3VA6440-7HL31-0AA0

Data sheet



circuit breaker 3VA6 UL frame 600 breaking capacity class C 100kA @ 480V 3-pole, line protection ETU320, LI, In=400A overload protection Ir=160A...400A short-circuit protection Ii=1.5...12 x In without connection

Model	
product brand name	SENTRON
product designation	Molded-case circuit breaker
product designation / according to UL file	CLAE
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	ETU320
protection function of the overcurrent release	Ц
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	No
ground-fault monitoring version	without
product function	
 communication function 	No
other measurement function	No
Net Weight	5.3 kg
Current	
marking / according to UL 489 / 100%-rated breaker	No
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	С
maximum short-circuit current breaking capacity (Icu)	

* #1240 V		
### 4600 V Operating short citizat current breaking capacity (tox) ### 415 V ### 415 V ### 415 V ### 416 V	● at 240 V	150 kA
operating short-credit current breaking capacity (ics) 100 kA 110 kA	● at 415 V	110 kA
### 249 V 150 KA ### 241 S V 150 KA ### 241 S V 24 KA ### 241 S V 240 KA ### 241 S V 240 KA ### 241 S V 240 KA ### 242 S V 240 KA ### 241 S	• at 690 V	6 kA
+ 4145 V	operating short-circuit current breaking capacity (Ics)	
### ### ### ##########################	• at 240 V	150 kA
### and 240 V	• at 415 V	110 kA
eat 415 V	• at 690 V	6 kA
• at 415 V	short-circuit current making capacity (lcm)	
• 16 00 V 5 kk	• at 240 V	330 kA
Switching capacity according to UL 499 current breaking capacity	• at 415 V	242 kA
current breaking capacity al 240 V at 480 V at 480 V at 600 V Adjustable parameters adjustable response value setting current (ir) / of the L-trip / with IZI characteristic minimum adjustable response value setting current (ir) / for L-tripping / with IZI otherecteristic minimum adjustable response value setting current (ii) / for L-tripping / with IZI otherecteristic minimum maximum adjustable setting current (iii) / for I-tripping minimum maximum 4800 A adjustable setting current (ink) / for N-tripping minimum maximum dispussable current response value current / of instantaneous short-circuit trip unit minimum maximum 4800 A adjustable current response value current / of instantaneous short-circuit trip unit minimum morpoduct function / grounding protection No Machanical Design product component undervoltage release No voltage trigger voltage trigger No voltage trigger voltage trigger No voltage trigger voltage trigge	● at 690 V	9 kA
at 240 V	Switching capacity according to UL 489	
at 240 V		
Adjustable parameters adjustable response value setting current (in) / of the L-trip / with Lit characteristic		200 kA
Adjustable parameters adjustable parameters adjustable parameters adjustable response value setting current (if) / of the L-tirp / with l2t characteristic maximum maximum maximum adjustable response value delay time (tr) / for L-tiripping / with l2t characteristic minimum maximum	• at 480 V	100 kA
Adjustable parameters adjustable response value setting current (ir) / of the L-trip / with 12t characteristic minimum maximum adjustable response value delay time (tr) / for L-tripping / with 12t characteristic minimum adjustable response value setting current (ii) / for L-tripping / with 12t characteristic minimum adjustable response value setting current (ii) / for L-tripping minimum maximum adjustable sesponse value setting current (iii) / for I-tripping minimum maximum A 800 A adjustable setting current (InN) / for N-tripping minimum o A adjustable setting current (InN) / for N-tripping minimum o A adjustable setting current (InN) / for N-tripping minimum o A adjustable setting current (InN) / for N-tripping minimum o A adjustable setting current (InN) / for N-tripping minimum o A adjustable setting current (InN) / for N-tripping minimum o A adjustable setting current (InN) / for N-tripping minimum o A adjustable setting current (InN) / for N-tripping minimum o A adjustable setting current (InN) / for N-tripping minimum o A adjustable setting current (InN) / for N-tripping minimum o A adjustable setting current (InN) / for N-tripping minimum o A adjustable setting current (InN) / for N-tripping minimum o A 4 800 A A 800 A A 800 A A 800		35 kA
adjustable response value setting current (ir) / of the L-trip / with 12th characteristic	Adjustable parameters	
Izi characteristic minimum maximum ma		
e maximum adjustable response value delay time (tr) / for L-tripping / with 12t characteristic e minimum maximum 17 s adjustable response value setting current (ii) / for I-tripping e minimum maximum 4800 A adjustable response value setting current (iii) / for I-tripping e minimum maximum 4800 A adjustable setting current (inN) / for N-tripping e minimum o A maximum 0 A adjustable current response value current / of instantaneous short-circuit fly unit e minimum 600 A maximum 4800 A adjustable current response value current / of instantaneous short-circuit fly unit e minimum 600 A maximum A800 A product function / grounding protection No Mechanical Design product tomponent e undervoltage release voltage trigger intip indicator No height [in] 9.76 in height [in] 4.33 in depth [in] 4.33 in depth [in] 4.33 in depth [in] Connections arrangement of electrical connectors / for main current circuit Without connection garangement of electrical connectors / for main current circuit Without connection ype of electrical connectors / for main current circuit Without connection ype of electrical connectors / for main current circuit Without connection ype of electrical connectors / for main current circuit Without connection ype of electrical connectors / for main current circuit Without connection ype of electrical connectors / for main current circuit Without connection ype of electrical connectors / for main current circuit Without connection ype of electrical connectors / for main current circuit Without connection ype of electrical connectors / for main current circuit Without connection ype of electrical connectors / for main current circuit Without connection ype of electrical connection / for main current circuit Without connection ype of electrical connection / for main current circuit Without connection ype of electrical connection / for main current circuit Without connection ype of electrical connection / for main current circuit Without		
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characteristic minimum maximum modepti [in]	• maximum	400 A
e maximum adjustable response value setting current (II) / for I-tripping e minimum		
adjustable response value setting current (iii) / for I-tripping	• minimum	0.5 s
adjustable response value setting current (iii) / for I-tripping	• maximum	
minimum maximum maxim		
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 during operation / minimum during operation / maximum during storage / minimum C 	·	IP40
 during operation / maximum during storage / minimum C 	•	05.10
• during storage / minimum -40 °C		
during storage / maximum 80 °C		
	during storage / maximum	80 °C

