



circuit breaker 3VA2 IEC Frame 1000 breaking capacity class M Icu=55 kA @ 415 V 4-pole, line protection ETU860, LSIG, In=630 A overload protection Ir=250 A...630 A short-circuit protection I_{sd}=0.6..10x I_n, I_i=1.5..12x I_n neutral conductor protection adjustable (OFF, up to 160%) ground-fault protection, can be switched off I_g=0.2...1 x I_n= tg=0.05-0.8s nut keeper kit

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	144 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	48 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	17.42 kg
Current	
operational current	
• at 40 °C	630 A
• at 45 °C	630 A
• at 50 °C	630 A
• at 55 °C	630 A
• at 60 °C	630 A
• at 65 °C	630 A
• at 70 °C	630 A
Switching capacity according to IEC 60947	
switching capacity class of the circuit breaker	M
maximum short-circuit current breaking capacity (I _{cu})	
• at 240 V	85 kA
• at 415 V	55 kA
• at 440 V	55 kA
• at 500 V	36 kA

<ul style="list-style-type: none"> • at 690 V 	25 kA
operating short-circuit current breaking capacity (Ics)	
<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 19 kA
short-circuit current making capacity (Icm)	
<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 52.5 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 _{2t} characteristic	
<ul style="list-style-type: none"> • minimum • maximum 	252 A 630 A
adjustable response value delay time (t _r) / for L-tripping / with I _{2t} characteristic	
<ul style="list-style-type: none"> • minimum • maximum 	0.5 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 	378 A 6 300 A
adjustable response value setting current (I _{sd}) / of S-trip / with I _{2t} characteristic	
<ul style="list-style-type: none"> • minimum • maximum 	378 A 6 300 A
adjustable response value delay time (t _{sd}) / for S-tripping / with I _{0t} characteristic	
<ul style="list-style-type: none"> • minimum • maximum 	0.05 s 0.5 s
adjustable response value delay time (t _{sd}) / for S-tripping / with I _{2t} characteristic	
<ul style="list-style-type: none"> • minimum • maximum 	0.05 s 0.5 s
adjustable response value setting current (I _l) / for I-tripping	
<ul style="list-style-type: none"> • minimum • maximum 	945 A 7 560 A
adjustable current response value current / for G-tripping / with standard characteristic	
<ul style="list-style-type: none"> • initial value • full-scale value 	126 A 630 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 	126 A 630 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 _n) / for N-tripping	
<ul style="list-style-type: none"> • minimum • maximum 	126 A 630 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



[Miscellaneous](#)



[Confirmation](#)



General Product Approval	EMV	Test Certificates	Maritime application
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[Miscellaneous](#)

[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)



Maritime application	other
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[CCS \(China Classification Society\)](#)

[Miscellaneous](#)

other	Dangerous goods	Environment
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**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?mfb=3VA2563-5KQ42-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA2563-5KQ42-0AA0>

