PRO AMP systems

DIGITAL RPM COUNTER / DRC

SPECIFICATIONS

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The Digital rpm counter (DRC) is a versatile instrument, designed specifically for diesel engines, using our Tacho relay (BX136), or other makes of Tacho relays with the same output signal and rpm range. (see technical specs below).

Features

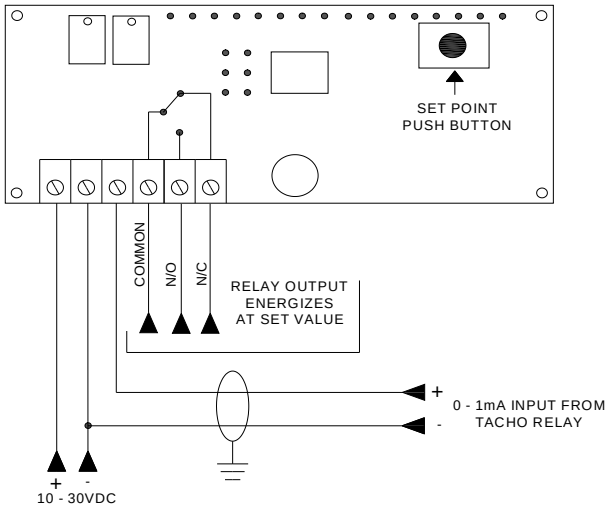
- Relay output SPDT (over/under speed) energises above set point.
- Multi voltage supply input.
- Relay output set point adjustable from 300 rpm to 3000 rpm.
- No batteries required.
- Memory Backup.
- LCD Range display when using a "Pro Amp" Tacho Relay BX136: $0 \rightarrow 1$ mA = 300-3000 rpm.
- LCD Range display when using other Tacho Relays: $0 \rightarrow 1$ mA = $0 \rightarrow 3000$ rpm.
- Panel door mounted.
- Display indication example: 2250 RPM.

Digital Rev Counter Specifications	
DC Supply Voltage	$10 \rightarrow 30$VDC
Relay output set point	From 300 rpm to 3000 rpm
Relay output SPDT	1A at 30 VDC
Operating Temperature	55°C
Operating Humidity	$0 \rightarrow 90\%$ RH, non-condensing
Memory Backup	Non-volatile memory EEProm
Input	0 – 1 mA (DC)
LCD Viewing area	64.6mm x 16mm
LCD Number of characters	16 characters x 2 liners
Display colour	Dark Blue
Background Colour	Yellow - Green
Dot Sizes	0.55mm x 0.65mm
Terminals	2.5mm plug in screw clamp
Mounting Method	Panel Door
Current Consumption (max)	80 mA max
Display accuracy	± 2,5 %
Input signal vs Display value delay	± 1000 m/s

How to set the relay output set point?

Simply press and hold the small push button for ±6 sec, located on the PC board behind the Digital display. The display will then display a factory default value of 1800 rpm. Continue to hold the push button until the default value changes, the value will increase from the default value until 3000 rpm is reached, should you continue to hold the push button, it will start from 300 rpm and continue to increase in value again. Once the desired rpm set point is reached, release the push button. The set point is now set and after a few seconds will return to the main display. Note that there is no hysteresis (differential) for the set point value. For example, if 2000 rpm is entered and the input rpm reaches 2000, the relay will energise and remain so until the rpm drops below 2000. Since the relay output has both N/O and N/C contacts, as well a wide rpm set point range, the control circuit can be manipulated using either the N/O or N/C contacts, such that the relay output could be used for either over or under speed.

DIGITAL RPM COUNTER (DRC) WIRING DIAGRAM



PANEL DOOR CUT OUT DIMENSIONS