



circuit breaker 3VA2 IEC Frame 160 breaking capacity class M Icu=55 kA @ 415 V
3-pole, motor protection ETU860M, LSIG, In=100 A overload protection Ir=40
A...100 A short-circuit protection Isd=1.2...15x In, li=3...15x In ground-fault
protection, can be switched off Ig=0.2...1 x In, tg=0.05-0.8s nut keeper kit circuit
breaker 3VA2 IEC Frame 160 2 auxiliary switches HQ

Model	
product brand name	SENTRON
product designation	Molded case circuit breaker
design of the product	Motor protection
design of the overcurrent release	ETU860M
protection function of the overcurrent release	LSIG
number of poles	3
design of the auxiliary switch	2 auxiliary switches HQ
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	55 000 W
operating power / at AC-3 / at 230 V	30 000 W
power loss [W] / maximum	10 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	3.33 W
mechanical service life (operating cycles) / typical	25 000
electrical endurance (operating cycles) / at AC-1 / at 380/415 V	14 000
electrical endurance (operating cycles) / at AC-1 / at 690 V	9 800
electrical endurance (operating cycles) / at AC-3 / at 380/415 V	5 000
product feature / for neutral conductors / upgradable/retrofitable / short-circuit and overload proof	No
ground-fault monitoring version	Summation current formation L-conductor
product function	
• communication function	Yes
• phase failure detection	Yes
• other measurement function	Yes
Net Weight	2.247 kg
Current	
operational current	
• at 40 °C	100 A
• at 45 °C	100 A
• at 50 °C	100 A
• at 55 °C	100 A
• at 60 °C	100 A
• at 65 °C	100 A
• at 70 °C	100 A
Switching capacity according to IEC 60947	
switching capacity class of the circuit breaker	E
maximum short-circuit current breaking capacity (Icu)	
• at 240 V	85 kA

• at 415 V • at 440 V • at 500 V • at 690 V	55 kA 55 kA 36 kA 2.5 kA
operating short-circuit current breaking capacity (Ics) • at 240 V • at 415 V • at 440 V • at 500 V • at 690 V	85 kA 55 kA 55 kA 36 kA 2.5 kA
short-circuit current making capacity (Icm) • at 240 V • at 415 V • at 440 V • at 500 V • at 690 V	187 kA 121 kA 121 kA 75.6 kA 3.7 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 • maximum	40 A 100 A
adjustable response value delay time (tr) / for L-tripping / with I2t characteristic • minimum • maximum	3 s 25 s
adjustable response value setting current (Isd) / of S-trip / with I0t characteristic • minimum • maximum	120 A 1 500 A
adjustable response value delay time (tsd) / for S-tripping / with I0t characteristic • minimum • maximum	0.03 s 0.03 s
adjustable response value setting current (Ii) / for I-tripping • minimum • maximum	300 A 1 500 A
adjustable current response value current / for G-tripping / with standard characteristic • initial value • full-scale value	20 A 100 A
adjustable response value delay time (tg) / for G-tripping / with I0t characteristic • maximum	0.8 s
adjustable response value setting current (Ig) / for G-tripping / with I2t characteristic • minimum • maximum	20 A 100 A
adjustable response value delay time (tg) / for G-tripping / with I2t characteristic • minimum • maximum	0.05 s 0.8 s
product function / grounding protection	Yes
adjustable trip class (Tc CLASS)	10A, 10/10E, 20/ 20E, 30/30E
tripping time (Tp) / with adjustable trip class (Tc CLASS) • minimum • maximum	3 s 25 s

Mechanical Design

product component • undervoltage release • voltage trigger • trip indicator	No No 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

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)	tin
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	2
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Accessories

product extension / optional / motor drive	Yes
manufacturer's article number	
• of the supplied basic switch	3VA21105MQ320AA0
• of the integrated auxiliary switch/alarm switch	3VA9988-0AA12

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
reference code / according to IEC 81346-2	Q

Approvals / Certificates

General Product Approval



[Confirmation](#)



[Miscellaneous](#)

General Product Approval	EMV	Test Certificates	Marine / Shipping
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[Special Test Certificate](#)

[Miscellaneous](#)



Marine / Shipping	other	Dangerous Good	Environment
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[CCS \(China Classification Society\)](#)

[Miscellaneous](#)

[Confirmation](#)

[Miscellaneous](#)

[Transport Information](#)

[Environmental Conformations](#)

Environment

[Environmental Conformations](#)

Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

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=3VA2110-5MQ32-0AC0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA2110-5MQ32-0AC0>

