## Features/Benefits

- Large 8 digit LCD batch total display & cumulative totaliser
- Robust IP66 field mountable housing with protection cover or DIN panel mount version
- Simple flow chart touch key programming
- Scaleable universal high speed pulse & frequency flow inputs
- Two stage control available for soft start & close sequencing .
- PIN protected programming
- Automatic overrun compensation
- Missing pulse (no flow) alarm
- Maximum batch size limiting
- Non volatile memory
- Multiple batcher interlock function (network up to 10 controllers)
- Reverse polarity protection

## Network Interlocks

As many as 10 Ecobatch controllers may be networked together with one common flowmeter for applications where one liquid is being dispensed to a number of individually operated outlets. Ecobatch will also take an "inhibit start" input signal from other control or plant equipment.

## Programming

Simple PIN protected flow chart programming with English prompts guide you through the programming routine greatly reducing the need to refer to the instruction manual.

## Options

- AC power + SPDT control relays
- Ecobatch batching systems
  Also available
- Battery totalisers
- Flow rate totalisers

## Overview

The EB Ecobatch high speed batch controller is specifically designed to operate with common pulse producing flowmeters such as positive displacement, turbine, mass, vortex or magnetic style. The instrument displays batch value, batch progress & cumulative total in engineering units as programmed by the user, it also logs the total number of batches performed. Ecobatch scrolls messages to prompt the user at each stage of operation. Batch limiting and no-flow detection are "feature safeguards" against erroneously high batch entries, loss of the flow input signal, control valve or pump failure.
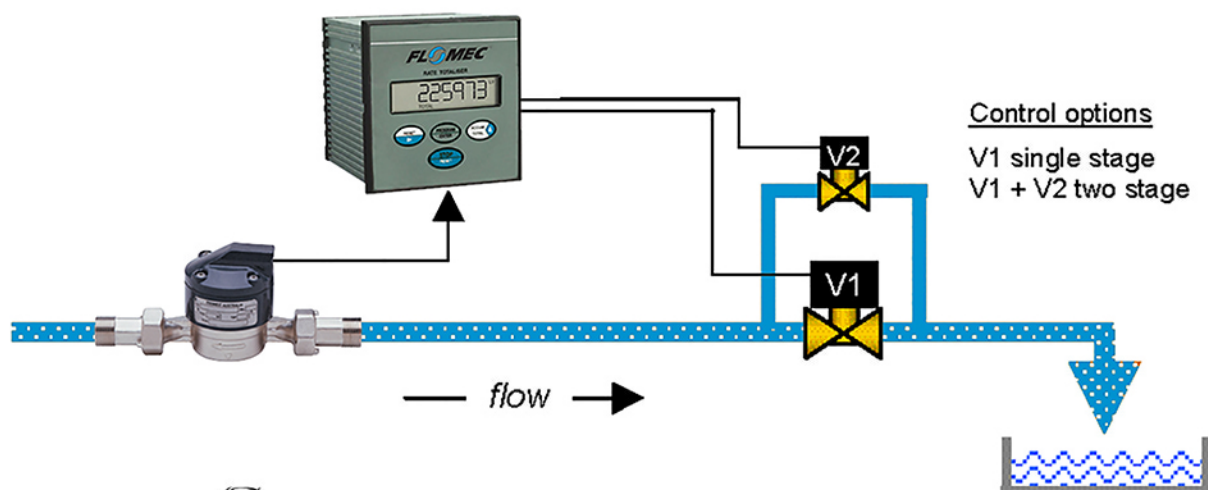
## Control Outputs

DC powered models have two solid state 1A NPN current sinking control outputs, AC & DIN models have two single pole double throw (SPDT) 5A relays. These two independent outputs can be programmed to provide stepped control at the start and/or end of each batch. An Automatic Overrun Compensation feature corrects for any batch errors attributed to slow closing valves or flow rate deterioration

## Specifications

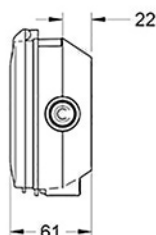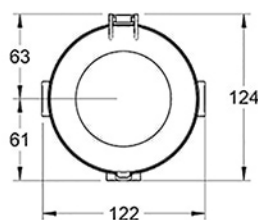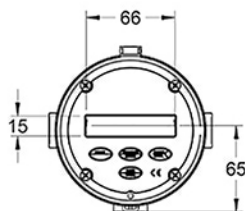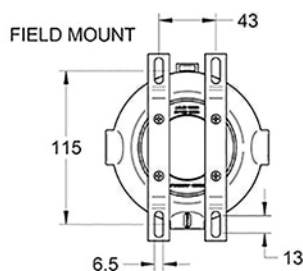| Liquid crystal display ( LCD ) | 9mm high alpha numeric characters + subscripts |
|---|---|
| Batch & accumulated totals | 8 digit, programmable to 3 decimal places |
| Engineering units displayed | Litres, gallons, m3, lbs, kgs or no eng. units displayed |
| Input types ( pulse & frequency ) | Reed switch, open collector, coil ( 15mV P~P min.) Namur & other proximities. Max. frequency 10Khz |
| Input scaling range | 0.001~9,999,999.999 with 3 floating decimal points |
| Control outputs | Two 1A NPN open collectors, 24Vdc max. Two SPDT 5A relays ( with AC & DIN powered versions ) |
| Alarm output ( no flow alarm ) | 1A open collector ( NPN/PNP selectable ), 24Vdc max. |
| Operating temperature | -10~+80°C (14~176°F), refer factory for higher temp. |
| Power requirements | 12~24Vdc, 50mA, 95~260Vac options |
| Status interlocks | Batch status output, batch inhibit input, network looping |
| Enclosures ( two styles ) | IP66 (NEMA 4X) GRN field mount or DIN panel mount |
| Mounting | Meter & stem mount, wall, surface, pipe or panel mount |
| Batching systems | Ecobatch with flowmeter & control valve eg: UM020 system, 1~70 L/min, 10 bar, 90°C |

