# **SIEMENS**

Product data sheet 3RV2421-4BA10



CIRCUIT-BREAKER SZ S0, FOR TRANSFORMER PROT. A-RELEASE 14...20A, N-RELEASE 325A, SCREW CONNECTION, STANDARD SW. CAPACITY

General technical data:		
product brand name		SIRIUS
product designation		3RV2 circuit breaker
Size of the circuit-breaker		S0
Number of poles / for main current circuit		3
Product function		
<ul> <li>removable terminal for auxiliary and control circuit</li> </ul>		No
overload protection		Yes
phase disturbance recognition		Yes
short-circuit to earth recognition		No
Product component		
auxiliary switch		No
undervoltage release mechanism		No
trip indicator		No
Product extension		
auxiliary switch		Yes
optional / motor drive		No
Impulse voltage resistance / rated value	kV	6
Protection class IP / on the front		IP20
Protection against electrical shock		finger-safe

Installation altitude / at a height over sea level / maximum	m	2,000
Resistance against shock		25g / 11 ms
Ambient temperature		
during transport	°C	-50 +80
during storage	°C	-50 +80
during operating	°C	-20 +60
Active power loss / total / typical	W	9.6
Main circuit:		
Operating voltage / rated value	V	690
Service power / at AC-3		
• at 400 V / rated value	W	7,500
• at 500 V / rated value	W	11,000
• at 690 V / rated value	W	15,000
Operational current / at AC-3 / at 400 V / rated value	Α	20
Mechanical operating cycles as operating time / of the main contacts / typical		100,000
Frequency of operation / at AC-3 / according to IEC 60947-6-2	1/h	15
Auxiliary circuit:		
Number of change-over switches / for auxiliary contacts		0
Mechanical operating cycles as operating time / of the auxiliary contacts / typical		100,000
Protection function:		
Trip class		CLASS 10
Adjustable response current / of the current-dependent overload release	Α	14 20
Breaking capacity limit short-circuit current (Icu)		
• at 400 V / rated value	Α	55,000
• at 500 V / rated value	Α	10,000
• at 690 V / rated value	Α	4,000
Safety:		
Proportion of dangerous failures		
<ul> <li>with high demand rate / according to SN 31920</li> </ul>	%	40
• with low demand rate / according to SN 31920	%	40
Failure rate (FIT value) / with low demand rate / according to SN 31920	FIT	50
B10 value / with high demand rate / according to SN 31920		50,000
T1 value / for proof test interval or service life / according to IEC 61508	а	10

Installation/mounting/dimensions:			
Type of mounting		screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715	
mounting position		any	
Depth	mm	96	
Height	mm	97	
Width	mm	45	

Connections:	
Arrangement of electrical connectors / for main current circuit	Top and bottom
Design of the electrical connection	
for main current circuit	screw-type terminals
Type of the connectable conductor cross-section	
for main contacts	
• solid	2x (1 2.5 mm²), 2x (2.5 10 mm²)
• finely stranded	
with conductor end processing	2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm²
for AWG conductors / for main contacts	2x (16 12), 2x (14 8)

UL/CSA ratings:		
yielded mechanical performance (hp)		
• for single-phase squirrel cage motors		
• at 110/120 V / rated value	hp	1.5
• at 230 V / rated value	hp	3
• for three-phase squirrel cage motors		
• at 200/208 V / rated value	hp	5
• at 220/230 V / rated value	hp	5
• at 460/480 V / rated value	hp	10
Operating current (FLA) / for three-phase squirrel cage motors		
• at 480 V / rated value	Α	14

# Certificates/approvals:

#### **General Product Approval**

# Declaration of Conformity

#### **Test Certificates**









Special Test Certificate

Type Test
Certificates/Test
Report

#### **Shipping Approval**







other







### **Shipping Approval**





other

## **Further information:**

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

http://www.siemens.com/industrial-controls/catalogs

Industry Mall (Online ordering system)

http://www.siemens.com/industrial-controls/mall

#### Cax online generator:

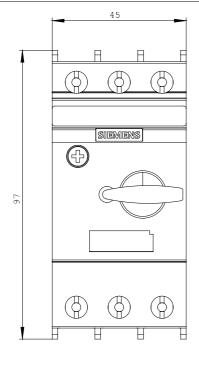
http://www.siemens.com/cax

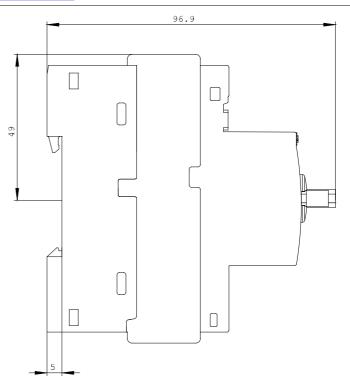
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

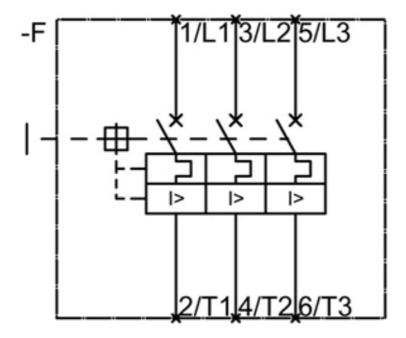
http://support.automation.siemens.com/WW/view/en/3RV2421-4BA10/all

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

http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3RV2421-4BA10







last change: Feb 14, 2013