3VA2220-5MN32-0AA0

Data sheet



circuit breaker 3VA2 IEC frame 250 breaking capacity class M Icu=55kA @ 415V 3-pole, motor protection ETU350M, LSI, In=200A overload protection Ir=80A...200A short-circuit protection Isd=3...15 x Ir, Ii=15 x In nut keeper kit

product brand name product designation Molded case circuit breaker Product version Molded case circuit breaker Molded case circuit breaker Product version Molded case circuit breaker Molded case circuit breaker Product version Molded case circuit breaker Product version Molded case circuit breaker Product version Molded case circuit breaker Product version Molded case circuit breaker Product version Molded case circuit breaker Product version Molded case circuit breaker Product version Molded case circuit breaker Product version Molded case circuit breaker Product version Molded case circuit breaker Product version Molded case circuit breaker Product version Molded case circuit breaker Product version Molded case circuit breaker Product version Molded case circuit breaker Product version Molded case circuit breaker Product dursion Molded case circuit breaker Product and the overcurrent version Molded case circuit breaker Max raded operational current of the frame size 250 A Courant persion Product function On the weight Product function On the weight Product function On the frame size on the frame size 250 A Courant persion of the frame size 250 A 200 A	Model				
Product version Motor protection	product brand name	SENTRON			
Design of the overcurrent release	product designation	Molded case circuit breaker			
Description function of the overcurrent release LSI	Product version	Motor protection			
Number of poles 3	design of the overcurrent release	ETU350M			
Seneral technical data rated insulation voltage Ui	protection function of the overcurrent release	LSI			
rated insulation voltage Ui operating power / at AC-3 / at 400 V operating power / at AC-3 / at 400 V operating power / at AC-3 / at 230 V operating power / at AC-3 / at 230 V operating power / at AC-3 / at 230 V own with the second control 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-3 / at 380/415 V 50/60 Hz Electrical endurance (switching cycles) / at AC-3 / at 380/415 V 50/60 Hz No ground-fault monitoring version without product function ophase failure detection yes other measurement function No net weight 2.3 kg Current Max. rated operational current of the frame size Courant permanent assigné lu operational current of at 40 °C at 45 °C at 45 °C at 55 °C at 60 °C 200 A at 65 °C at 60 °C 200 A	number of poles	3			
operating power / at AC-3 / at 400 V 75 000 W operating power / at AC-3 / at 230 V 37 000 W power loss [W] / maximum 46 W Active power loss / for rated value of the current / at AC / in hot operating state / per pole mechanical service life (switching cycles) / typical 25 000 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 AC-3 / at 380/415 V 50/60 Hz Electrical endurance (switching cycles) / at AC-3 / at 380/415 V 50/60 Hz Neutral conductors / upgradeable/retrofittable No ground-fault monitoring version Without product function No ophase failure detection Yes other measurement function No other measurement function No net weight 2.3 kg Current Max. rated operational current of the frame size 250 A Courant permanent assigné lu 200 A operational current at 40 °C 200 A at 45 °C 200 A at 55 °C 200 A at 55 °C 200 A at 60 °C 200 °C 200 °C at 60 °C 200 °C	General technical data				
operating power / at AC-3 / at 230 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-3 / at 380/415 V 50/60 Hz Electrical endurance (switching cycles) / at AC-3 / at 380/415 V 50/60 Hz Neutral conductors / upgradeable/retrofittable No ground-fault monitoring version Without product function • communication function • phase failure detection Yes • other measurement function No net weight Current Max. rated operational current of the frame size 250 A Courant permanent assigné lu 200 A operational current • at 40 °C 200 A • at 55 °C 200 A • at 55 °C 200 A • at 60 °C 200 A	rated insulation voltage Ui	800 V			
Description	operating power / at AC-3 / at 400 V	75 000 W			
Active power loss / for rated value of the current / at AC / in hot operating state / per pole mechanical service life (switching cycles) / typical 25 000 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 AC-3 / at 380/415 V 50/60 Hz Neutral conductors / upgradeable/retrofittable No ground-fault monitoring version Without product function • communication function No • phase failure detection Yes • other measurement function No net weight 2.3 kg Current Max. rated operational current of the frame size 250 A Courant permanent assigné lu 200 A operational current • at 40 °C 200 A • at 50 °C 200 A • at 55 °C 200 A • at 60 °C 200 A • at 60 °C 200 A	operating power / at AC-3 / at 230 V	37 000 W			
