



circuit breaker 3VA2 IEC Frame 1000 breaking capacity class H Icu=85 kA @ 415 V 4-pole, line protection ETU860, LSIG, In=1000 A overload protection Ir=400 A...1000 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 nut keeper kit

Model	
product brand name	SETRON
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	330 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	110 W
mechanical service life (operating cycles) / typical	10 000
electrical endurance (operating cycles) / at AC-1 / at 380/415 V	4 900
electrical endurance (operating cycles) / at AC-1 / at 690 V	3 400
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	18.45 kg
Current	
operational current	
• at 40 °C	1 000 A
• at 45 °C	1 000 A
• at 50 °C	1 000 A
• at 55 °C	1 000 A
• at 60 °C	955 A
• at 65 °C	885 A
• at 70 °C	815 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 (I _r) / of the L-trip / with I ₂ t characteristic	
• minimum	400 A
• maximum	1 000 A
adjustable response value delay time (t _r) / for L-tripping / with I ₂ t characteristic	
• minimum	0.5 s
• maximum	25 s
adjustable response value setting current (I _{sd}) / of S-trip / with I ₀ t characteristic	
• minimum	600 A
• maximum	10 000 A
adjustable response value setting current (I _{sd}) / of S-trip / with I ₂ t characteristic	
• minimum	600 A
• maximum	10 000 A
adjustable response value delay time (t _{sd}) / for S-tripping / with I ₀ t characteristic	
• minimum	0.05 s
• maximum	0.5 s
adjustable response value delay time (t _{sd}) / for S-tripping / with I ₂ t characteristic	
• minimum	0.05 s
• maximum	0.5 s
adjustable response value setting current (I _I) / for I-tripping	
• minimum	1 500 A
• maximum	10 000 A
adjustable current response value current / for G-tripping / with standard characteristic	
• initial value	200 A
• full-scale value	1 000 A
adjustable response value delay time (t _g) / for G-tripping / with I ₀ t characteristic	
• minimum	0.05 s
• maximum	0.8 s
adjustable response value setting current (I _g) / for G-tripping / with I ₂ t characteristic	
• minimum	200 A
• maximum	1 000 A
adjustable response value delay time (t _g) / for G-tripping / with I ₂ t characteristic	
• minimum	0.05 s
• maximum	0.8 s
adjustable setting current (I _N) / for N-tripping	
• minimum	200 A
• maximum	1 000 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		on both sides nut keeper kit
type of connectable conductor cross-sections / for flat-bar terminal connection / minimum		20 x 4 mm
type of connectable conductor cross-sections / for flat-bar terminal connection / maximum		50 x 28 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)		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		
 CCC  EG-Konf. Confirmation  VDE Miscellaneous 		
EMV	Test Certificates	Maritime application
 RCM	Type Test Certificates/Test Report Special Test Certificate Miscellaneous	 ABS  BUREAU VERITAS
Maritime application		other
 DNV	 LRS	 RMRS
CCS (China Classification Society)		 产品合格 QC PASS
Confirmation		
other	Dangerous goods	Environment

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=3VA2510-6KQ42-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA2510-6KQ42-0AA0>

