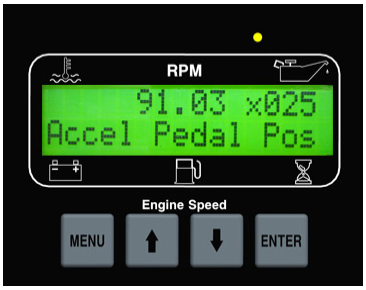
CONTROLS INCORPORATED

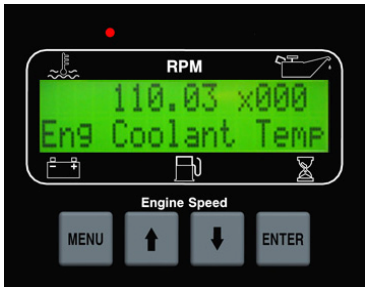
uCAN Series™
J1939 CAN Bus Engine Controller
P/N C3-100 (Manual Start) & C3-100-AS (Auto Start)

DESCRIPTION
The iCAN™ Engine Control Module is a microprocessor-based, digital controller providing engine monitoring, control, and protection for SAE J1939 electronic engines. The large backlit display provides complete, easy-to-read engine information. Auto start is available (P/N C3-100-AS)

DISPLAY
Large backlit display with ½" characters. Six full-time display parameters.

ALARMS & SHUTDOWNS
Engine protection is provided with easy-to-read display messages and indication lamps (red and yellow) for pre alarm and alarm conditions. The display provides the SPN.FMI trouble code, the number of occurrences and a descriptive message.





ENCLOSURE
The enclosure is water tight, constructed of a durable polycarbonate with an industrial overlay made of autotext polyester. The heavy-duty package provides protection and longevity for off-highway industrial applications exposed to vibration, UV, chemicals, solvents, diesel fuel, oil, etc.

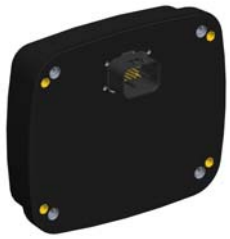
THROTTLE CONTROL
Three throttle control configurations are available (Selectable).
- Defined Range – Select min and max rpm settings, operate within range
- Two State – Two speed settings
- Three State – Three speed settings

BUTTONS
Large tactile dome buttons to insure positive feedback for operators with gloves.

CONNECTOR
A water tight 14-pin connector is utilized for simple plug-in installation.

FLEX INPUTS/OUTPUTS
The controller flex input and flex outputs are configurable to be normally open or closed and can be assigned for different functions. Customer specific display messages can be implemented for each input or output.

Back



SPECIFICATIONS

GENERAL

OPERATING VOLTAGE	5.5 VDC to 20VDC
MAXIMUM CURRENT CONSUMPTION AT 12.6V	150mA
OPERATING TEMPERATURE	-20˚C to +70˚C
STORAGE TEMPERATURE	-30˚C to +80˚C
HUMIDITY	95% Non-condensing
REVERSE POLARITY PROTECTION	Yes
TRANSIENT VOLTAGE SURPRESSION	Yes
LOAD DUMP PROTECTION	Yes
DISPLAY	LCD, 1"H X 4"W, (2 lines x 16 characters/line)
ENCLOSURE	Polycarbonate
OVERLAY/INTERFACE	Autotex Polyester
APPROX. WEIGHT	1.5 lbs
APPROX. DIMENSIONS	5.69"H x 6.57"W x 1.61"D

COMMUNICATIONS

ENGINE COM PORT	CAN bus J1939 Protocol

INPUTS

ANALOG INPUT	1
DIGITAL FLEX INPUT	1

Configurable as: 1) Normally open or normally closed, 2) Relay closure, pre alarm or alarm, 3) User defined message for display

FLEX OUTPUTS

5A FORM A DRY CONTACTS	2
5A OR 10A FORM A DRY CONTACTS (Specification Dependent)	2

Each output is configurable as: 1) Normally open or normally closed, 2) Pre alarm, alarm, throttle or tied to flex input

THROTTLE CONFIGURATION ..... SELECTABLE
1) TSC Range 2) Digital 2-State 3) Digital 3-State 4) Digital Momentary 5) Disabled

CONNECTOR

TYCO AMPSEAL 14-PIN	ENVIRONMENTALLY SEALED

OTHER

ENGLISH/METRIC DISPLAY	SELECTABLE
DISPLAY BACKLIGHT ADJUSTMENT	SELECTABLE
DISPLAY TEMPERATURE CONTRAST AJDUSTMENT	AUTOMATIC
Extreme Cold Weather Option	
OPERATING TEMPERATURE	-45˚C to +85˚C
STORAGE TEMPERATURE	-55˚C to +95˚C

SUMMARY
- Robust design & construction for demanding, off-highway applications
- Easy-to-read, simple-to-operate
- Flexible input and outputs
- Configurable via user friendly menu selections (No computer interface required)
- Units can be pre-configured at the factory per customer specification

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