SIEMENS

Data sheet 3VA2220-7MN32-0AA0

Siemens EcoTech



circuit breaker 3VA2 IEC Frame 250 breaking capacity class C Icu=110 kA @ 415 V 3-pole, motor protection ETU350M, LSI, In=200 A overload protection Ir=80 A...200 A short-circuit protection Isd=3...15 x Ir, Ii=15 x In nut keeper kit

Model	
product brand name	SENTRON
product designation	Molded case circuit breaker
design of the product	Motor protection
design of the overcurrent release	ETU350M
protection function of the overcurrent release	LSI
number of poles	3
General technical data	
insulation voltage / rated value	800 V
operating voltage / at AC / rated value	690 V
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
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	15.33 W
mechanical service life (operating cycles) / typical	25 000
electrical endurance (operating cycles) / at AC-1 / at 380/415 V	12 000
electrical endurance (operating cycles) / at AC-1 / at 690 V	8 400
electrical endurance (operating cycles) / at AC-3 / at 380/415 V	6 000
product feature / for neutral conductors / upgradable/retrofittable / short-circuit and overload proof	No
ground-fault monitoring version	Without
product function	
● communication function	No
● phase failure detection	Yes
● other measurement function	No
Net Weight	2.117 kg
Current	
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
● at 65 °C	200 A
● at 70 °C	200 A

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Switching capacity according to IEC 60947	
switching capacity class of the circuit breaker	C
maximum short-circuit current breaking capacity (Icu)	
● at 240 V	150 kA
● at 415 V	110 kA
● at 440 V	110 kA
● at 500 V	85 kA
● at 690 V	4 kA
operating short-circuit current breaking capacity (Ics)	
● at 240 V	150 kA
● at 415 V	110 kA
● at 440 V	110 kA
● at 500 V	85 kA
● at 690 V	3.5 kA
short-circuit current making capacity (Icm)	
● at 240 V	330 kA
● at 415 V	242 kA
● at 440 V	242 kA
● at 500 V	187 kA
● at 690 V	5.2 kA
Adjustable parameters	
product feature / for L-tripping / can be switched on/off	No
adjustable response value setting current (Ir) / of the L-trip / with I2t characteristic	
● minimum	80 A
● maximum	200 A
adjustable response value delay time (tr) / for L-tripping / with I2t characteristic	
● minimum	4 s
● maximum	15 s
adjustable response value setting current (Isd) / of S-trip / with I0t characteristic	
● minimum	240 A
● maximum	3 000 A
adjustable response value delay time (tsd) / for S-tripping / with I0t characteristic	
● minimum	0.03 s
● maximum	0.03 s
adjustable response value setting current (Ii) / for I-tripping	
● minimum	3 000 A
● maximum	3 000 A
adjustable setting current (InN) / for N-tripping	
● minimum	0 A
● maximum	0 A
product function / grounding protection	No
adjustable trip class (Tc CLASS)	10A, 10E, 20E
tripping time (Tp) / with adjustable trip class (Tc CLASS)	
● minimum	4 s
● maximum	15 s
Mechanical Design	
product component	
● undervoltage release	No
● voltage trigger	No
● trip indicator	No
height [in]	7.13 in
height	181 mm
width [in]	4.13 in
width	105 mm
depth [in]	3.39 in
depth	86 mm

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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-sections / for flat-bar terminal connection / minimum	13 x 1 mm
type of connectable conductor cross-sections / for flat-bar terminal connection / maximum	25 x 8 mm
design of the surface / of the connections / on the top of the switch (N, 1, 3, 5)	silver
design of the surface / of the connections / on the bottom of the switch (N, 2, 4, 6)	tin
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
Environmental footprint	
Environmental Product Declaration(EPD)	Yes
global warming potential [CO2 eq] / total	251 kg
global warming potential [CO2 eq] / during manufacturing	20.4 kg
global warming potential [CO2 eq] / during operation	235 kg
global warming potential [CO2 eq] / after end of life	-3.75 kg
Siemens eco profile (SEP)	Siemens EcoTech
reference code / according to IEC 81346-2	Q

Approvals / Certificates

General Product Approval

Miscellaneous | Confirmation

General Product Approval	EMV	Test Certificates			Maritime application
		Miscellaneous	Special Test Certificate	Type Test Certificates/Test Report	

