## **SIEMENS**

Product data sheet 3RR2141-2AW30



MONITORING RELAY ATTACHABLE TO CONTACTOR 3RT2. SIZE S00 BASIC,
ANALOG ADJUSTABLE APPARENT CURRENT
MONITORING 1.6 - 16A,
50-60 HZ,
2-PHASE SUPPLY 24-240 V AC/DC 1 CO CONTACT
MONITORING FOR CURRENT
OVERSHOOT/UNDERSHOOT PHASE FAILURE,
WIRE BREAK WITH OR W/O ERROR LOG ON-DELAY 0-60
S SPURIOUS PEAK SUPPR.0-30 S SWITCHING
HYSTERESIS 6% SPRING-LOADED CONNECTION

General technical data:		
Product brand name		SIRIUS
product designation		multi-phase current monitoring
Design of the product		multi-phase current monitoring
Size of the contactor / can be combined / company-specific		S00
Insulation voltage / for overvoltage category III according to IEC 60664 / with degree of pollution 3		
• rated value	V	690
Installation altitude / at a height over sea level / maximum	m	2,000
Ambient temperature		
during storage	°C	-40 80
during operating	°C	-25 60
Electromagnetic compatibility		IEC 60947-1 / IEC 61000-6-2 / IEC 61000-6-4
EMC immunity to interference		
according to IEC 60947-1		ambience A (industrial sector)
EMC emitted interference		
according to IEC 60947-1		ambience A (industrial sector)
Resistance against shock		15g / 11 ms
Resistance against vibration		10 55 Hz / 0.35 mm
Impulse voltage resistance / rated value	kV	6

Operating apparent output / rated value	V·A	3.5
Rating / Rated value	W	2.5
Item designation		
<ul> <li>according to DIN 40719 extendable after IEC 204-2 / according to IEC 750</li> </ul>		К
according to DIN EN 61346-2		κ
Mechanical operating cycles as operating time		
• typical		10,000,000
Electrical operating cycles as operating time / at AC-15 / at 230 V		
• typical		100,000
Adjustable response delay time		
when starting	s	0 60
with lower or upper limit violation	s	0 30
Standby time / for restart after fault	S	0.3
Phase number		3
Number of monitored phases		2
Product function		
overcurrent monitoring		Yes
• undercurrent monitoring		Yes
<ul> <li>overcurrent and undercurrent monitoring</li> </ul>		Yes
apparent current monitoring		Yes
active current monitoring		No
• undercurrent recognition DC		No
<ul> <li>undercurrent recognition of 1 phase</li> </ul>		No
overcurrent recognition DC		No
• current window recognition DC		No
<ul> <li>undercurrent recognition of 3 phases</li> </ul>		No
<ul> <li>overcurrent recognition of 1 phase</li> </ul>		No
• tension window recognition of 3 phases		No
• tension window recognition of 1 phase		No
phase sequence recognition		No
• can be activated or deactivated / phase sequence recognition		No
• self-reset		Yes
• reset external		No
manual RESET		Yes
Adjustable response current		
•1	Α	1.6 16
• 2	Α	1.6 16

Type of current / for monitoring  AC  Measurable current / for AC  Relative switching hysteresis / for measured current value  % 6.25  Response time / maximum  ms 300  Relative repeat accuracy  % 2  Temperature drift per °C  %/°C  0.1
Relative switching hysteresis / for measured current value % 6.25  Response time / maximum ms 300  Relative repeat accuracy % 2  Temperature drift per °C %/°C 0.1
Response time / maximum     ms     300       Relative repeat accuracy     %     2       Temperature drift per °C     %/°C     0.1
Relative repeat accuracy % 2 Temperature drift per °C %/°C 0.1
Temperature drift per °C %/°C 0.1
Current-carrying capacity
• for permanent overcurrent / maximum permissible A 16
• for overcurrent duration < 1 s / maximum permissible A 320

Supply voltage:		
Type of voltage / of supply voltage		AC/DC
Supply voltage frequency / 1	Hz	50 60
Supply voltage / 1		
• for DC	V	24 240
• at 50 Hz / for AC	V	24 240
• at 60 Hz / for AC	V	24 240
Stored energy time / supply voltage failure / minimum	ms	10