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

https://www.automation.siemens.com/bilddb/cax_en.aspx?mfb=3VA2563-5KQ42-0AA0

CAX-Online-Generator

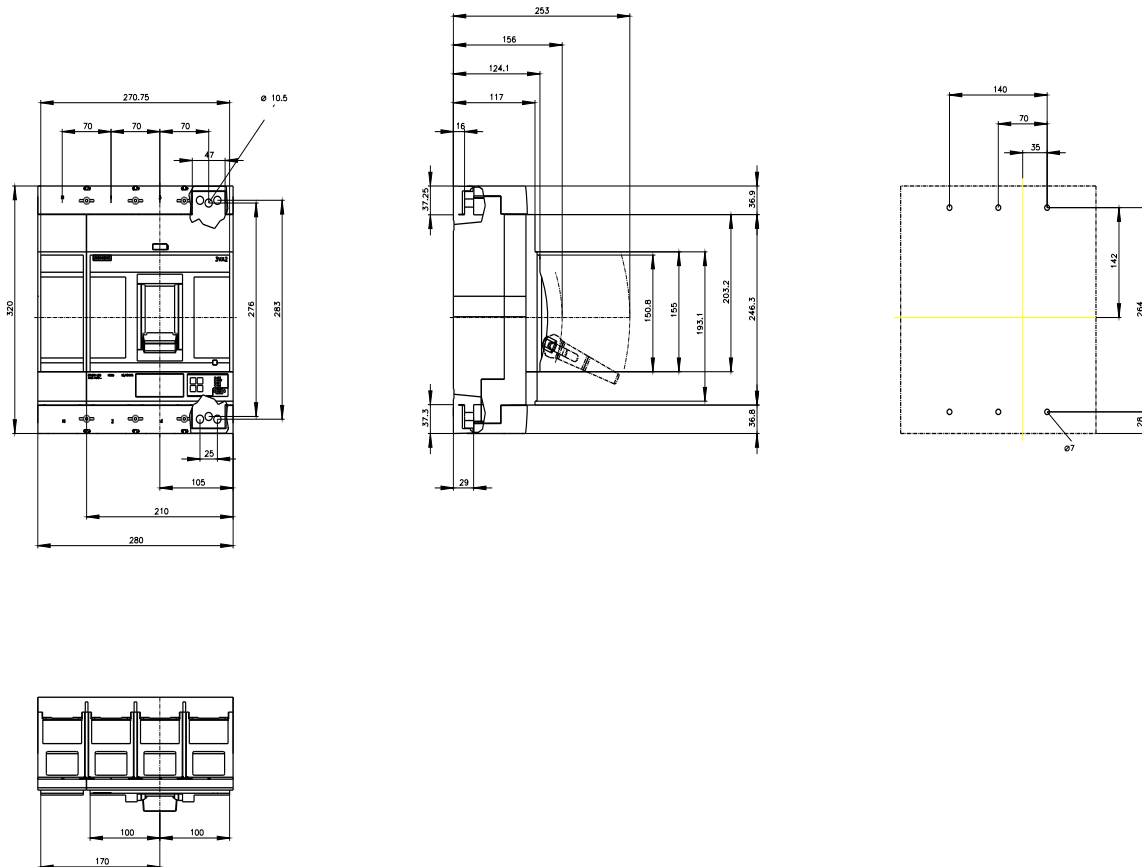
<https://www.siemens.com/cax>

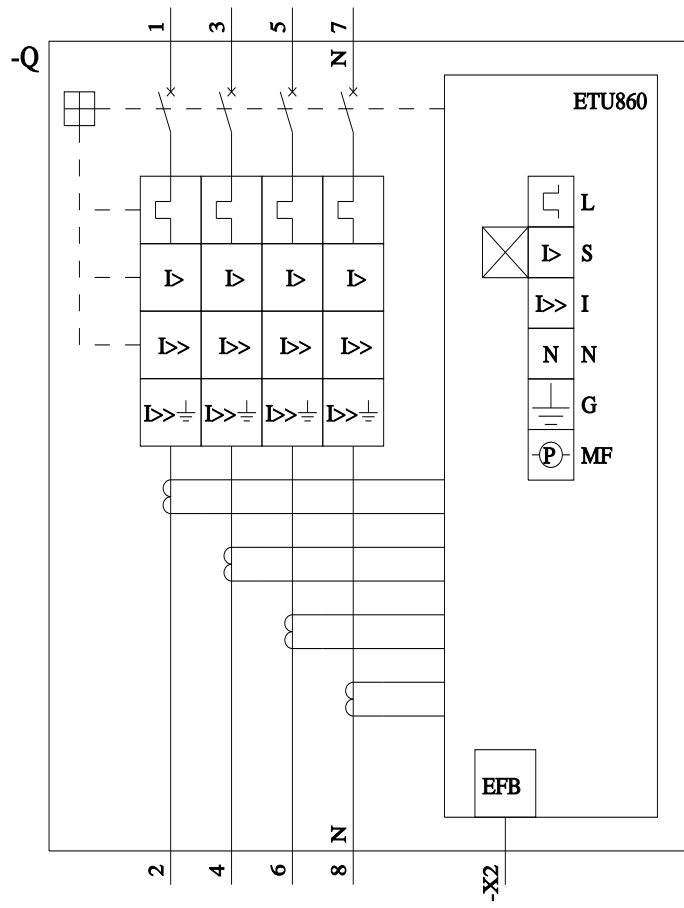
Tender specifications

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

Characteristic curves

[https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP="HAUPT"></mmp_prod_no>](https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP=)





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