3VA6440-7HL32-0AA0

## **Data sheet**



circuit breaker 3VA6 UL frame 600 breaking capacity class C 100kA @ 480 V 3-pole, line protection ETU320, LI, In=400A overload protection Ir=160A ...400A short-circuit protection li=1.5...12 x In nut keeper kit on both sides

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	
<ul> <li>communication function</li> </ul>	No
other measurement function	No
Net Weight	5.596 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)	

• at 240 V	150 kA
● at 415 V	110 kA
● at 690 V	6 kA
operating short-circuit current breaking capacity (lcs)	
• at 240 V	150 kA
• at 415 V	110 kA
• at 690 V	6 kA
short-circuit current making capacity (Icm)	
• at 240 V	330 kA
• at 415 V	242 kA
• at 690 V	9 kA
Switching capacity according to UL 489	
current breaking capacity	
• at 240 V	200 kA
• at 480 V	100 kA
• at 600 V	35 kA
Adjustable parameters	
adjustable response value setting current (Ir) / of the L-trip / with	
I2t characteristic	
• minimum	150 A
maximum	400 A
adjustable response value delay time (tr) / for L-tripping / with I2t characteristic	
• minimum	0.5 s
• maximum	17 s
adjustable current response value current / of instantaneous short-circuit trip unit	
• minimum	600 A
• maximum	4 800 A
product function / grounding protection	No
Mechanical Design	
product component	
product component  • undervoltage release	No
	No No
undervoltage release	
<ul><li>undervoltage release</li><li>voltage trigger</li></ul>	No
<ul><li>undervoltage release</li><li>voltage trigger</li><li>trip indicator</li></ul>	No No
undervoltage release voltage trigger trip indicator height [in]	No No 9.76 in
undervoltage release voltage trigger trip indicator height [in] height	No No 9.76 in 248 mm
undervoltage release voltage trigger trip indicator height [in] height width [in]	No No 9.76 in 248 mm 5.43 in
undervoltage release  voltage trigger  trip indicator  height [in]  height  width [in]	No No 9.76 in 248 mm 5.43 in 138 mm
undervoltage release voltage trigger trip indicator height [in] height width [in] width depth [in]	No No 9.76 in 248 mm 5.43 in 138 mm 4.33 in
undervoltage release voltage trigger trip indicator height [in] height width [in] width depth [in] depth	No No 9.76 in 248 mm 5.43 in 138 mm 4.33 in
undervoltage release  voltage trigger  trip indicator  height [in]  height  width [in]  width  depth [in]  depth  Connections  arrangement of electrical connectors / for main current circuit	No No 9.76 in 248 mm 5.43 in 138 mm 4.33 in 110 mm
undervoltage release voltage trigger trip indicator height [in] height width [in] width depth [in] depth  Connections arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit	No No 9.76 in 248 mm 5.43 in 138 mm 4.33 in 110 mm  Front connection nut keeper kit on both ends
undervoltage release voltage trigger trip indicator height [in] height width [in] width depth [in] depth  Connections arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit type of connectable conductor cross-sections / for flat-bar terminal connection / minimum	No No 9.76 in 248 mm 5.43 in 138 mm 4.33 in 110 mm  Front connection nut keeper kit on both ends 20 x 1 mm
undervoltage release  voltage trigger  trip indicator  height [in]  height  width [in]  width  depth [in]  depth  Connections  arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit type of connectable conductor cross-sections / for flat-bar	No No 9.76 in 248 mm 5.43 in 138 mm 4.33 in 110 mm  Front connection nut keeper kit on both ends
undervoltage release  voltage trigger  trip indicator  height [in]  height  width [in]  width  depth [in]  depth  Connections  arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit type of connectable conductor cross-sections / for flat-bar terminal connectable conductor cross-sections / for flat-bar type of connectable conductor cross-sections / for flat-bar	No No 9.76 in 248 mm 5.43 in 138 mm 4.33 in 110 mm  Front connection nut keeper kit on both ends 20 x 1 mm
undervoltage release voltage trigger trip indicator height [in] height width [in] width depth [in] depth  Connections arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit type of connectable conductor cross-sections / for flat-bar terminal connection / minimum type of connectable conductor cross-sections / for flat-bar terminal connection / maximum	No No 9.76 in 248 mm 5.43 in 138 mm 4.33 in 110 mm  Front connection nut keeper kit on both ends 20 x 1 mm
undervoltage release voltage trigger trip indicator height [in] height width [in] width depth [in] depth  Connections arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit type of connectable conductor cross-sections / for flat-bar terminal connection / minimum type of connectable conductor cross-sections / for flat-bar terminal connection / maximum  Auxiliary circuit	No No 9.76 in 248 mm 5.43 in 138 mm 4.33 in 110 mm  Front connection nut keeper kit on both ends 20 x 1 mm  35 x 10 mm
undervoltage release voltage trigger trip indicator height [in] height width [in] width depth [in] depth  Connections arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit type of connectable conductor cross-sections / for flat-bar terminal connection / minimum type of connectable conductor cross-sections / for flat-bar terminal connection / maximum  Auxiliary circuit number of CO contacts / for auxiliary contacts	No No 9.76 in 248 mm 5.43 in 138 mm 4.33 in 110 mm  Front connection nut keeper kit on both ends 20 x 1 mm  35 x 10 mm
undervoltage release voltage trigger trip indicator height [in] height width [in] width depth [in] depth  Connections arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit type of connectable conductor cross-sections / for flat-bar terminal connection / minimum  type of connectable conductor cross-sections / for flat-bar terminal connection / maximum  Auxiliary circuit number of CO contacts / for auxiliary contacts  Accessories	No No 9.76 in 248 mm 5.43 in 138 mm 4.33 in 110 mm  Front connection nut keeper kit on both ends 20 x 1 mm 35 x 10 mm
undervoltage release voltage trigger trip indicator height [in] height width [in] width depth [in] depth  Connections arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit type of connectable conductor cross-sections / for flat-bar terminal connection / minimum type of connectable conductor cross-sections / for flat-bar terminal connection / maximum  Auxiliary circuit number of CO contacts / for auxiliary contacts  Accessories product extension / optional / motor drive Environmental conditions	No No 9.76 in 248 mm 5.43 in 138 mm 4.33 in 110 mm  Front connection nut keeper kit on both ends 20 x 1 mm 35 x 10 mm