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

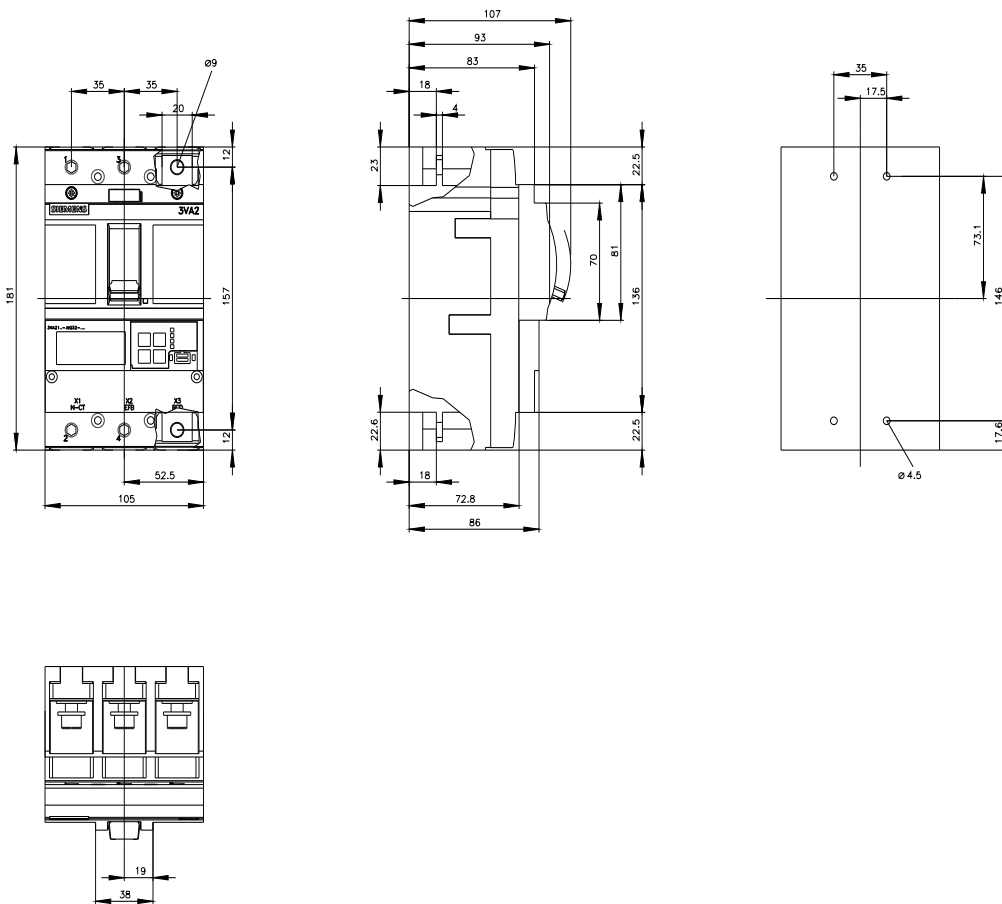
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2110-5MQ32-0AC0

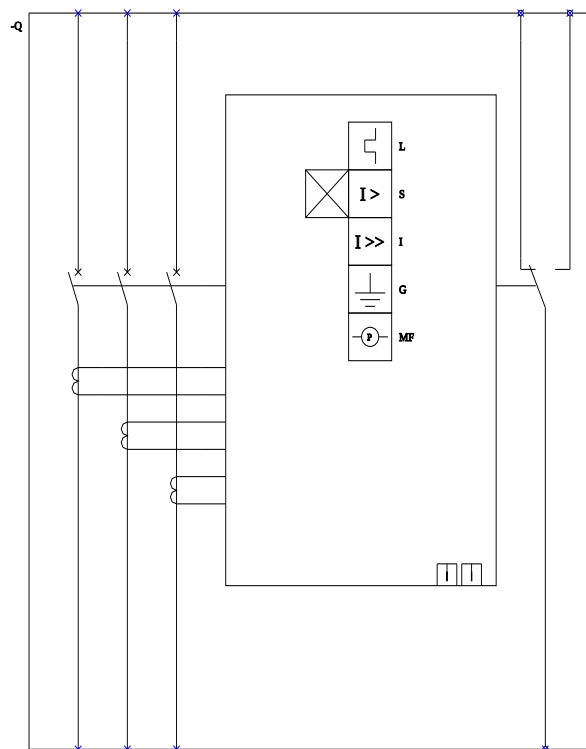
CAX-Online-Generator

<http://www.siemens.com/cax>

Tender specifications

<http://www.siemens.com/specifications>





L (Long Time Delay / Überlastschutz); S (Short Time Delay / Kurzschlusschutz, kurzzeitverzögert);
 I (Instantaneous / Kurzschlusschutz, unverzögert); G (Ground Fault Protection / Erdschlussschutz);
 MF (Metering function / Messfunktion);

last modified:

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