

InteliDrive WP



Order code: ID2C1000BEC
Engine Controller

Datasheet

Product description

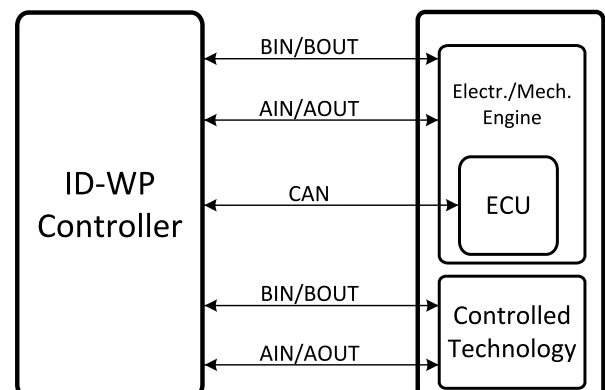
The InteliDrive WP is a cost effective and small form factor engine controller with higher IP grade, which features outstanding control, monitoring and protection for both mechanical and electronic diesel/gas engines – all in one unit. The controller is suitable for pumps, compressors, and other simple engine control requirements. Connector kit and harness options are sold separately

Key features

- Engine controller for land-based and marine applications
- Control, monitoring and protection for both mechanical and electronic diesel/gas engines in one unit
- Automatic or manual start/stop of the engine
- Support of engines with Electronic Control Unit (ECU) - J1939
- Analog gauge (VDO, Datcon and others) output – operator friendly
- Smooth engine speed control
- 5 configurable binary inputs
- 9 configurable analog inputs
- 5 configurable binary outputs (2 relays - up to 10A)
- 1 configurable analog output PWM (5 VDC)

- Selectable protections alarm/shutdown
- 3 level of password protection
- USB port for programming
- 2 languages (user changeable)
- Real time clock and event history log
- Control functions: PID loop, Comparators, Timers
- Dust and water protection IP 65 (front and rear panel)
- Operating temperature: –20 to +70°C
- EN certifications

Application overview



Technical data

Power supply

Power supply range	8-36 V DC
Power supply drop-out immunity	50 ms (from min. 12 V)
Power consumption	118 mA @ 8 V; 38 mA @ 36 V
Backup battery type	CR 1225, Encapsulated
Estimated backup battery lifetime	10 years

Operating conditions

Operating temperature	-20 °C to +70 °C
Operating humidity	95 % non-condensing (EN 60068-2-30)
Protection degree (front/back panel)	IP 65
Vibration	5-25 Hz, ± 1.6 mm 25-100 Hz, $a = 4$ g
Shocks	a_{max} 200 m/s ²
Storage temperature	-30 °C to +80 °C
Heat radiation	3.5 W
Weight	301 g

Binary inputs

Number	5, non-isolated
Input resistance	4.2 k Ω
Common pole	Positive, $V_s = 8-36$ V DC
Close/Open indication	0-2 V DC close contact 4 V - V_s open contact

Binary relay outputs (BO1, BO2)

Number	2, isolated
Output type	voltage free contacts
Maximum current	10 A
Maximum switching voltage	30 V DC, 250 V AC

Binary open collector outputs (BO3, BO4, BO5)

Number	3, non-isolated
Output type	open collector
Maximum current	0.5 A
Maximum switching voltage	36 V DC

Analog inputs - resistive

Number	3, non-isolated
Electrical range	0-2500 Ω
Resolution	10 bits, 4 digits
Accuracy	4 % ± 5 Ω
Supported sensor types	Predefined: VDO 10Bar, VDO Temperature, VDO Fuel level User-defined: 30 points non-linear sensors can be defined by the user

Analog inputs - voltage

Number	3, non-isolated
Electrical range	0-10 V
Resolution	10 bits, 4 digits
Accuracy	1 % ± 0.2 mA
Input impedance	>100 k Ω
Supported sensor types	User-defined: 30 points non-linear sensors can be defined by the user

