3VA1220-5EF42-0AA0

Data sheet



circuit breaker 3VA1 IEC frame 250 breaking capacity class M Icu=55kA @ 415V 4-pole, line protection TM240, ATAM, In=200A overload protection Ir=140A...200A short-circuit protection Ii=5...10 x In N conductor unprotected nut keeper kit

Model	
product brand name	SENTRON
product designation	Molded case circuit breaker
Product version	Line protection
design of the overcurrent release	TM240
protection function of the overcurrent release	LI
number of poles	4
General technical data	
rated insulation voltage Ui	800 V
Max. rated operational voltage Ue with DC	600 V
power loss [W] / maximum	42 W
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	14 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	5 400
Neutral conductors / upgradeable/retrofittable	No
ground-fault monitoring version	Without
product function	
 communication function 	No
other measurement function	No
net weight	2.087 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 50 °C	200 A
● at 55 °C	194 A
● at 60 °C	188 A
● at 65 °C	182 A
● at 70 °C	176 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	36 kA
● at 500 V	15 kA
● at 690 V	10 kA
breaking capacity operating short-circuit current (Ics)	
● at 240 V	85 kA
● at 415 V	55 kA
● at 440 V	36 kA
● at 500 V	10 kA
● at 690 V	5 kA
short-circuit current making capacity (Icm)	
● at 240 V	187 kA
● at 415 V	121 kA
• at 440 V	75.6 kA
● at 500 V	30 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
Adjustable parameters	
Adjustable response value current / li min.	1 000 A
Adjustable response value current / li max.	2 000 A
design of the N-conductor protection	Without
Ground fault protection / tripping switchable / I2t=ON/OFF	No
Mechanical Design	
height [in]	6.22 in
Height	158 mm
width [in]	5.51 in
Width	140 mm
depth [in]	2.76 in
depth	70 mm
Connections	
arrangement of electrical connectors / for main current circuit	Front terminal
type of electrical connection / for main current circuit	nut keeper kit on both ends
Type of connectable conductor cross-section, connection screw, width x thickness , min.	13 x 1 mm
Type of connectable conductor cross-section, connection screw, width x thickness , max.	25 x 8 mm
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
General Product Approval	EMC





Miscellaneous

FAI



Declaration of Conformity

Test Certificates

Marine / Shipping



UK Declaration of Conformity Miscellaneous

Type Test Certificates/Test Report

<u>KC</u>

Special Test Certificate



Marine / Shipping

other









Miscellaneous

Miscellaneous

Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

http://www.siemens.com/lowvoltage/catalogs

Industry Mall (Online ordering system)

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

https://support.industry.siemens.com/cs/ww/en/ps/3VA1220-5EF42-0AA0

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

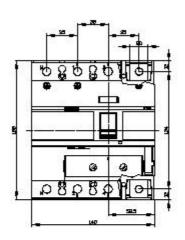
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA1220-5EF42-0AA0

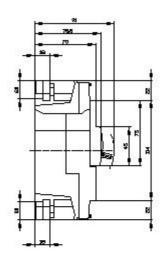
CAx-Online-Generator

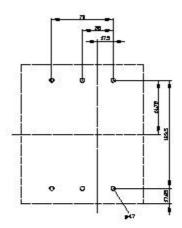
http://www.siemens.com/cax

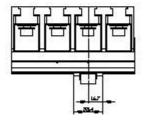
Tender specifications

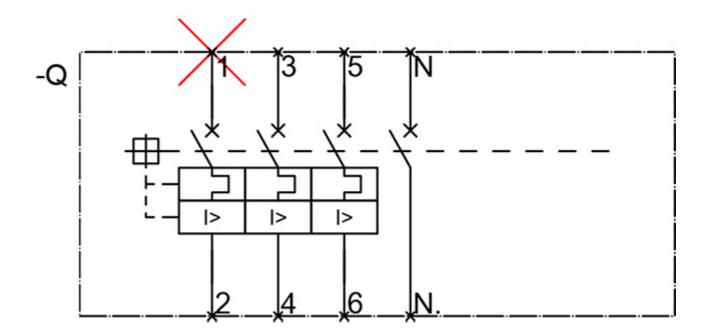
http://www.siemens.com/specifications











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