



circuit breaker 3VA2 IEC frame 160 breaking capacity class C $I_{cu}=110\text{kA}$ @ 415V 3-pole, motor protection ETU860M, LSIG, $I_n=40\text{A}$ overload protection $I_r=16\text{A}...40\text{A}$ short-circuit protection $I_{sd}=1.2...15 \times I_n$, $I_i=3...15 \times I_n$ gr.-fault prot., can be sw. off $I_g=0.4...1 \times I_n$, $t_g=0.05-0.8\text{s}$ nut keeper kit undervoltage release (UVR) 208-230V AC 50/60Hz 2 auxiliary switches HQ 1 trip alarm switch HQ

Model	
product brand name	SENTRON
product designation	Molded case circuit breaker
Product version	Motor protection
design of the overcurrent release	ETU860M
protection function of the overcurrent release	LSIG
number of poles	3
Auxiliary contact version	2 auxiliary switches + 1 trip alarm switch HQ
General technical data	
rated insulation voltage U_i	800 V
operating power / at AC-3 / at 400 V	18 500 W
operating power / at AC-3 / at 230 V	11 000 W
power loss [W] / maximum	4.1 W
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	1.37 W
mechanical service life (switching cycles) / typical	25 000
Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz	14 000
Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz	9 800
Electrical endurance (switching cycles) / at AC-3 / at 380/415 V 50/60 Hz	10 000
Neutral conductors / upgradeable/retrofitable	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	2,449 kg
Current	
Max. rated operational current of the frame size	160 A
Courant permanent assigné I_u	40 A
operational current	
• at 40 °C	40 A
• at 45 °C	40 A
• at 50 °C	40 A
• at 55 °C	40 A
• at 60 °C	40 A
• at 65 °C	40 A
• at 70 °C	40 A

Switching capacity according to IEC 60947	
switching capacity class of the circuit breaker	C
breaking capacity maximum short-circuit current (I _{cu})	
• at 240 V	150 kA
• at 415 V	110 kA
• at 440 V	110 kA
• at 500 V	85 kA
• at 690 V	2.5 kA
breaking capacity operating short-circuit current (I _{cs})	
• at 240 V	150 kA
• at 415 V	110 kA
• at 440 V	110 kA
• at 500 V	85 kA
• at 690 V	2.5 kA
short-circuit current making capacity (I _{cm})	
• at 240 V	330 kA
• at 415 V	242 kA
• at 440 V	242 kA
• at 500 V	187 kA
• at 690 V	3.7 kA
Adjustable parameters	
Adjustable response value current / I _i min.	120 A
Adjustable response value current / I _i max.	600 A
Ground fault protection / tripping switchable / I _{2t} =ON/OFF	Yes
Adjustable response value current / I _g min.	8 A
Adjustable response value current / I _g max.	40 A
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
Type of connectable conductor cross-section, connection screw, width x thickness , max.	25 x 8 mm
design of the surface / of the connections / on the top of the switch (N, 1, 3, 5)	tin
Auxiliary circuit	
product component	
• undervoltage release	Yes
• voltage trigger	No
• trip indicator	Yes
number of CO contacts / for auxiliary contacts	3
Accessories	
product extension / optional / motor drive	Yes
manufacturer's article number	
• of the supplied basic switch	#BEZUG!
• of the integrated auxiliary switch/alarm switch	3VA9988-0AA12
• of the integrated auxiliary switch/alarm switch	3VA9988-0AB12
• of the integrated auxiliary trip unit	3VA9608-0BB25
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

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General Product Approval

EMC

Declaration of
Conformity



[Miscellaneous](#)



[UK Declaration of
Conformity](#)

Declaration of
Conformity

Test Certificates

Marine / Shipping



[Special Test Certificate](#)

[Miscellaneous](#)



[CCS / China Classification Society](#)

other

[Miscellaneous](#)

[Confirmation](#)

[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=3VA2140-7MQ32-0DH0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA2140-7MQ32-0DH0>

