

InteliDrive CCU



MODULAR ENGINE CONTROLLER FOR COMPRESSOR APPLICATIONS

Description

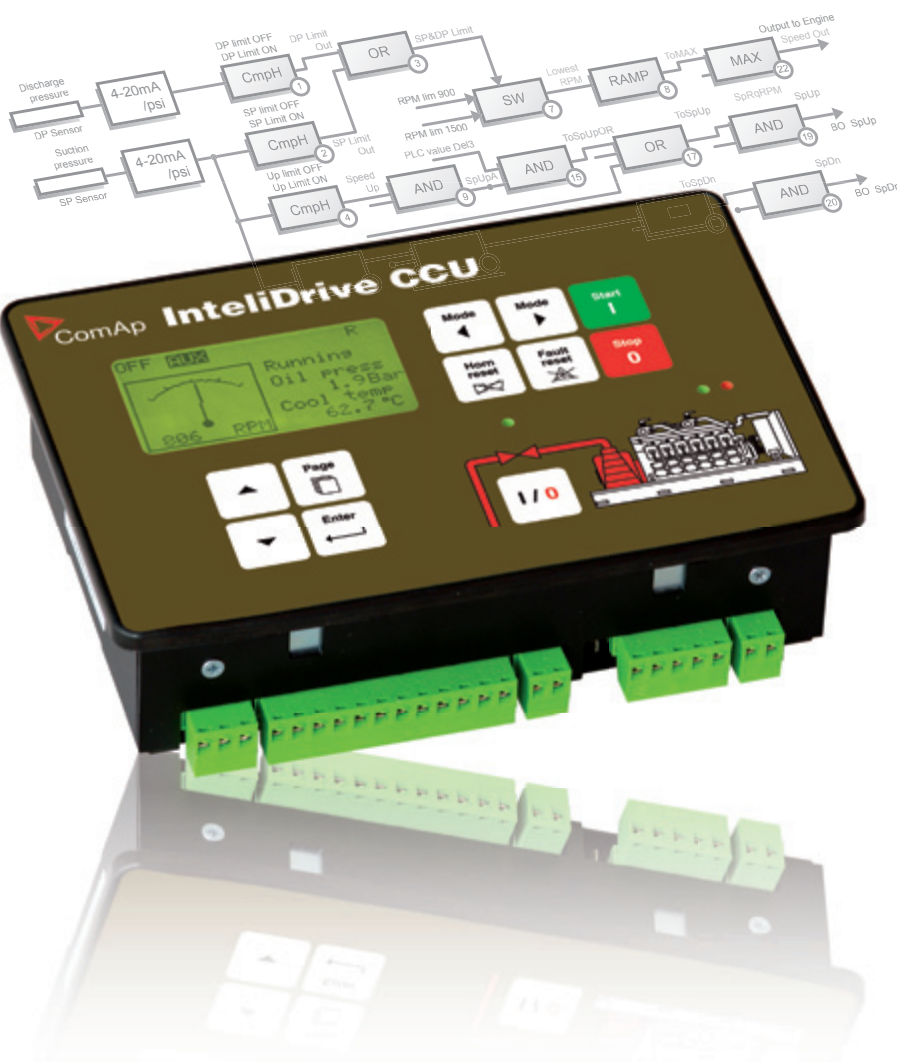
The InteliDrive CCU is a highly flexible sophisticated controller, which features outstanding control, monitoring and protection designed for compressor applications.

InteliDrive can communicate via standard and proprietary CAN J1939 communication protocols to a wide range of EFI engines, which include Caterpillar, Cummins, Deutz, Detroit Diesel, GM, Iveco, Isuzu, John Deere, MAN, MTU, Perkins, Scania, Sisu, Volvo Penta and others. Designed to be highly flexible, InteliDrive can be expanded by means of additional modules to offer over 100 binary inputs and outputs.

The set of PLC (analog and binary) functions is available in the standard software and can be used by the customer to control and regulate drive-train components.

Like all ComAp products, InteliDrive features a powerful graphic display providing user-friendly information in an easy to understand format – not only for professionals but also for occasional users. The diagnostic information is available in intelligible plain text instead of potentially misleading cryptic codes or flashing lights.

Remote control and monitoring is possible via analog/GSM modem, SMS or Internet.



