3VA5211-5GD41-0AA0

Data sheet



circuit breaker 3VA5 UL frame 250 breaking capacity class M 35kA @ 480 V 4-pole, line protection TM210, FTFM, In=110A overload protection Ir=110A fixed short-circuit protection Ii=10 x In N conductor protection 100% without connection

product designation Molded-case circuit breaker product designation According to UL file MFAS Product version System protection design of the load switch / acc. to UL 489 / Heating, Arr Type) design of the overcurrent release TMZ10 protection function of the overcurrent release LI number of poles 4 Ceneral tochnical 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 1 000 V power loss [W] / maximum 22.6 W Active power loss / for rated value of the current / at AC / in hot operating state / per pole mechanical service life (switching cycles) / typical 20 000 Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz Electrical endurance (switching cycles) / at 480 V electrical endurance (switching cycles) / at 480 V electrical endurance (switching cycles) / at 480 V electrical endurance (switching cycles) / at 600 V Nourtan conductors / upgradeable/retrofittable No ground-fault monitoring version Without product function No Max. rated operational current of the frame size 250 A Courant permanent assignée lu 110 A e at 40 °C 110 A e at 50 °C 110 A e at 55 °C 106.7 A	Model	
product designation / according to UL file Product version design of the load switch / acc. to UL 489 / Heating, Air Conditioning, and Refrigeration circuit breaker (HACR Type) design of the overcurrent release protection function of the overcurrent release ILI number of poles 4 Concert technical data Tension assignée d'isolement UI Max. rated operational voltage Ue with AC 50/60Hz Active power loss / for rated value of the current / at AC / in hot operating state / per pole mechanical service life (switching cycles) / typical Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz Electrical endurance (switching cycles) / at AC-1 / at 680/00 V Solvio Hz Electrical endurance (switching cycles) / at AC-1 / at 680/00 V Solvio Hz Electrical endurance (switching cycles) / at AC-1 / at 680/00 V V 50/60 Hz Electrical endurance (switching cycles) / at AC-1 / at 680/00 V V 50/60 Hz Electrical endurance (switching cycles) / at AC-1 / at 690/00 V V 50/60 Hz Electrical endurance (switching cycles) / at AC-1 / at 690/00 V V 50/60 Hz Electrical endurance (switching cycles) / at AC-1 / at 690/00 V V 50/60 Hz Electrical endurance (switching cycles) / at AC-1 / at 690/00 V V 50/60 Hz Electrical endurance (switching cycles) / at AC-1 / at 690/00 V V 50/60 Hz Electrical endurance (switching cycles) / at AB0 V electrical endurance (switching cycles) / at AB0 V electrical endurance (switching cycles) / at B0 V electrical endurance / at B0 V electrical endurance / at B0 V e	product brand name	SENTRON
Product version design of the load switch / acc. to UL 489 / Heating, Air Conditioning, and Refrigeration circuit breaker (HACR Type) design of the overcurrent release	product designation	Molded-case circuit breaker
design of the load switch / acc. to UL 489 / Heating, Air Conditioning, and Refrigeration circuit breaker (HACR Type) design of the overcurrent release protection function of the overcurrent release I	product designation / according to UL file	MFAS
Conditioning, and Refrigeration circuit breaker (HACR Type) design of the overcurrent release protection function of the overcurrent release number of poles Tension assignée d'isolement Ui Max. rated operational voltage Ue with AC 50/60Hz Max. rated operational voltage Ue with DC power loss [W] / maximum 22.6 W Active power loss / for rated value of the current / at AC / in hot operating state / per pole mechanical service life (switching cycles) / typical Electrical endurance (switching cycles) / at AC-1 / at 80 00 V 50/60 Hz Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz electrical endurance (switching cycles) / at 480 V electrical endurance (switching cycles) / at 480 V electrical endurance (switching cycles) / at 600 V Neutral conductors / upgradeable/retofittable No ground-fault monitoring version v communication function o communication function No other measurement function No Max. rated operational current of the frame size 250 A Courant permanent assigné lu operational current of 440 °C of 445 °C 110 A 110 A 110 A 110 A	Product version	System protection
protection function of the overcurrent release number of poles General technical data Tension assignée d'isolement Ui Max. rated operational voltage Ue with AC 50/60Hz 690 V Max. rated operational voltage Ue with DC power loss [W] / maximum 22.6 W Active power loss / for rated value of the current / at AC / in hot operating state / per pole mechanical service life (switching cycles) / typical Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz electrical endurance (switching cycles) / at 480 V electrical endurance (switching cycles) / at 600 V Neutral conductors / upgradeable/retrofittable No ground-fault monitoring version voluntial monitoring version voluntian on the firm of the frame size communication function one other measurement function No Max. rated operational current of the frame size 250 A Courant permanent assigné lu operational current of 45°C 110 A operational current of 110 A operational current of 110 A operational current of 110 A	Conditioning, and Refrigeration circuit breaker (HACR Type)	Yes
number of poles 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 1000 V power loss [W] / maximum 22.6 W Active power loss / for rated value of the current / at AC / in hot operating state / per pole mechanical service life (switching cycles) / typical 20 000 Electrical endurance (switching cycles) / typical 8 000 Selectrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz electrical endurance (switching cycles) / at 480 V 8 000 electrical endurance (switching cycles) / at 600 V 4 000 Neutral conductors / upgradeable/retrofitable No ground-fault monitoring version Without product function • communication function No • other measurement function No • other measurement function No Max. rated operational current of the frame size 250 A Courant permanent assigné lu 0perational current • at 40 °C 110 A • at 45 °C 110 A • at 50 °C 110 A	design of the overcurrent release	
Tension assignée d'isolement Ui Max. rated operational voltage Ue with AC 50/60Hz Max. rated operational voltage Ue with DC 1000 V power loss [W] / maximum Active power loss / for rated value of the current / at AC / in hot operating state / per pole mechanical service life (switching cycles) / typical Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz electrical endurance (switching cycles) / at AC-1 / at 690 V 8 000 electrical endurance (switching cycles) / at 600 V 4 000 Neutral conductors / upgradeable/retrofittable No ground-fault monitoring version product function • communication function • communication function No Ourrent marking / acc. to UL 489 / 100%-rated breaker Max. rated operational current of the frame size 250 A Courant permanent assigné lu operational current • at 40 °C • at 45 °C 110 A • at 45 °C 110 A • at 50 °C 110 A	protection function of the overcurrent release	
