3VA6140-6HL32-0AA0

Data sheet



circuit breaker 3VA6 UL frame 150 breaking capacity class H 65kA @ 480 V 3-pole, line protection ETU320, LI, In=40A overload protection Ir=16A ...40A short-circuit protection Ii=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	HDAE
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	LI
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	2.4 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	0.8 W
mechanical service life (operating cycles) / typical	25 000
electrical endurance (operating cycles) / at AC-1 / at 380/415 V	14 000
electrical endurance (operating cycles) / at AC-1 / at 690 V	9 800
electrical endurance (operating cycles) / at 480 V	14 000
electrical endurance (operating cycles) / at 600 V	9 800
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	2.645 kg
Current	
marking / according to UL 489 / 100%-rated breaker	No
operational current	
• at 40 °C	40 A
• at 45 °C	40 A
• at 50 °C	40 A
• at 55 °C	40 A
• at 60 °C	40 A
● at 65 °C	40 A
● at 70 °C	40 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	2.5 kA
operating short-circuit current breaking capacity (Ics)	
• at 240 V	110 kA
• at 415 V	85 kA
● at 690 V	2.5 kA
short-circuit current making capacity (Icm)	
• at 240 V	242 kA
● at 415 V	187 kA
● at 690 V	3.8 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	
12t characteristic	
• minimum	15 A
• maximum	40 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	60 A
• maximum	480 A
product function / grounding protection	No
Mechanical Design	
mechanical Design	
product component	
	No
product component	No No
product component • undervoltage release	
product component undervoltage release voltage trigger	No
product component	No No
product component	No No 7.8 in
product component	No No 7.8 in 198 mm
product component undervoltage release voltage trigger trip indicator height [in] height width [in]	No No 7.8 in 198 mm 4.13 in
product component • undervoltage release • voltage trigger • trip indicator height [in] height width [in]	No No 7.8 in 198 mm 4.13 in 105 mm
product component undervoltage release voltage trigger trip indicator height [in] height width [in] width depth [in]	No No 7.8 in 198 mm 4.13 in 105 mm 3.39 in
product component • undervoltage release • voltage trigger • trip indicator height [in] height width [in] width depth [in]	No No 7.8 in 198 mm 4.13 in 105 mm 3.39 in
product component undervoltage release voltage trigger trip indicator height [in] height width [in] width depth [in] depth Connections	No No 7.8 in 198 mm 4.13 in 105 mm 3.39 in 86 mm
product component 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 7.8 in 198 mm 4.13 in 105 mm 3.39 in 86 mm
product component 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 7.8 in 198 mm 4.13 in 105 mm 3.39 in 86 mm Front connection nut keeper kit on both ends 13 x 1 mm
product component 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	No No 7.8 in 198 mm 4.13 in 105 mm 3.39 in 86 mm Front connection nut keeper kit on both ends
product component 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 7.8 in 198 mm 4.13 in 105 mm 3.39 in 86 mm Front connection nut keeper kit on both ends 13 x 1 mm
product component • 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 7.8 in 198 mm 4.13 in 105 mm 3.39 in 86 mm Front connection nut keeper kit on both ends 13 x 1 mm 25 x 8.5 mm
product component 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 7.8 in 198 mm 4.13 in 105 mm 3.39 in 86 mm Front connection nut keeper kit on both ends 13 x 1 mm
product component 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 7.8 in 198 mm 4.13 in 105 mm 3.39 in 86 mm Front connection nut keeper kit on both ends 13 x 1 mm 25 x 8.5 mm
product component 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	No No 7.8 in 198 mm 4.13 in 105 mm 3.39 in 86 mm Front connection nut keeper kit on both ends 13 x 1 mm 25 x 8.5 mm
product component 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 7.8 in 198 mm 4.13 in 105 mm 3.39 in 86 mm Front connection nut keeper kit on both ends 13 x 1 mm 25 x 8.5 mm
product component 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 7.8 in 198 mm 4.13 in 105 mm 3.39 in 86 mm Front connection nut keeper kit on both ends 13 x 1 mm 25 x 8.5 mm
product component 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 7.8 in 198 mm 4.13 in 105 mm 3.39 in 86 mm Front connection nut keeper kit on both ends 13 x 1 mm 25 x 8.5 mm O Yes
product component 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 7.8 in 198 mm 4.13 in 105 mm 3.39 in 86 mm Front connection nut keeper kit on both ends 13 x 1 mm 25 x 8.5 mm 0 Yes IP40 -25 °C
product component • 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 7.8 in 198 mm 4.13 in 105 mm 3.39 in 86 mm Front connection nut keeper kit on both ends 13 x 1 mm 25 x 8.5 mm O Yes IP40 -25 °C 70 °C
product component • undervoltage release • voltage trigger • trip indicator height [in] height width [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 operation / maximum • during storage / minimum • during storage / minimum	No 7.8 in 198 mm 4.13 in 105 mm 3.39 in 86 mm Front connection nut keeper kit on both ends 13 x 1 mm 25 x 8.5 mm O Yes IP40 -25 °C 70 °C -40 °C
product component • 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 / maximum	No No 7.8 in 198 mm 4.13 in 105 mm 3.39 in 86 mm Front connection nut keeper kit on both ends 13 x 1 mm 25 x 8.5 mm O Yes IP40 -25 °C 70 °C
product component • 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 / maximum Certificates	No 7.8 in 198 mm 4.13 in 105 mm 3.39 in 86 mm Front connection nut keeper kit on both ends 13 x 1 mm 25 x 8.5 mm O Yes IP40 -25 °C 70 °C -40 °C 80 °C
product component • 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 / maximum • during storage / maximum	No 7.8 in 198 mm 4.13 in 105 mm 3.39 in 86 mm Front connection nut keeper kit on both ends 13 x 1 mm 25 x 8.5 mm O Yes IP40 -25 °C 70 °C -40 °C