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

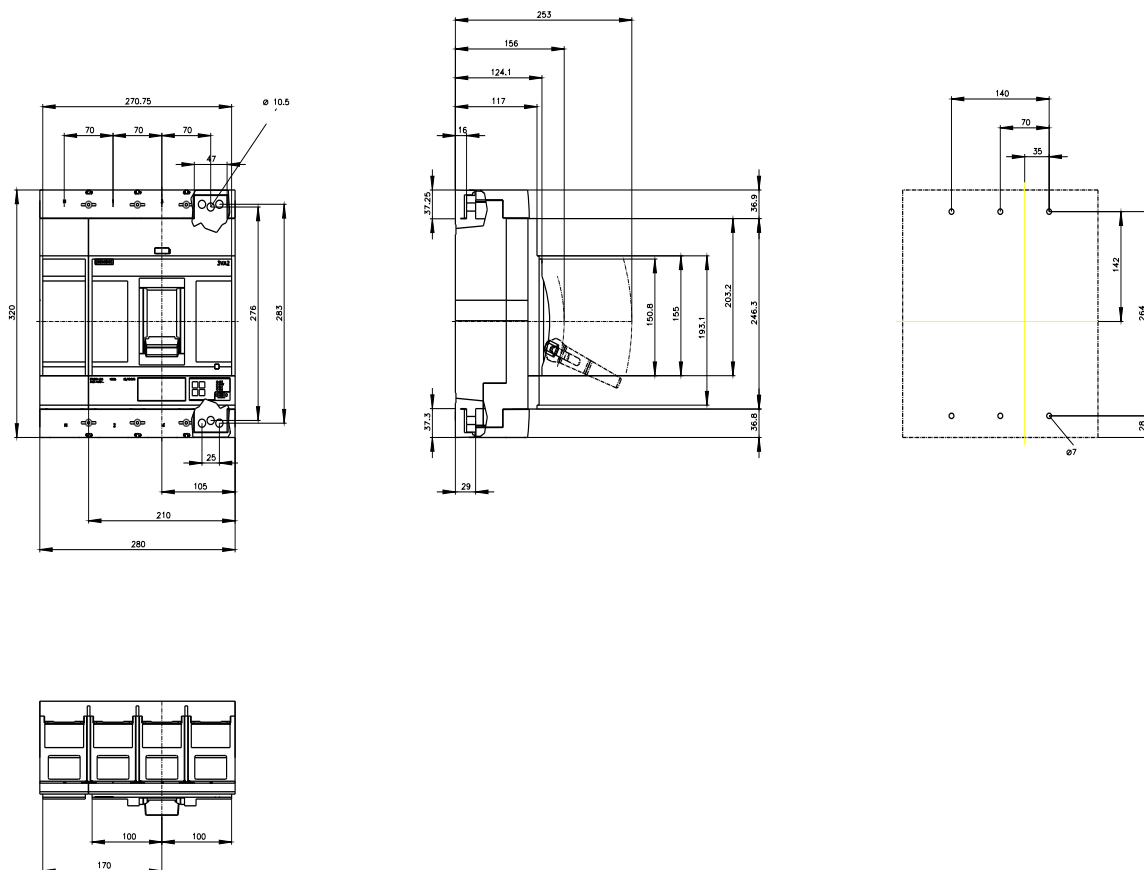
https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2510-6KQ42-0AA0

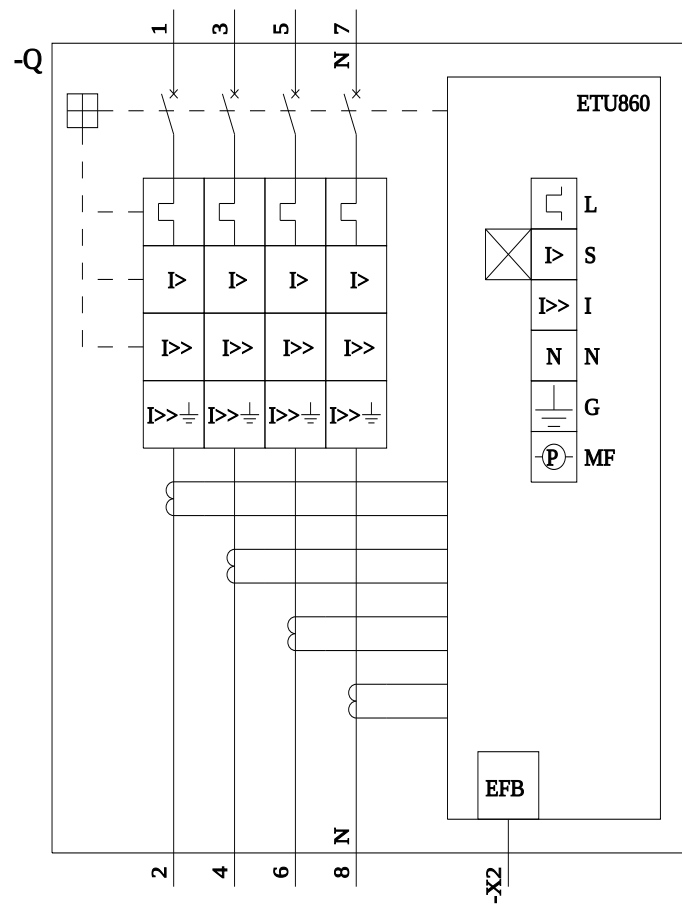
CAX-Online-Generator

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

Tender specifications

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





last modified:

5/25/2025

