



Monitoring relay, can be mounted to Contactor 3RT2, Size S0 basic, analog adjustment Apparent current monitoring 4...40 A, 50...60 Hz, 2-phase Supply 24 V AC/DC 1 change-over contact Monitoring for Current overshoot and undershoot Phase failure, Cable break with or without fault buffer ON delay 0-60 s Noise pulse suppression 0-30 s Switching hysteresis 6% spring-type connection system

<b>product brand name</b>	SIRIUS
<b>product designation</b>	Monitoring relays
<b>design of the product</b>	analogically adjustable, 2-phase current monitoring
<b>product type designation</b>	3RR2
<b>General technical data</b>	
<b>size of contactor can be combined company-specific</b>	S0
<b>operating apparent power rated value</b>	4 VA
insulation voltage for overvoltage category III according to IEC 60664	
• with degree of pollution 3 rated value	690 V
<b>surge voltage resistance rated value</b>	6 kV
protection class IP	
• on the front	IP20
• of the terminal	IP20
<b>shock resistance</b>	15g / 11 ms
<b>vibration resistance</b>	10 ... 55 Hz / 0.35 mm
mechanical service life (switching cycles) typical	10 000 000
electrical endurance (switching cycles) at AC-15 at 230 V typical	100 000
<b>reference code according to IEC 81346-2</b>	K
<b>relative repeat accuracy</b>	2 %
<b>Substance Prohibitance (Date)</b>	10/01/2009
<b>Supply voltage</b>	
<b>type of voltage of the supply voltage</b>	AC/DC
<b>supply voltage 1 at AC</b>	
• at 50 Hz rated value	24 V
• at 60 Hz rated value	24 V
<b>supply voltage 1 at DC rated value</b>	24 V
supply voltage frequency 1	50 ... 60 Hz
<b>Measuring circuit</b>	
<b>type of current for monitoring</b>	AC
<b>adjustable current response value current</b>	
• 1	4 ... 40 A
• 2	4 ... 40 A
<b>adjustable response delay time</b>	
• when starting	0 ... 60 s
• with lower or upper limit violation	0 ... 30 s
<b>Precision</b>	
<b>temperature drift per °C</b>	0.1 %/°C

Communication/ Protocol	
protocol is supported IO-Link protocol	No
<b>type of voltage supply via input/output link master</b>	No
Auxiliary circuit	
<b>number of CO contacts</b> • for auxiliary contacts	1
<b>operational current of auxiliary contacts at AC-15</b> • at 24 V • at 230 V • at 400 V	3 A 3 A 3 A
<b>operational current of auxiliary contacts at DC-13</b> • at 24 V • at 125 V • at 250 V	1 A 0.2 A 0.1 A
<b>contact rating of auxiliary contacts according to UL</b>	B300 / R300
Main circuit	
operating power rated value	2.5 W
<b>ampacity of the semiconductor output in SIO mode</b>	200 mA
<b>operational current at 17 V minimum</b>	5 mA
Electromagnetic compatibility	
EMC emitted interference according to IEC 60947-1	ambience A (industrial sector)
EMC immunity according to IEC 60947-1	ambience A (industrial sector)
Connections/ Terminals	
<b>product component removable terminal for main circuit</b>	No
<b>product component removable terminal for auxiliary and control circuit</b>	Yes
<b>type of electrical connection</b> • for main current circuit • for auxiliary and control circuit	spring-loaded terminals spring-loaded terminals
<b>type of connectable conductor cross-sections</b> • for main contacts — solid — finely stranded with core end processing — finely stranded without core end processing • at AWG cables for main contacts	1x (1 ... 10 mm <sup>2</sup> ) 1x (1 ... 6 mm <sup>2</sup> ) 1x (1 ... 6 mm <sup>2</sup> ) 1x (18 ... 8)
<b>connectable conductor cross-section for main contacts</b> • solid or stranded • finely stranded with core end processing • finely stranded without core end processing	1 ... 10 mm <sup>2</sup> 1 ... 6 mm <sup>2</sup> 1 ... 6 mm <sup>2</sup>
<b>type of connectable conductor cross-sections</b> • for auxiliary contacts — solid — finely stranded with core end processing — finely stranded without core end processing • at AWG cables for auxiliary contacts	1x (0.5 ... 4 mm <sup>2</sup> ), 2x (0.5 ... 2.5 mm <sup>2</sup> ) 2x (0.25 ... 1.5 mm <sup>2</sup> ) 2x (0.25 ... 1.5 mm <sup>2</sup> ) 2x (24 ... 16)
AWG number as coded connectable conductor cross section for main contacts	18 ... 8
tightening torque with screw-type terminals	0.8 ... 1.2 N·m
Installation/ mounting/ dimensions	
<b>mounting position</b>	any
<b>fastening method</b>	direct mounting
<b>height</b>	109 mm
<b>width</b>	45 mm
<b>depth</b>	92 mm
<b>required spacing</b> • with side-by-side mounting — forwards — backwards	 0 mm 0 mm

