# **SIEMENS**

# Data sheet

# 3VA2140-5HL42-0AA0



CIRCUIT BREAKER 3VA2 IEC FRAME 160 BREAKING CAPACITY CLASS M ICU=55KA @ 415 V 4POLE, LINE PROTECTION ETU320, LI, IN=40A OVERLOAD PROTECTION IR=16A ...40A SHORT CIRCUIT PROTECTION II=12 X IN NEUTRAL PROTECTION ADJUSTABLE(OFF,100%) BUSBAR CONNECTION

Model		
product brand name	SENTRON	
Product designation	Molded case	e circuit breaker
Design of the product	Line protecti	ion
Product variations	Selective Ap	pplications
Ground fault monitoring version	Without	
Design of the auxiliary release	without auxi	liaryrelease
Design of the auxiliary switch	Without	
Design of the operating mechanism	toggle handl	le
Type of the driving mechanism / motor drive	No	
Design of the overcurrent release	ETU320	
General technical data		

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		12 000
circuit-breaker / Design		3VA
Mechanical service life (switching cycles) / typical		20 000

Voltage		
Insulation voltage / Rated value	V	800

#### Protection class

Protection class IP		IP40
Protection class IP / on the front		IP40
Protective function of the overcurrent release		LI
Switching capacity		
Switching capacity class of the circuit breaker		М
Dissipation		
Active power loss		
• maximum	W	1.6
Electricity		
Continuous current / Rated value / maximum	Α	160
Continuous current / Rated value	Α	40
Adjustable response value current / of the	Α	1.5
instantaneous short-circuit release / initial value		
Main circuit		
Operating voltage		
<ul><li>with AC / at 50/60 Hz / Rated value</li></ul>	V	690
Operating current		
• at 40 °C / Rated value	Α	40
• at 50 °C / Rated value	Α	40
• at 60 °C / Rated value	Α	40
• at 65 °C / Rated value	Α	40
• at 70 °C / Rated value	Α	40
Auxiliary circuit		
Number of NC contacts / for auxiliary contacts		0
Number of NO contacts / for auxiliary contacts		0
Suitability		
Suitability for use		system protection
Adjustable parameters		
Adjustable response value current		
• of I-trip / Full-scale value	Α	12
Adjustable response value current / of the current-	Α	0.4
dependent overload release / initial value		
Product details		
Product component		
Trip indicator		No
• display		No
undervoltage release		No
Product property		

		No
<ul> <li>for neutral conductors / upgradeable/retrofittable / Short-circuit and</li> </ul>		No
overload proof		
Product expansion / optional / motor drive	_	Yes
Dec doct for attend	_	
Product function  Product function		
Intrinsic device protection		Yes
communication function		No
		No
Phase failure detection		
other measurement function		No
Accessories		
Manufacturer article number / of the supplied basic		3VA2140-5HL42-0AA0
switch		
Short circuit		
Operational short-circuit current breaking capacity		
(Ics)		
• at 240 V / Rated value	kA	85
● at 415 V / Rated value	kA	55
● at 440 V / Rated value	kA	55
• at 500 V / Rated value	kA	36
• at 690 V / Rated value	kA	2.5
Maximum short-circuit current breaking capacity (Icu)	-	
• at 240 V / Rated value	kA	85
• at 415 V / Rated value	kA	55
• at 440 V / Rated value	kA	55
• at 500 V / Rated value	kA	36
• at 690 V / Rated value	kA	2.5
Short-circuit current making capacity (lcm)	_	
• at 240 V / Rated value	kA	187
• at 415 V / Rated value	kA	121
• at 440 V / Rated value	kA	121
• at 500 V / Rated value	kA	79
• at 690 V / Rated value	kA	3.75
Connections		
Arrangement of electrical connectors / for main		Front terminal
current circuit		
Type of connectable conductor cross-section		
• for flat-bar terminal connection / minimum		13 x 1 mm
• for flat-bar terminal connection / maximum		25 x 8.5
Type of electrical connection / for main current circuit		Lug terminal

Height	mm	181
Width	mm	140
Depth	mm	107
Mounting type		fixed mounting

			1111
Environmen <sup>1</sup>	tal (	conc	titions
	ten c	,0110	

Ambient temperature		
<ul><li>during operation / minimum</li></ul>	°C	-25
<ul> <li>during operation / maximum</li> </ul>	°C	70
<ul> <li>during storage / minimum</li> </ul>	°C	-40
<ul><li>during storage / maximum</li></ul>	°C	80

### Certificates

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

General Product Approval	EMC	Declaration of	Shipping
		Conformity	Approval











Shipping	other
Approval	



other

GL

## Further information

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

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

Industry Mall (Online ordering system)

 $\underline{\text{https://eb.automation.siemens.com/mall/en/WW/Catalog/Product/3VA21405HL420AA0}}$ 

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

http://support.automation.siemens.com/WW/view/en/3VA21405HL420AA0/all

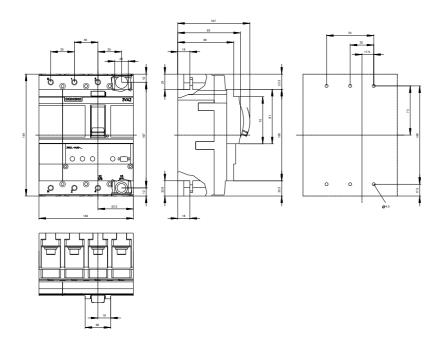
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) <a href="http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VA21405HL420AA0">http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VA21405HL420AA0</a>

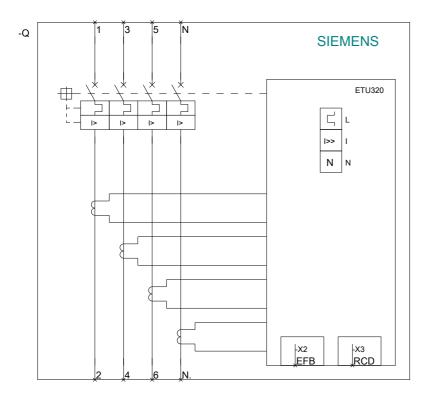
**CAx-Online-Generator** 

http://www.siemens.com/cax

**Tender specifications** 

http://ausschreibungstexte.siemens.com/tiplv





last modified: 11.03.2015