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 1000 V power loss [W] / maximum 22.6 W Active power loss / for rated value of the current / at AC / in hot operating state / per pole mechanical service life (switching cycles) / typical 20 000 Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz Electrical endurance (switching cycles) / at 480 V 8 000 electrical endurance (switching cycles) / at 480 V 4 000 Neutral conductors / upgradeable/retrofittable No ground-fault monitoring version Without product function • communication function No • other measurement function 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 110 A • at 40 °C 110 A • at 45 °C 110 A	number of poles	4
Max. rated operational voltage Ue with AC 50/60Hz Max. rated operational voltage Ue with DC power loss [W] / maximum Active power loss for rated value of the current / at AC / in hot operating state / per pole mechanical service life (switching cycles) / typical Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz electrical endurance (switching cycles) / at 480 V electrical endurance (switching cycles) / at 480 V v 50/60 Hz electrical endurance (switching cycles) / at 480 V for in the operation of the form o	General technical data	
Max. rated operational voltage Ue with DC power loss [W] / maximum 22.6 W Active power loss / for rated value of the current / at AC / in hot operating state / per pole mechanical service life (switching cycles) / typical 20 000 Electrical endurance (switching cycles) / typical 20 000 Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz electrical endurance (switching cycles) / at 480 V 8 000 electrical endurance (switching cycles) / at 600 V 4 000 Neutral conductors / upgradeable/retrofitable No ground-fault monitoring version Without product function • communication function • other measurement function 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 110 A operational current • at 40 °C • at 45 °C 110 A • at 50 °C 110 A	Tension assignée d'isolement Ui	800 V
power loss [W] / maximum Active power loss / for rated value of the current / at AC / in hot operating state / per pole mechanical service life (switching cycles) / typical Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz 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 Current marking / acc. to UL 489 / 100%-rated breaker No Max. rated operational current of the frame size 250 A Courant permanent assigné lu 110 A operational current • at 40 °C 110 A • at 45 °C 110 A • at 50 °C 110 A	Max. rated operational voltage Ue with AC 50/60Hz	690 V
Active power loss / for rated value of the current / at AC / in hot operating state / per pole mechanical service life (switching cycles) / typical 20 000 Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz 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 Current marking / acc. to UL 489 / 100%-rated breaker No Max. rated operational current of the frame size 250 A Courant permanent assigné lu 110 A operational current • at 40 °C 110 A • at 45 °C 110 A • at 50 °C 110 A	Max. rated operational voltage Ue with DC	1 000 V
in hot operating state / per pole mechanical service life (switching cycles) / typical 20 000 Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz 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 Current marking / acc. to UL 489 / 100%-rated breaker No Max. rated operational current of the frame size 250 A Courant permanent assigné lu 110 A operational current • at 40 °C 110 A • at 45 °C 110 A • at 50 °C 110 A	power loss [W] / maximum	22.6 W
Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz 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 Current marking / acc. to UL 489 / 100%-rated breaker No Max. rated operational current of the frame size 250 A Courant permanent assigné lu 110 A operational current • at 40 °C 110 A • at 45 °C 110 A • at 50 °C 110 A		7.53 W
Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz 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 Current marking / acc. to UL 489 / 100%-rated breaker No Max. rated operational current of the frame size 250 A Courant permanent assigné lu 110 A operational current • at 40 °C 110 A • at 45 °C 110 A • at 50 °C 110 A	mechanical service life (switching cycles) / typical	20 000
electrical endurance (switching cycles) / at 480 V electrical endurance (switching cycles) / at 600 V Neutral conductors / upgradeable/retrofittable No ground-fault monitoring version • communication function • other measurement function Max. rated operational current of the frame size Courant permanent assigné lu operational current • at 40 °C • at 45 °C • at 50 °C 110 A		8 000
electrical endurance (switching cycles) / at 600 V Neutral conductors / upgradeable/retrofittable ground-fault monitoring version product function communication function other measurement function Mo Current marking / acc. to UL 489 / 100%-rated breaker Max. rated operational current of the frame size Courant permanent assigné lu operational current at 40 °C at 45 °C at 45 °C 110 A other measurement in a signé lu 110 A at 45 °C 110 A at 50 °C 110 A		4 000
Neutral conductors / upgradeable/retrofittable ground-fault monitoring version or communication function or other measurement function Mo Current marking / acc. to UL 489 / 100%-rated breaker Max. rated operational current of the frame size Courant permanent assigné lu operational current of at 40 °C of at 45 °C of at 50 °C 110 A	electrical endurance (switching cycles) / at 480 V	8 000
ground-fault monitoring version product function communication function other measurement function Mo Current marking / acc. to UL 489 / 100%-rated breaker Max. rated operational current of the frame size Courant permanent assigné lu operational current operational current other in the frame size 110 A operational current other in the frame size 110 A operational current other in the frame size 110 A operational current other in the frame size 110 A	electrical endurance (switching cycles) / at 600 V	4 000
product function	Neutral conductors / upgradeable/retrofittable	No
 communication function other measurement function No Current marking / acc. to UL 489 / 100%-rated breaker Max. rated operational current of the frame size Courant permanent assigné lu operational current at 40 °C at 45 °C at 45 °C at 50 °C 110 A 	ground-fault monitoring version	Without
 other measurement function No Current marking / acc. to UL 489 / 100%-rated breaker Max. rated operational current of the frame size Courant permanent assigné lu operational current at 40 °C at 45 °C at 45 °C at 50 °C 110 A 	product function	
Current marking / acc. to UL 489 / 100%-rated breaker Max. rated operational current of the frame size Courant permanent assigné lu operational current • at 40 °C • at 45 °C • at 50 °C 110 A	 communication function 	No
marking / acc. to UL 489 / 100%-rated breaker Max. rated operational current of the frame size Courant permanent assigné lu operational current • at 40 °C • at 45 °C • at 50 °C No No 110 A 110 A 110 A	 other measurement function 	No
Max. rated operational current of the frame size Courant permanent assigné lu operational current • at 40 °C • at 45 °C • at 50 °C 110 A	Current	
Courant permanent assigné lu operational current • at 40 °C • at 45 °C • at 50 °C 110 A	marking / acc. to UL 489 / 100%-rated breaker	No
operational current	Max. rated operational current of the frame size	250 A
 at 40 °C at 45 °C at 50 °C 110 A 110 A 110 A 	Courant permanent assigné lu	110 A
 at 45 °C at 50 °C 110 A 110 A 	operational current	
• at 50 °C 110 A	● at 40 °C	110 A
	● at 45 °C	110 A
• at 55 °C 106.7 A	• at 50 °C	110 A
	● at 55 °C	106.7 A