Auxiliary circuit:		
Design of the contact element / of the output relay		closed-circuit current
Operating current / at 17 V / minimum	mA	5
Number of change-over switches		
for auxiliary contacts		1
Operating current / of the auxiliary contacts		
• at AC-15		
• at 24 V	Α	3
• at 230 V	Α	3
• at 400 V	Α	3
• at DC-13		
• at 24 V	Α	1
• at 125 V	Α	0.2
• at 250 V	Α	0.1

## Inputs/ Outputs:

# Short-circuit:

Installation/mounting/dimensions:		
Built in orientation		any
Type of mounting		direct mounting

Width	mm	45
Height	mm	91
Depth	mm	81
Distance, to be maintained, to the ranks assembly		
• forwards	mm	0
• backwards	mm	0
• upwards	mm	0
• downwards	mm	0
• sidewards	mm	0
Distance, to be maintained, to earthed part		
• forwards	mm	6
• backwards	mm	0
• upwards	mm	0
• downwards	mm	0
• sidewards	mm	6
Distance, to be maintained, conductive elements		
• forwards	mm	6
• backwards	mm	0
• upwards	mm	0
• downwards	mm	0
• sidewards	mm	6

Connections:	
Design of the electrical connection	
• for main current circuit	spring-loaded terminals
<ul> <li>for auxiliary and control current circuit</li> </ul>	spring-loaded terminals
Product function	
• removable terminal for main circuit	No
<ul> <li>removable terminal for auxiliary and control circuit</li> </ul>	Yes
Type of the connectable conductor cross-section	
• for main contacts	
• solid	1x (0.5 4 mm²)
• finely stranded	
<ul> <li>with conductor end processing</li> </ul>	1x (0.5 2.5 mm²)
<ul> <li>without conductor final cutting</li> </ul>	1x (0.5 2.5 mm²)
• for AWG conductors / for main contacts	1x (20 12)
for auxiliary contacts	
• solid	1x (0.5 4 mm²), 2x (0.5 2.5 mm²)
• finely stranded	
with conductor end processing	2x (0.25 1.5 mm²)

without conductor final cutting		2x (0.25 1.5 mm²)
• for AWG conductors / for auxiliary contacts		2x (24 16)
Tightening torque		
with screw-type terminals	N·m	0.8 1.2

#### Certificates/approvals:

Verification of suitability CE / UL / CSA

#### **General Product Approval**

**Test Certificates** 









Manufacturer other

**Shipping Approval** 

other











Manufacturer

### **UL/CSA** ratings:

Contact rating designation / for auxiliary contacts / according to

B300 / R300

#### **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:

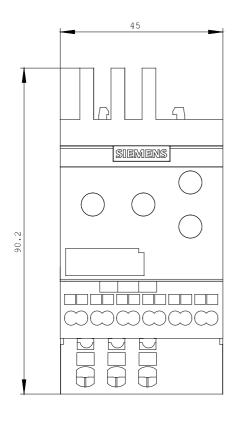
http://www.siemens.com/cax

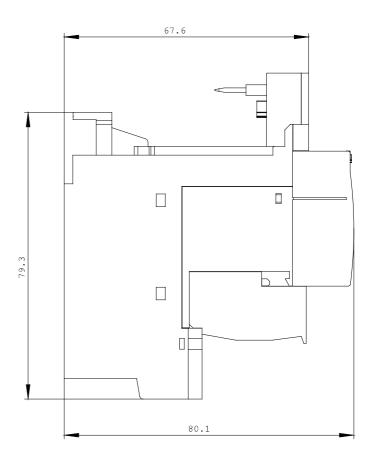
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

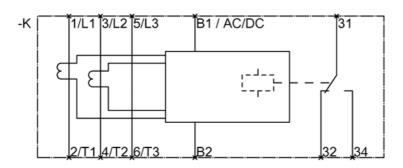
http://support.automation.siemens.com/WW/view/en/3RR2141-2AW30/all

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

http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3RR2141-2AW30







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