ME995-6  LITRES decimal point  CONTROLLER

FEATURES

* 3 Digit LED display
* 4 x LED status indicators
* Preact function and preset maximum limit
* Missing pulse detection
* Counts in 0.1 Litre increments upto 99.9
* Optional PLC/ computer interface
* Interchangeable with earlier ME188 models

The ME995-6 LITRES decimal point preset batch controller with new features complies with Quality Assurance requirements. It incorporates a standard preact (overflow deduct) feature and a contact drive LED indicator. With the ME995 series batch controller using the same 10 pin Weidmuller receptacle plug as the previous ME188-6, changeover and replacement is instant with no rewiring necessary. The ME995-6 controller can easily be interfaced with PLCs, thus incorporating it’s safety features and providing a backup batch facility or as a setpoint controller.

Batch quantities are easily selected using the 3 rotary selector switches. The batch operator can also visually refer to the numbered selector dials for the batch quantity selected. Command operations are by user-friendly toggle switches, and four LEDs indicate operational status conditions.

Batch counting and selection is in increments of 0.1Litres. The seven segment LEDs count upward, to a maximum of 99.9 litres. The batch controller operates from standard 220 - 260 vac (or optional 110 vac or 12 - 24 VDC) voltage supplies. Contact output drive is via one (or optional two) relays. Standard controllers are in panel mount form, or optionally can be housed in a metal housing box or IP65 ABS wall mount enclosure.

SAFETY FEATURES

* CONTACT DRIVE (CD) LED indicates voltage contact output drive when pump or solenoid is activated.
* FLOW (FL) LED monitors and indicates incoming pulses from field flowmeter, or if TEST is used.
* PULSE FAIL (PF) LED activates if no pulses arrive within 1.5 seconds (variable) initial start time period, or if pulses are interrupted or intermittent during the batch cycle and fall below set (variable) pulse scanning time (typical 30Hz). Subsequently, automatic shutoff of voltage contract drive occurs.
* LIMIT LED (LM) illuminates if the batch cycle reaches the locked internal limit maximum, or if circuit diagnostics detect an internal chip problem. Subsequently, automatic shutoff of voltage contract drive occurs.
* Internal audible ALARM sounds momentarily during completion of batch cycle, and continuously if PULSE FAIL or LIMIT LEDs are activated, or if overflow runs 1litre (variable) past the selected batch quantity.

Warning: if CONTACT or FLOW LED indicators are on, but controller not counting, discontinue use and call for service.
OPERATING INSTRUCTIONS

* To operate, push each of the toggle switches ON-OFF, START-STOP and TEST-RESET to the desired function.

* Switch the power ON to unit. Select required batch quantity using rotary number dial selector switches.

* RESET unit. The LED displays zero, all LED indicators and alarm sounds turn off. The unit is ready for batching.

* START unit; voltage contact drive activates. CONTACT DRIVE LED illuminates indicating pump or solenoid are energised, followed by FLOW LED illuminating, indicating pulsing and operation of flowmeter. The digits begin counting upward towards the selected batch quantity.

* Upon digits reaching the selected batch quantity, the alarm sounds (short beep) indicating completion of batch; CONTACT Drive and FLOW LEDs turn off. LED display digits and selected batch quantity should correspond. If digits overshoot target, use PREACT (inflight, freefall) overflow deduct dials (located at rear of controller unit) to scale back the difference.

* To interrupt unit before completion of batch, push STOP toggle; digit counting then stops. Push START toggle to resume batch.

* TEST toggle is used to test digit counting, switch contacts, alarm conditions or generate output pulses for computer interfacing. Test does not activate pump or solenoid.

PREACT: Calibrating inflight overflow deduct is via two rotary knobs marked “tens” and “units” of 0.1 litre increments located at rear. Simply set to same reading as the overflow value indicated by the LED display (which is a true indication of the overflow quantity).

SPECIFICATIONS

<table>
<thead>
<tr>
<th>Output to flowmeter</th>
<th>12 VDC , up to 100mA.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mounting</td>
<td>Panel mount.</td>
</tr>
<tr>
<td>Relay outputs</td>
<td>Maximum 240 vac, 30 VDC, 1 Amp. (or open contact with –OC option)</td>
</tr>
<tr>
<td>Frequency input</td>
<td>5 KHz Maximum, NPN input. (fixed for 1ml./1pulse flowmeter only)</td>
</tr>
<tr>
<td>Display</td>
<td>3 digits, 7 segment LED (14mm High).</td>
</tr>
<tr>
<td>Connection</td>
<td>10-pin mating plug/socket.</td>
</tr>
<tr>
<td>Fuse</td>
<td>1 Amp (5 x 20mm case).</td>
</tr>
<tr>
<td>Power supply</td>
<td>220-260 vac, 50-60Hz (optional 24vac, 110 vac or 12-24 VDC).</td>
</tr>
<tr>
<td>Batch selection</td>
<td>Visual rotary select switches.</td>
</tr>
<tr>
<td>Batch commands</td>
<td>Push toggle switches.</td>
</tr>
<tr>
<td>Instrument housing</td>
<td>ABS hi-impact mould.</td>
</tr>
<tr>
<td>External dimensions</td>
<td>206 L, 130 H, 95 D mm.</td>
</tr>
<tr>
<td>Panel cutout</td>
<td>190 L, 122 H mm.</td>
</tr>
<tr>
<td>Weight</td>
<td>1 kg.</td>
</tr>
</tbody>
</table>

