## 3VA5215-5GC41-0AA0

**Data sheet** 



circuit breaker 3VA5 UL frame 250 breaking capacity class M 35kA @ 480 V 4-pole, line protection TM230, FTAM, In=150A overload protection Ir=150A fixed short-circuit protection Ii=5...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, Air Zonditioning, and Refrigeration circuit breaker (HACR Type)   design of the overcurrent release   TM230   protection function of the overcurrent release   LI   number of poles   4    Ceneral 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   1 000 V   power loss [W] / maximum   29.9 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 600 V   Noutral conductors / upgradeable/retrofittable   No   ground-fault monitoring version   Without   product function   No    Max. rated operational current of the frame size   250 A   Courant permanent assigné lu   150 A   eat 45 °C   150 A   eat 50 °C   150 A   eat 55 °C   145.5 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 protection function of the overcurrent release protection function of the overcurrent release LI 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 29.9 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) / 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 V 50/60 Hz Electrical endurance (switching cycles) / at AC-1 / at 690 V V 50/60 Hz Electrical endurance (switching cycles) / at AC-1 / at 690 V V 50/60 Hz Electrical endurance (switching cycles) / at AC-1 / at 690 V V 50/60 Hz Electrical endurance (switching cycles) / at AC-1 / at 690 V V 50/60 Hz Electrical endurance (switching cycles) / at AC-1 / at 690 V V 50/60 Hz Electrical endurance (switching cycles) / at AC-1 / at 690 V V 50/60 Hz Electrical endurance (switching cycles) / at AC-1 / at 690 V V 50/60 Hz Electrical endurance (switching cycles) / at AC-1 / at 690 V V 50/60 Hz Electrical endurance (switching cycles) / at BO V A 50/60 Hz Electrical endurance (switching cycles) / at BO V A 50/60 Hz Electrical endurance (switching cycles) / at BO V A 50/60 Hz Electrical endurance (switching cycles) / at BO V A 50/60 Hz Electrical endurance (switching cycles) / at BO V A 50/60 Hz Electrical endurance (switching cycles) / at BO V A 50/60 Hz Electrical endurance (switching cycles) / at BO V A 50/60 Hz Electrical endurance (switching cycles) / at BO V A 50/60 Hz Electrical endurance (switching cycles) / at BO V A 50/60 Hz Electrical endurance (switching cycles) / at BO V	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 protection function of the overcurrent release number of poles  4  General technical data  Tension assignée d'isolement Ui Max. rated operational voltage Ue with AC 50/60Hz Max. rated operational voltage Ue with DC 1 000 V  Max. rated operational voltage Ue with DC 1 000 V  Active power loss / I/O rated value of the current / at AC / in hot operating state / per pole mechanical service life (switching cycles) / typical 28:Detricial endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz Electricial endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz electrical endurance (switching cycles) / at 8000 electrical endurance (switching cycles) / at 800 v 8000 electrical endurance (switching cycles) / at 8000 electrical endurance (switching cycles) / at 800 V without product function • communication function • communication function • other measurement function • other measurement function • other measurement function • other measurement of the frame size  250 A Courant permanent assigné lu operational current • at 40 °C • at 45 °C • at 50 °C  150 A	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 Inumber of poles  design of the overcurrent release protection function of the overcurrent release Inumber of poles  design of the overcurrent release Inumber of poles  design of the overcurrent release It Inumber of poles  design of the overcurrent release It Inumber of poles  design of the overcurrent release It Inumber of poles  design of the overcurrent release It Inumber of poles  design of the overcurrent release It Inumber of poles  design of the overcurrent release It Inumber of poles  design of the overcurrent of the frame size  each of the overcurrent of the overcurrent of the frame size  each of the overcurent of the overcurent of the frame size  each of the overcurent of the overcurent of the frame size  eac	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 protection function of the overcurrent release protection function of the overcurrent release LI number of poles  General technical data  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 29.9 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) / typical Electrical endurance (switching cycles) / at AC-1 / at 890 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 without product function • communication function • other measurement function No • other measurement function No Max. rated operational current of the frame size 250 A Courant permanent assigné lu operational current • at 40 °C at 45 °C 150 A • at 50 °C 150 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 29.9 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 of 4150 A of 150 A of 150 A	Conditioning, and Refrigeration circuit breaker (HACR	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 29.9 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 A 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 operational current  • at 40 °C 150 A 150 A 150 A 150 A 150 A 150 C 150 C 150 A 1	design of the overcurrent release	TM230
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  29.9 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 AC-1 / at 690 V 50/60 Hz  electrical endurance (switching cycles) / at AC-1 / at 690 V 4 000  Neutral conductors / upgradeable/retrofittable No ground-fault monitoring version  product function  communication function  communication function  Mo  Active power loss (Withough and Communication function No Max. rated operational current of the frame size 250 A  Courant permanent assigné lu operational current  at 40 °C  at 45 °C  at 45 °C  at 45 °C  150 A  at 50 °C  150 A	protection function of the overcurrent release	Ш
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 29.9 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 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 150 A  • at 40 °C 150 A  • at 45 °C 150 A  • at 45 °C 150 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 29.9 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 150 A operational current • at 40 °C • at 45 °C • at 45 °C • at 50 °C	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 150 A  operational current  • at 40 °C 150 A  • at 45 °C 150 A  • at 50 °C 150 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 operational current  • at 40 °C 150 A  • at 45 °C 150 A  • at 50 °C 150 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 150 A  operational current  • at 40 °C 150 A  • at 45 °C 150 A  • at 50 °C 150 A	power loss [W] / maximum	29.9 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 150 A  operational current  • at 40 °C • at 45 °C • at 50 °C  150 A		9.97 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 150 A  operational current  • at 40 °C 150 A  • at 45 °C 150 A  • at 50 °C 150 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  150 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  at 50 °C  150 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  No  Without  No  No  No  150 A 150 A 150 A 150 A 150 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	electrical endurance (switching cycles) / at 600 V	4 000
product function	Neutral conductors / upgradeable/retrofittable	No
<ul> <li>communication function</li> <li>other measurement function</li> <li>No</li> </ul> Current marking / acc. to UL 489 / 100%-rated breaker Max. rated operational current of the frame size Courant permanent assigné lu <ul> <li>operational current</li> <li>at 40 °C</li> <li>at 45 °C</li> <li>at 45 °C</li> <li>at 50 A</li> </ul> • at 50 °C <ul> <li>150 A</li> </ul> 150 A <ul> <li>150 A</li> </ul> • 150 A <ul> <li>150 A</li> </ul> <p< td=""><td>ground-fault monitoring version</td><td>Without</td></p<>	ground-fault monitoring version	Without
<ul> <li>other measurement function</li> <li>No</li> <li>Current</li> <li>marking / acc. to UL 489 / 100%-rated breaker</li> <li>Max. rated operational current of the frame size</li> <li>Courant permanent assigné lu</li> <li>operational current</li> <li>at 40 °C</li> <li>at 45 °C</li> <li>at 45 °C</li> <li>at 50 °C</li> <li>150 A</li> </ul>	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  No  No  150 A  150 A	<ul> <li>communication function</li> </ul>	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  150 A  150 A	<ul> <li>other measurement function</li> </ul>	No
Max. rated operational current of the frame size  Courant permanent assigné lu  operational current  • at 40 °C  • at 45 °C  • at 50 °C  150 A	Current	
Courant permanent assigné lu  operational current  • at 40 °C  • at 45 °C  • at 50 °C  150 A	marking / acc. to UL 489 / 100%-rated breaker	No
operational current	Max. rated operational current of the frame size	250 A
<ul> <li>at 40 °C</li> <li>at 45 °C</li> <li>at 50 °C</li> <li>150 A</li> <li>150 A</li> </ul>	Courant permanent assigné lu	150 A
<ul> <li>at 45 °C</li> <li>at 50 °C</li> <li>150 A</li> <li>150 A</li> </ul>	operational current	
• at 50 °C 150 A	● at 40 °C	150 A
	● at 45 °C	150 A
• at 55 °C 145.5 A	• at 50 °C	150 A
	● at 55 °C	145.5 A