in hot operating state / per pole mechanical service life (switching cycles) / typical 25 000 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 AC-3 / at 380/415 V 50/60 Hz Neutral conductors / upgradeable/retrofittable No ground-fault monitoring version Without product function	power loss [W] / maximum	46 W			
Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz		15.33 W			
Sector S	mechanical service life (switching cycles) / typical	25 000			
Electrical endurance (switching cycles) / at AC-3 / at 380/415 V 50/60 Hz Neutral conductors / upgradeable/retrofittable ground-fault monitoring version No product function • communication function • phase failure detection • other measurement function net weight Current Max. rated operational current of the frame size Courant permanent assigné lu operational current • at 40 °C • at 45 °C • at 55 °C • at 60 °C • at 60 °C 6 000 No No No No No 2.3 kg Current 250 A Courant permanent assigné lu 200 A 200 A 200 A 200 A 200 A 200 A	Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz	12 000			
Neutral conductors / upgradeable/retrofittable ground-fault monitoring version Product function Communication function Phase failure detection Other measurement function No net weight Current Max. rated operational current of the frame size Courant permanent assigné lu Operational current At 40 °C At 45 °C At 45 °C At 55 °C At 60 °C At 60 °C No Without No No No No 2.3 kg Current 250 A 200 A		8 400			
ground-fault monitoring version product function communication function phase failure detection other measurement function No net weight Current Max. rated operational current of the frame size Courant permanent assigné lu operational current at 40 °C at 45 °C at 50 °C at 50 °C at 60 °C Vithout No		6 000			
product function • communication function • phase failure detection • other measurement function net weight Current Max. rated operational current of the frame size Courant permanent assigné lu operational current • at 40 °C • at 45 °C • at 50 °C • at 55 °C • at 60 °C • at 60 °C No No 2.3 kg Current 2.3 kg Current 2.00 A 200 A	Neutral conductors / upgradeable/retrofittable	No			
 communication function phase failure detection other measurement function net weight 2.3 kg Current 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 at 55 °C at 60 °C 200 A 	ground-fault monitoring version	Without			
 phase failure detection other measurement function net weight 2.3 kg Current 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 at 50 °C at 55 °C at 60 °C 200 A at 60 °C 200 A 200 A at 60 °C 200 A 200 A 200 A 200 A 200 A 200 A 200 A 200 A 200 A 200 A 200 A 200 A 200 A 200 A 200 A 200 A 200 A 200 A 200 A 200 A 200 A 200 A 200 A 200 A 200 A 200 A 200 A 200 A 200 A 200 A 200 A 200 A 200 A 200 A 200 A 200 A 200 A 200 A 200 A 200 A 200 A 200 A 200 A 200 A 200 A 200 A 200 A 200 A 200 A 200 A 200 A 200 A 200 A<	product function				
● other measurement function net weight 2.3 kg Current Max. rated operational current of the frame size Courant permanent assigné lu operational current ● at 40 °C ● at 45 °C ● at 50 °C ● at 55 °C ● at 60 °C Politic measurement function No 2.3 kg 250 A 200 A	 communication function 	No			
net weight Current Max. rated operational current of the frame size 250 A Courant permanent assigné lu 200 A operational current • at 40 °C 200 A • at 45 °C 200 A • at 50 °C 200 A • at 55 °C 200 A • at 60 °C 200 A	 phase failure detection 	Yes			
Current Max. rated operational current of the frame size Courant permanent assigné lu operational current • at 40 °C • at 45 °C • at 50 °C • at 55 °C • at 60 °C 200 A 200 A 200 A 200 A 200 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 • at 55 °C • at 60 °C 200 A 200 A 200 A 200 A 200 A 200 A	net weight	2.3 kg			
Courant permanent assigné lu 200 A operational current 200 A • at 40 °C 200 A • at 45 °C 200 A • at 50 °C 200 A • at 55 °C 200 A • at 60 °C 200 A	Current				
operational current • at 40 °C • at 45 °C • at 50 °C • at 55 °C • at 60 °C 200 A 200 A 200 A 200 A 200 A	Max. rated operational current of the frame size	250 A			
 at 40 °C at 45 °C at 50 °C at 55 °C at 60 °C 200 A 200 A 200 A 200 A 200 A 200 A 	Courant permanent assigné lu	200 A			
 at 45 °C at 50 °C at 55 °C at 60 °C 200 A 200 A 200 A 	operational current				
 at 50 °C at 55 °C at 60 °C 200 A 200 A 200 A 	• at 40 °C	200 A			
at 55 °C	● at 45 °C	200 A			
• at 60 °C 200 A	• at 50 °C	200 A			
	● at 55 °C	200 A			
• at 65 °C 200 A	• at 60 °C	200 A			
	• at 65 °C	200 A			