OPTIONS:

- Your company name branded on face
- PLC/computer interface options
- Pulse output and alarm output options
- Other control output options
- Housing enclosures

Due to continuous product development, specifications are subject to change without notice.
ME995-6  Batch Controller, 240 vac supply and output, with 12 VDC power to flowmeter (standard).

Options:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>-DC-OC</td>
<td>12-24 VDC power supply input/output drive, with Open Contact output drive (5 A) which is via external voltages</td>
</tr>
<tr>
<td>-24VAC</td>
<td>24 vac powered and output.</td>
</tr>
<tr>
<td>-110</td>
<td>110 vac powered and output.</td>
</tr>
<tr>
<td>-Sn</td>
<td>Combined with MC2 or MC2-C, for 10, 20, 50 or 100 ml / pulse output (where 'n' is the pulse value required i.e. 10, 20, 50 or 100).</td>
</tr>
<tr>
<td>-OC</td>
<td>Open Contact pump/valve output, for use with any driving voltage (maximum 5A current).</td>
</tr>
<tr>
<td>-A0</td>
<td>Contact output: alarm/batch-complete voltage relay or logic state</td>
</tr>
</tbody>
</table>

-5P  5-pin computer interface plug (start, stop, reset, pulse, +12V) for use with ME5IC interface card for Jonel, COMMANDbatch etc PLCs.
-MC  4-pin PLC/Computer Command (Start/Stop/Reset) interface plug.
-MC2 2-pin plug for scaled 4N33 open collector pulse output (1 pulse/ 0.1 Litre). Includes 4-pin external command (Start/Stop/Reset) interface plug.
-MC2-C Computubatch interface: 2-pin plug with OPTO 4N33 pulse output. Includes 4-pin external command (Start/Stop/Reset) plug.
-MC2-C External command: Start/Stop/Reset, for connection to HB2500-SSR housing box, or for remote control facility.
-SRBC External command: Start/Stop/Reset, for connection to HB2500-SSR housing box, or for remote control facility.

e.g. “ME995-6” is the standard Batch Controller, 240vac powered, without any of the options, whereas “ME995-6-MC2” is an ME995-6 Batch Controller with a scaled open collector pulse output, and a Start/Stop/Reset computer interface.

HOUSING ENCLOSURES

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SHB1</td>
<td>Single enclosure. Powder coated metal. Wired with 240vac contactor (for 1 hp pump), plug-in 240 vac pump outlet and plug.</td>
</tr>
<tr>
<td>SHB1-T</td>
<td>as for SHB1 above, but with terminal wiring entry connection instead of 240vac pump outlet</td>
</tr>
<tr>
<td>DHB</td>
<td>Dual enclosure. Powder coated metal.</td>
</tr>
<tr>
<td>DHB2</td>
<td>Dual enclosure. Powder coated metal. Wired with 2x 240vac contactors, 2x pump outlets, and 2x plugs for Batch Controllers.</td>
</tr>
<tr>
<td>DHB2-T</td>
<td>as for DHB2, but with terminal wiring entry connections (instead of mains lead and pump outlets).</td>
</tr>
<tr>
<td>HB2510-SSR</td>
<td>IP65 waterproof single enclosure. HB2510-SSR IP65 enclosure shown with ME3000 Batch Controller</td>
</tr>
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**ME995-6**

**WIRING DIAGRAM**

- ADMIX STORAG TANK
- Non-Return Valve
- Tank Valve
- Filter
- Gate Valve
- Flowmeter
- Non-Return Valve
- outlet line above level of Storage Tank (most common)

**Standard AC Wiring for Pump and optional Solenoid**

**Optional batch override/top-up momentary push button switch**

- Open Contact Output Drive
- 12 – 24 VDC supply
- +VDC
- 0v
- CONTACT
- CONTACT 1

**Wiring for DC-powered Batch Controller with DC Open Contact Output Drive to Pump and/or Solenoid**

- NOTE: If current draw of solenoid is > 0.5 Amps, or if using a pump, then install a contactor

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