



Monitoring relay, can be mounted to Contactor 3RT2, Size S00 basic, analog adjustment Apparent current monitoring 1.6-16 A, 20-400 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

product brand name	SIRIUS
product designation	Monitoring relays
design of the product	analogically adjustable, 2-phase current monitoring
product type designation	3RR2
General technical data	
size of contactor can be combined company-specific	S00
operating apparent power rated value	4 V·A
insulation voltage for overvoltage category III according to IEC 60664	
• with degree of pollution 3 rated value	690 V
surge voltage resistance rated value	6 kV
protection class IP	
• on the front	IP20
• of the terminal	IP20
shock resistance	15g / 11 ms
vibration resistance	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
reference code acc. to IEC 81346-2	K
relative repeat accuracy	2 %
Supply voltage	
type of voltage of the supply voltage	AC/DC
supply voltage 1 at AC	
• at 50 Hz rated value	24 V
• at 60 Hz rated value	24 V
supply voltage 1 at DC rated value	24 V
• supply voltage frequency 1	50 ... 60 Hz
Measuring circuit	
type of current for monitoring	AC
adjustable current response value current	
• 1	1.6 ... 16 A
• 2	1.6 ... 16 A
adjustable response delay time	
• when starting	0 ... 60 s
• with lower or upper limit violation	0 ... 30 s
Precision	
temperature drift per °C	0.1 %/°C




Communication/ Protocol	
protocol is supported IO-Link protocol	No
type of voltage supply via input/output link master	No
Auxiliary circuit	
number of CO contacts • for auxiliary contacts	1
operational current of auxiliary contacts at AC-15 • at 24 V • at 230 V • at 400 V	3 A 3 A 3 A
operational current of auxiliary contacts at DC-13 • at 24 V • at 125 V • at 250 V	1 A 0.2 A 0.1 A
contact rating of auxiliary contacts according to UL	B300 / R300
Main circuit	
operating power rated value	2.5 W
Outputs	
ampacity of the semiconductor output in SIO mode	200 mA
operational current at 17 V minimum	5 mA
Electromagnetic compatibility	
EMC emitted interference acc. to IEC 60947-1	ambience A (industrial sector)
EMC immunity acc. to IEC 60947-1	ambience A (industrial sector)
Safety related data	
touch protection against electrical shock	finger-safe
Connections/ Terminals	
product function • removable terminal for main circuit • removable terminal for auxiliary and control circuit	No Yes
type of electrical connection • for main current circuit • for auxiliary and control circuit	spring-loaded terminals spring-loaded terminals
type of connectable conductor cross-sections • for main contacts — solid — finely stranded with core end processing — finely stranded without core end processing • at AWG cables for main contacts	1x (0.5 ... 4 mm ²) 1x (0.5 ... 2.5 mm ²) 1x (0.5 ... 2.5 mm ²) 1x (20 ... 12)
connectable conductor cross-section for main contacts • solid or stranded • finely stranded with core end processing • finely stranded without core end processing	0.5 ... 4 mm ² 2.5 ... 2.5 mm ² 0.5 ... 2.5 mm ²
type of connectable conductor cross-sections • 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 ²), 2x (0.5 ... 2.5 mm ²) 2x (0.25 ... 1.5 mm ²) 2x (0.25 ... 1.5 mm ²) 2x (24 ... 16)
• AWG number as coded connectable conductor cross section for main contacts	20 ... 12
• tightening torque with screw-type terminals	0.8 ... 1.2 N·m
Installation/ mounting/ dimensions	
mounting position	any
fastening method	direct mounting
height	90 mm
width	45 mm

depth	80 mm
required spacing	
<ul style="list-style-type: none"> • with side-by-side mounting <ul style="list-style-type: none"> — forwards 0 mm — backwards 0 mm — upwards 0 mm — downwards 0 mm — at the side 0 mm • for grounded parts <ul style="list-style-type: none"> — forwards 6 mm — backwards 0 mm — upwards 0 mm — at the side 6 mm — downwards 0 mm • for live parts <ul style="list-style-type: none"> — forwards 6 mm — backwards 0 mm — upwards 0 mm — downwards 0 mm — at the side 6 mm 	

Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
<ul style="list-style-type: none"> • ambient temperature during operation -25 ... +60 °C • ambient temperature during storage -40 ... +80 °C 	

Certificates/ approvals

General Product Approval	EMC	Declaration of Conformity
     		

Declaration of Conformity	Test Certificates	Marine / Shipping			
Miscellaneous	Special Test Certificate	Type Test Certificates/Test Report			