ComAp is a member of AMPS (The Association of Manufacturers of Power generating Systems).



ComAp products meet the highest standards, with every stage of production undertaken in accordance with the ISO certification obtained in 1998.

Benefits

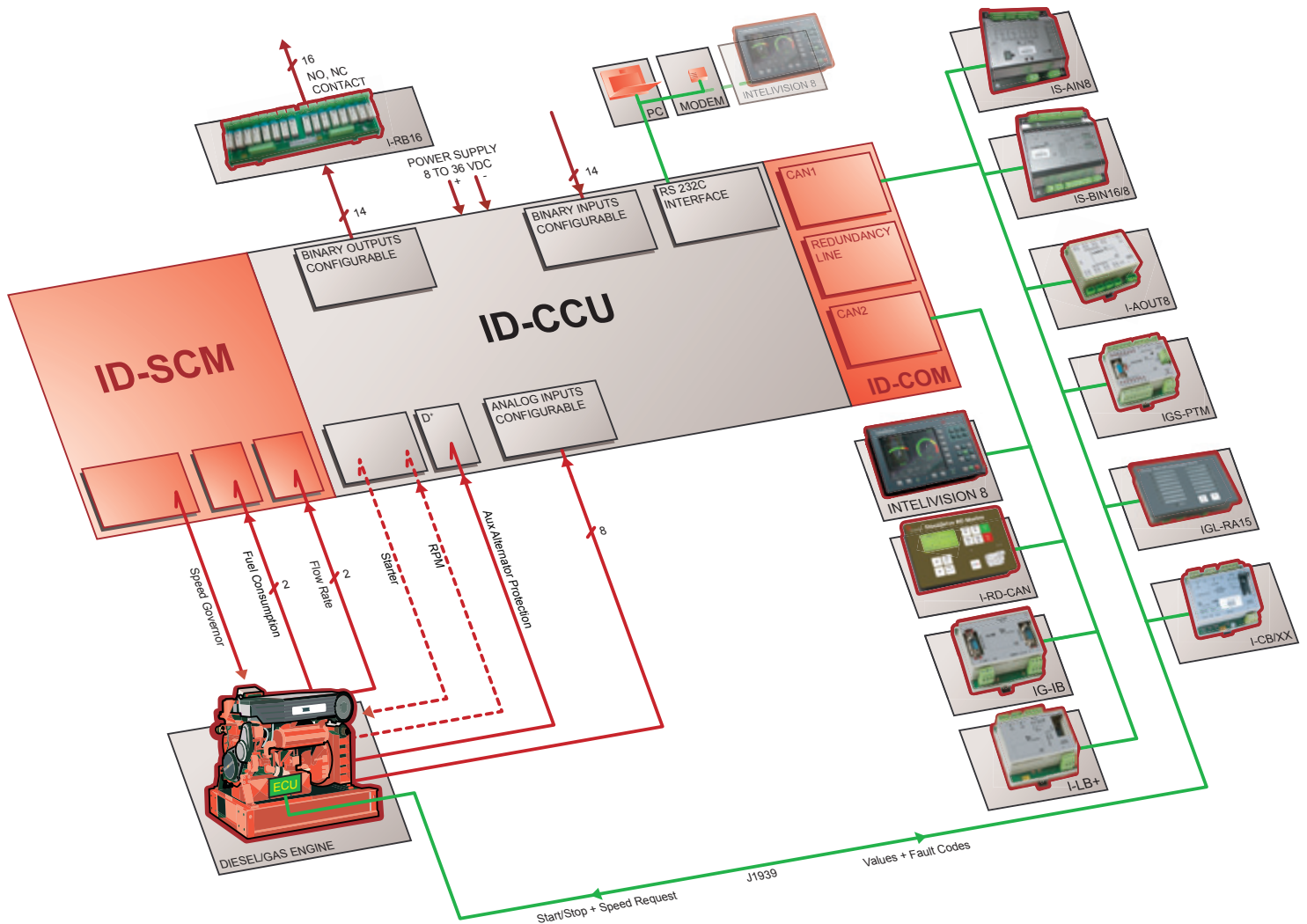
- ▶ Integrated solution with hardwired safety functions – less wiring and components
- ▶ Full communication support of engines with ECU – simpler wiring, access to information from ECU via Modbus
- ▶ Event driven History record, easy backtracking and problem solving
- ▶ Load sharing for propulsion engines – better power utilization of installed engines
- ▶ Slave panels available – economical solution of remote control
- ▶ Integrated clutch control – less wiring and components
- ▶ Many types of communication – easy supervision and servicing
- ▶ Perfect price/performance ratio
- ▶ Built-in PLC-integrated control of compressors

