3VA6440-7HL41-2AA0

Data sheet



Circuit breaker 3VA6 UL Frame 600 breaking capacity class C 100kA @ 480V 4-pole, Line protection ETU320, LI, In=400A overload protection, 100% rated Ir=160A...400A Short-circuit protection Ii=1.5...12 x In N conductor protection adjustable (OFF, 50%, 100%) 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	LI	
number of poles	4	
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	6.9 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	C	
maximum short-circuit current breaking capacity (lcu)		

* at 240 V * at 460 V	-+ 0.40 \	4501-4
### 1600 V - protecting short-citud correct breaking capacity (ica) - ## 240 V - ## 415	• at 240 V	150 kA
Second		
42 40 V		6 KA
19 K4		
+ 16 80 V 5hort-circuit current making capacity (form)		100
short-focut current making capacity (lcm)		
1240 V		6 kA
# 41 41 5 V	short-circuit current making capacity (Icm)	
Switching capacity according to UL 459 200 kA 200 kA 2460 V 200 kA 38 kA 200	• at 240 V	330 kA
Switching capacity according to UL 499 200 kA 4180 V 4180 V 35 kA 400 V 35 kA 400 V	• at 415 V	242 kA
Current breaking capacity		9 kA
all 240 V	Switching capacity according to UL 489	
e at 800 V 35 KA Adjustable parameters adjustable response value setting current (Ir) / of the L-trip / with Izt characteristic e minimum 150 A adjustable response value delay time (Ir) / for L-tripping / with Izt characteristic e minimum 0.5 s maximum 17 s adjustable response value setting current (III) / for I-tripping / with Izt characteristic e minimum 0.5 s maximum 17 s adjustable response value setting current (III) / for I-tripping e minimum 600 A adjustable setting current (InN) / for N-tripping e minimum 200 A adjustable setting current (InN) / for N-tripping e minimum 200 A adjustable current response value current / of instantaneous short crout trip unit e minimum 4800 A adjustable current response value current / of instantaneous short crout trip unit e minimum 4800 A elaging of the N-conductor protection adjustable OFF; 50%; 100% product function / grounding protection No Mochanical Design product component e undervoltage release No e voltage trigger No e virig indicator No height [In] 9.76 in height depth [In] 4.33 in depth 10 nmm Connections arrangement of electrical connectors / for main current circuit Without connection / for suin current circuit Without Auxiliary circuit number of CO contacts / for main current circuit Without connection / for carine current circuit Without ambient emperature e during operation / minimum 9-25 °C eduring operation / minimum 9-25 °C	current breaking capacity	
at 600 V Adjustable parameters adjustable response value setting current (in) / of the L-trip / with 12t characteristic maximum	● at 240 V	200 kA
Adjustable parameters adjustable response value setting current (ir) / of the L-trip / with IZt characteristic iminimum 400 A adjustable response value delay time (tr) / for L-tripping / with IZt characteristic iminimum 400 A adjustable response value setting current (ii) / for I-tripping / with IZt characteristic iminimum 400 A adjustable response value setting current (ii) / for I-tripping / with IZT characteristic iminimum 400 A adjustable setting current (inn) / for N-tripping / with IZT characteristic iminimum 400 A adjustable setting current (inn) / for N-tripping / with IZT characteristic / without maximum 400 A adjustable setting current (inn) / for N-tripping / with IZT characteristic / without for IZT characteristic / without component / without for IZT characteristic / without for IZT characteristic / without connection / vicinity in IZT characteristic / vicinity contection / vicinity in IZT characteristic / vicinity /	• at 480 V	100 kA
adjustable response value setting current (Ir) / of the L-trip / with L2t characteristic	• at 600 V	35 kA
intrinum 150 A 400	Adjustable parameters	
minimum 150 A 400		
maximum		
adjustable response value delay time (tr) / for L-tripping / with 12t characteristic		
characteristic in minimum in minimum in maximum in maximum in maximum in maximum in minimum in min		400 A
e maximum adjustable response value setting current (iii) / for I-tripping e minimum	characteristic	
adjustable response value setting current (iii) / for I-tripping minimum	• minimum	0.5 s
minimum maximum maxim	• maximum	17 s
minimum 200 A adjustable setting current (InN) / for N-tripping minimum 200 A maximum 400 A adjustable current response value current / of instantaneous short-circult trip unit minimum 600 A maximum 4800 A design of the N-conductor protection adjustable OFF; 50%; 100% product function / grounding protection No Mechanical Design product component undervoltage release voltage trigger No trip indicator No height [in] 9,76 in height 248 mm width [in] 7.24 in width 184 mm depth [in] 4.33 in depth [in] 4.33 in depth 110 mm Connections arrangement of electrical connectors / for main current circuit Without connection type of electrical connectors / for main current circuit Without Auxiliary circuit number of CO contacts / for auxiliary contacts 0 Accessories product extension / optional / motor drive product extension / optional / motor drive e- during operation / minimum -25 °C e- du	adjustable response value setting current (Ii) / for I-tripping	
adjustable setting current (inN) / for N-tripping	• minimum	600 A
minimum makijustable current response value current / of instantaneous short-circuit trip unit minimum makijustable current response value current / of instantaneous short-circuit trip unit minimum makijustable offe; 50%; 100% makijustable offe; 50%; 100% modulation / grounding protection modulation / grounding	maximum	4 800 A
	adjustable setting current (InN) / for N-tripping	
adjustable current response value current / of instantaneous short-circuit trip unit • minimum • maximum 4 800 A design of the N-conductor protection product function / grounding protection No Mechanical Design product component • undervoltage release • voltage trigger • trip indicator height [in] depth [in] depth [in] depth [in] depth [in] 4.33 in depth [in] 4.33 in depth [in] Without Connections arrangement of electrical connectors / for main current circuit Without 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 -25 °C • during operation / maximum 70 °C	• minimum	200 A
short-circuit trip unit minimum maximum design of the N-conductor protection product function / grounding protection No Mechanical Design product component undervoltage release voltage trigger virip indicator height [in] height width [in] 7.24 in width depth depth Connections arrangement of electrical connectors / for main current circuit Type of electrical connector / for main current circuit Without Auxiliary circuit number of CO contacts / for auxiliary contacts product extension / optional / motor drive Environmental conditions protection class IP / on the front end wind in year and in the foreit arbitration of the conditions end of the conditions end of the condition of the conditions end of the conditions protection class IP / on the front end of the condition of th	• maximum	400 A
