SIEMENS

Data sheet



Circuit breaker 3VA6 UL Frame 150 breaking capacity class M 35kA @ 480V 4-pole, Line protection ETU860, LSIG, In=100A overload protection, 100% rated Ir=40A...100A Short-circuit protection Isd=0.6..10x In, Ii=1.5..12x In N conductor protection adjustable (OFF, up to 150%) Ground-fault protection Ig=0.2...1 x In=tg=0.05-0.8s without connection

Model	
product brand name	SENTRON
product designation	Molded-case circuit breaker
product designation / according to UL file	MDAE
design of the product	System protection
design of the load switch / according to UL 489 / Heating, Air Conditioning, and Refrigeration circuit breaker (HACR Type)	Yes
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	13 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	4.33 W
mechanical service life (operating cycles) / typical	25 000
electrical endurance (operating cycles) / at AC-1 / at 380/415 V	14 000
electrical endurance (operating cycles) / at AC-1 / at 690 V	9 800
electrical endurance (operating cycles) / at 480 V	14 000
electrical endurance (operating cycles) / at 600 V	9 800
product feature / for neutral conductors / upgradable/retrofittable / 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	2.9 kg
Current	
marking / according to UL 489 / 100%-rated breaker	Yes
operational current	
• at 40 °C	100 A
● at 45 °C	100 A
● at 50 °C	100 A
● at 55 °C	100 A
• at 60 °C	100 A
• at 65 °C	100 A
• at 70 °C	100 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 690 V	2.5 kA
operating short-circuit current breaking capacity (lcs)	
• at 240 V	85 kA
● at 415 V	55 kA
● at 690 V	2.5 kA
short-circuit current making capacity (Icm)	
• at 240 V	187 kA
• at 415 V	121 kA
• at 690 V	3.8 kA
Switching capacity according to UL 489	
current breaking capacity	400 kA
• at 240 V	100 kA
at 480 V at 600 V	35 kA 18 kA
Adjustable parameters	10 KA
adjustable response value setting current (Ir) / of the L-trip / with	
12t characteristic	
• minimum	40 A
• maximum	100 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 (lsd) / of S-trip / with l0t characteristic	
• minimum	60 A
• maximum	1 000 A
adjustable response value setting current (lsd) / of S-trip / with l2t characteristic	
• minimum	60 A
maximum adjustable response value delay time (tad) / for S tripping (with	1 000 A
adjustable response value delay time (tsd) / for S-tripping / with l0t characteristic	
• minimum	0.05 s
maximum	0.5 s
adjustable response value delay time (tsd) / for S-tripping / with 12t characteristic	
• minimum	0.05 s
maximum	0.5 s
adjustable response value setting current (li) / for I-tripping	
• minimum	150 A
• maximum	1 200 A
adjustable current response value current / for G-tripping / with standard characteristic	
• initial value	20 A
full-scale value	100 A
adjustable response value delay time (tg) / for G-tripping / with l0t characteristic	
• minimum	0.05 s
• maximum	0.8 s
adjustable response value setting current (lg) / for G-tripping / with l2t characteristic	
• minimum	20 A
• maximum	100 A
adjustable response value delay time (tg) / for G-tripping / with 12t characteristic	
• minimum	0.05 s
maximum adjustable patting suggest (InN) / for N tringing	0.8 s
adjustable setting current (InN) / for N-tripping	20.4
minimum maximum	20 A 150 A
adjustable delay time / of S-trip / with I2t characteristic	0.5 s
aujustable delay time / OFS-trip / With 12t Characteristic	U.J 3

adjustable current response value current / of instantaneous short-circuit trip unit	
• minimum	150 A
• maximum	1 200 A
design of the N-conductor protection	adjustable OFF; 20% to 150%
product function / grounding protection	Yes
total break time / for G-tripping / with standard characteristic	
• initial value	0.05 s
• full-scale value	0.8 s
Mechanical Design	
product component	
 undervoltage release 	No
 voltage trigger 	No
trip indicator	No
height [in]	7.8 in
height	198 mm
width [in]	5.51 in
width	140 mm
depth [in]	3.39 in
depth	86 mm
Connections	
arrangement of electrical connectors / for main current circuit	Without connection
type of electrical connection / for main current circuit	Without
Auxiliary circuit	
number of CO contacts / for auxiliary contacts	0
Accessories	
product extension / optional / motor drive	Yes
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 / according to IEC 81346-2	Q
certificate of suitability / as approval for NAVAL (no combat vessels) / supplement SB	Yes
General Product Approval	



Confirmation





Miscellaneous



EMC Declaration of Conformity Marine / Shipping other











Confirmation

other Dangerous Good

<u>Miscellaneous</u> <u>Miscellaneous</u> <u>Transport Information</u>

Further information

Siemens has decided to exit the Russian market (see here).

https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

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=3VA6110-5KQ41-2AA0

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

https://support.industry.siemens.com/cs/ww/en/ps/3VA6110-5KQ41-2AA0

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

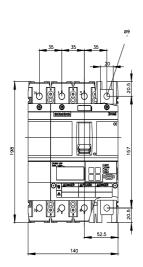
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA6110-5KQ41-2AA0

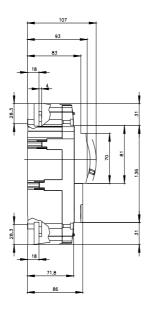
CAx-Online-Generator

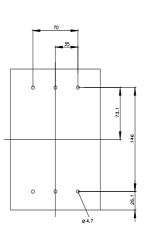
http://www.siemens.com/cax

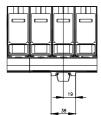
Tender specifications

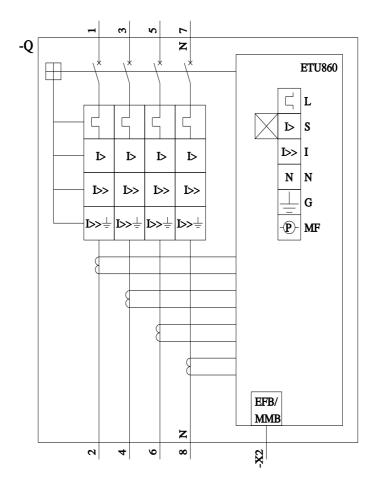
http://www.siemens.com/specifications

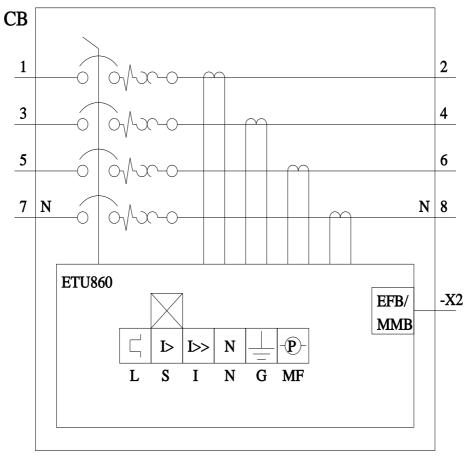












last modified: 8/14/2023 🖸



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