

Universal process transmitter with control unit

RMA42



€ 206.-
11–35 pcs.



Complete product information:
www.e-direct.endress.com/rma42

- 1 or 2 universal inputs, optional intrinsically safe
- Backlit 5-digit LCD
- 2 limit value relays with additional status output

i Specs at a glance:

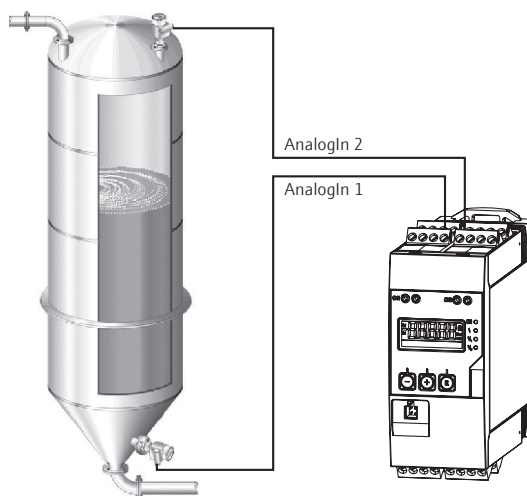
- **Inputs:**
1/2 universal inputs measuring current, voltage, resistance, temperature, optional intrinsically safe
- **Functionalities:**
Linearization, mathematical calculations, differential pressure package
- **Outputs:**
2 relays, 1/2 analog outputs
- **Dimensions:**
45 × 115 × 118 mm
(1.77" × 4.53" × 4.66")
- **Display:**
LCD – 2 lines; black/white/
yellow; toggle function
between channels

Application Due to its universal design RMA42 is suitable for many industries such as chemical, water and waste water and food and beverages. Typical applications include monitoring of signals for any violation of preset limit values (also to WHG) as well as transmission of signals from hazardous areas, differential pressure applications and signal multiplying.

RMA42 can be installed in a switch cabinet or used in a field housing.

Function The RMA42 process transmitter powers the transmitter or sensor and processes the analog signals from those. These signals are monitored, evaluated, calculated, saved, separated, linked, converted and displayed. The signals, intermediate values and the results of calculations and analysis are transmitted by digital or analog means. With the two relays the process can be controlled.

Application example

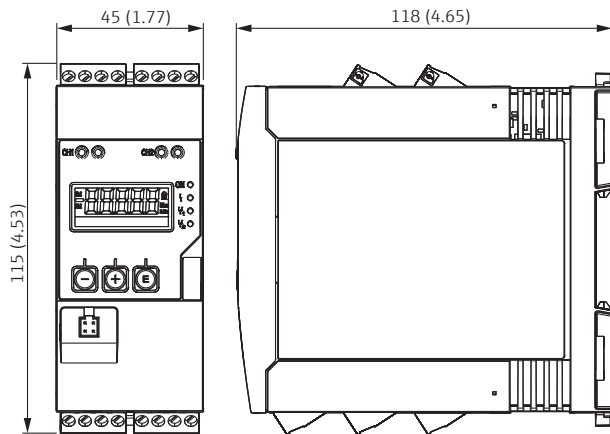


Example of application
"differential pressure"

