SIEMENS

Data sheet

3VA2440-6HL42-0AA0



CIRCUIT BREAKER 3VA2 IEC FRAME 630 BREAKING CAPACITY CLASS H ICU=85KA @ 415 V 4-POLE, LINE PROTECTION ETU320, LI, IN=400A OVERLOAD PROTECTION IR=160A ...400A SHORT CIRCUIT PROTECTION II=12 X IN NEUTRAL PROTECTION ADJUSTABLE(OFF,50%,100%) BUSBAR CONNECTION

Figure similar

Model	
product brand name	SENTRON
Product designation	Molded case circuit breaker
Design of the product	Line protection
Product variations	Selective Applications
Ground fault monitoring version	Without
Design of the auxiliary release	without auxiliaryrelease
Design of the auxiliary switch	Without
Design of the operating mechanism	toggle handle
Type of the driving mechanism / motor drive	No
Design of the overcurrent release	ETU320

General technical data				
Number of poles		4		
Trip class / of the L-trip / with I2t characteristic / initial value		0.5		
Trip class / of the L-trip / with I2t characteristic / Full-scale value		17		
Electrical endurance (switching cycles)				
• at AC-1 / at 380/415 V / at 50/60 Hz		4 000		
circuit-breaker / Design		3VA		
Mechanical service life (switching cycles) / typical		15 000		

Voltage		
	tage	
Insulation voltage / Rated value V 800	sulation voltage / Rated value	V

