## SIEMENS

## Data sheet

## 3VA5280-7EC36-0AA0



circuit breaker 3VA5 UL frame 250 breaking capacity class C 100kA @ 480 V 3-pole, line protection TM230, FTAM, In=80A overload protection Ir=80A fixed short-circuit protection Ii=5...10 x In cable connection on both sides

Model	
product brand name	SENTRON
product designation	Molded-case circuit breaker
product designation / according to UL file	CFAS
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	TM230
protection function of the overcurrent release	LI
number of poles	3
General technical data	
rated insulation voltage Ui	800 V
Max. rated operational voltage Ue with DC	750 V
operating voltage / at AC / rated value	690 V
power loss [W] / maximum	20 W
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	6.8 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
Net Weight	2.308 kg
Current	
marking / according to UL 489 / 100%-rated breaker	No
operational current	
• at 40 °C	80 A
• at 45 °C	80 A
• at 50 °C	80 A

	77.0 4
• at 55 °C	77.6 A
• at 60 °C	76 A
● at 65 °C ● at 70 °C	73.6 A
	70.4 A
Switching capacity according to IEC 60947	0
switching capacity class of the circuit breaker	C
breaking capacity maximum short-circuit current (Icu)	200 //4
● at 240 V ● at 415 V	200 kA 110 kA
• at 690 V	10 kA
breaking capacity operating short-circuit current (Ics)	
• at 240 V	200 kA
• at 415 V	110 kA
• at 690 V	10 kA
short-circuit current making capacity (Icm)	
• at 240 V	440 kA
● at 415 V	242 kA
• at 690 V	17 kA
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 240 V	200 kA
● at 480 V	100 kA
• at 600 V	35 kA
Adjustable parameters	
Adjustable response value current / lg min.	80 A
Adjustable response value current / lg min.	80 A
Ground fault protection / tripping switchable / I2t=ON/OFF	No
Mechanical Design	
height [in]	7.28 in
Height	185 mm
width [in]	4.13 in
Width	105 mm
depth [in]	3.27 in
depth	83 mm
Connections	
arrangement of electrical connectors / for main current circuit	Front connection
arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit	circular conductor terminal on both sides
arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit Type of connectable conductor cross-section, round conductor terminal, stranded	
arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit Type of connectable conductor cross-section, round conductor terminal, stranded Auxiliary circuit	circular conductor terminal on both sides
arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit Type of connectable conductor cross-section, round conductor terminal, stranded Auxiliary circuit product component	circular conductor terminal on both sides
arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit Type of connectable conductor cross-section, round conductor terminal, stranded Auxiliary circuit product component • undervoltage release	circular conductor terminal on both sides 1 x (6 AWG - 350 kcmil)
arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit Type of connectable conductor cross-section, round conductor terminal, stranded Auxiliary circuit product component • undervoltage release • voltage trigger	circular conductor terminal on both sides 1 x (6 AWG - 350 kcmil) No
arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit Type of connectable conductor cross-section, round conductor terminal, stranded Auxiliary circuit product component • undervoltage release • voltage trigger • trip indicator	circular conductor terminal on both sides 1 x (6 AWG - 350 kcmil) No No No
arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit Type of connectable conductor cross-section, round conductor terminal, stranded Auxiliary circuit product component • undervoltage release • voltage trigger • trip indicator number of CO contacts / for auxiliary contacts	circular conductor terminal on both sides 1 x (6 AWG - 350 kcmil) No
arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit Type of connectable conductor cross-section, round conductor terminal, stranded Auxiliary circuit product component • undervoltage release • voltage trigger • trip indicator number of CO contacts / for auxiliary contacts Accessories	circular conductor terminal on both sides 1 x (6 AWG - 350 kcmil) No No 0
arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit Type of connectable conductor cross-section, round conductor terminal, stranded Auxiliary circuit product component • undervoltage release • voltage trigger • trip indicator number of CO contacts / for auxiliary contacts Accessories product extension / optional / motor drive	circular conductor terminal on both sides 1 x (6 AWG - 350 kcmil) No No No
arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit Type of connectable conductor cross-section, round conductor terminal, stranded Auxiliary circuit product component • undervoltage release • voltage trigger • trip indicator number of CO contacts / for auxiliary contacts Accessories product extension / optional / motor drive Environmental conditions	circular conductor terminal on both sides 1 x (6 AWG - 350 kcmil) No No No O Yes
arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit Type of connectable conductor cross-section, round conductor terminal, stranded Auxiliary circuit product component • undervoltage release • voltage trigger • trip indicator number of CO contacts / for auxiliary contacts Accessories product extension / optional / motor drive Environmental conditions protection class IP / on the front	circular conductor terminal on both sides 1 x (6 AWG - 350 kcmil) No No 0
arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit Type of connectable conductor cross-section, round conductor terminal, stranded Auxiliary circuit product component • undervoltage release • voltage trigger • trip indicator number of CO contacts / for auxiliary contacts Accessories product extension / optional / motor drive Environmental conditions protection class IP / on the front ambient temperature	circular conductor terminal on both sides 1 x (6 AWG - 350 kcmil) No No No 0 Yes
arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit Type of connectable conductor cross-section, round conductor terminal, stranded <b>Auxiliary circuit</b> product component • undervoltage release • voltage trigger • trip indicator number of CO contacts / for auxiliary contacts <b>Accessories</b> product extension / optional / motor drive <b>Environmental conditions</b> protection class IP / on the front ambient temperature • during operation / minimum	circular conductor terminal on both sides 1 x (6 AWG - 350 kcmil) No No No 0 Yes IP40 -25 °C
arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit Type of connectable conductor cross-section, round conductor terminal, stranded <b>Auxiliary circuit</b> product component • undervoltage release • voltage trigger • trip indicator number of CO contacts / for auxiliary contacts <b>Accessories</b> product extension / optional / motor drive <b>Environmental conditions</b> protection class IP / on the front ambient temperature • during operation / minimum • during operation / maximum	circular conductor terminal on both sides 1 x (6 AWG - 350 kcmil) No No No 0 Yes IP40 -25 °C 70 °C
arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit Type of connectable conductor cross-section, round conductor terminal, stranded Auxiliary circuit product component • undervoltage release • voltage trigger • trip indicator 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 / maximum • during storage / minimum	circular conductor terminal on both sides 1 x (6 AWG - 350 kcmil) No No No O Yes IP40 -25 °C 70 °C -40 °C
arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit Type of connectable conductor cross-section, round conductor terminal, stranded Auxiliary circuit product component • undervoltage release • voltage trigger • trip indicator 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	circular conductor terminal on both sides 1 x (6 AWG - 350 kcmil) No No No 0 Yes IP40 -25 °C 70 °C
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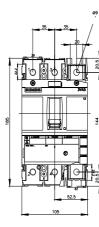


