



circuit breaker 3VA2 IEC Frame 1250 breaking capacity class H Icu=85 kA @ 415 V 4-pole, line protection ETU860, LSIG, In=1250 A overload protection Ir=500 A ...1250 A short-circuit protection Isd=0.6..10x In, li=1.5..10x In neutral conductor protection adjustable (OFF, up to 100%) ground-fault protection, can be switched off Ig=0.2... 1 x In, tg=0.05-0.8s bus connectors broadened

Model	
product brand name	SENTRON
product designation	Molded case circuit breaker
design of the product	Line protection
design of the overcurrent release	ETU860
protection function of the overcurrent release	LSIG
number of poles	4
General technical data	
insulation voltage / rated value	800 V
operating voltage / at AC / rated value	690 V
power loss [W] / maximum	516 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	172 W
mechanical service life (operating cycles) / typical	10 000
electrical endurance (operating cycles) / at AC-1 / at 380/415 V	4 600
electrical endurance (operating cycles) / at AC-1 / at 690 V	3 200
product feature / for neutral conductors / upgradable/retrofitable / short-circuit and overload proof	No
ground-fault monitoring version	Summation current formation L + N conductor
product function	
• communication function	Yes
• other measurement function	Yes
Net Weight	28.24 kg
Current	
operational current	
• at 40 °C	1 250 A
• at 45 °C	1 250 A
• at 50 °C	1 250 A
• at 55 °C	1 187 A
• at 60 °C	1 125 A
• at 65 °C	1 000 A
• at 70 °C	875 A
Switching capacity according to IEC 60947	
switching capacity class of the circuit breaker	H
maximum short-circuit current breaking capacity (Icu)	
• at 240 V	110 kA
• at 415 V	85 kA
• at 440 V	85 kA
• at 500 V	55 kA

• at 690 V	35 kA
operating short-circuit current breaking capacity (Ics)	
• at 240 V	110 kA
• at 415 V	85 kA
• at 440 V	70 kA
• at 500 V	55 kA
• at 690 V	19 kA
short-circuit current making capacity (Icm)	
• at 240 V	242 kA
• at 415 V	187 kA
• at 440 V	187 kA
• at 500 V	121 kA
• at 690 V	73.5 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	500 A
• maximum	1 250 A
adjustable response value delay time (tr) / for L-tripping / with I2t characteristic	
• minimum	0.5 s
• maximum	25 s
adjustable response value setting current (Isd) / of S-trip / with I0t characteristic	
• minimum	750 A
• maximum	12 500 A
adjustable response value setting current (Isd) / of S-trip / with I2t characteristic	
• minimum	750 A
• maximum	12 500 A
adjustable response value delay time (tsd) / for S-tripping / with I0t characteristic	
• minimum	0.05 s
• maximum	0.5 s
adjustable response value delay time (tsd) / for S-tripping / with I2t characteristic	
• minimum	0.05 s
• maximum	0.5 s
adjustable response value setting current (Ii) / for I-tripping	
• minimum	1 875 A
• maximum	12 500 A
adjustable current response value current / for G-tripping / with standard characteristic	
• initial value	250 A
• full-scale value	1 250 A
adjustable response value delay time (tg) / for G-tripping / with I0t characteristic	
• minimum	0.05 s
• maximum	0.8 s
adjustable response value setting current (Ig) / for G-tripping / with I2t characteristic	
• minimum	250 A
• maximum	1 250 A
adjustable response value delay time (tg) / for G-tripping / with I2t characteristic	
• minimum	0.05 s
• maximum	0.8 s
adjustable setting current (InN) / for N-tripping	
• minimum	250 A
• maximum	1 250 A
design of the N-conductor protection	adjustable OFF; 20% to 100%

product function / grounding protection	Yes
Mechanical Design	
product component	
• undervoltage release	No
• voltage trigger	No
• trip indicator	No
height [in]	12.6 in
height	320 mm
width [in]	11.02 in
width	280 mm
depth [in]	4.72 in
depth	120 mm
Connections	
arrangement of electrical connectors / for main current circuit	Front terminal
type of electrical connection / for main current circuit	both sides processed busbar connection piece
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)	silver
Auxiliary circuit	
number of CO contacts / for auxiliary contacts	0
Accessories	
product extension / optional / motor drive	No
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](#)



EMV	Test Certificates	Maritime application
	Miscellaneous	Type Test Certificates/Test Report

Maritime application	other	Dangerous goods	Environment
		Confirmation	Confirmation
		Miscellaneous	Transport Information
			Environmental Confirmations

Environment
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>

<https://support.industry.siemens.com/cs/ww/en/view/109995012>
Information- and Downloadcenter (Catalogs, Brochures,...)