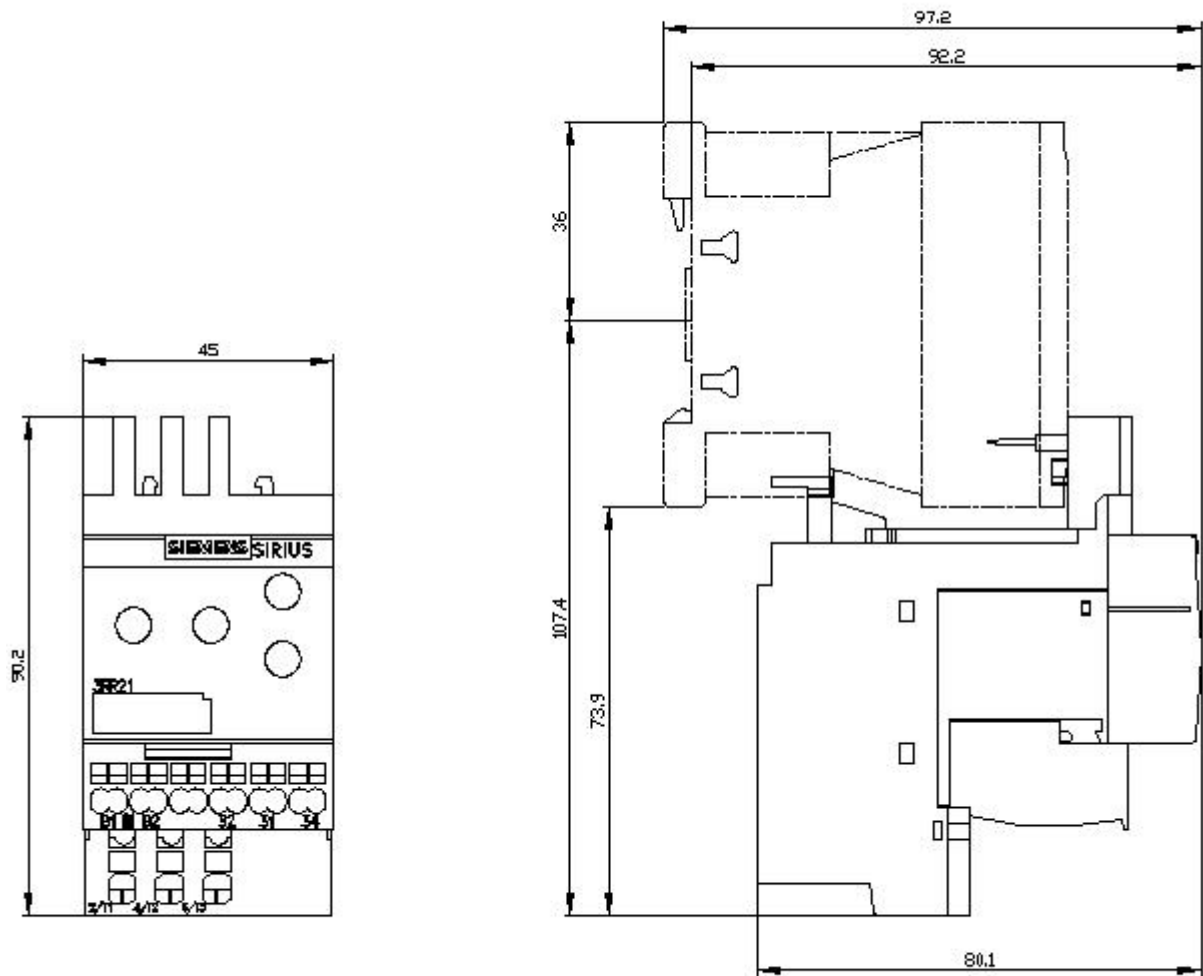
Marine / Shipping	other				
  	Confirmation				

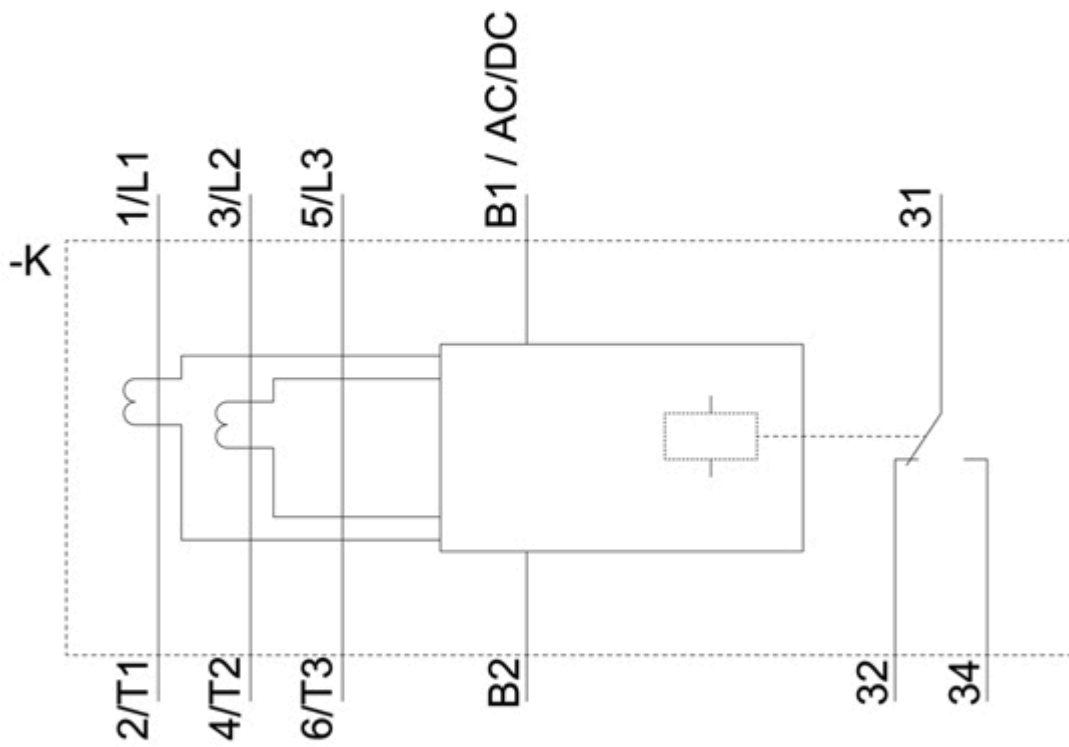
Further information

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=3RR2141-2AA30>
Cax online generator
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RR2141-2AA30>
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
<https://support.industry.siemens.com/cs/ww/en/ps/3RR2141-2AA30>

Characteristic: Derating

<https://support.industry.siemens.com/cs/ww/en/ps/3RR2141-2AA30/manual>





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