Technical data

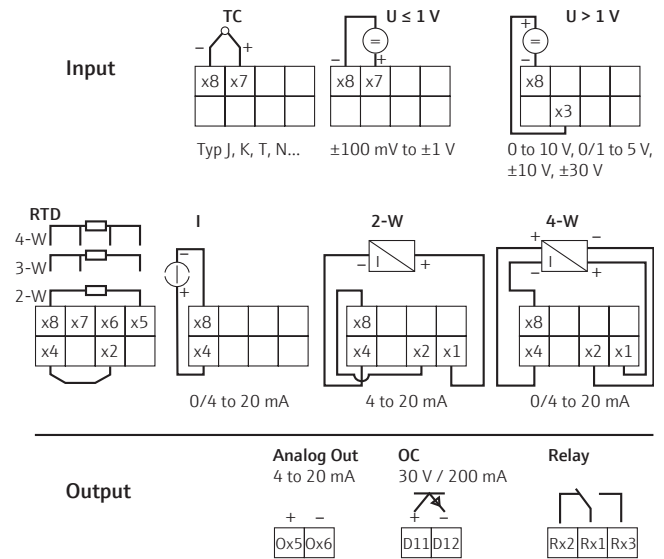
Input parameters		Operating conditions	
Input	1/2 × universal input 0 to 20 mA, 4 to 20 mA; Over range: up to 22 mA, 0 to 10 V, 2 to 10 V, 0 to 5 V, 1 to 5 V, ±1 V, ±10 V, ±30 V, ±100 mV, 30 to 3000 Ω; Pt 100 according to IEC60751, GOST, JIS1604, Pt 500 and Pt 1000 according to IEC60751; Cu 100, Cu 50, Pt 50, Pt 46, Cu 53 according to GOST; Ni 100, Ni 1000 according to DIN43760; Type J, K, T, N, B, S, R according to IEC60584; Type U according to DIN43710; Type L according to DIN43710, GOST; Type C, D according to ASTM E998	Protection Class	DIN rail housing IP20
Linearization	2 Linearization tables of input values (up to 32 linearization points supported)	Ambient temperature	-20 to +50 °C (-4 to 122 °F)
Output parameters		Storage temperature	-40 to +85 °C (-40 to 185 °F)
Analog output	1/2 × analog output, 0 to 20 mA, 4 to 20 mA; 0 to 10 V, 2 to 10 V, 0 to 5 V; short-circuit proof, $I_{max} < 25$ mA	Power supply	
Loop power supply	24 V DC (+15 %/-5 %), max. 30 mA; short-circuit proof and overload proof; galvanically isolated from system and outputs	Wide range power supply	24 V to 230 V AC/DC (-20%/+10%) 50/60 Hz
Status Output	Open Collector to monitor device status as well as cable open circuit	Structural design	
Relay	2 changers with function modes: min, max, gradient, alarm, out-band, in-band	Housing (W × H × D)	45 × 115 × 118 mm (1.77" × 4.53" × 4.66")
Limit function	Max. contact burden DC 30 V / 3 A (permanent state, without destruction of the input) Max. contact burden AC 250 V / 3 A (permanent state, without destruction of the input) Min. contact load 500 mW (12 V/10 mA)	Electrical Connection	Pluggable screw clamps, 2,5 mm ²
		Display and user interface	
		Display	LCD 2-lines; black/white/yellow; toggle function; 1st line: 7 segment, 5-digit; 2nd line: Dot-Matrix free programmable for Bargraph, TAG, unit
		LED	2 × Device status; 2 × Relay status
		Operation	using three buttons and/or via configuration software FieldCare Device Setup
		Approvals	
		Ex-Approvals	ATEX II(1)GD [Ex ia] IIC
		Others	SIL2, UL, GL, CSA GP
		Software functionalities	
		Min/Max log function / memory, alarm logging, differential pressure application package, 2 calculation channels: sum, difference, average, linearization	
		Accessories	
		Configuration software FieldCare Device Setup	
		Commubox TXU10 (including FieldCare Device Setup)	

Dimensions in mm (inches)



Installation according to instruction manual.

Electrical connection



Price table

Process transmitter RMA42		Order no.	Price/pcs. in €		
Approval	Input; Output		1 to 3	4 to 10	11 to 35
Non-hazardous area	1 × universal; 1 × analog	RMA42-AAA	251.-	226.-	206.-
	2 × universal; 2 × analog	RMA42-AAB	341.-	307.-	279.-
	1 × universal; 1 × analog + 2 relay	RMA42-AAC	304.-	274.-	250.-
	2 × universal; 2 × analog + 2 relay	RMA42-AAD	394.-	354.-	323.-
ATEX II(1)GD [Ex ia] IIC	1 × universal; 1 × analog	RMA42-BHA	296.-	266.-	243.-
	2 × universal; 2 × analog	RMA42-BHB	386.-	348.-	317.-
	1 × universal; 1 × analog + 2 relay	RMA42-BHC	350.-	315.-	287.-
	2 × universal; 2 × analog + 2 relay	RMA42-BHD	439.-	395.-	360.-

Accessories	Order no.	Price/pcs. in €
Configuration kit USB	TXU10-AC	101.72
Protective housing IP 66 for max. 2 RMA42 (182 × 180 × 165 mm)	52010132	74.96

Prices are applicable for Germany until 30/06/2020, in Euro per unit, net excluding value added tax (VAT), cost of packing and dispatch. Endress+Hauser retains the right to change or modify pricing at any time. The terms of sales and delivery of Endress+Hauser are applicable. Current prices and delivery times can be verified prior to ordering on www.e-direct.endress.com.



Complete product information:
www.e-direct.endress.com/rma42

More products to complete
your measuring point ...



Capacitive probe
Liquicap T FMI21



Temperature sensor
Easytemp TMR31



Temperature transmitter
iTEMP TMT80