## **SIEMENS**

## **Data sheet**



Circuit breaker 3VA6 UL Frame 600 breaking capacity class H 65kA @ 480 V 3-pole, Line protection ETU560, LSIG, In=400A overload protection, 100% rated Ir=160A ...400A Short-circuit protection Isd=0.6..10x In, Ii=1.5..12x In N conductor protection optionally with external CT; up to 160% Ground-fault protection Ig=0.2... 1 x In, tg=0.05-0.8s nut keeper kit 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	70 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	23.33 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	
<ul> <li>communication function</li> </ul>	Yes
<ul> <li>other measurement function</li> </ul>	No
Net Weight	5.596 kg
Current	
marking / according to UL 489 / 100%-rated breaker	Yes
operational current	
• at 40 °C	400 A
● at 45 °C	400 A
● at 50 °C	400 A
● at 55 °C	400 A
• at 60 °C	400 A
• at 65 °C	400 A
• at 70 °C	400 A
Switching capacity according to IEC 60947	
switching capacity class of the circuit breaker	Н
maximum short-circuit current breaking capacity (Icu)	

a at 240 V	440 kA
• at 240 V	110 kA
<ul><li>at 415 V</li><li>at 690 V</li></ul>	85 kA 6 kA
operating short-circuit current breaking capacity (Ics)	O MA
• at 240 V	110 kA
• at 415 V	85 kA
• at 690 V	6 kA
short-circuit current making capacity (Icm)	
• at 240 V	242 kA
• at 415 V	187 kA
• at 690 V	9 kA
Switching capacity according to UL 489	
current breaking capacity	
• 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	160 A
maximum	400 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 l0t characteristic	
• minimum	240 A
maximum	4 000 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 I2t characteristic	
• minimum	0.05 s
adjustable current response value current / for G-tripping / with	
standard characteristic	
• initial value	80 A
full-scale value	400 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	
• minimum	600 A
maximum	4 800 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	
<ul> <li>voltage trigger</li> </ul>	No	
trip indicator	No	
height [in]	9.76 in	
height	248 mm	
width [in]	5.43 in	
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	nut keeper kit on both ends	
type of connectable conductor cross-sections / for flat-bar terminal connection / minimum	20 x 1 mm	
type of connectable conductor cross-sections / for flat-bar terminal connection / maximum	35 x 10 mm	
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		
<ul><li>during operation / minimum</li></ul>	-25 °C	
<ul><li>during operation / maximum</li></ul>	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		Declaration of Conformity



Confirmation



**Miscellaneous** 





Declaration of Conformity

Marine / Shipping other

Dangerous Good





Confirmation

**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=3VA6440-6JQ32-2AA0

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

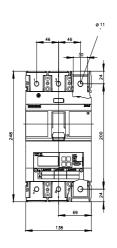
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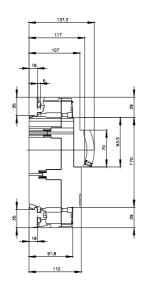
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

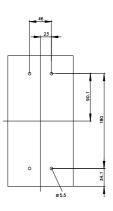
http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VA6440-6JQ32-2AA0

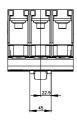
**CAx-Online-Generator** 

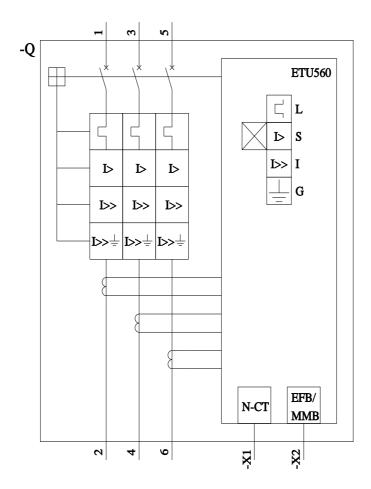
http://www.siemens.com/cax Tender specifications

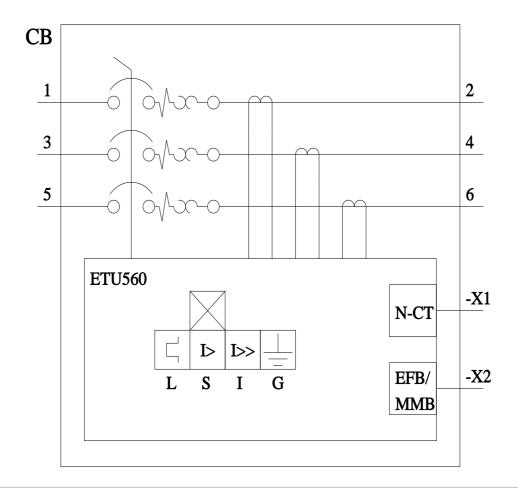












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