Features

- ▶ Engine control, monitoring and protection
- ▶ 14 binary inputs, 14 binary outputs, 8 analog inputs
- ▶ RS232/Modem/Modbus/Internet communication/GSM
- ▶ Engine measurement from sensors or via J1939
- ▶ Input/output and J1939 configuration
- ▶ Running hours meter, number of starts counter
- ▶ Graphic back-lit LCD display with icons and bar graphs
- ▶ Sealed membrane panel to IP65
- ▶ 180 × 120 mm front panel mounted case
- ▶ Operating temperature:
 - -20 to +70 °C regular unit
 - -40 to +70 °C low temperature unit
- ▶ 3 level password protection
- ▶ IntelliDrive controller meets several forcing counter standards (EN, UL, CSA, NFPA)
- ▶ Internal – configurable PLC functions

Configurable PLC functions

- ▶ Logical functions: AND, OR, XOR, RS
- ▶ Comparators with delay or with hysteresis
- ▶ Analog switch from two inputs to one output
- ▶ Mathematics functions: ADD, SUB, MAX, MIN, AVG
- ▶ Linear interpolation, Moving average
- ▶ PID loops with analog or binary outputs
- ▶ Counters, Timers, Delay functions
- ▶ History and protection forcing
- ▶ Rump Up/Down, Inc/Dec, Jump, Programmable switches and others



Speed control modules ID-SCM, ID-SCM1

- ▷ 2× RPM inputs
- ▷ 2× IMP pulse inputs
- ▷ 3× Analog outputs (10V/20mA)

Relay board I-RB8 / I-RB16

- ▷ 8 or 16 relays for ID-DCU (ID-RPU) binary outputs separation
- ▷ Each channel has both n.o. and n.c. contacts available
- ▷ LED state indication

Extension modules and remote displays

- ▷ up to 4× **I-AOUT8** (Analog Outputs Extension Module)
- ▷ up to 4× **IGL-RA15** (Remote Annunciator)
- ▷ up to 4× **IGS-PTM** (Input/Output Module)
- ▷ up to 4× **IS-AIN8** (Analogue Input Module)
- ▷ up to 4× **IS-BIN16/8** (Binary Input/Output Module)
- ▷ up to 2× **I-RD-CAN** (Remote Display with CAN Bus Interface)
- ▷ up to 3× **InteliVision 8** or **InteliVision 5 CAN** (Controller Colour Display Unit)

Communication modules and PC tools

- ▷ **IG-IB** (Internet Bridge)
- ▷ **I-LB+** (Local Bridge)
- ▷ **I-CB** (ECU Communication Bridge)
- ▷ **DriveMonitor** (PC Monitoring Tool)
- ▷ **WinScope** (Special Graphical Controllers' Monitoring Software)
- ▷ **DriveConfig** (PC Configuration Tool)