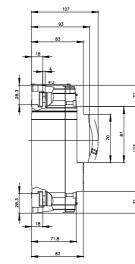
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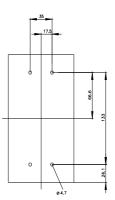
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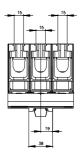
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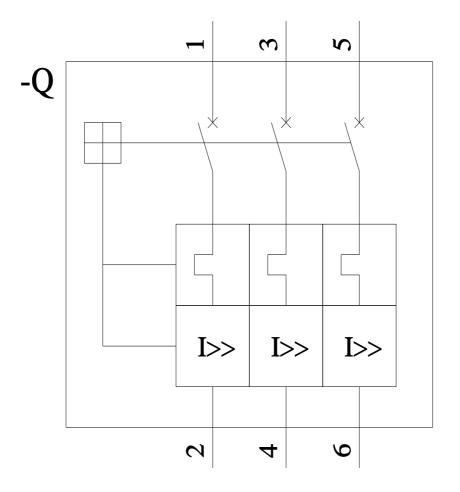
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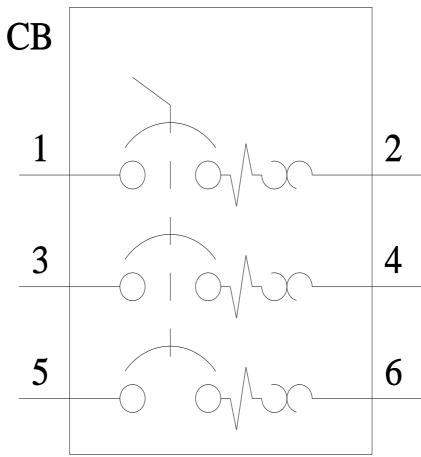












last modified:

7/15/2022 🖸

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