t CO °C	104.5.4
• at 60 °C	104.5 A
at 65 °C at 70 °C	101.2 A
200.10	96.8 A
Switching capacity according to IEC 60947	
switching capacity class of the circuit breaker	M
breaking capacity maximum short-circuit current (Icu)	0.714
• at 240 V	85 kA
• at 415 V	55 kA
• at 690 V	7 kA
breaking capacity operating short-circuit current (Ics)	OF ItA
• at 240 V	85 kA
at 415 V at 690 V	55 kA 7 kA
short-circuit current making capacity (Icm)	/ NA
• 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.	110 A
Adjustable response value current / lg min.	110 A
Adjustable response value current / li min.	1 100 A
Adjustable response value current / li max.	1 100 A
design of the N-conductor protection	100%
Ground fault protection / tripping switchable / I2t=ON/OFF	No
Mechanical Design	
height [in]	7.3 in
Height	185 mm
width [in]	5.5 in
Width	140 mm
depth [in]	3.3 in
depth	83 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	





Miscellaneous



EAC



Declaration of Conformity

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=3VA5211-5GD41-0AA0

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

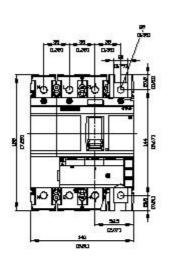
https://support.industry.siemens.com/cs/ww/en/ps/3VA5211-5GD41-0AA0

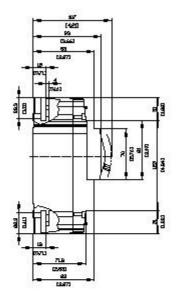
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

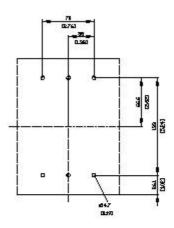
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA5211-5GD41-0AA0

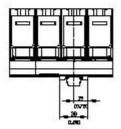
Tender specifications

http://www.siemens.com/specifications









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