










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 I_{sd}=1.2...1.5x I_n, I_i=3...1.5x I_n ground-fault protection, can be switched off I_g=0.2...1 x I_n, t_g=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 (I _{cu})	
<ul style="list-style-type: none"> • at 240 V • at 415 V • at 440 V • at 500 V • at 690 V 	85 kA 55 kA 55 kA 36 kA 3 kA
operating short-circuit current breaking capacity (I _{cs})	
<ul style="list-style-type: none"> • 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 (I _{cm})	
<ul style="list-style-type: none"> • at 240 V • at 415 V • at 440 V • at 500 V • at 690 V 	187 kA 121 kA 121 kA 75.5 kA 3.7 kA
Adjustable parameters	
product feature / for L-tripping / can be switched on/off	No
adjustable response value setting current (I _r) / of the L-trip / with I _{2t} characteristic	
<ul style="list-style-type: none"> • minimum • maximum 	40 A 100 A
adjustable response value delay time (t _r) / for L-tripping / with I _{2t} characteristic	
<ul style="list-style-type: none"> • minimum • maximum 	3 s 25 s
adjustable response value setting current (I _{sd}) / of S-trip / with I _{0t} characteristic	
<ul style="list-style-type: none"> • minimum • maximum 	120 A 1 500 A
adjustable response value delay time (t _{sd}) / for S-tripping / with I _{0t} characteristic	
<ul style="list-style-type: none"> • minimum • maximum 	0.03 s 0.03 s
adjustable response value setting current (I _l) / for I-tripping	
<ul style="list-style-type: none"> • minimum • maximum 	300 A 1 500 A
adjustable current response value current / for G-tripping / with standard characteristic	
<ul style="list-style-type: none"> • initial value • full-scale value 	20 A 100 A
adjustable response value delay time (t _g) / for G-tripping / with I _{0t} characteristic	
<ul style="list-style-type: none"> • minimum • maximum 	0.05 s 0.8 s
adjustable response value setting current (I _g) / for G-tripping / with I _{2t} characteristic	
<ul style="list-style-type: none"> • minimum • maximum 	20 A 100 A
adjustable response value delay time (t _g) / for G-tripping / with I _{2t} characteristic	
<ul style="list-style-type: none"> • minimum • maximum 	0.05 s 0.8 s
adjustable setting current (I _{nN}) / for N-tripping	
<ul style="list-style-type: none"> • minimum • maximum 	0 A 0 A
product function / grounding protection	Yes
adjustable trip class (T _c CLASS)	10A, 10/10E, 20/ 20E, 30/30E
tripping time (T _p) / with adjustable trip class (T _c CLASS)	

<ul style="list-style-type: none"> • minimum • maximum 	<p>3 s</p> <p>25 s</p>	
Mechanical Design		
product component		
<ul style="list-style-type: none"> • undervoltage release • voltage trigger • trip indicator 	<p>No</p> <p>No</p> <p>No</p>	
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	
Accessories		
product extension / optional / motor drive	Yes	
manufacturer's article number		
<ul style="list-style-type: none"> • of the supplied basic switch • of the integrated auxiliary switch/alarm switch 	<p>3VA21105MQ320AA0</p> <p>3VA9988-0AA12</p>	
Environmental conditions		
protection class IP / on the front	IP40	
ambient temperature		
<ul style="list-style-type: none"> • during operation / minimum • during operation / maximum • during storage / minimum • during storage / maximum 	<p>-25 °C</p> <p>70 °C</p> <p>-40 °C</p> <p>80 °C</p>	
reference code / according to IEC 81346-2	Q	
Approvals / Certificates		
General Product Approval		
 	<p>Miscellaneous</p>   <p>Confirmation</p>	
General Product Approval	EMV	Test Certificates
 		<p>Miscellaneous</p> <p>Special Test Certificate</p> <p>Type Test Certificates/Test Report</p>
Maritime application	other	



CCS (China Classification Society)

Miscellaneous

Miscellaneous

Confirmation

other	Dangerous goods	Environment
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[Transport Information](#)

[Environmental Confirmations](#)

[Environmental Confirmations](#)

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=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, ...)