maximum 4800 A design of the N-conductor protection product function / grounding protection No Mechanical Design product component undervoltage release voltage trigger vitip indicator height [in] height 248 mm width [in] 7.24 in width 184 mm depth [in] 4.33 in depth [in] 4.33 in depth [in] 50 ef electrical connectors / for main current circuit without Connections arrangement of electrical connector / for main current circuit without Auxiliary circuit number of CO contacts / for auxiliary contacts Accessories product extension / optional / motor drive Yes Environmental conditions protection class IP / on the front indiving operation / minimum -25 °C eduring operation / maximum ### A00 m		
design of the N-conductor protection product function / grounding protection No Mechanical Design product component • undervoltage release • voltage trigger • trip indicator height [in] indicator width [in] depth [in] depth [in] depth [in] A.33 in depth [in] garrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit Auxillary circuit number of CO contacts / for auxillary contacts product extension / optional / motor drive Environmental conditions protection class IP / on the front ambient temperature • during operation / minimum -25 °C -during operation / maximum 70 °C	• minimum	600 A
product function / grounding protection Mechanical Design product component • undervoltage release • voltage trigger • trip indicator height [in] height [in] 9.76 in height [in] width [in] 184 mm width [in] 4.33 in depth 110 mm Connections arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit Type of electrical connection / for auxiliary contacts O Accessories product extension / optional / motor drive Environmental conditions protection class IP / on the front ambient temperature • during operation / minimum -25 °C • during operation / mainmum 70 °C	• maximum	4 800 A
product component • undervoltage release • voltage trigger • trip indicator height [in] height [in] width [in] width [in] depth 110 mm Connections arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit number of CO contacts / for auxiliary contacts product extension / optional / motor drive Environmental conditions protection class IP / on the front environmental emperature • during operation / maximum volume of volume version / maximum Auxiliary or class IP / on the front environmental conditions protection class IP / on the front environmental emperature • during operation / maximum 70 °C	design of the N-conductor protection	adjustable OFF; 50%; 100%
## Product component • undervoltage release	product function / grounding protection	No
undervoltage release voltage trigger No trip indicator No height [in] 9.76 in height [in] 248 mm width [in] 7.24 in width [in] 4.33 in depth [in] 4.33 in depth 110 mm Connections arrangement of electrical connectors / for main current circuit Without 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 / maximum 70 °C eduring operation / maximum 70 °C		
undervoltage release voltage trigger No trip indicator No height [in] 9.76 in height [in] 248 mm width [in] 7.24 in width [in] 4.33 in depth [in] 4.33 in depth 110 mm Connections arrangement of electrical connectors / for main current circuit Without 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 / maximum 70 °C eduring operation / maximum 70 °C	product component	
voltage trigger v		No
• trip indicator height [in] height	-	No
height [in] 9.76 in height 248 mm width [in] 7.24 in width 184 mm depth [in] 4.33 in depth 110 mm Connections arrangement of electrical connectors / for main current circuit Without connection type of electrical connection / for main current circuit Without 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 • during operation / maximum 70 °C		
height 248 mm width [in] 7,24 in width 184 mm depth [in] 4.33 in depth 110 mm Connections arrangement of electrical connectors / for main current circuit Without connection type of electrical connection / for main current circuit Without 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	·	
width [in] 7.24 in width 184 mm depth [in] 4.33 in depth 110 mm Connections arrangement of electrical connectors / for main current circuit Without connection type of electrical connection / for main current circuit Without 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		
width 184 mm depth [in] 4.33 in depth 110 mm Connections arrangement of electrical connectors / for main current circuit Without connection type of electrical connection / for main current circuit Without 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		
depth [in] 4.33 in depth 110 mm Connections arrangement of electrical connectors / for main current circuit Without connection type of electrical connection / for main current circuit Without 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		
depth 110 mm Connections arrangement of electrical connectors / for main current circuit Without connection type of electrical connection / for main current circuit Without 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		
arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit 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 -25 °C • during operation / maximum 70 °C		
arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit 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 -25 °C • during operation / maximum 70 °C		
type of electrical connection / for main current circuit 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 -25 °C • during operation / maximum Without Without Without Flag 1P40 -25 °C		Without connection
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 -25 °C • during operation / maximum 70 °C		
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 -25 °C • during operation / maximum 70 °C		TTILIOUL
Accessories product extension / optional / motor drive Environmental conditions protection class IP / on the front ambient temperature • during operation / minimum -25 °C • during operation / maximum 70 °C		0
product extension / optional / motor drive Environmental conditions protection class IP / on the front ambient temperature • during operation / minimum -25 °C • during operation / maximum 70 °C	-	U
Environmental conditions protection class IP / on the front ambient temperature • during operation / minimum • during operation / maximum 70 °C		Voc
protection class IP / on the front IP40 ambient temperature • during operation / minimum -25 °C • during operation / maximum 70 °C		Yes
ambient temperature • during operation / minimum • during operation / maximum 70 °C		
 during operation / minimum during operation / maximum 70 °C 		IP40
• during operation / maximum 70 °C	•	
• during storage / minimum -40 °C		
	during storage / minimum	-40 °C

