

RA33 Batch Controller

Recording and controlling of batch operations



More information and current pricing:

www.au.endress.com/RA33

Benefits:

- Fixed and automatic after-run correction for constant, extremely accurate results
- Higher quality through fast and exact dosing
- Optional volume correction for mineral oils as per ASTM D1250-04
- Detailed logging of protocols (preset counter, volume counter, batch name and number) as well as error messages and changes of operating parameters
- Standard models are suitable for connecting and supplying all common flow transmitters, temperature sensors and density sensors
- Remote control option to start and abort batch runs
- Daily, monthly and annual statistics on the batch run size and quantity

Specs at a glance

- **Input** 1 x analogue (I) / pulse (for flow) 1 x RTD (for temperature) 1 x analogue (I) (for density) Loop power supply 24V DC (+/-16%)
- **Output** 1 x analogue (I) / pulse (active) 2 x open collector
- **Display** 160 x 80 Dot-Matrix LCD with white backlit Colour change in case of alarm event Active display area 70 x 34 mm
- **Calculations** Volume calculation

Field of application: The Batch Controller RA33 is designed to record flow and control output signals for valves and pumps to ensure the exact dosing of predefined batch quantities. The measured volume can be corrected with the temperature/density compensation function. The filling process can be optimized with an automatic or fixed after-run correction. Mineral oils can be corrected according to the ASTM D1250-04 standard.

Features and specifications

Energy & Application Manager	Measuring principle Application manager
	Measuring principle Batch controller
	Function Filling & dosing
	Calculations Volume calculation
	Number of applications 1
	Data storage yes
	Calculation standards ASTM D1250-04
	Communication RS232
	USB
	Ethernet
Modbus TCP	
Modbus RTU	
Power supply Not defined	

Energy & Application Manager Loop power supply

Low voltage power supply:

100 bis 230 V AC (-15% / +10%)

Small voltage power supply:

24 V DC (-50% / +75%)

24 V AC ($\pm 50\%$)

Protection classIP65

Input

1 x analogue (I) / pulse (for flow)

1 x RTD (for temperature)

1 x analogue (I) (for density)

Loop power supply 24V DC (+/-16%)

Output

1 x analogue (I) / pulse (active)

2 x open collector

Dimensions (WxHxD)144 x 144 x 103.1 mm (5.67" x 5.67" x 4.06")

Energy & Application Manager	Operation
	3 operation buttons and 14 function buttons for batch operation or via FieldCare
	Read out of historical / logged data via Field Data Manager software (SQL database and visualization interface)
	Selectable language
	Display
	160 x 80 Dot-Matrix LCD with white backlit
	Colour change in case of alarm event
Active display area 70 x 34 mm	
Software functions	
Volume calculation	
1 or 2 stage operation	
Manual and automatic overrun correction	
Volume correction factor (VCF) according ASTM D1250-04 for generalized crude oils, refined products and lubricating oils	
Certificates	
CE	
CSA GP	
NTEP (USA)	

Acquisition / Evaluation	Measuring principle
	Batch controller

Acquisition / Evaluation**Function**

Filling & dosing

Certification

CE

UL listed

CSA GP

Input

1 x analogue (I) / pulse (for flow)

1 x RTD (for temperature)

1 x analogue (I) (for density)

Loop power supply 24V DC (+/-16%)

Output

1 x analogue (I) / pulse (active)

2 x open collector

Relay output

2 x relay

Auxiliary power supply / Loop power supply

Low voltage power supply:

100 bis 230 V AC (-15% / +10%)

Small voltage power supply:

24 V DC (-50% / +75%), 24 V AC (\pm 50%)

Acquisition / Evaluation**Dimensions (wxhxd)**

144 x 144 x 103.1 mm

(5.67" x 5.67" x 4.06")

Software

Volume calculation

1 or 2 stage operation

Manual and automatic overrun correction

Volume correction factor (VCF) according ASTM D1250-04 for generalized crude oils, refined products and lubricating oils

Operation

3 operation buttons and 14 function buttons for batch operation or via FieldCare

Read out of historical / logged data via Field Data Manager software (SQL database and visualization interface)

Selectable language

Display

160 x 80 Dot-Matrix LCD with white backlit

Colour change in case of alarm event

Active display area 70 x 34 mm

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