## **SIEMENS**

## 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 contactor can be combined company-specific		S00		
Protection class IP				
• on the front		IP20		
• of the terminal		IP20		
Insulation voltage for overvoltage category III	V	690		
according to IEC 60664 with degree of pollution 3				
Rated value				
Installation altitude at height above sea level	m	2 000		
maximum				
Ambient temperature				
<ul> <li>during storage</li> </ul>	°C	-40 +80		
<ul> <li>during operation</li> </ul>	°C	-25 +60		
Electromagnetic compatibility		IEC 60947-1 / IEC 61000-6-2 / IEC 61000-6-4		
EMI immunity acc. to IEC 60947-1		ambience A (industrial sector)		
EMC emitted interference acc. to IEC 60947-1		ambience A (industrial sector)		
Shock resistance		15g / 11 ms		
Vibration resistance		10 55 Hz / 0.35 mm		
Surge voltage resistance Rated value	kV	6		
Operating apparent output Rated value	V·A	4		
Operating power Rated value	W	2.5		
Equipment marking acc. to DIN 40719 extended		К		
according to IEC 204-2 acc. to IEC 750				

Equipment marking acc. to DIN EN 61346-2	_	κ
Mechanical service life (switching cycles) typical	-	10 000 000
Electrical endurance (switching cycles) at AC-15 at 230 V typical	_	100 000
Adjustable response delay time	_	
• when starting	s	0 60
<ul> <li>with lower or upper limit violation</li> </ul>	s	0 30
Stand-by time for restart after fault	S	0.3
Phase number	_	3
Number of monitored phases		2
Product function		
Overcurrent monitoring		Yes
<ul> <li>Undercurrent monitoring</li> </ul>		Yes
<ul> <li>Overcurrent and undercurrent monitoring</li> </ul>		Yes
<ul> <li>Apparent current monitoring</li> </ul>		Yes
<ul> <li>active current monitoring</li> </ul>		No
undercurrent detection DC		No
<ul> <li>undercurrent detection 1 phase</li> </ul>		No
Overcurrent detection DC		No
<ul> <li>Current window recognition DC</li> </ul>		No
<ul> <li>undercurrent detection 3 phases</li> </ul>		No
<ul> <li>Overcurrent detection 1 phase</li> </ul>		No
<ul> <li>Voltage window recognition 3 phase</li> </ul>		No
<ul> <li>Voltage window recognition 1 phase</li> </ul>		No
<ul> <li>phase sequence recognition</li> </ul>		No
<ul> <li>can be activated or deactivated phase sequence recognition</li> </ul>		No
• Auto-reset		Yes
• External reset		No
Manual RESET		Yes
Adjustable response value current	_	
• 1	А	1.6 16
• 2	А	1.6 16
Relative metering precision		
<ul> <li>relating to measuring range limit</li> </ul>	%	10
Type of current for monitoring		AC
Measurable current with AC	А	1.6 16
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
Ampacity		

<ul> <li>for permanent overcurrent maximum permissible</li> </ul>	A	16
<ul> <li>for overcurrent duration &lt; 1 s maximum permissible</li> </ul>	A	320
Supply voltage:		
Type of voltage of the supply voltage		AC/DC
Supply voltage frequency 1	Hz	50 60
Supply voltage 1		
• for DC	V	24 240
• with AC		
— at 50 Hz	V	24 240
— at 60 Hz	V	24 240
Buffering time in the event of power failure minimum	ms	10

Auxiliary circuit:		
Circuit principle of the output relay	closed-circuit current	
Operating current at 17 V minimum	mA	5
Number of CO contacts	-	
<ul> <li>for auxiliary contacts</li> </ul>		1
Operating current of the auxiliary contacts	_	
● at AC-15		
— at 24 V	А	3
— at 230 V	А	3
— at 400 V	А	3
• at DC-13		
— at 24 V	А	1
— at 125 V	А	0.2
— at 250 V	А	0.1

## Inputs/ Outputs:

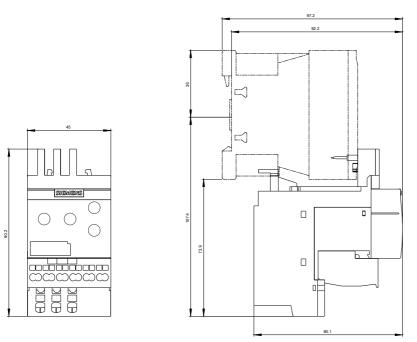
Short-circuit:

Installation/ mounting/ dimensions:			
mounting position		any	
Mounting type		direct mounting	
Width	mm	45	
Height	mm	90	
Depth	mm	80	
Required spacing with side-by-side mounting			
<ul> <li>forwards</li> </ul>	mm	0	
Backwards	mm	0	
• upwards	mm	0	
downwards	mm	0	

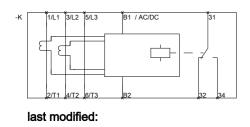
• at the side	mm	0
Required spacing for grounded parts		
• forwards	mm	6
Backwards	mm	0
• upwards	mm	0
downwards	mm	0
• at the side	mm	6
Required spacing for live parts		
• forwards	mm	6
Backwards	mm	0
• upwards	mm	0
• downwards	mm	0
• at the side	mm	6

Connections/ Terminals:		
Type of electrical connection		
<ul> <li>for main current circuit</li> </ul>	spring-loaded terminals	
<ul> <li>for auxiliary and control current circuit</li> </ul>		spring-loaded terminals
Product function		
<ul> <li>removable terminal for main circuit</li> </ul>		No
<ul> <li>removable terminal for auxiliary and control circuit</li> </ul>		Yes
Type of connectable conductor cross-section		
<ul> <li>for main contacts</li> </ul>		
— solid		1x (0.5 4 mm²)
— finely stranded		
— with core end processing		1x (0.5 2.5 mm²)
- without core end processing		1x (0.5 2.5 mm²)
<ul> <li>for AWG conductors</li> </ul>		
— for main contacts		1x (20 12)
— for auxiliary contacts		2x (24 16)
<ul> <li>for auxiliary contacts</li> </ul>		
— solid		1x (0.5 4 mm²), 2x (0.5 2.5 mm²)
— finely stranded		
— with core end processing		2x (0.25 1.5 mm²)
- without core end processing		2x (0.25 1.5 mm²)
Tightening torque with screw-type terminals	N∙m	0.8 1.2
Certificates/ approvals:		
Certificate of suitability		CE / UL / CSA

				Declaration of Conformity
	EHC		С-тіск	EG-Konf.
Test Certificates	Shipping App	proval		
Type TestSpecialCertificates/TestCertiReportCerti	Al Test ficate	B U R E A U V E R I T A S	DNV DNV	GL
Shipping Approval		other		
LRS RINA	RMRS	Environmental Confirmations	<u>Confirmation</u>	
JL/CSA ratings:				
Contact rating of the auxiliary of	ontacts acc. to UL	B300 / R3	00	
Safety related data:				
Protection against electrical sh	ock	finger-safe	9	
Further information Information- and Downloadcen http://www.siemens.com/industrial- Industry Mall (Online ordering s http://www.siemens.com/industrym Cax online generator http://support.automation.siemens. Service&Support (Manuals, Ce http://support.automation.siemens. Image database (product imag	controls/catalogs system) all com/WW/CAXorder/default.asp rtificates, Characteristics, F com/WW/view/en/3RR21412A	ox?lang=en&mlfb=3RR21 AQs,) W30/all		AN macros)



NIN BARBARCAN IS GSRIELTAD SRT2



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