General Product Approval



Confirmation





Miscellaneous



EMC

Declaration of Conformity

Marine / Shipping

other









Miscellaneous

Confirmation

Dangerous Good

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=3VA6140-6HL32-0AA0

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

https://support.industry.siemens.com/cs/ww/en/ps/3VA6140-6HL32-0AA0

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

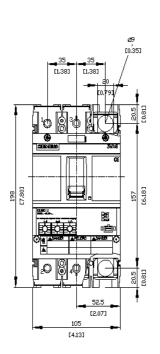
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA6140-6HL32-0AA0

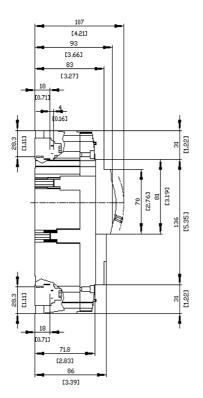
CAx-Online-Generator

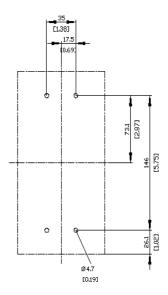
http://www.siemens.com/cax

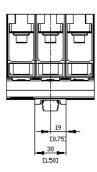
Tender specifications

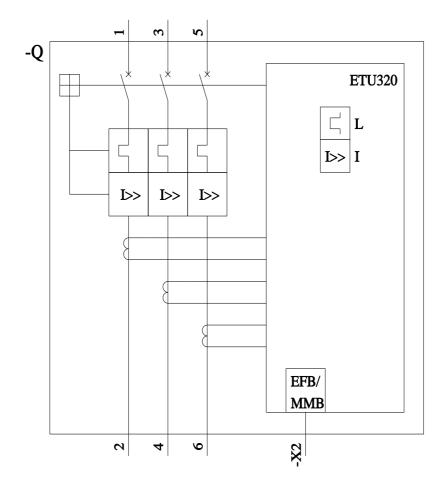
http://www.siemens.com/specifications

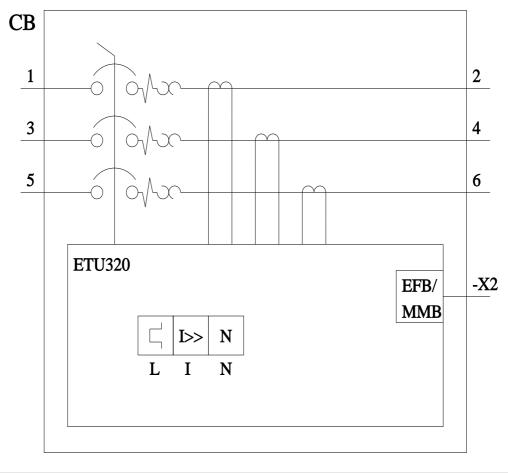












last modified: 8/14/2023 🖸

Mouser Electronics

Authorized Distributor

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

Siemens:

3VA61406HL320AA0