3VA5220-6EC36-0AA0

Data sheet



circuit breaker 3VA5 UL frame 250 breaking capacity class H 65kA @ 480 V 3-pole, line protection TM230, FTAM, In=200A overload protection Ir=200A 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	HFAS
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	43 W
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	14.17 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	
 communication function 	No
other measurement function	No
Net Weight	2.2 kg
Current	
marking / according to UL 489 / 100%-rated breaker	No
operational current	
• at 40 °C	200 A
● at 45 °C	194 A
● at 50 °C	189 A

● at 55 °C	183 A
• at 60 °C	178 A
• at 65 °C	172 A
● at 70 °C	167 A
Switching capacity according to IEC 60947	
switching capacity class of the circuit breaker	Н
breaking capacity maximum short-circuit current (Icu)	
● at 240 V	100 kA
● at 415 V	70 kA
● at 690 V	10 kA
breaking capacity operating short-circuit current (Ics)	
• at 240 V	100 kA
● at 415 V	70 kA
● at 690 V	10 kA
short-circuit current making capacity (Icm)	
● at 240 V	220 kA
● at 415 V	154 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	100 kA
● at 480 V	65 kA
● at 600 V	25 kA
Adjustable parameters	
Adjustable response value current / lg min.	200 A
Adjustable response value current / lg min.	200 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
type of electrical connection / for main current circuit	
type of electrical confliction? For main current circuit	circular conductor terminal on both sides
Type of connectable conductor cross-section, round conductor terminal, stranded	circular conductor terminal on both sides 1 x (6 AWG - 350 kcmil)
Type of connectable conductor cross-section, round	
Type of connectable conductor cross-section, round conductor terminal, stranded	
Type of connectable conductor cross-section, round conductor terminal, stranded Auxiliary circuit	
Type of connectable conductor cross-section, round conductor terminal, stranded Auxiliary circuit product component	1 x (6 AWG - 350 kcmil)
Type of connectable conductor cross-section, round conductor terminal, stranded Auxiliary circuit product component undervoltage release voltage trigger trip indicator	1 x (6 AWG - 350 kcmil) No
Type of connectable conductor cross-section, round conductor terminal, stranded Auxiliary circuit product component undervoltage release voltage trigger	1 x (6 AWG - 350 kcmil) No No
Type of connectable conductor cross-section, round conductor terminal, stranded Auxiliary circuit product component undervoltage release voltage trigger trip indicator	1 x (6 AWG - 350 kcmil) No No No
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	1 x (6 AWG - 350 kcmil) No No No
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	1 x (6 AWG - 350 kcmil) No No No O
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	1 x (6 AWG - 350 kcmil) No No No O
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	1 x (6 AWG - 350 kcmil) No No No O Yes
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	1 x (6 AWG - 350 kcmil) No No No O Yes
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	1 x (6 AWG - 350 kcmil) No No No O Yes
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	1 x (6 AWG - 350 kcmil) No No No O Yes IP40 -25 °C
Type of connectable conductor cross-section, round conductor terminal, stranded Auxiliary circuit product component	1 x (6 AWG - 350 kcmil) No No No O Yes IP40 -25 °C 70 °C
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	1 x (6 AWG - 350 kcmil) No No No O Yes IP40 -25 °C 70 °C -40 °C
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 • during storage / maximum	1 x (6 AWG - 350 kcmil) No No No O Yes IP40 -25 °C 70 °C -40 °C



Confirmation









Declaration of Conformity

Marine / Shipping

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=3VA5220-6EC36-0AA0

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

https://support.industry.siemens.com/cs/ww/en/ps/3VA5220-6EC36-0AA0

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

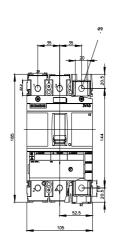
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA5220-6EC36-0AA0

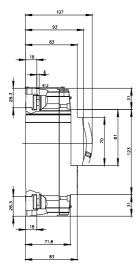
CAx-Online-Generator

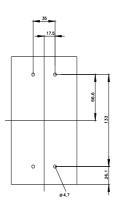
http://www.siemens.com/cax

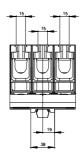
Tender specifications

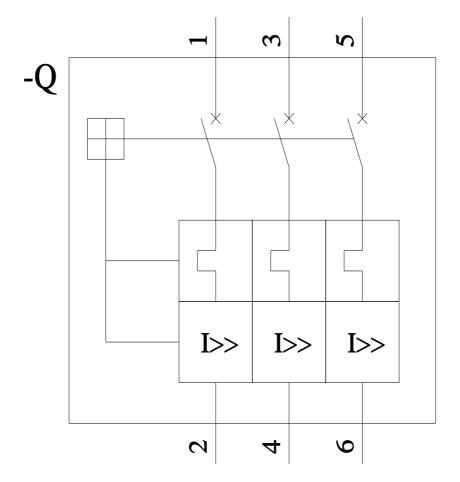
http://www.siemens.com/specifications

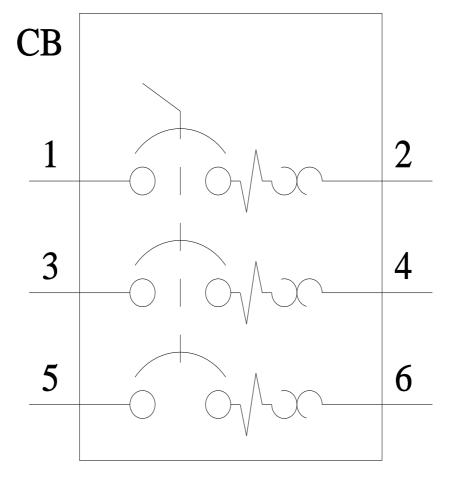












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