Overview

The EB Ecobatch is a fully programmable high speed batch controller 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 and total volume dispensed.

Ecobatch scrolls messages to prompt the user at each stage of operation. Batch limiting and no-flow detection are “safeguards” against erroneously high batch entries, loss of the flow input signal or control valve or pump failure.

Control outputs

Two independent outputs can be programmed to provide stepped control at the start and/or end of each batch. DC powered models have two solid state control outputs, DIN models can be AC or DC powered and have two single pole double throw (SPDT) control 5A relays.

An Automatic Overrun Compensation feature corrects for any batch errors attributed to slow closing valves or flow rate variations.

Network interlocks

As many as 9 Ecobatch controllers may be networked together, typical applications are where one liquid is being dispensed to a number of outlets or a number of different liquids are being batched via one common flowmeter. Ecobatch will also take an “inhibit start” 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.

Features

- Large 8 digit batch & cumulative total LCD
- Robust IP66/67 universal mount or DIN panel mount version
- Simple programming
- PIN protected programming
- Scaleable flow inputs
- Two stage control
- Automatic overrun compensation
- Missing pulse (no flow) alarm
- Maximum batch size limiting
- Non volatile memory
- Multiple batcher interlock function
- Remote Run, Stop, batch set, etc

Also available

- Batching systems
- Self powered totalisers
- Flow rate totalisers
### Specifications

<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liquid crystal display (LCD)</td>
<td>9mm high alpha numeric characters + subscripts</td>
</tr>
<tr>
<td>Batch &amp; accumulated totals</td>
<td>8 digit, programable to 3 decimal places</td>
</tr>
<tr>
<td>Engineering units displayed</td>
<td>litres, gallons, m³, lbs, kgs or nil eng. units displayed</td>
</tr>
<tr>
<td>Input types (pulse &amp; frequency)</td>
<td>reed switch, open collector, coil (15mV P-P min.), current, voltage, namur &amp; other proximities. Max. frequency 10Khz</td>
</tr>
<tr>
<td>Input scaling range</td>
<td>0.001~9,999,999.999 with 3 floating decimal points</td>
</tr>
<tr>
<td>Control outputs (field mount)</td>
<td>Two 1A NPN open collectors, 24Vdc max.</td>
</tr>
<tr>
<td>(panel mount)</td>
<td>Two SPDT 5A relays (with DIN versions)</td>
</tr>
<tr>
<td>Alarm output (no flow alarm)</td>
<td>1A open collector (NPN/PNP selectable), 24Vdc max.</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>-10~+80°C (14~176°F), refer factory for higher/lower temp.</td>
</tr>
<tr>
<td>Power requirements</td>
<td>12<del>24Vdc, 50mA, 95</del>260Vac (DIN version)</td>
</tr>
<tr>
<td>Status interlocks</td>
<td>Batch status output, batch inhibit input, network looping</td>
</tr>
<tr>
<td>Enclosures (two styles)</td>
<td>IP66/67 (NEMA 4X) GRN field mount or DIN panel mount</td>
</tr>
<tr>
<td>Mounting</td>
<td>meter mount, wall, surface, pipe or panel mount</td>
</tr>
<tr>
<td>Batching systems example (see front page photo)</td>
<td>Ecobatch with flowmeter &amp; control valve eg: UM020 system</td>
</tr>
<tr>
<td></td>
<td>1~70 L/min, 10 bar, 90°C (0.3-18 Usgpm, 145psi, 195°F)</td>
</tr>
</tbody>
</table>

### Single or two stage control

- **Control options**
  - V1 single stage
  - V1 + V2 two stage

### Dimensions (mm)

- **DIN Panel mount housing**
  - 91 x 91 mm

### Ordering codes

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMEB1#</td>
<td>Single &amp; two stage high speed batch controller (cumulative &amp; batch totals)</td>
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</table>

#### Input type

- **D** digital (pulse or frequency)

#### Power supply (PM version only)

- **0** 12~24Vdc, 50mA
- **1** *95~135Vac
- **2** *190~260Vac

#### Housing type

- **FM** universal mount (field, surface, pipe, wall, stem or panel mount)
- **MM** integral meter mount
- **PM** DIN panel mount 91 x 91mm (3.6 x 3.6") cut out
- **FE** DIN mount field enclosure IP66 (NEMA 4x)

Refer factory for mounting accessories.