undervoltage release voltage trigger trip indicator height [in] height width [in] width depth [in] depth  Connections arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit type of connectable conductor cross-sections / for flat-bar terminal connection / minimum type of connectable conductor cross-sections / for flat-bar terminal connection / maximum  Auxiliary circuit number of CO contacts / for auxiliary contacts  Accessories product extension / optional / motor drive  Environmental conditions protection class IP / on the front	No No 9.76 in 248 mm 5.43 in 138 mm 4.33 in 110 mm  Front connection nut keeper kit on both ends 20 x 1 mm  35 x 10 mm
undervoltage release voltage trigger trip indicator height [in] height width [in] width depth [in] depth  Connections arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit type of connectable conductor cross-sections / for flat-bar terminal connection / minimum type of connectable conductor cross-sections / for flat-bar terminal connection / maximum  Auxiliary circuit number of CO contacts / for auxiliary contacts  Accessories product extension / optional / motor drive  Environmental conditions protection class IP / on the front ambient temperature	No No 9.76 in 248 mm 5.43 in 138 mm 4.33 in 110 mm  Front connection nut keeper kit on both ends 20 x 1 mm 35 x 10 mm   O  Yes
undervoltage release voltage trigger trip indicator height [in] height width [in] width depth [in] depth  Connections arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit type of connectable conductor cross-sections / for flat-bar terminal connection / minimum  type of connectable conductor cross-sections / for flat-bar terminal connection / maximum  Auxiliary circuit number of CO contacts / for auxiliary contacts  Accessories product extension / optional / motor drive  Environmental conditions protection class IP / on the front ambient temperature during operation / minimum	No No 9.76 in 248 mm 5.43 in 138 mm 4.33 in 110 mm  Front connection nut keeper kit on both ends 20 x 1 mm  35 x 10 mm  0  Yes  IP40 -25 °C
undervoltage release voltage trigger trip indicator height [in] height width [in] width depth [in] depth  Connections arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit type of connectable conductor cross-sections / for flat-bar terminal connection / minimum type of connectable conductor cross-sections / for flat-bar terminal connection / maximum  Auxiliary circuit number of CO contacts / for auxiliary contacts  Accessories product extension / optional / motor drive  Environmental conditions protection class IP / on the front ambient temperature during operation / minimum during operation / maximum	No No 9.76 in 248 mm 5.43 in 138 mm 4.33 in 110 mm  Front connection nut keeper kit on both ends 20 x 1 mm  35 x 10 mm  0  Yes  IP40  -25 °C 70 °C
undervoltage release voltage trigger trip indicator height [in] height width [in] width depth [in] depth  Connections arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit type of connectable conductor cross-sections / for flat-bar terminal connection / minimum type of connectable conductor cross-sections / for flat-bar terminal connection / maximum  Auxiliary circuit number of CO contacts / for auxiliary contacts  Accessories product extension / optional / motor drive  Environmental conditions protection class IP / on the front ambient temperature during operation / minimum during operation / maximum during storage / minimum	No No 9.76 in 248 mm 5.43 in 138 mm 4.33 in 110 mm  Front connection nut keeper kit on both ends 20 x 1 mm  35 x 10 mm  0  Yes  IP40  -25 °C 70 °C -40 °C
undervoltage release voltage trigger trip indicator  height [in] height width [in] width depth [in] depth  Connections arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit type of connectable conductor cross-sections / for flat-bar terminal connection / minimum type of connectable conductor cross-sections / for flat-bar terminal connection / maximum  Auxiliary circuit number of CO contacts / for auxiliary contacts  Accessories product extension / optional / motor drive  Environmental conditions protection class IP / on the front ambient temperature during operation / minimum during storage / minimum during storage / minimum during storage / maximum	No No 9.76 in 248 mm 5.43 in 138 mm 4.33 in 110 mm  Front connection nut keeper kit on both ends 20 x 1 mm  35 x 10 mm  0  Yes  IP40 -25 °C 70 °C
undervoltage release     voltage trigger     trip indicator  height [in] height width [in] width depth [in] depth  Connections arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit type of connectable conductor cross-sections / for flat-bar terminal connection / minimum  type of connectable conductor cross-sections / for flat-bar terminal connection / maximum  Auxiliary circuit number of CO contacts / for auxiliary contacts  Accessories product extension / optional / motor drive  Environmental conditions protection class IP / on the front ambient temperature     during operation / maximum     during storage / minimum     during storage / minimum     during storage / maximum  Certificates	No 9.76 in 248 mm 5.43 in 138 mm 4.33 in 110 mm  Front connection nut keeper kit on both ends 20 x 1 mm 35 x 10 mm  0  Yes  IP40  -25 °C 70 °C -40 °C 80 °C
undervoltage release voltage trigger trip indicator  height [in] height width [in] width depth [in] depth  Connections arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit type of connectable conductor cross-sections / for flat-bar terminal connection / minimum type of connectable conductor cross-sections / for flat-bar terminal connection / maximum  Auxiliary circuit number of CO contacts / for auxiliary contacts  Accessories product extension / optional / motor drive  Environmental conditions protection class IP / on the front ambient temperature during operation / minimum during storage / minimum during storage / minimum during storage / maximum	No No 9.76 in 248 mm 5.43 in 138 mm 4.33 in 110 mm  Front connection nut keeper kit on both ends 20 x 1 mm  35 x 10 mm  0  Yes  IP40  -25 °C 70 °C -40 °C