Analog inputs - Current

Number	3, non-isolated
Electrical range	0-20 mA
Resolution	10 bits, 4 digits
Input impedance	180 Ω
Accuracy	1 % ± 100 mV (± 400 mV for AIN4-5)
Supported sensor types	User-defined: 30 points non-linear sensors can be defined by the user

Analog output

Amount	1
Type	PWM
Specification	0-5V, 15mA, 500Hz

Communication

CAN	ECU, 250 kbps, max 200 m, Isolated
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Magnetic pick-up

Voltage input range	2 - 70 V _{pp}
Frequency input range	4 Hz to 10 kHz (min 2 V _{pp} @ 4Hz - 4 kHz, 6 V _{pp} @ 10 kHz)
Frequency measurement tolerance	0.2 %

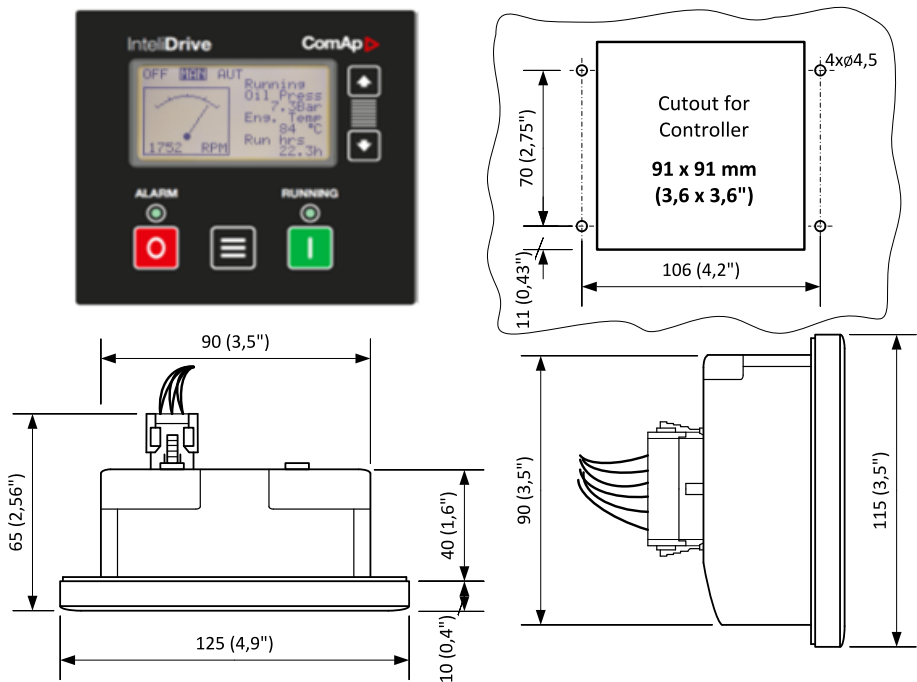
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Excitation current	300 mA, during the engine start only
Charging fail threshold	80 % of U _{supply}
Voltage range	0-60 V (max. 70 V)
Voltage accuracy	± 0.1 V

Display

Type	Build-in monochromatic
Resolution	128 \times 64 px

Dimensions and mounting



Note: The controller is to be mounted onto the switchboard door. The requested cut-out size is 91 × 91 mm. Use the nylon screws and nuts delivered with the controller to fix the controller into the door.

Available harnesses and connectors

Order code	Description
OT1TS009XXX	Set of term-set connectors
OT2WPHARNES	Set of 2 m long harness for IntelliDrive WP

Note: Controller itself is delivered without terminals and harnesses.

Certificates and standards

<ul style="list-style-type: none"> ➤ EN 60068-2-1 ➤ EN 60068-2-2 ➤ EN 60068-2-6 ➤ EN 60068-2-27 ➤ EN 60068-2-30:2005 25/55°C, RH 95%, 48hours ➤ EN 61000-6-4 ➤ EN 61000-6-2 ➤ EN 60529 (IP65) 	
List of standards is available on: https://webstore.iec.ch/	



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