



circuit breaker 3VA2 IEC Frame 1000 breaking capacity class M Icu=55 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	18.38 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	M
maximum short-circuit current breaking capacity (Icu)	
• at 240 V	85 kA
• at 415 V	55 kA
• at 440 V	55 kA
• at 500 V	36 kA

• at 690 V	25 kA
operating short-circuit current breaking capacity (Ics)	
• at 240 V	85 kA
• at 415 V	55 kA
• at 440 V	55 kA
• at 500 V	36 kA
• at 690 V	19 kA
short-circuit current making capacity (Icm)	
• at 240 V	187 kA
• at 415 V	121 kA
• at 440 V	121 kA
• at 500 V	75.6 kA
• at 690 V	52.5 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	400 A
• maximum	1 000 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	600 A
• maximum	10 000 A
adjustable response value setting current (Isd) / of S-trip / with I2t characteristic	
• minimum	600 A
• maximum	10 000 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	1 500 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 (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	200 A
• maximum	1 000 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	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					
General Product Ap- proval	EMV	Test Certificates	Maritime application		
	 RCM	Special Test Certi- cate	Miscellaneous	Type Test Certi- ficates/Test Report	 ABS
Maritime application				other	
	 DNV	 LRS	 RMRS	CCS (China Classifica- tion Society)	
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=3VA2510-5KQ42-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA2510-5KQ42-0AA0>

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

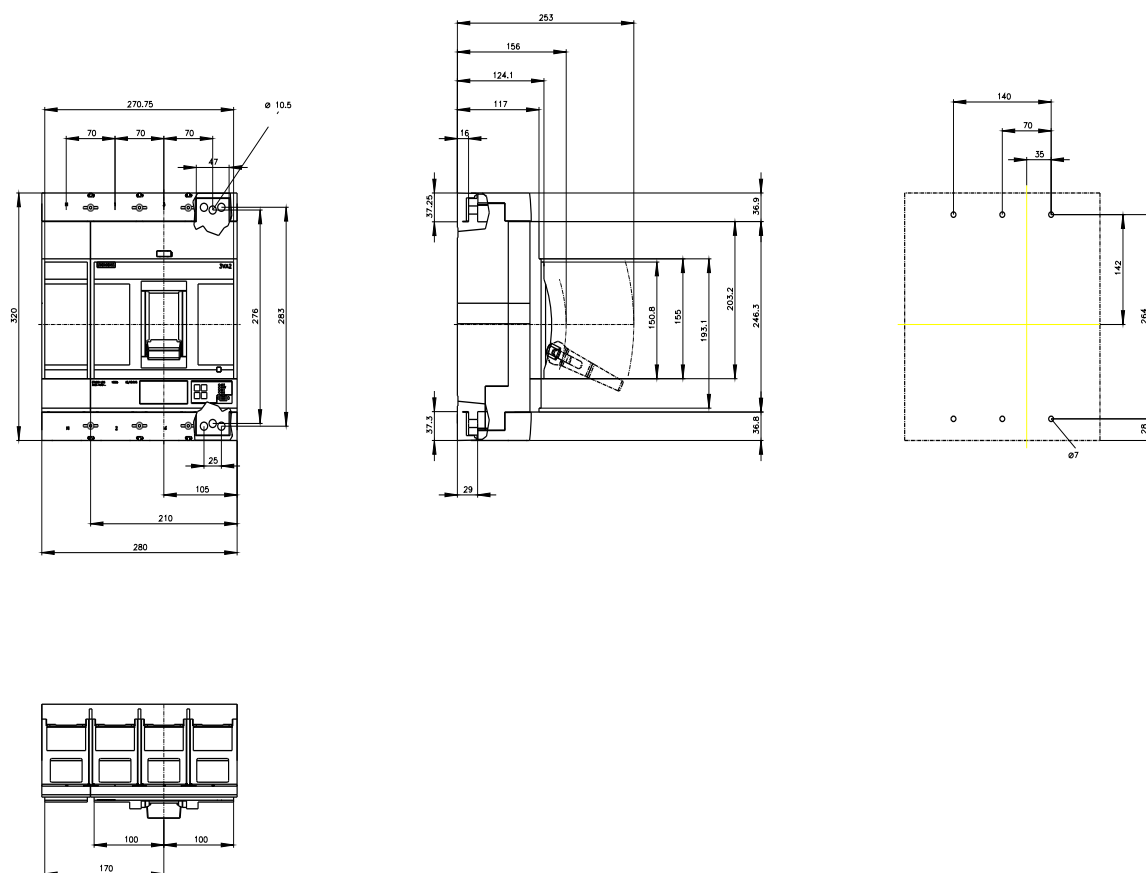
https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2510-5KQ42-0AA0

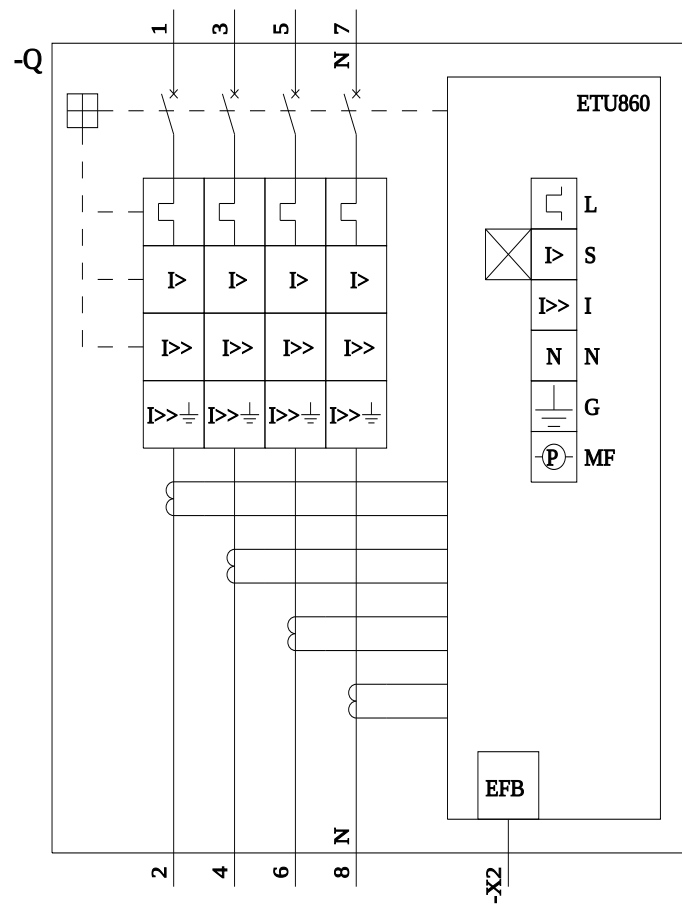
CAX-Online-Generator

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

Tender specifications

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





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