vessels) / supplement SB

**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).

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=3VA6440-7HL32-0AA0

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

https://support.industry.siemens.com/cs/ww/en/ps/3VA6440-7HL32-0AA0

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

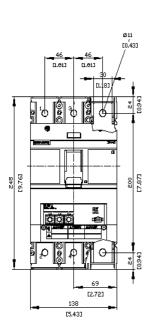
http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VA6440-7HL32-0AA0

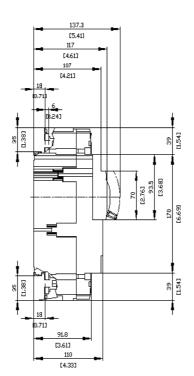
**CAx-Online-Generator** 

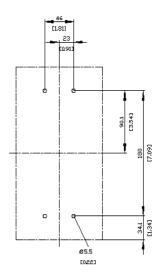
http://www.siemens.com/cax

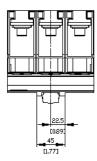
**Tender specifications** 

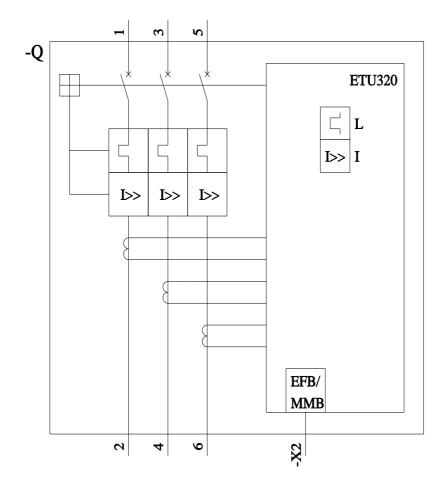
http://www.siemens.com/specifications

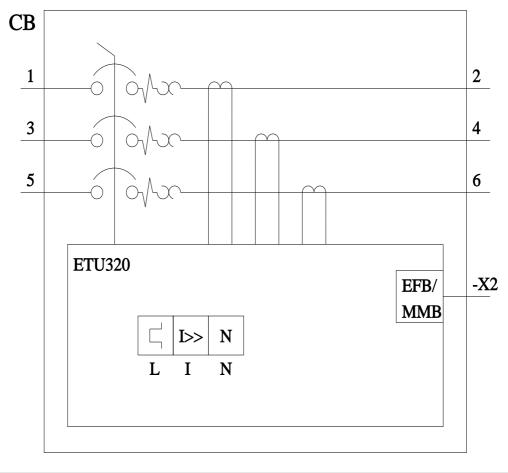












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**Authorized Distributor** 

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