Benefits
Compact flow computer combines signals from volumetric flowmeters with those from pressure, temperature and density sensors. Using appropriate flow equations, a wide range of important variables can be calculated and displayed.

1. Calculates and displays mass flow, corrected volume, heat, delta heat and other process variables.
2. Fast initial start-up possible using the “Quick Setup” program.
3. Function keys are programmable.
4. Outputs are galvanically isolated.
5. Has a multi-language (English, German, French) cleartext display.
6. Easy connection to and full compatibility with EF77 flowmeters.

Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>EC351</th>
</tr>
</thead>
<tbody>
<tr>
<td>Display</td>
<td>Two-line, backlit, liquid crystal, 20 characters per line</td>
</tr>
<tr>
<td>Power Consumption</td>
<td>AC: less than 10 VA; DC: less than 10 W</td>
</tr>
<tr>
<td>Integral Supply for Transmitters</td>
<td>24 V DC, 100 mA regulated</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>32 – 122°F</td>
</tr>
<tr>
<td>Protection Standard</td>
<td>Front Panel: IP 65 / NEMA 4X; Housing: IP 20 (EN 60529)</td>
</tr>
<tr>
<td>Housing Material</td>
<td>Flameproof plastic</td>
</tr>
</tbody>
</table>

**Flow**
- Analog Input
  - Range: 0/4 – 20 mA, 0 – 10 V, 0 – 5 V, 1 – 5 V
  - Resolution: 18 bit
  - Automatic Error Recognition: Signal over-range, current loop broken
  - Current Input Restriction: Vinc: 24 V DC, Iinc: 100 mA

**Pulse Input**
- Trigger Level: Current Pulse: 12 mA; Voltage Pulse: 10 mV, 100 mV, 2.5 V
- Input Restriction: Vin: 50 V DC; Irms: 25 mA, fmax: 20 kHz

**Pressure, Density, Temperature**
- Pt100 (RTD) Input
  - Temperature Resolution: 0.01°C (°F)
  - Linearity: Corrected internally
  - Automatic Error Recognition: RTD short, RTD open

**Relay Output (>=2)**
- Function: Flow alarm, temperature alarm, pressure alarm
- Pulse Output: 5 Hz
- Contacts: SPDT 240 V, 1 A

**Current Output (>=2)**
- Range: 0/4 – 20 mA
- Resolution: 16 bit
- Linearity: 0.05% o.f.s. (at 68°F)
- Maximum Load Resistance: 1 kΩ

**Printer Output (selectable)**
- Open Collector: Voltage < 30 V DC, current < 25 mA, Vce < 0.4 V
- Voltage Pulses: 24 V, current < 15 mA, internal resistance: 100 Ω, I rms: 50 Hz

**Interface**
- Serial interface RS232, 9-pin DSUB connector
Connecting Terminals

Terminal Designation Inputs/Outputs

1. -24 V DC supply (internally connected with terminal 8)
2. Pulse or voltage input (active+, passive-) or high-range current input for split range DP transmitters
3. Current input (active+, passive-) or low-range current input for split range DP transmitters
4. ( - ) Ground connection, 24 V DC supply
5. (+) Pt100
6. (+) Pt100
7. Pt100 (-) or current input (active+, passive-)
8. +24 V DC power (internally connected with terminal 1)
9. (+) Pt100
10. (+) Pt100
11. Pt100 (-) or current input (active+, passive-) 
12. (+) active or passive
13. (+) active or passive
14. (+) Current output 1
15. (+) Current output 2
16. (-) Ground connection
17. Function: Normally Open contact (NO)
18. Relay 1 wiper
19. Function: Normally Closed contact (NC)
20. Function: Normally Closed contact (NC)
21. Relay 2 wiper
22. Function: Normally Open contact (NO)
23. L1 for AC  L+ for DC
24. N for AC  L- for DC

Galvanic Isolation

The three inputs share a common ground connection. The two current outputs also share a separate ground connection.

If complete separation is required between the two current outputs, then external galvanic isolators must be used.

Dimensions

- EC351 Housing for panel mounting

(Rear view of panel mount housing)

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Specifications subject to change without notice.

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ISO 9001 / ISO 14001

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