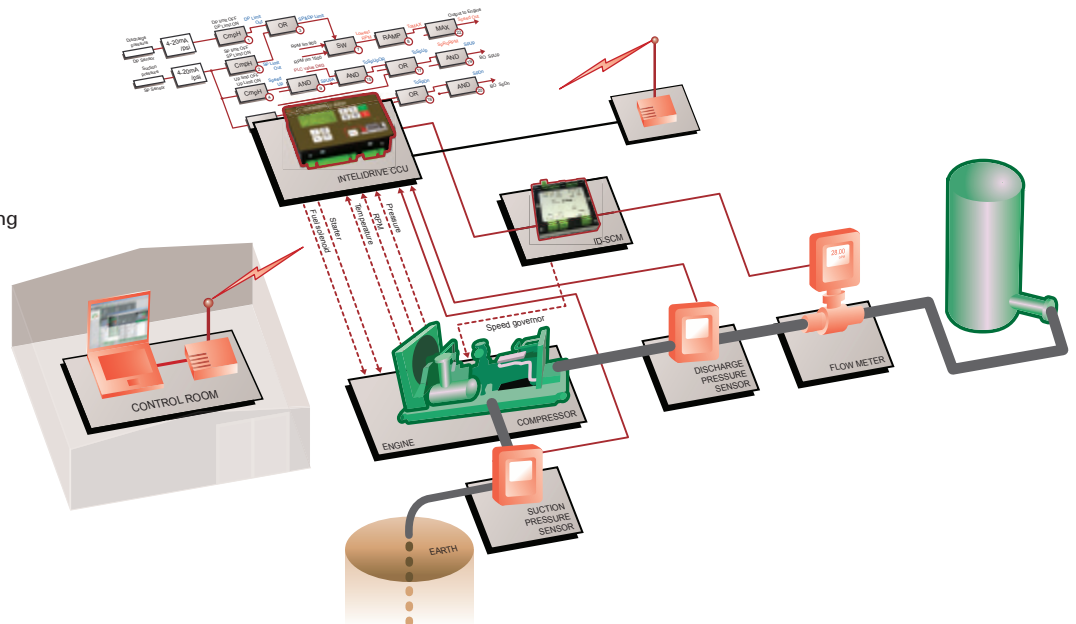
Communication interface ID-COM

- ▷ Multi-controller and/or Remote display and InteliVision communication and/or IG-IB and/or I-LB+

Typical application

GAS COMPRESSOR

- ▷ Gas compressor is driven by a combustion engine.
- ▷ InteliDrive makes complete control, monitoring and protection of the engine and compressor.
- ▷ Sophisticated control algorithm using build-in PLC modules accomplishes optimal running conditions for the compressor.
- ▷ Speed of the engine is determined according to the suction and discharge pressures of the compressor.
- ▷ Additional unload and by-pass valves are controlled by InteliDrive in dependence on both suction and discharge pressures.



InteliDrive – a proven family of controllers for compressor applications

New InteliDrive Lite



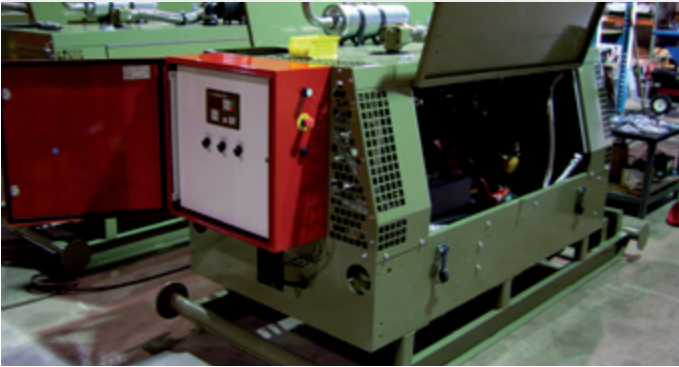
InteliDrive DCU Industrial



Worldwide references



USA • BOSS INDUSTRIES



"ComAp's compressor/engine control solution optimizes the natural gas production of our gas well booster compressor units allowing our customers to maximize gas production by providing very accurate process control utilizing digital pressure transducers and temperature thermocouples at a 1% accuracy which gives much finer process resolution at even extreme ambient temperatures down to -40 degrees.

ComAp's panel also provided us with automatic start/stop as well as automatic engine speed control based on the gas well conditions optimizing the performance of the unit by conserving energy and wear and tear on engine and compressor components. Our customers are very happy with its event history capabilities as well as its compressor and engine protective features.

We also value the fact that the IntelliDrive controller is fully compatible with future electronic emission certified engines and is also capable of offering integrated remote monitoring. BOSS Industries has standardized on the ComAp panel for our gas well booster compressor units."



Ed Ketcham,
VP Sales
www.bossair.com



ITALY • CNG FILLING STATIONS



Dresser Wayne, an innovator of retail fuel dispensers and technologies, is partnering with its sister company Dresser Waukesha, a leading manufacturer of sparkignited, gaseous-fueled engines, to supply gas engine driven compressors in CNG (compressed natural gas) filling stations in Thailand.

- ▶ Dresser Wayne's Cubogas™ compression systems will be packaged with Dresser Waukesha VGF® engines at the company's facility in Talamona, Italy.
- ▶ ComAp Systems Italy – Italy supplied these compressor systems by control panels with IntelliDrive controllers.

For more information about our products and applications visit

www.comap.cz



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