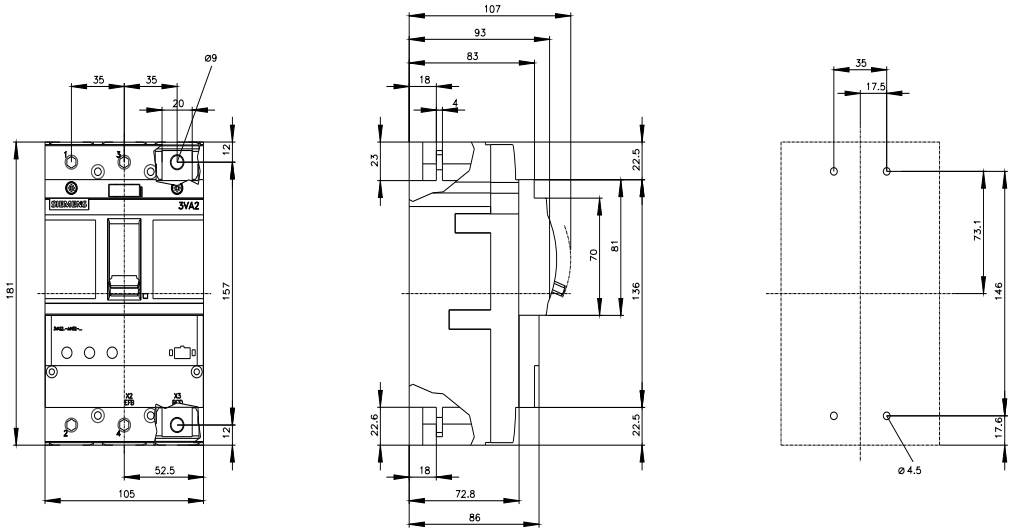
Maritime application		other			
	CCS (China Classification Society)	Miscellaneous	Miscellaneous	Confirmation	

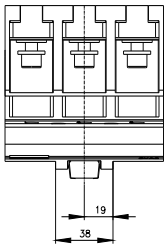
Dangerous goods	Environment			
Transport Information	Environmental Confirmations		Environmental Confirmations	

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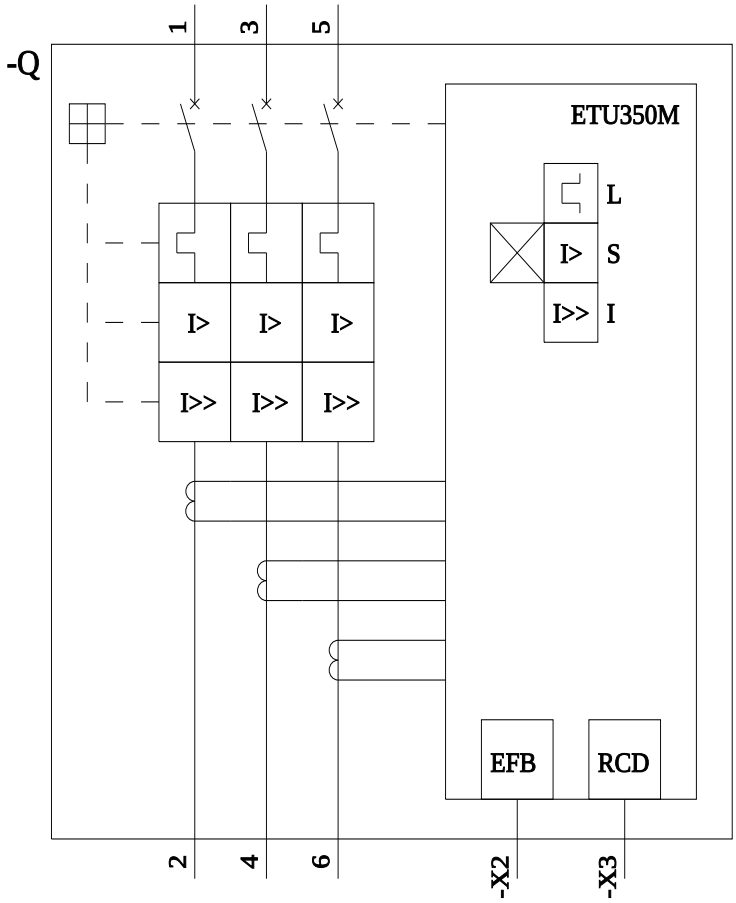
Further information

Information on the packaging
https://support.industry.siemens.com/cs/ww/en/view/109813875
Information for data generation and storage
https://support.industry.siemens.com/cs/ww/en/view/109995012
Information- and Downloadcenter (Catalogs, Brochures,…)
https://www.siemens.com/lowvoltage/catalogs
Industry Mall (Online ordering system)
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3VA2220-7MN32-0AA0
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3VA2220-7MN32-0AA0
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2220-7MN32-0AA0
CAx-Online-Generator
https://www.siemens.com/cax
Tender specifications
https://www.siemens.com/specifications
Kennlinien
https://curves.simaris.siemens.com/curves/3VA2220-7MN32-0AA0





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