SIEMENS

Data sheet 3RR2243-1FW30

Monitoring relay, can be mounted to Contactor 3RT2, Size S2 standard, digitally adjustable Apparant/active current monitoring 8...80 A, 20...400 Hz, 3-phase Supply 24-240 V AC/DC 1 change-over contact, 1 semiconductor output for alarm and warning Monitoring for Current overshoot and undershoot Phase failure, Cable break Phase sequence Residual current Blocking current Warning and alarm thresholds with or without fault buffer ON delay 0-99 s Noise pulse suppression 0-30 s Pause after fault 0-300 min Screw connection system

Product brand name	SIRIUS
Product designation	Monitoring relays
Design of the product	digitally adjustable, 3-phase current monitoring
Product type designation	3RR2

General technical data	
Size of contactor can be combined company-specific	S2
Operating apparent output 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	IP00
Shock resistance	10g / 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 DIN 40719 extended according to IEC 204-2 acc. to IEC 750	K
Reference code acc. to DIN EN 81346-2	K
Reference code acc. to DIN EN 61346-2	K
Relative repeat accuracy	2 %

Supply voltage

Type of voltage of the supply voltage	AC/DC
Supply voltage 1 at AC	
• at 50 Hz	24 ... 240 V
• at 60 Hz	24 ... 240 V
Supply voltage 1 at DC	24 ... 240 V
Supply voltage frequency	
• 1	50 ... 60 Hz

Measuring circuit

Type of current for monitoring	AC
Adjustable pick-up value current	
• 1	8 ... 80 A
• 2	8 ... 80 A
Adjustable response delay time	
• when starting	0 ... 99 s
• with lower or upper limit violation	0 ... 30 s
Adjustable switching hysteresis for measured current value	0.2 ... 16 A
Accuracy of digital display	+/-1 digit

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
Operating current of auxiliary contacts at AC-15	
• at 24 V	3 A
• at 230 V	3 A
• at 400 V	3 A
Operating current of auxiliary contacts at DC-13	
• at 24 V	1 A

• at 125 V	0.2 A
• at 250 V	0.1 A
Contact rating of auxiliary contacts according to UL	B300 / R300

Main circuit

Operating power	
• rated value	2.5 W

Outputs

Current-carrying capacity of semiconductor output in the SIO mode	200 mA
Operating current at 17 V minimum	5 mA

Electromagnetic compatibility

EMC emitted interference	
• acc. to IEC 60947-1	ambience A (industrial sector)
EMI immunity	
• **acc. to IEC 60947-1**	ambience A (industrial sector)

Safety related data

Protection against electrical shock	finger-safe when touched vertically from front acc. to IEC 60529

Connections/ Terminals

Product function	
• removable terminal for main circuit	No
• removable terminal for auxiliary and control circuit	Yes
Type of electrical connection	
• for main current circuit	screw-type terminals
• for auxiliary and control current circuit	screw-type terminals
Type of connectable conductor cross-sections	
• for main contacts	
— solid	2x (1 ... 35 mm²), 1x (1 ... 50 mm²)
— stranded	2x (1 ... 35 mm²), 1x (1 ... 50 mm²)
— finely stranded with core end processing	2x (1 ... 25 mm²), 1x (1 ... 35 mm²)
• at AWG conductors for main contacts	2x (18 ... 2), 1x (18 ... 1)
Connectable conductor cross-section for main contacts	
• single or multi-stranded	1 ... 50 mm²
• finely stranded with core end processing	1 ... 35 mm²
Type of connectable conductor cross-sections	
• for auxiliary contacts	
— solid	1x (0.5 ... 4 mm²), 2x (0.5 ... 2.5 mm²)
— finely stranded with core end processing	1x (0.5 ... 2.5 mm²), 2x (0.5 ... 1.5 mm²)
• at AWG conductors for auxiliary contacts	2x (20 ... 14)

AWG number as coded connectable conductor cross section	
• for main contacts	18 ... 1
Tightening torque	
• with screw-type terminals	0.8 ... 1.2 N·m

