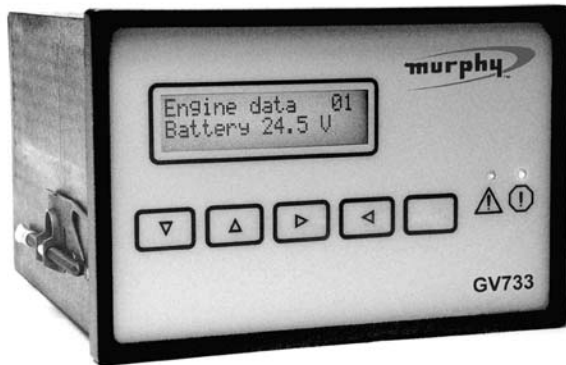


GV733

Display and Diagnostic Module

ys6371
revision E, 6th October 2008
catalogue section 75



- Interfaces with Cummins G-Drive* RS485 Modbus
- Displays engine data, configuration, fault status and history
- LED indication of warning or shutdown faults

Description

The GV733 is a display module for use with the RS485 Modbus interface found on many Cummins G-Drive* engines, including models QSX15, QSK45 and QSK60.

The back-lit LCD and simple navigation keys provide plain English readout of engine configuration, running data, current faults and recent fault history: see overleaf for a full listing of data displayed.

The GV733 case can be mounted in a standard DIN 140 x 92 mm panel cut-out. Electrical connection of the power supply and RS485 network is by 4 screw terminals on a removable block at the rear. The RS485 network may be alternatively connected through 2 x RJ45 sockets, fitted at the rear of each unit and supplied with a network terminator.

Application

The GV733 can be used as a user-interface for genset operators or as a basic diagnostic module for service engineers.

Warranty

A two year limited warranty on materials and workmanship is given with this Murphy product. Details are available on request and at www.fwmurphy.co.uk/warranty.

Product specification

Power supply:	
operating voltage: steady state range	5 – 40 V DC continuous
crank brown-out	to 0 V for >=100mS
current consumption (typ):	55mA @ 24V DC
Communications:	
RS485 connection	screw terminals (+ and –), also 2 x RJ45 socket with 1 x terminating plug/resistor
RS485 voltage isolation	1000 V
RS485 Baud rate	9600
RS485 maximum network length	1000 metres
RS485 protocol	MODBUS RTU, packet upload interval approx. 250mS
RS232 connection (for updates only)	RJ11 socket
RS232 Baud rate	9600
RS232 max. lead length	10 metres
Physical:	
overall dimensions (W x H x D)	144 x 96 x 162 mm
panel cut-out size (W x H)	DIN standard 140 x 92 mm
weight	approx. 500 g
operating ambient temperature	-10 to +55 °C

*Cummins and G-Drive are trademarks of Cummins Inc.

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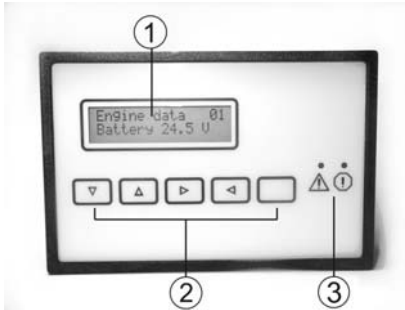
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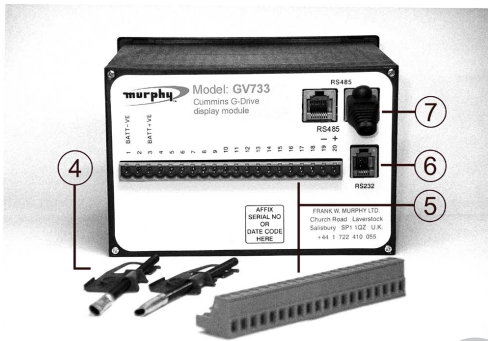
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Front facia



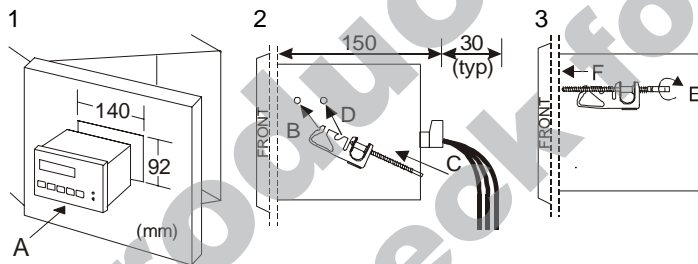
- 1) 2 line x 16 character back-lit liquid crystal display
- 2) Display scroll control keys:-
- 3) Fault warning (amber) and shutdown (red) LED indicators

Rear facia



- 4) Mounting clamps
- 5) 1 x two part, screw terminal block
- 6) 1 x RJ11 connector, RS232 communication/upgrade port
- 7) 2 x RJ45 connectors (RS485 Modbus alternative connection), shown with 1 x network terminator (supplied)

Installation



How to order

<i>stock no.</i>	<i>model / description</i>
76.70.0340	GV733 display and diagnostic module

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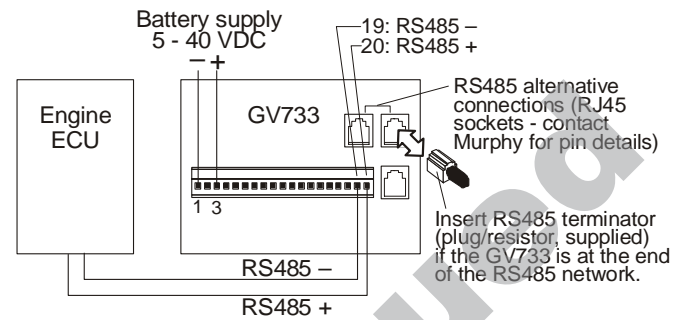
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Electrical connection



Display data parameters

Use < and > to select data type, then Δ and ∇ keys to scroll through available data:-

Note: * available only on QSX15 engines
 ** available only on QSK30 engines
 *** available only on QSK23/45/60/78 engines

Engine sensor parameters:

Engine speed
 Coolant temperature
 Oil pressure
 Ambient air pressure
 Intake manifold pressure
 Intake manifold temperature
 Coolant level
 Aftercooler water inlet temp***
 Blowby flow***
 Coolant pressure**/**
 Fuel pump pressure***
 Fuel rail pressure***
 Fuel outlet pressure*
 Fuel supply pressure**
 Fuel temperature**
 Oil temperature**/
 Oil inlet temperature***
 Timing rail pressure***
 Fuel rack position, left & right**

Adjustable input settings:

Frequency adjust pot.
 Droop adjust pot.
 Governor gain adjust pot.

Fault / diagnostic data:

Active warning fault events
 Active shutdown fault events
 Most recent fault events

Other data

Battery voltage
 Engine running time
 ECM on-time
 Base frequency
 Base speed
 Final speed reference
 Estimated torque
 Load profile monitor, 50 & 60 Hz)
 Fuel consumption rate
 Cumulative fuel consumption

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