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<https://www.siemens.com/lowvoltage/catalogs>

<https://www.siemens.com/lowvoltage/catalogs>
Industry Mall (Online ordering system)

Industry Mall (Online ordering system)
<https://mall.industry.siemens.com/mall/en>

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3VA2612-6KQ42-0AA0>

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
<https://support.industry.siemens.com/cs/ww/en/ps/3VA2612-6KQ42-0A>

<https://support.industry.siemens.com/cs/ww/en/ps/3VA2612-6KQ42-0AA0>

Image database (product images, 2D dimension drawings, 3D models)

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2612-6KQ42-0AA0

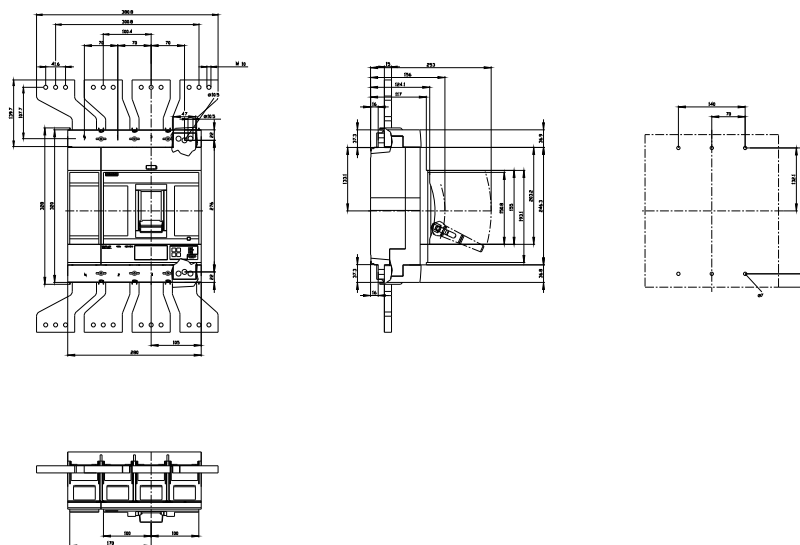
https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2612-6KQ42-0AA0

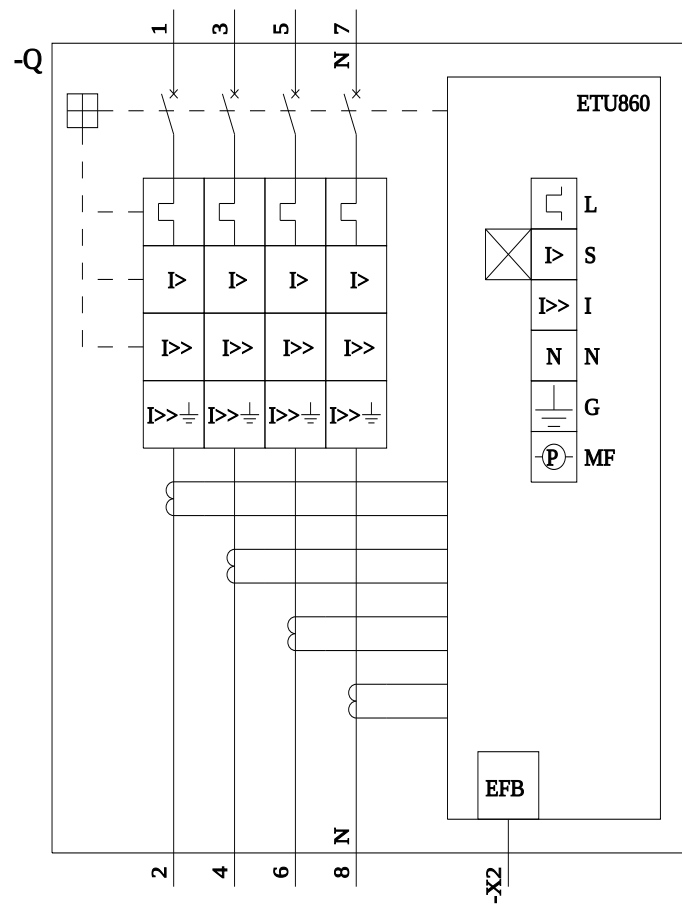
CAX-Online-Generator
<https://www.siemens.com>

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

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

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





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