Installation/ mounting/ dimensions

Mounting position	any
Mounting type	direct mounting
Height	99 mm
Width	55 mm
Depth	112 mm
Required spacing	
• with side-by-side mounting	
— forwards	0 mm
— Backwards	0 mm
— upwards	0 mm
— downwards	10 mm
— at the side	0 mm
• for grounded parts	
— forwards	10 mm
— Backwards	0 mm
— upwards	10 mm
— at the side	10 mm
— downwards	10 mm
• for live parts	
— forwards	10 mm
— Backwards	0 mm
— upwards	10 mm
— downwards	10 mm
— at the side	10 mm

Ambient conditions

Installation altitude at height above sea level	
• maximum	2 000 m

Certificates/ approvals

General Product Approval				EMC	Declaration of Conformity
CCC	CSA	UL	EAC	RCM	EG-Konf.

Declaration of Conformity	Test Certificates	Marine / Shipping			
Miscellaneous	Special Test Certificate	ABS	LRS	PRS	RINA

Marine / Shipping		other
RMRS		Confirmation

Further information

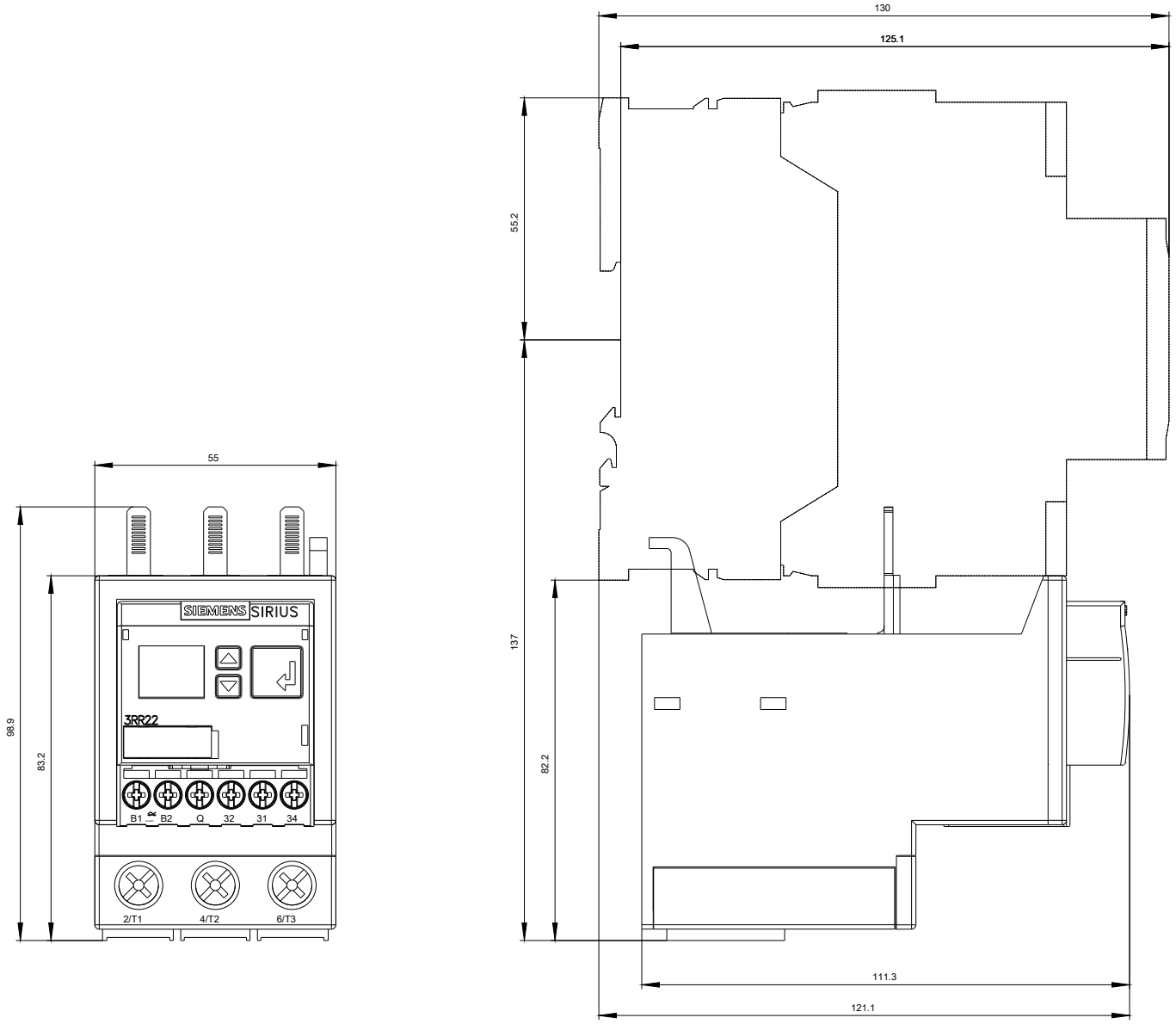
Information- and Downloadcenter (Catalogs, Brochures,…)
www.siemens.com/ic10

