SIEMENS

Data sheet



circuit breaker 3VA6 UL frame 600 breaking capacity class H 65kA @ 480 V 3-pole, line protection ETU560, LSIG, In=600A overload protection Ir=240A ...600A short-circuit protection Isd=0.6.9x In, Ii=1.5..9x In N conductor protection opt. w. ext. CT; up to 160% ground-fault protection Ig=0.2... 1 x In, tg=0.05-0.8s cable connection on both sides

Model	
product brand name	SENTRON
product designation	Molded-case circuit breaker
product designation / according to UL file	HLAE
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	ETU560
protection function of the overcurrent release	LSIG
number of poles	3
General technical data	
insulation voltage / rated value	800 V
operating voltage / at AC / rated value	690 V
power loss [W] / maximum	151 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	50.33 W
mechanical service life (operating cycles) / typical	20 000
electrical endurance (operating cycles) / at AC-1 / at 380/415 V	4 000
electrical endurance (operating cycles) / at AC-1 / at 690 V	3 500
electrical endurance (operating cycles) / at 480 V	4 000
electrical endurance (operating cycles) / at 600 V	3 500
product feature / for neutral conductors / upgradable/retrofittable / short-circuit and overload proof	Yes
ground-fault monitoring version	Summation current formation L-conductor
product function	
 communication function 	Yes
 other measurement function 	No
Net Weight	9.621 kg
Current	
marking / according to UL 489 / 100%-rated breaker	No
operational current	
• at 40 °C	600 A
• at 45 °C	600 A
• at 50 °C	570 A
● at 55 °C	540 A
● at 60 °C	510 A
● at 65 °C	480 A
• at 70 °C	450 A
Switching capacity according to IEC 60947	
switching capacity class of the circuit breaker	Н
maximum short-circuit current breaking capacity (Icu)	

• at 240 V	110 kA
• at 415 V	85 kA
• at 690 V	6 kA
operating short-circuit current breaking capacity (lcs)	
• at 240 V	110 kA
• at 415 V	85 kA
• at 690 V	6 kA
short-circuit current making capacity (lcm)	
• at 240 V	242 kA
• at 415 V	187 kA
• at 690 V	9 kA
Switching capacity according to UL 489	
current breaking capacity	400 l.4
• at 240 V	100 kA
• at 480 V	65 kA
• at 600 V	22 kA
Adjustable parameters	
adjustable response value setting current (Ir) / of the L-trip / with I2t characteristic	
• minimum	240 A
maximum	600 A
adjustable response value delay time (tr) / for L-tripping / with I2t characteristic	
• minimum	0.5 s
maximum	15 s
adjustable response value setting current (Isd) / of S-trip / with l0t characteristic	
• minimum	360 A
• maximum	5 400 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
adjustable current response value current / for G-tripping / with standard characteristic	
• initial value	120 A
full-scale value	600 A
adjustable response value delay time (tg) / for G-tripping / with l0t characteristic	
• minimum	0.05 s
maximum	0.8 s
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	0.2 A
• maximum	1.6 A
adjustable delay time / of S-trip / with I2t characteristic	0.5 s
adjustable current response value current / of instantaneous short-circuit trip unit	000 4
• minimum	900 A
maximum design of the N conductor protection	5 400 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	0.05 c
• 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]	9.76 in	
height	248 mm	
width [in]	5.43 in	
type of connectable conductor cross-sections / of the round conductor terminal / stranded	2 x (2/0 - 600 kcmil)	
width	138 mm	
depth [in]	4.33 in	
depth	110 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	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		EMC

Confirmation





Miscellaneous





Declaration of Conformity

Marine / Shipping

other

Dangerous Good







Miscellaneous

Confirmation

Transport Information

Further information

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

 $\underline{\text{https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business}}$

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=3VA6460-6JQ36-0AA0

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

https://support.industry.siemens.com/cs/ww/en/ps/3VA6460-6JQ36-0AA0

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

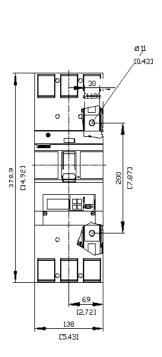
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA6460-6JQ36-0AA0

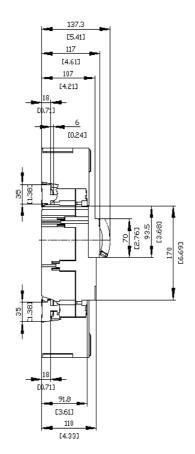
CAx-Online-Generator

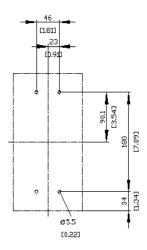
http://www.siemens.com/cax

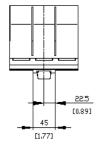
Tender specifications

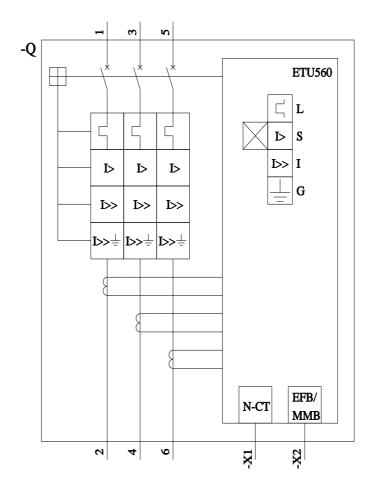
http://www.siemens.com/specifications

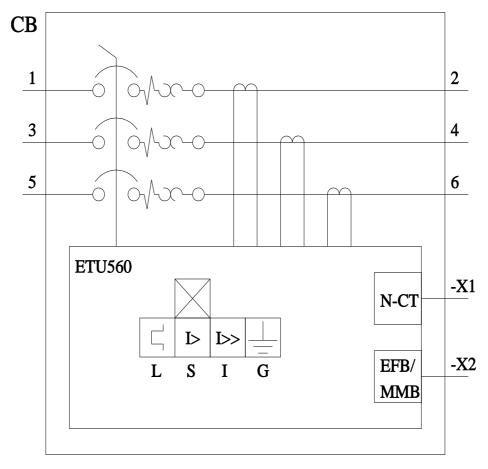












last modified: 8/14/2023 🖸



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Siemens:

3VA64606JQ360AA0