Protection class

Protection class IP / on the front Protective function of the overcurrent release Switching capacity Switching capacity class of the circuit breaker Dissipation Active power loss • maximum W 70 Electricity Continuous current / Rated value / maximum A 630 Continuous current / Rated value A 400 Adjustable response value current / of the instantaneous short-circuit release / initial value Main circuit Main circuit Operating voltage • with AC / at 50/60 Hz / Rated value • at 40 °C / Rated value • at 40 °C / Rated value • at 60 °C / Rated value • at 70 °C / Rated value • at 50 °C / Rated value • for N-conductor protection / initial value • for N-conductor protection /	Protection class IP		IP40
Switching capacity Switching capacity class of the circuit breaker Dissipation Active power lose • maximum W 70 Electricity Continuous current / Rated value / maximum A 630 Continuous current / Rated value A 400 Adjustable response value current / of the instantaneous short-circuit release / initial value Main circuit Operating voltage • with AC / at 50/60 Hz / Rated value V 690 Operating current • at 40 °C / Rated value • at 50 °C / Rated value • at 50 °C / Rated value • at 65 °C / Rated value • at 65 °C / Rated value • at 70 °C / Rate	Protection class IP / on the front	_	IP40
Switching capacity class of the circuit breaker Dissipation Active power loss • maximum W 70 Electricity Continuous current / Rated value / maximum Adjustable response value current / of the instantaneous short-circuit release / initial value Main circuit Operating voltage • with AC / at 50/60 Hz / Rated value • at 40 °C / Rated value • at 50 °C / Rated value • at 60 °C / Rated value • at 70 °C / Rated value • at	Protective function of the overcurrent release		Ш
Switching capacity class of the circuit breaker Dissipation Active power loss • maximum W 70 Electricity Continuous current / Rated value / maximum Adjustable response value current / of the instantaneous short-circuit release / initial value Main circuit Operating voltage • with AC / at 50/60 Hz / Rated value • at 40 °C / Rated value • at 50 °C / Rated value • at 60 °C / Rated value • at 70 °C / Rated value • at	Switching capacity		
Active power loss • maximum Maximum			Н
Active power loss • maximum Maximum	Dissipation		
Electricity Continuous current / Rated value / maximum A 630 Continuous current / Rated value Adjustable response value current / of the instantaneous short-circuit release / initial value Main circuit Operating voltage • with AC / at 50/60 Hz / Rated value V 690 Operating current • at 40 °C / Rated value • at 50 °C / Rated value • at 60 °C / Rated value • at 65 °C / Rated value • at 65 °C / Rated value • at 70 °C / Rated value A 3880 • at 70 °C / Rated value A 352 Auxiliary circuit Number of NC contacts / for auxiliary contacts Number of NO contacts / for auxiliary contacts O Sultability Sultability Sultability for use Adjustable parameters Adjustable parameters Adjustable parameters Adjustable response value current • of I-trip / Full-scale value • for N-conductor protection / initial value Product details Product component • Trip indicator • display			
Continuous current / Rated value / maximum	• maximum	W	70
Continuous current / Rated value / maximum	Electricity		
Adjustable response value current / of the instantaneous short-circuit release / initial value Main circuit Operating voltage • with AC / at 50/60 Hz / Rated value • at 40 °C / Rated value • at 50 °C / Rated value • at 65 °C / Rated value • at 70 °C / Rated value A 368 • at 70 °C / Rated value A 352 Auxiliary circuit Number of NC contacts / for auxiliary contacts Number of NO contacts / for auxiliary contacts O Suitability Suitability Suitability Suitabile parameters Adjustable parameters Adjustable response value current • of I-trip / Full-scale value • for N-conductor protection / Full-scale value A 10 Adjustable response value current / of the current-dependent overload release / initial value Product details Product component • Trip indicator • display A 100 No	Continuous current / Rated value / maximum	Α	630
instantaneous short-circuit release / initial value Main circuit Operating voltage • with AC / at 50/60 Hz / Rated value V 690 Operating current • at 40 °C / Rated value • at 50 °C / Rated value • at 60 °C / Rated value • at 65 °C / Rated value • at 65 °C / Rated value • at 70 °C / Rated value A 388 • at 70 °C / Rated value A 352 Auxiliary circuit Number of NO contacts / for auxiliary contacts Number of NO contacts / for auxiliary contacts O Suitability Suitability for use Adjustable response value current • of I-trip / Full-scale value • for N-conductor protection / initial value • for N-conductor protection / Full-scale value Adjustable response value current / of the current-dependent overload release / initial value Product details Product component • Trip indicator • display No	Continuous current / Rated value	Α	400
Operating voltage • with AC / at 50/60 Hz / Rated value Operating current • at 40 °C / Rated value • at 50 °C / Rated value • at 60 °C / Rated value • at 60 °C / Rated value • at 65 °C / Rated value A 3880 • at 65 °C / Rated value A 3688 • at 70 °C / Rated value A 3522 Auxiliary circuit Number of NC contacts / for auxiliary contacts Number of NO contacts / for auxiliary contacts O Suitability Suitability Suitable parameters Adjustable parameters Adjustable response value current • of I-trip / Full-scale value • for N-conductor protection / initial value A 12 • for N-conductor protection / Full-scale value A 100 Adjustable response value current / of the current-dependent overload release / initial value Product details Product component • Trip indicator • display		Α	1.5
with AC / at 50/60 Hz / Rated value Operating current at 40 °C / Rated value at 50 °C / Rated value at 50 °C / Rated value at 60 °C / Rated value at 60 °C / Rated value at 65 °C / Rated value at 65 °C / Rated value A 380 at 65 °C / Rated value A 368 at 70 °C / Rated value A 352 Auxiliary circuit Number of NC contacts / for auxiliary contacts Number of NO contacts / for auxiliary contacts 0 Suitability Suitability Suitability for use System protection Adjustable parameters Adjustable parameters Adjustable response value current of I-trip / Full-scale value for N-conductor protection / Full-scale value a 50 for N-conductor protection / Full-scale value A 100 Adjustable response value current / of the current-dependent overload release / initial value Product details Product component Trip indicator o display	Main circuit		
Operating current • at 40 °C / Rated value • at 50 °C / Rated value • at 60 °C / Rated value • at 60 °C / Rated value • at 65 °C / Rated value • at 65 °C / Rated value • at 70 °C / Rated value • at 70 °C / Rated value A 368 • at 70 °C / Rated value A 352 Auxiliary circuit Number of NC contacts / for auxiliary contacts Number of NO contacts / for auxiliary contacts 0 Suitability Suitability Suitability for use Adjustable parameters Adjustable parameters Adjustable response value current • of I-trip / Full-scale value • for N-conductor protection / Full-scale value A 50 • for N-conductor protection / Full-scale value A 100 Adjustable response value current / of the current-dependent overload release / initial value Product details Product component • Trip indicator • display	Operating voltage		
at 40 °C / Rated value at 50 °C / Rated value at 60 °C / Rated value at 60 °C / Rated value at 65 °C / Rated value at 65 °C / Rated value A 380 at 65 °C / Rated value A 368 at 70 °C / Rated value A 352 Auxiliary circuit Number of NC contacts / for auxiliary contacts Number of NO contacts / for auxiliary contacts O Suitability Suitability Suitability for use Adjustable parameters Adjustable parameters Adjustable response value current of I-trip / Full-scale value for N-conductor protection / Full-scale value A 50 Adjustable response value current / of the current-dependent overload release / initial value Product details Product component Trip indicator display No	• with AC / at 50/60 Hz / Rated value	V	690
at 50 °C / Rated value at 60 °C / Rated value at 65 °C / Rated value A 380 at 65 °C / Rated value A 368 at 70 °C / Rated value A 352 Auxiliary circuit Number of NC contacts / for auxiliary contacts Number of NO contacts / for auxiliary contacts O Suitability Suitability Suitability for use Adjustable parameters Adjustable parameters Adjustable response value current of I-trip / Full-scale value for N-conductor protection / initial value for N-conductor protection / Full-scale value A 100 Adjustable response value current / of the current-dependent overload release / initial value Product details Product component Trip indicator odd isplay No	Operating current		
at 60 °C / Rated value at 65 °C / Rated value A 368 at 70 °C / Rated value A 352 Auxiliary circuit Number of NC contacts / for auxiliary contacts Number of NO contacts / for auxiliary contacts O Suitability Suitability Suitability for use Adjustable parameters Adjustable response value current of I-trip / Full-scale value for N-conductor protection / initial value for N-conductor protection / Full-scale value Adjustable response value current/ of the current-dependent overload release / initial value Product details Product component Trip indicator display No	• at 40 °C / Rated value	Α	400
at 65 °C / Rated value at 70 °C / Rated value A 352 Auxiliary circuit Number of NC contacts / for auxiliary contacts Number of NO contacts / for auxiliary contacts 0 Suitability Suitability for use Adjustable parameters Adjustable response value current of I-trip / Full-scale value for N-conductor protection / Initial value of or N-conductor protection / Full-scale value Adjustable response value current / of the current-dependent overload release / Initial value Product details Product component Trip indicator otinical value A 368 A 368 A 368 A 352 A 352 A 352 A 352 A 100 Adjustability for use System protection A 12 50 0 0.4 100 Adjustable response value current / of the current-dependent overload release / Initial value Product details Product component Trip indicator otinical value No No	• at 50 °C / Rated value	Α	400
at 70 °C / Rated value A 352 Auxiliary circuit Number of NC contacts / for auxiliary contacts Number of NO contacts / for auxiliary contacts 0 Suitability Suitability for use Adjustable parameters Adjustable response value current of I-trip / Full-scale value for N-conductor protection / initial value of or N-conductor protection / Full-scale value Adjustable response value current / of the current-dependent overload release / initial value Product details Product component Trip indicator other initial value A 352 Adjustable response value current A 12 A 12 A 100 Adjustable response value current / of the current-dependent overload release / initial value Product details Product component Trip indicator ONO No	• at 60 °C / Rated value	Α	380
Auxiliary circuit Number of NC contacts / for auxiliary contacts Number of NO contacts / for auxiliary contacts 0 Suitability Suitability for use Adjustable parameters Adjustable response value current • of I-trip / Full-scale value • for N-conductor protection / initial value A 50 • for N-conductor protection / Full-scale value A 100 Adjustable response value current / of the current-dependent overload release / initial value Product details Product component • Trip indicator • display	• at 65 °C / Rated value	Α	368
Number of NC contacts / for auxiliary contacts Number of NO contacts / for auxiliary contacts Suitability Suitability Suitability for use Adjustable parameters Adjustable response value current • of I-trip / Full-scale value • for N-conductor protection / initial value • for N-conductor protection / Full-scale value Adjustable response value current / of the current-dependent overload release / initial value Product details Product component • Trip indicator • display No	• at 70 °C / Rated value	Α	352
Number of NO contacts / for auxiliary contacts Suitability Suitability for use Adjustable parameters Adjustable response value current • of I-trip / Full-scale value • for N-conductor protection / initial value • for N-conductor protection / Full-scale value Adjustable response value current / of the current-dependent overload release / initial value Product details Product component • Trip indicator • display O System protection A 12 4 50 A 100 A 0.4 Contact of No	Auxiliary circuit		
Suitability for use system protection Adjustable parameters Adjustable response value current • of I-trip / Full-scale value • for N-conductor protection / initial value • for N-conductor protection / Full-scale value A 50 • for N-conductor protection / Full-scale value A 100 Adjustable response value current / of the current-dependent overload release / initial value Product details Product component • Trip indicator • display No	Number of NC contacts / for auxiliary contacts		0
Suitability for use Adjustable parameters Adjustable response value current of I-trip / Full-scale value for N-conductor protection / initial value of or N-conductor protection / Full-scale value Adjustable response value current / of the current-dependent overload release / initial value Product details Product component Trip indicator odisplay	Number of NO contacts / for auxiliary contacts		0
Adjustable parameters Adjustable response value current of I-trip / Full-scale value for N-conductor protection / initial value for N-conductor protection / Full-scale value Adjustable response value current / of the current-dependent overload release / initial value Product details Product component Trip indicator display No	Suitability		
Adjustable response value current of I-trip / Full-scale value for N-conductor protection / initial value of Intrip / Full-scale value A 50 A 100 Adjustable response value current / of the current-dependent overload release / initial value Product details Product component Trip indicator of Intrip indicator No No No	Suitability for use		system protection
of I-trip / Full-scale value of r N-conductor protection / initial value of r N-conductor protection / Full-scale value of r N-conductor protection / Full-scale value A 100 Adjustable response value current / of the current-dependent overload release / initial value Product details Product component of rip indicator	Adjustable parameters		
 for N-conductor protection / initial value for N-conductor protection / Full-scale value Adjustable response value current / of the current-dependent overload release / initial value Product details Product component Trip indicator display No 	Adjustable response value current		
for N-conductor protection / Full-scale value A 100 Adjustable response value current / of the current-dependent overload release / initial value Product details Product component Trip indicator display No	• of I-trip / Full-scale value	Α	12
Adjustable response value current / of the current- dependent overload release / initial value Product details Product component • Trip indicator • display No	• for N-conductor protection / initial value	Α	50
Product details Product component Trip indicator display No	• for N-conductor protection / Full-scale value	Α	100
Product details Product component • Trip indicator • display No	Adjustable response value current / of the current-	Α	0.4
Product component	dependent overload release / initial value		
 Trip indicator display No No 	Product details		
• display No	Product component		
	Trip indicator		No
• undervoltage release No	• display		No
	• undervoltage release		No

