**ECU-3233A Multi-Function, Programmable Controller**

**DESCRIPTION**

The ECU-3233A Electronic Controller is a powerful multi-function programmable controller designed to withstand the real-world environmental demands of the off-highway mobile market.

With a 32-bit CPU, four CAN ports, 65 pins with 32 outputs and 33 inputs, it can be configured in multiple ways.

Programming is done with CoDeSys 2.3 which can be downloaded from the HydraForce Electronics Portal at no charge.

It has a light, leakproof, chemical-resistant aluminum/plastic enclosure, indicator LED, Gore-Tex "breather" and three AMP35 connectors.

**RATINGS**

**PROCESSOR:** 32-bit CPU, 128 MHz

**MEMORY:**
- Flash ROM: 8 MBytes (1 MByte for PLCOpen application)
- RAM: 4 MBytes (256 kByte for PLCOpen application variables)
- NVRAM (Non-Volatile Memory): 512 Kbytes (for error logs, system parameters)

**POWER REQUIREMENTS:**
- Nominal Supply Voltage: 12/24 Vdc systems, 8.3 to 36 Vdc
- Idle Power Consumption: 2.2 watts
- Under Voltage Reset: 7.5 V
- Control Unit Shut Down Voltage: Typical 43 V
- Over-Voltage: From 43 to 97.5 V

**REFERENCE VOLTAGE OUTPUTS:** +5 V, +10 V

**DIAGNOSTICS:** Signal LED (green/red); Temperature monitoring; Error logging

**PROGRAMMING:** CoDeSys 2.3 Application Size 1 MB

**CONNECTORS:** (3) AMP35 connectors

**COMMUNICATIONS INTERFACES:**
- (4) ISO CAN 2.0B, 1 x Ethernet Interfaces

**ENVIRONMENTAL RATINGS:**
- Operating and Storage Temperature: -40 to 85 °C (-40 to 185 °F)
- Water Resistance: meets IP67 standards

**FEATURES**

- Reliable operation in real-world temperature conditions from -40 to 85 °C (-40 to 185 °F)
- Robust, light, leakproof, chemical-resistant aluminum/plastic enclosure
- Three-point anchorage confirms firm mounting, even on irregular surfaces
- Inputs and outputs are protected against shorts
- Internal diagnostic capability to detect overvoltage and overtemperature alarms
- Signal LED for quick status check and fault detection
- Temperature monitoring
- Four CAN ports

**INPUTS / OUTPUTS — 65 Total**

<table>
<thead>
<tr>
<th>Max I/O Count</th>
<th>Digital In (SWG)</th>
<th>Digital In (SWB)</th>
<th>Pulse Input</th>
<th>Analog Input</th>
<th>Current Feedback</th>
<th>PWM (Source)</th>
<th>Digital Out (Source)</th>
<th>Digital Out (Sink)</th>
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**Note:** The ECU-3233A has inputs and outputs that can be configured in multiple ways.
**ECU-3233A Multi-Function, Programmable Controller**

**DIMENSIONS**

![Diagram of ECU-3233A Multi-Function, Programmable Controller]

Weight: 2.09 lbs (0.95 kg)

**TO ORDER**

- **Controller**: Model [ECU-3233A](#) Part No. 4000343
- **Connectors**: Grey X1 Part No. 400381; Black X2 Part No. 4002746; Blue X3 Part No. 4002747
- **Strain Relief**: Part No. 4000382
- **Socket Contacts**: Gold Part No. 400364
- **Cavity Sealing Plug**: Part No. 400365
- **Programming Software**: CoDeSys available from HydraForce Electronics Portal as free download.