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

CAX-Online-Generator

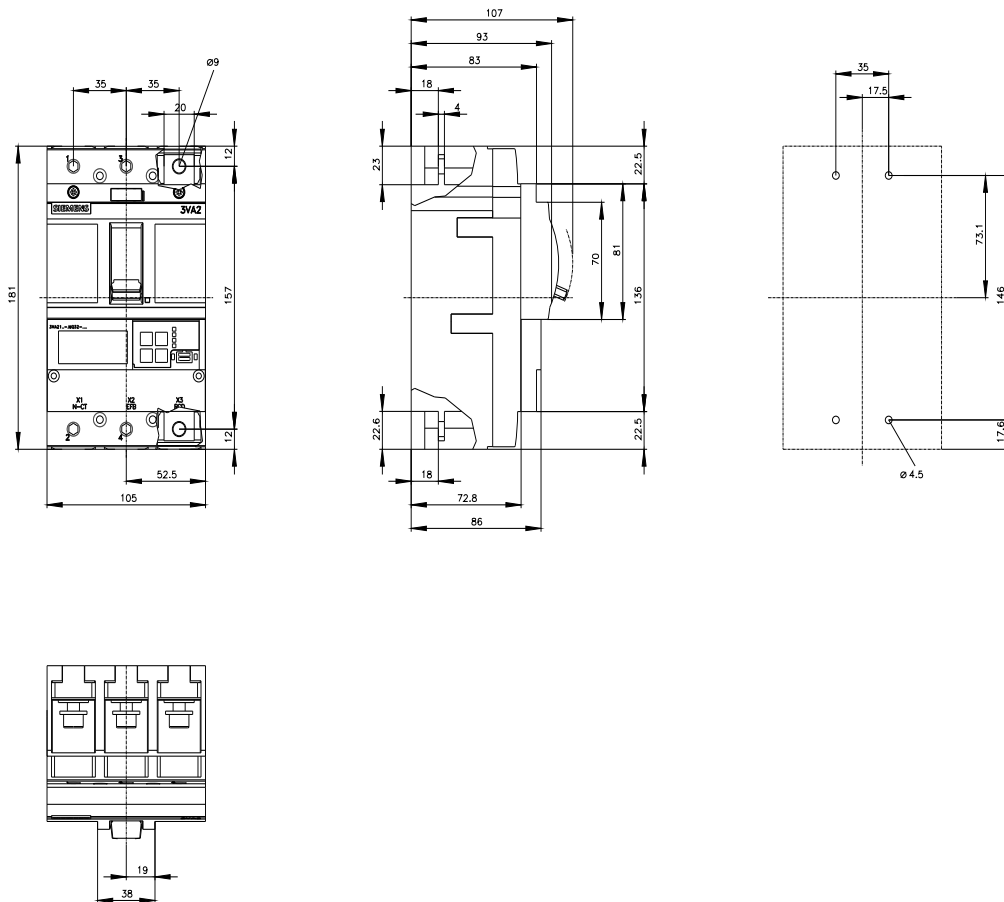
<https://www.siemens.com/cax>

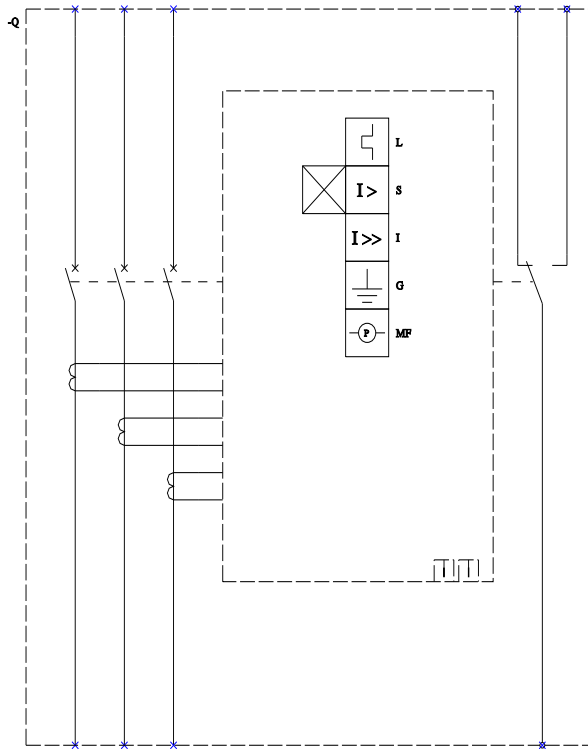
Tender specifications

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

Characteristic curves

https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP='HAUPT'></mmp_prod_no>





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

last modified:

4/23/2026 

