3VA6580-6KT46-2AA0

Data sheet



Circuit breaker 3VA6 UL Frame 800 breaking capacity class H 65kA @ 480 V 4-pole, Line protection ETU856, LSI, In=800A overload protection, 100% rated Ir=315A ...800A Short-circuit protection Isd=0.6..10x In, Ii=1.5..10x In N conductor protection adjustable (OFF, up to 160%) Ground-fault alarm message via EFB300 or COM cable connection on both sides

Model	
product brand name	SENTRON
product designation	Molded-case circuit breaker
product designation / according to UL file	HMAE
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	ETU856
protection function of the overcurrent release	LSI-G-alarm only
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	231 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	77 W
mechanical service life (operating cycles) / typical	10 000
electrical endurance (operating cycles) / at AC-1 / at 380/415 V	5 800
electrical endurance (operating cycles) / at AC-1 / at 690 V	4 000
electrical endurance (operating cycles) / at 480 V	5 800
electrical endurance (operating cycles) / at 600 V	4 000
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	23.298 kg
Current	
marking / according to UL 489 / 100%-rated breaker	Yes
operational current	
• at 40 °C	0 A
• at 45 °C	0 A
• at 50 °C	0 A
Switching capacity according to IEC 60947	
switching capacity class of the circuit breaker	Н
maximum short-circuit current breaking capacity (lcu)	
• at 240 V	110 kA
• at 415 V	85 kA
• at 690 V	35 kA
operating short-circuit current breaking capacity (lcs)	

	440 kA
• at 240 V	110 kA
• at 415 V	85 kA
• at 690 V	19 kA
short-circuit current making capacity (Icm)	
• at 240 V	242 kA
• at 415 V	187 kA
• at 690 V	74 kA
Switching capacity according to UL 489	
current breaking capacity	
● at 240 V	150 kA
• at 480 V	65 kA
● at 600 V	35 kA
Adjustable parameters	
adjustable response value setting current (Ir) / of the L-trip / with I2t characteristic	
• minimum	320 A
maximum	800 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	480 A
• maximum	8 000 A
adjustable response value setting current (Isd) / of S-trip / with I2t characteristic	
• minimum	480 A
• maximum	8 000 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 l2t characteristic	
• minimum	0.05 s
• maximum	0.5 s
adjustable response value setting current (li) / for I-tripping	
• minimum	1 200 A
• maximum	8 000 A
adjustable current response value current / for G-tripping / with standard characteristic	
• initial value	160 A
• full-scale value	800 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	160 A
• maximum	800 A
adjustable response value delay time (tg) / for G-tripping / with l2t characteristic	
• minimum	0.05 s
• maximum	0.8 s
adjustable absolute value setting current (InN) / for N-tripping	
• minimum	160 A
• maximum	800 A
adjustable delay time / of S-trip / with I2t characteristic	0.5 s
adjustable current response value current / of instantaneous short-circuit trip unit	
• minimum	1 200 A
• maximum	8 000 A

design of the N-conductor protection	adjustable OFF; 20% to 100%	
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]	12.91 in	
height	328 mm	
width [in]	11.02 in	
type of connectable conductor cross-sections / of the round conductor terminal / stranded	4 x (4/0 - 500 kcmil)	
width	280 mm	
depth [in]	4.72 in	
depth	120 mm	
Connections		
arrangement of electrical connectors / for main current circuit	Front connection	
type of electrical connection / for main current circuit	circular conductor terminal on both sides	
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	
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		EMC

Confirmation





Miscellaneous





Declaration of Conformity

Marine / Shipping

other









Confirmation

Miscellaneous

other **Dangerous Good**

Miscellaneous **Transport Information**

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=3VA6580-6KT46-2AA0

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

https://support.industry.siemens.com/cs/ww/en/ps/3VA6580-6KT46-2

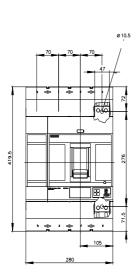
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA6580-6KT46-2AA0

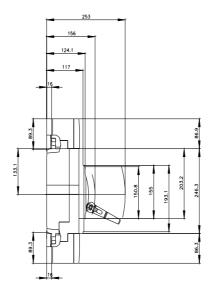
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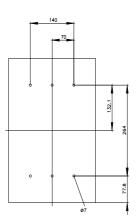
http://www.siemens.com/cax

Tender specifications

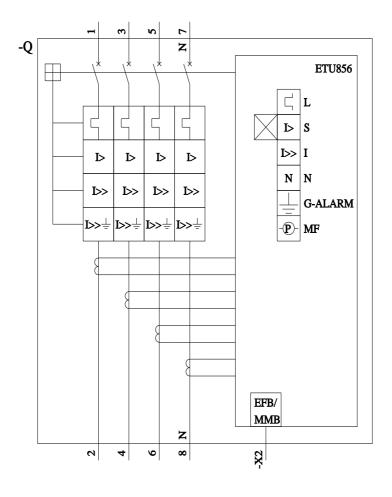
http://www.siemens.com/specifications

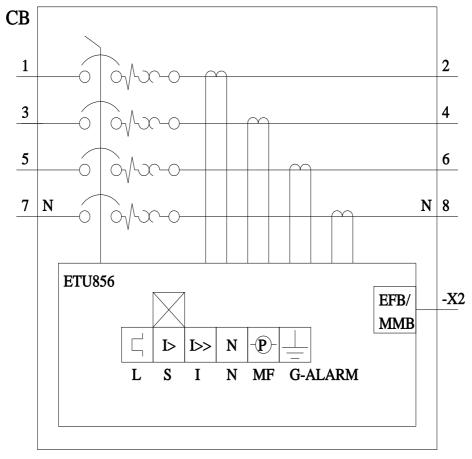












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