during storage / maximum
 80 °C
 Certificates
 reference code / according to IEC 81346-2
 certificate of suitability / as approval for NAVAL (no combat vessels) / supplement SB
 General Product Approval

Confirmation







Miscellaneous



EMC Declaration of Conformity

Marine / Shipping

other









<u>Miscellaneous</u>

Confirmation

other Dangerous Good

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=3VA6440-7HL41-2AA0

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

https://support.industry.siemens.com/cs/ww/en/ps/3VA6440-7HL41-2AA0

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

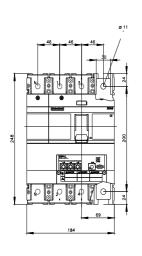
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA6440-7HL41-2AA0

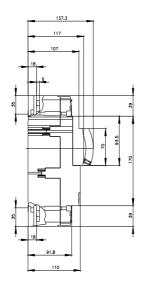
CAx-Online-Generator

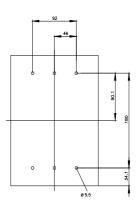
http://www.siemens.com/cax

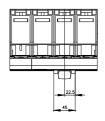
Tender specifications

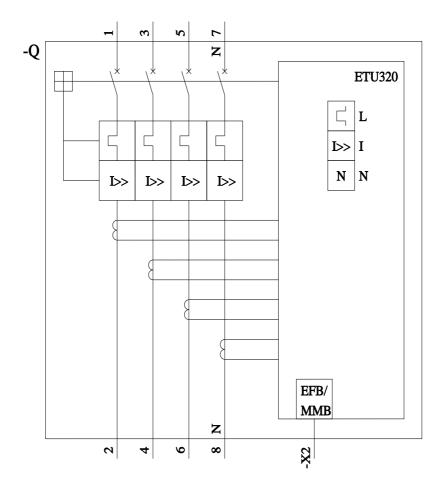
http://www.siemens.com/specifications

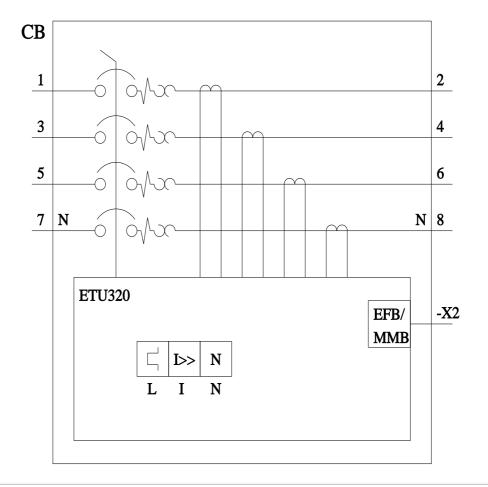












last modified: 8/14/2023 🖸

Mouser Electronics

Authorized Distributor

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

Siemens:

3VA64407HL412AA0