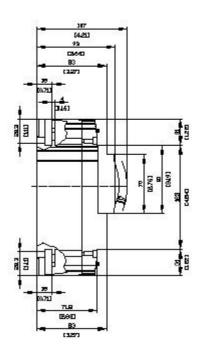
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3VA5290-7EC31-1AA0

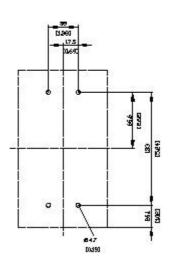
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

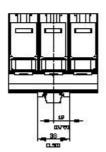
https://support.industry.siemens.com/cs/ww/en/ps/3VA5290-7EC31-1AA0

Tender specifications
<a href="http://www.siemens.com/specifications">http://www.siemens.com/specifications</a>









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