reference code / according to IEC 81346-2 certificate of suitability / as approval for NAVAL (no combat vessels) / supplement SB General Product Approval

Confirmation









Miscellaneous

General Product Approval

EMC

Declaration of Conformity

Marine / Shipping













Marine / Shipping

other



Confirmation

Miscellaneous

Miscellaneous

Transport Information

Dangerous Good

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)

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

https://support.industry.siemens.com/cs/ww/en/ps/3VA6440-7HL31-0AA0

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

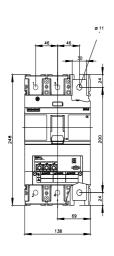
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA6440-7HL31-0AA0

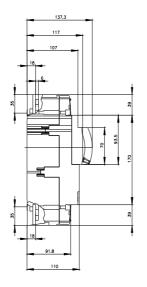
CAx-Online-Generator

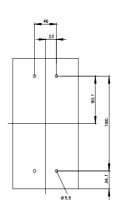
http://www.siemens.com/cax

Tender specifications

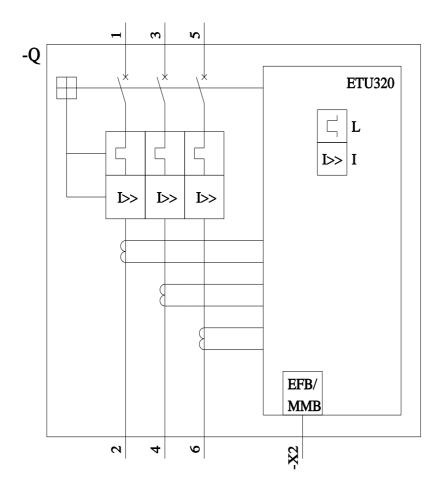
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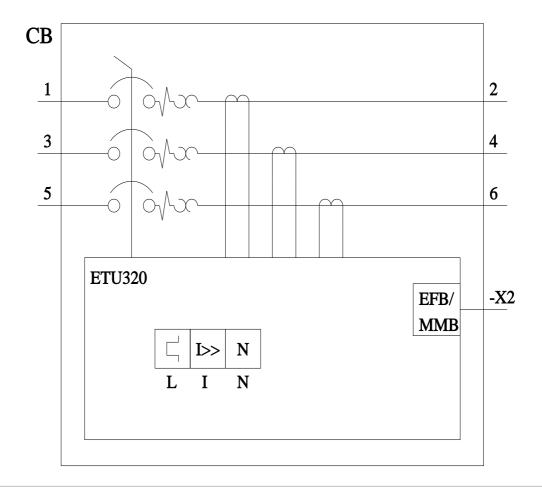












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