Product property		
for neutral conductors /		No
upgradeable/retrofittable / Short-circuit and		
overload proof		
Product expansion / optional / motor drive		Yes
Product function		
Product function		
Intrinsic device protection		Yes
 communication function 		No
Phase failure detection		No
other measurement function		No
Accessories		
Manufacturer article number / of the supplied basic switch		3VA2440-6HL42-0AA0
Short circuit		
Operational short-circuit current breaking capacity		
(Ics)		
• at 240 V / Rated value	kA	110
• at 415 V / Rated value	kA	85
● at 690 V / Rated value	kA	6
Maximum short-circuit current breaking capacity (Icu)		
● at 240 V / Rated value	kA	110
● at 415 V / Rated value	kA	85
● at 690 V / Rated value	kA	6
Short-circuit current making capacity (Icm)		
● at 240 V / Rated value	kA	242
● at 415 V / Rated value	kA	187
• at 690 V / Rated value	kA	9
Connections		
Arrangement of electrical connectors / for main		Front terminal
current circuit		
Type of connectable conductor cross-section		20 x 1
• for flat-bar terminal connection / minimum		
for flat-bar terminal connection / maximum Type of electrical connection / for main current circuit		35 x 10
		Lug terminal
Mechanical Design		240
Height	mm	248
Width	mm	184 137
Depth Mounting type	mm	fixed mounting
		naca mounting
Environmental conditions		