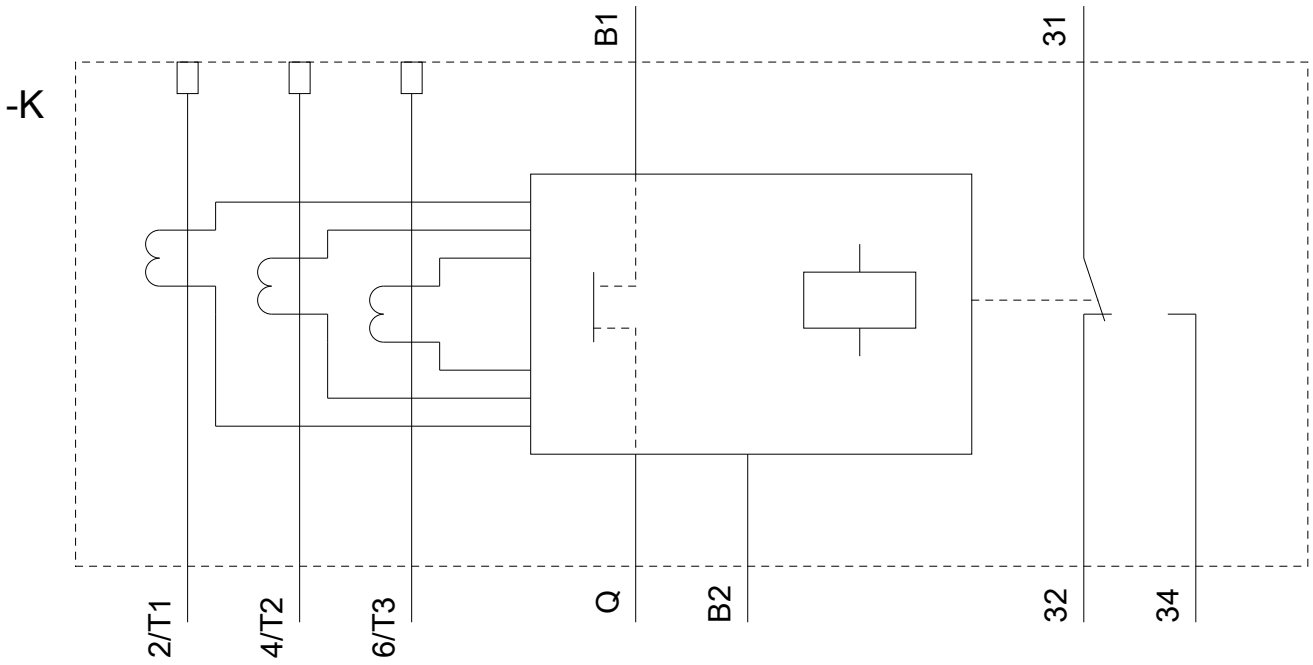
Industry Mall (Online ordering system)
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RR2243-1FW30

Cax online generator
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RR2243-1FW30

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3RR2243-1FW30

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RR2243-1FW30&lang=en





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