• at 70 °C	200 A		
Switching capacity according to IEC 60947			
switching capacity class of the circuit breaker	M		
breaking capacity maximum short-circuit current (Icu)			
• at 240 V	85 kA		
● at 415 V	55 kA		
● at 440 V	55 kA		
● at 500 V	36 kA		
● at 690 V	3.5 kA		
breaking capacity operating short-circuit current (lcs)			
● at 240 V	85 kA		
● at 415 V	55 kA		
● at 440 V	55 kA		
● at 500 V	36 kA		
● at 690 V	3.5 kA		
short-circuit current making capacity (lcm)			
• at 240 V	187 kA		
● at 415 V	121 kA		
• at 440 V	121 kA		
● at 500 V	75.6 kA		
● at 690 V	5.2 kA		
Adjustable parameters			
Adjustable response value current / li min.	3 000 A		
Adjustable response value current / li max.	3 000 A		
Ground fault protection / tripping switchable / I2t=ON/OFF	No		
Mechanical Design			
height [in]	7.13 in		
Height	181 mm		
width [in]	4.13 in		
Width	105 mm		
depth [in]	3.39 in		
depth	86 mm		
Connections			
arrangement of electrical connectors / for main current circuit	Front terminal		
type of electrical connection / for main current circuit	on both sides nut keeper kit		
Type of connectable conductor cross-section, connection screw, width x thickness , min.	13 x 1 mm		
Auxiliary circuit			
product component			
undervoltage release	No		
voltage trigger	No		
trip indicator	No		
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		
General Product Approval		EMC	Declaration of Conformity





Miscellaneous







Declaration of Conformity

Test Certificates

Marine / Shipping



<u>Miscellaneous</u> <u>Special Test Certific</u>

ate



CCS / China Classification Society



other

Confirmation

Miscellaneous

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=3VA2220-5MN32-0AA0

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

https://support.industry.siemens.com/cs/ww/en/ps/3VA2220-5MN32-0AA0

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

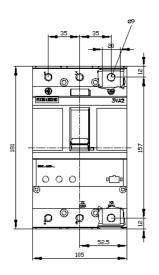
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2220-5MN32-0AA0

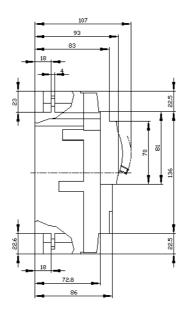
CAx-Online-Generator

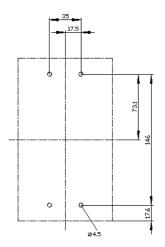
http://www.siemens.com/cax

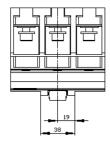
Tender specifications

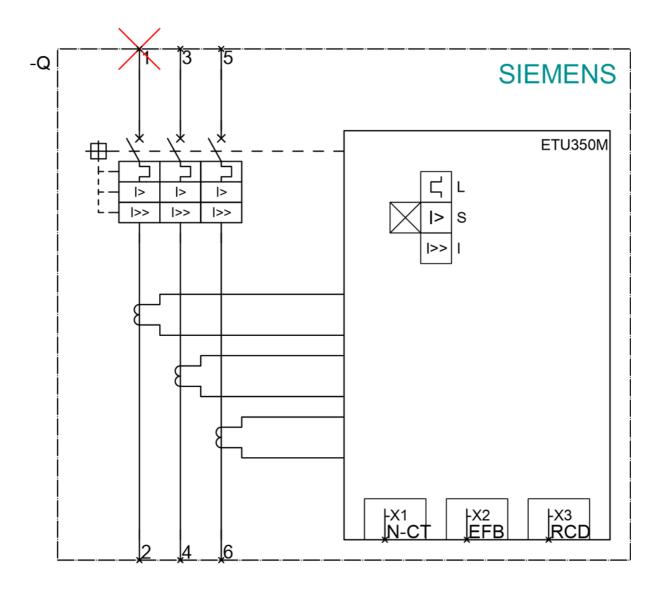
http://www.siemens.com/specifications











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