SIEMENS

Data sheet



Circuit breaker 3VA6 UL frame 250 breaking capacity class C 100kA @ 480V 4-pole, Line protection ETU830, LIG, In=100A overload protection, 100% rated Ir=40A...100A Short-circuit protection Ii=1.5...12 x In 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	CFAE
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	ETU830
protection function of the overcurrent release	LIG
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	6.7 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	2.23 W
mechanical service life (operating cycles) / typical	25 000
electrical endurance (operating cycles) / at AC-1 / at 380/415 V	12 000
electrical endurance (operating cycles) / at AC-1 / at 690 V	8 400
electrical endurance (operating cycles) / at 480 V	12 000
electrical endurance (operating cycles) / at 600 V	8 400
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	С
maximum short-circuit current breaking capacity (Icu)	

• at 240 V	150 kA
• at 415 V	110 kA
● at 690 V	3 kA
operating short-circuit current breaking capacity (lcs)	
● at 240 V	150 kA
● at 415 V	110 kA
● at 690 V	3 kA
short-circuit current making capacity (Icm)	
• at 240 V	330 kA
● at 415 V	242 kA
• at 690 V	4.5 kA
Switching capacity according to UL 489	
current breaking capacity	
● at 240 V	200 kA
• at 480 V	100 kA
• at 600 Y/347 V	35 kA
• at 600 V	35 kA
Adjustable parameters	
adjustable response value setting current (Ir) / of the L-trip / with	
I2t 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 (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 (Ig) / for G-tripping / with I2t characteristic	
• minimum	20 A
• maximum	100 A
adjustable response value delay time (tg) / for G-tripping / with l2t characteristic	
• minimum	0.05 s
• maximum	0.8 s
adjustable setting current (InN) / for N-tripping	
• minimum	20 A
• maximum	160 A
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 160%
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





<u>Miscellaneous</u>



EMC Declaration of Conformity Marine / Shipping other











Confirmation

other Dangerous Good

Miscellaneous <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=3VA6210-7KM41-2AA0

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

https://support.industry.siemens.com/cs/ww/en/ps/3VA6210-7KM41-2AA0

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

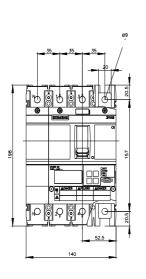
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA6210-7KM41-2AA0

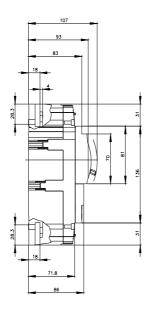
CAx-Online-Generator

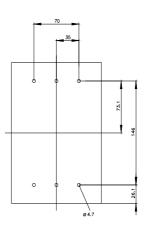
http://www.siemens.com/cax

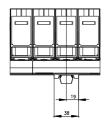
Tender specifications

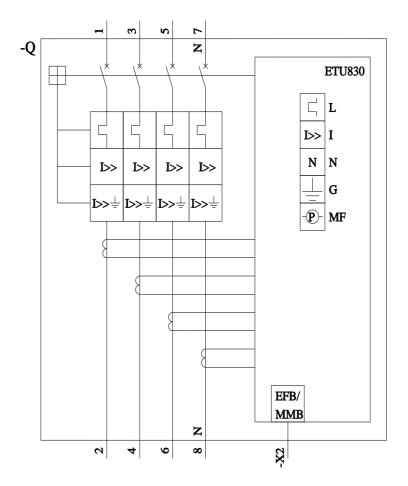
http://www.siemens.com/specifications

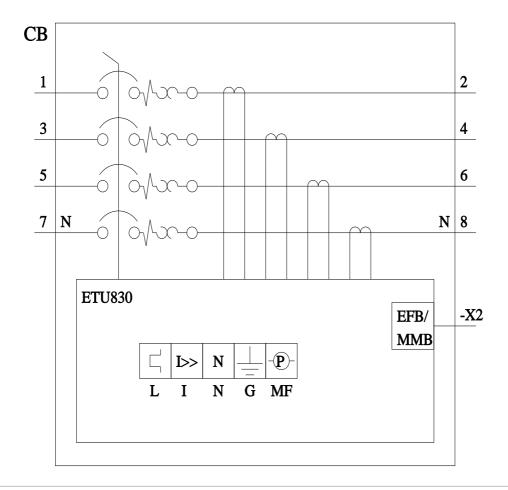












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