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

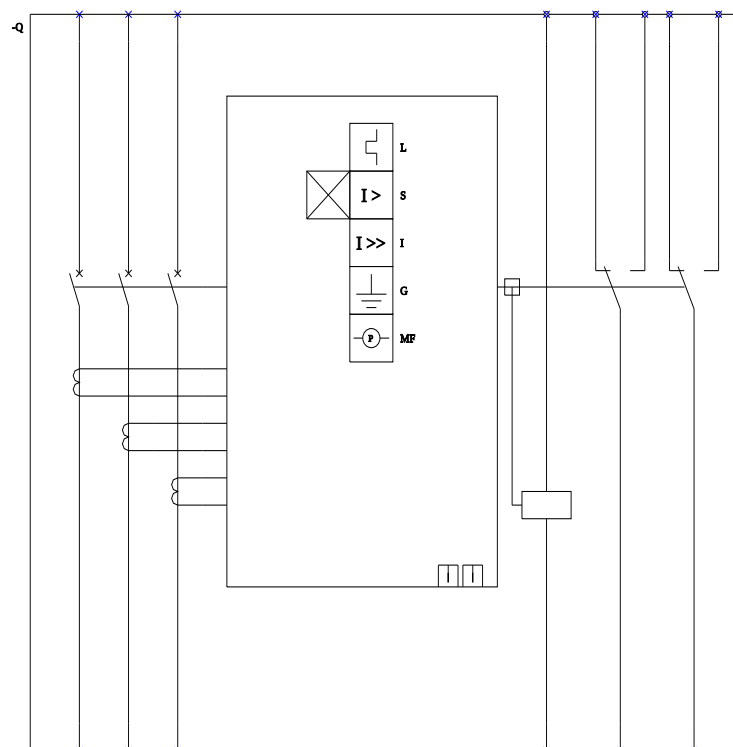
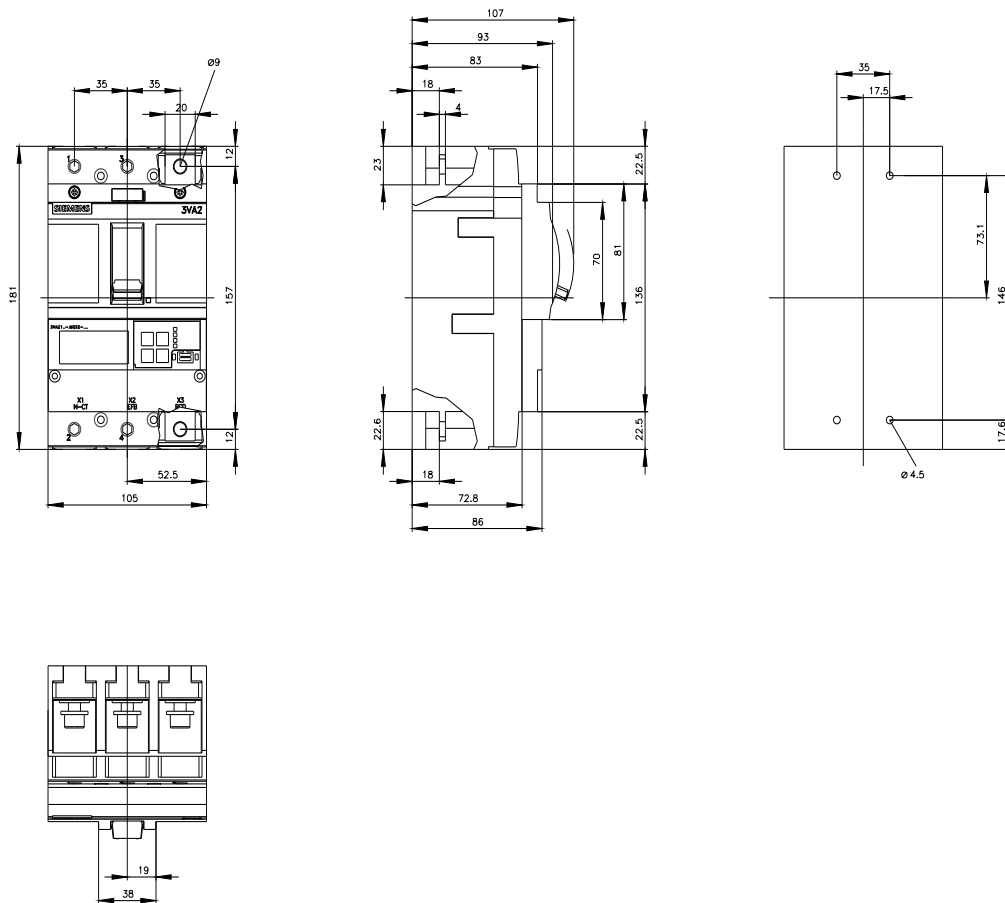
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2140-7MQ32-0DH0

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 / Erdschlusschutz);
MF (Metering function / Messfunktion);

last modified:

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