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## Single or Two Stage Control



**Control options**

V1 single stage
V1 + V2 two stage

flow ➔

## Dimensions

STANDARD ENCLOSURE



FIELD MOUNT

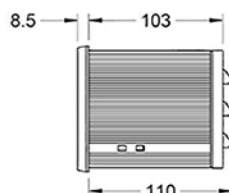43
115
6.5
13

66
15
65

63
61
124
122

22
61

DIN PANEL MOUNT ENCLOSURE



96
96
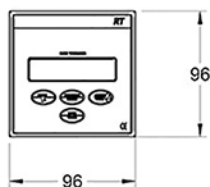
CUTOUT DIMENSIONS
91mm x 91mm

8.5
103
110



Meter mount view of the OM025 Aluminium threaded meter fitted with FEB10 batch controller

## Model Coding

### FLOMEC™ Panel Mount Flow Instruments

**PANEL MOUNT INSTRUMENTS** ( suitable for Panel or Enclosure mount )

| Model | Function ( FEB10 instruments have program PIN protection ) | | | | | | |
|---|---|---|---|---|---|---|---|
| EB10 | AC or DC powered ecobatch one or two stage batch controller with two SPDT x 5A control relays | | | | | | |
| | **Electrical access** | | | | | | |
| | 0 | Rear terminal connections, DIP switches & 8~24 Vdc source regulation. | | | | | |
| | | **Flow input type** | | | | | |
| | | D | Digital (pulse or frequency) | | | | |
| | | | **Power supply** | | | | |
| | | | 1 | 110V AC (can also be powered by 8~24V DC) | | | |
| | | | 2 | 220V AC (can also be powered by 8~24V DC) | | | |
| | | | | **Housing type** | | | |
| | | | | PM | DIN panel mount 96 x 96 (3.8") bezel 91 x 91 (3.5") cut out, 110mm (4.3") deep | | |
| | | | | FE | Instrument supplied fitted to an IP66 field enclosue (FE) also includes clear bezel boot | | |
| | | | | | **Options** | | |
| | | | | | - | S | Clear silicone bezel boot (seals entire bezel whilst maintaining touch key sensitivity) |

**M o d e l  N o .  E x a m p l e**

| EB10 | 0 | D | 2 | PM | - | S |
|---|---|---|---|---|---|---|

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**UNIVERSAL MOUNT INSTRUMENTS** (suitable for wall, surface, pipe, meter or panel mounting)

| Model | Function (all instruments have program PIN protection) | | | | | | |
|---|---|---|---|---|---|---|---|
| EB10 | Ecobatch dc powered one or two stage batch controller | | | | | | |
| | **Electrical access** | | | | | | |
| | 0 | Cable gland supplied (BT11 totaliser only) | | | | | |
| | 1 | M20 x 1.5mm (M16 x 1.5mm for Al housing) | | | | | |
| | 2 | 1/2" NPT female threaded conduit entry ports (not available on aluminium housing) | | | | | |
| | 5 | 3/4" NPT female threaded conduit entry ports (only available on Exd housing for connection to turbine meters) | | | | | |
| | | **Flow input type** | | | | | |
| | | D | Digital (pulse or frequency) | | | | |
| | | | **Power supply** | | | | |
| | | | 0 | Self powered (battery) or regulated 8~24Vdc - EB10 batcher needs to be externally powered | | | |
| | | | | **Housing type** | | | |
| | | | | FM | Universal mount (field or panel) - GRN housing | | |
| | | | | FA | Universal mount (field or panel) - Aluminium housing | | |
| | | | | MM | Integral meter mount - GRN housing | | |
| | | | | MA | Integral meter mount - Aluminium housing | | |
| | | | | | * Only order MM or MA when retro fitting an instrument to OM series pulse meters | | |
| | | | | | **Electrical options** | | |
| | | | | | - | R | Control output relay board interface with two DPDT relays (RT12 & EB10 only) |
| | | | | | | **Mechanical options** | |
| | | | | | | P | Facia protector - for Aluminium housing only (3mm clear polycarbonate protection plate) |

**M o d e l  N o .  E x a m p l e**

| EB10 | 1 | D | 0 | FA | - | R | P |
|---|---|---|---|---|---|---|---|

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