Ambient temperature			
during operation / minimum	°C	-25	
during operation / maximum	°C	70	
during storage / minimum	°C	-40	
during storage / maximum	°C	80	

		11.0		
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Equipment marking

• acc. to DIN EN 61346-2 Q • acc. to DIN EN 81346-2 Q

General Product Approval	EMC	Declaration of	other
		Conformity	





other



other

Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

http://www.siemens.com/lowvoltage/catalogs

Industry Mall (Online ordering system)
https://eb.automation.siemens.com/mall/en/WW/Catalog/Product/3VA24406HL420AA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA24406HL420AA0/all

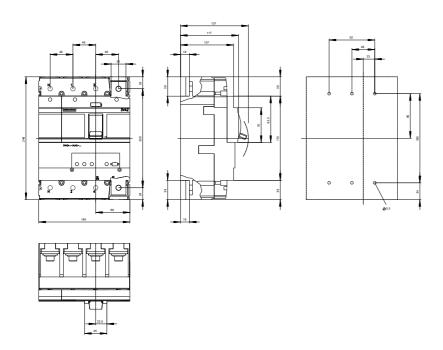
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA24406HL420AA0

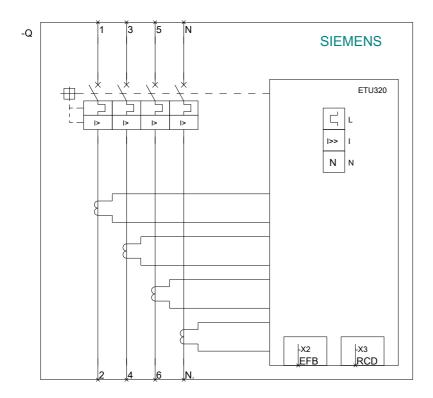
CAx-Online-Generator

http://www.siemens.com/cax

Tender specifications

http://ausschreibungstexte.siemens.com/tiplv





last modified: 11.03.2015