— upwards	0 mm
— downwards	0 mm
— at the side	0 mm
• for grounded parts	
— forwards	6 mm
— backwards	0 mm
— upwards	6 mm
— at the side	6 mm
— downwards	6 mm
• for live parts	
— forwards	6 mm
— backwards	0 mm
— upwards	6 mm
— downwards	6 mm
— at the side	6 mm

#### Ambient conditions

installation altitude at height above sea level maximum	2 000 m
<b>ambient temperature</b>	
• during operation	-25 ... +60 °C
• during storage	-40 ... +80 °C

#### Certificates/ approvals

##### General Product Approval

##### EMC



[Confirmation](#)



##### Declaration of Conformity

##### Test Certificates

##### Marine / Shipping



[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)



##### Marine / Shipping

##### other



[Confirmation](#)

#### Further information

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

<https://www.siemens.com/ic10>

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RR2142-2AA30>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RR2142-2AA30>

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

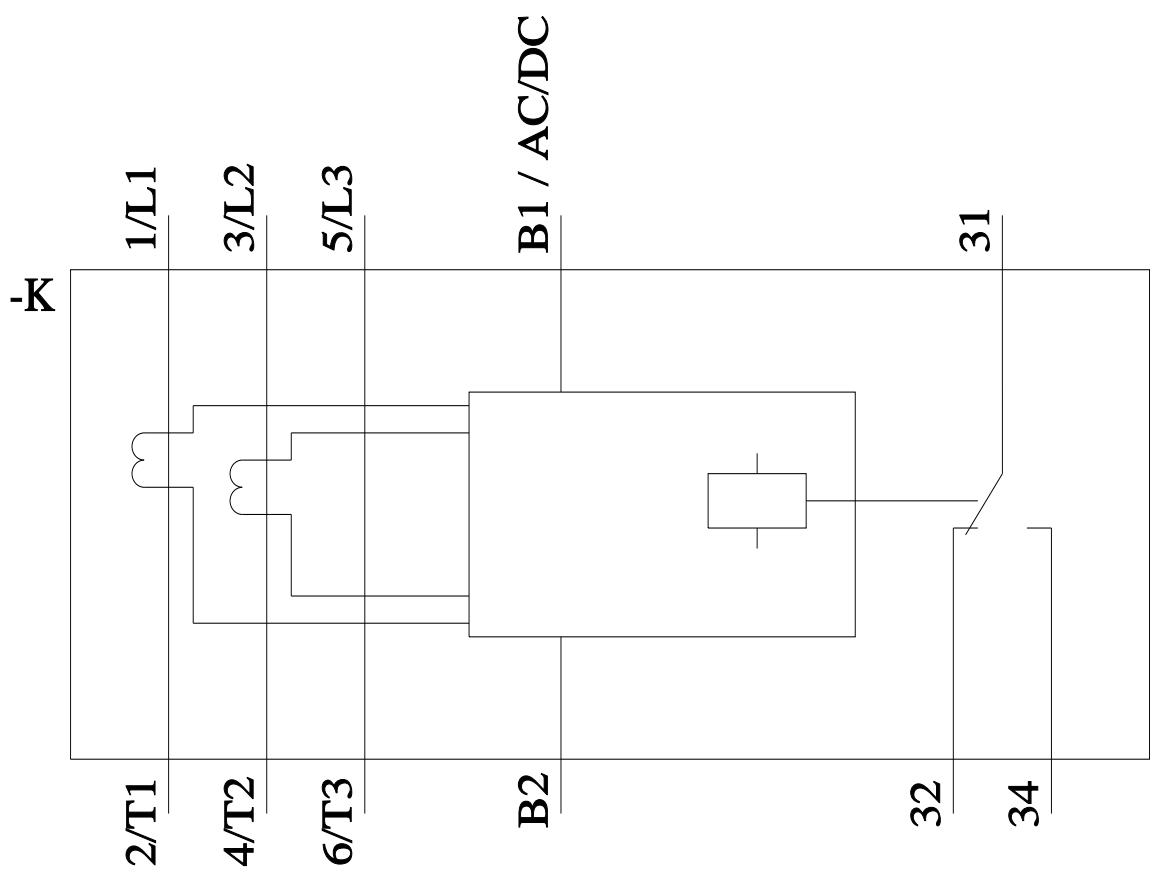
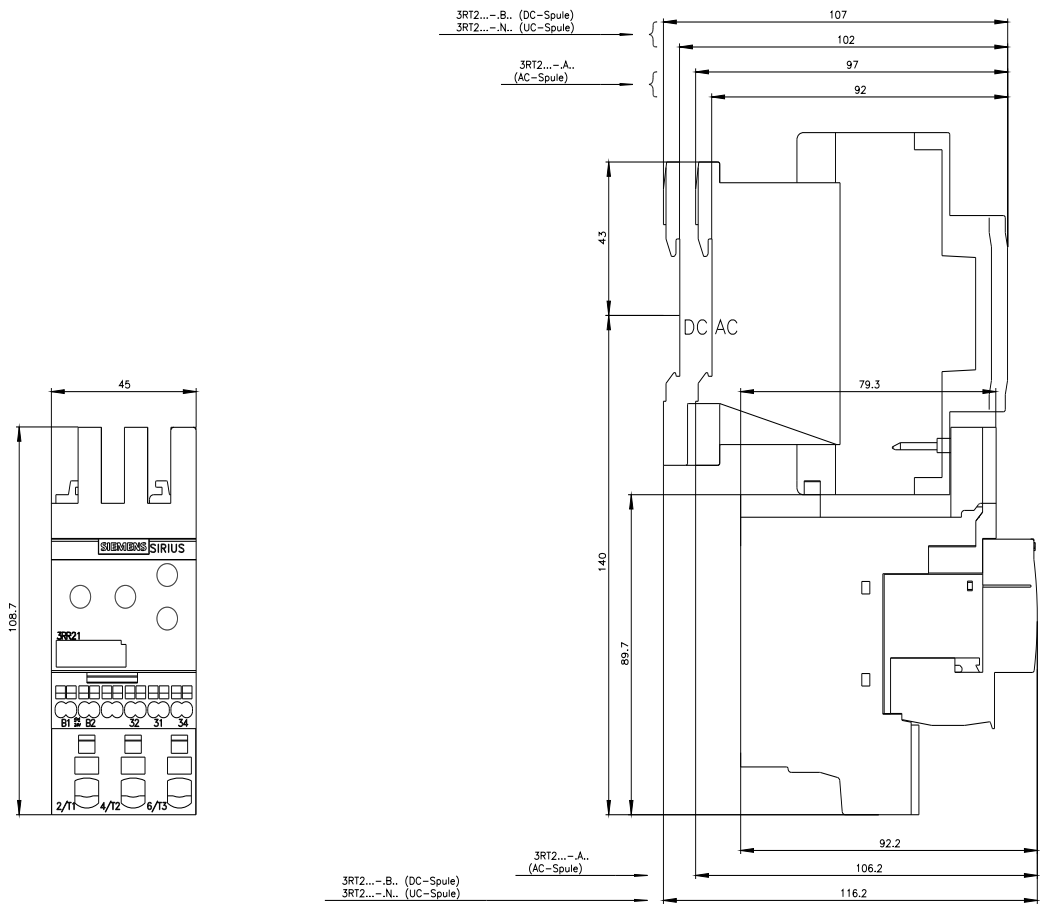
<https://support.industry.siemens.com/cs/ww/en/ps/3RR2142-2AA30>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RR2142-2AA30&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RR2142-2AA30&lang=en)

Characteristic: Derating

<https://support.industry.siemens.com/cs/ww/en/ps/3RR2142-2AA30/manual>



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