-1 00 %0	440.5.4
• at 60 °C	142.5 A
at 65 °C     at 70 °C	138 A
200.10	132 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     at 415 V	85 kA
• at 690 V	55 kA 7 kA
breaking capacity operating short-circuit current (lcs)	/ NA
• at 240 V	85 kA
• at 415 V	55 kA
• at 690 V	7 kA
short-circuit current making capacity (lcm)	
• 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 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.	150 A
Adjustable response value current / lg min.	150 A
Adjustable response value current / li min.	750 A
Adjustable response value current / li max.	1 500 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	V
product extension / optional / motor drive	Yes
Environmental conditions	ID40
protection class IP / on the front	IP40
ambient temperature	-25 °C
during operation / maximum	-25 °C 70 °C
<ul><li>during operation / maximum</li><li>during storage / minimum</li></ul>	-40 °C
during storage / maximum     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=3VA5215-5GC41-0AA0

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

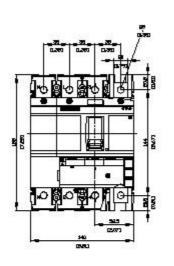
https://support.industry.siemens.com/cs/ww/en/ps/3VA5215-5GC41-0AA0

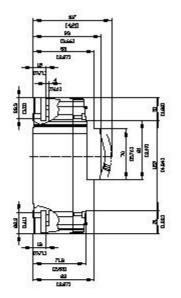
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

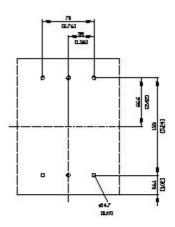
http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VA5215-5GC41-0AA0

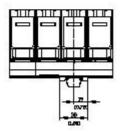
**Tender specifications** 

http://www.siemens.com/specifications









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