InteliDrive DCU Marine

MODULAR ENGINE CONTROLLER FOR MARINE APPLICATIONS

ComAp
CREATIVE ENGINEERING

Description

The InteliDrive DCU Marine is an engine controller designed specially to meet the demanding needs of the marine market, providing a high level of performance coupled with extensive communication capabilities and incorporating hardwired safety functions and primary/secondary power switching.

The controller is easily integrated into the ship's control system and takes on board the full communication capability with electronic engines. ComAp developed this capability for their market leading gen-set controllers through the use of J1939 and redundant J1587 communication buses.

This engine specific approach enables InteliDrive DCU Marine to communicate fully with the engine's Electronic Control Unit (ECU), delivering a greater range of values and most importantly delivering all diagnostic information in intelligible plain text, instead of potentially misleading cryptic codes or flashing lights.

The unit provides users with a highly flexible solution, featuring configurable inputs and outputs, allowing the controller to be customized to a particular application or requirement without complicated programming.

ABS · Bureau Veritas · DNV · Germanischer Lloyd · KR Korean Register · Lloyd's Register · RINA

AMPS

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

ISO 9001 CERTIFIED

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

InteliDrive DCU Marine

MODULAR ENGINE CONTROLLER FOR MARINE APPLICATIONS

Benefits

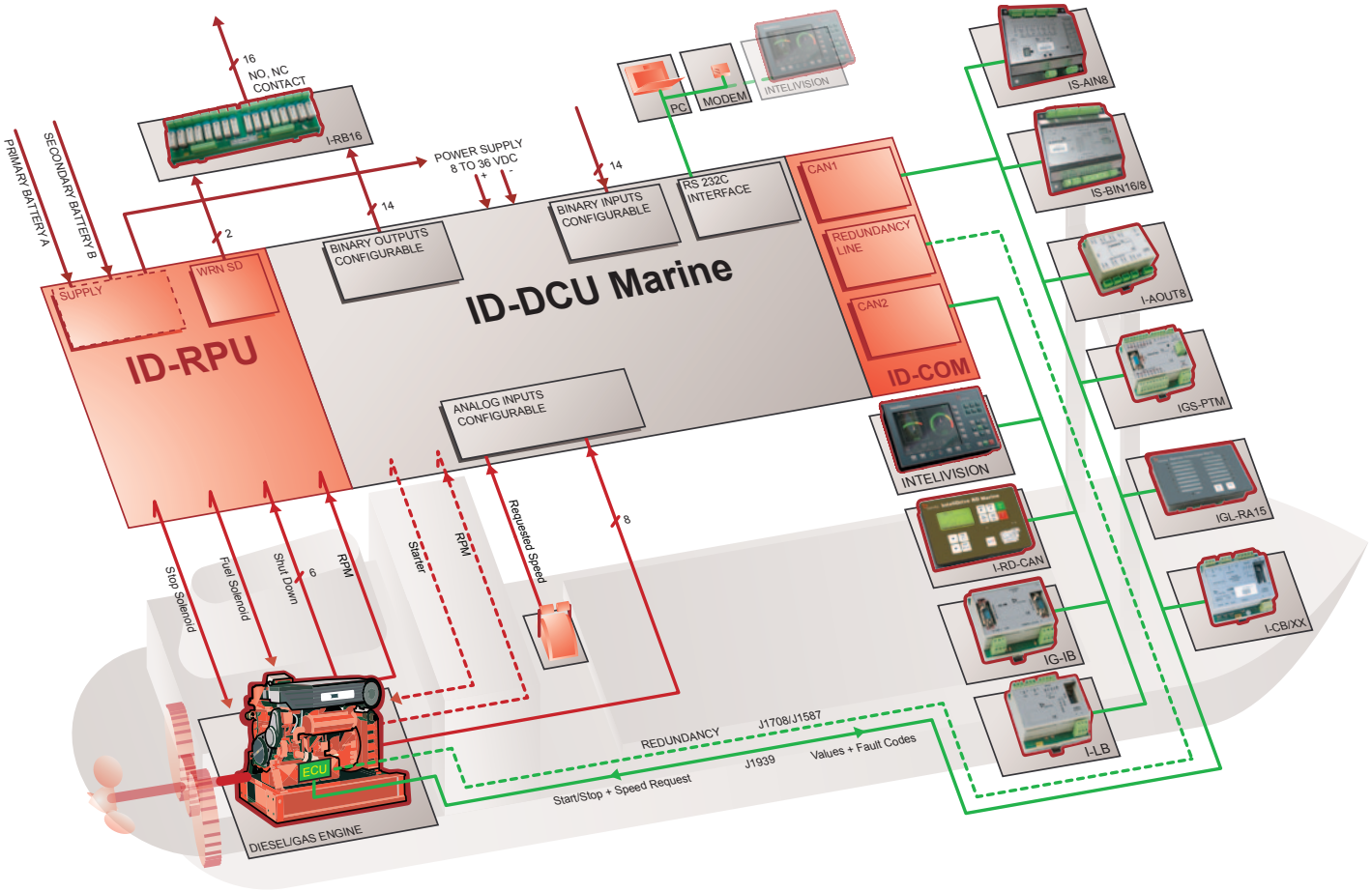
- Integrated solution with hardwired safety functions – less wiring and components
- Full communication support of engines with ECU – simpler wiring, access to information from ECU via Modbus
- Event driven History record, easy backtracking and problem solving
- Load sharing for propulsion engines – better utilization of power of installed engines
- Slave panel 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
- Type approval from 10 major certification societies

Redundant power module ID-RPU

- Supervision of ID-DCU Marine in stand by mode
- Automatic back up mode activation if the main unit fails
- Hardwired safety functions in back up mode
- 1 emergency stop normally opened
- 5 shutdown channels with broken wires detection
- Fuel and Stop solenoids with broken wires detection
- Automatic switchover between primary and secondary battery
- Common alarm and Common shutdown outputs
- It is possible to use ID-SCM when ID-RPU is not connected

Features

- Engine control, monitoring and protection
- 14 binary inputs and outputs, 8 analog inputs
- RS232/Modem/Modbus/Internet communication
- Redundant module ID-RPU with hardwired safety functions activated in backup mode
- Switching between primary and secondary battery (with ID-RPU module)
- Automatic switchover to backup mode in case of detection of main unit failure
- Internal – configurable PLC functions
- Graphical screen with icons and bar graphs
- Event and time driven history record for backtracking
- Different engine application support: Auxiliary, Emergency/Harbour, Propulsion
- Clutch control for propulsion engines
- Symmetrical load sharing for propulsion engines with J1939 (via CAN bus)
- Extension modules for expandable number of Inputs/Outputs (connected via CAN bus)
- Slave panels for remote control available
- Inputs/Outputs configuration
- Configurable list of values that are read from J1939 bus
- Support of redundant J1587 communication bus
- Direct speed/load control via J1939 or J1587 buses
- Diagnostic information from J1939 or J1587 displayed in plain intelligible text
- Configurable Modbus and Modbus TCP support for easy integration into the ship's control system



Communication modules and PC tools

- **IG-IB** (Ethernet/Internet communication support; multiple gen-set control via Internet; active e-mails on gen-set failure; Internet dial-up / callback function)
- **I-LB / I-LB+** (direct, modem or USB (I-LB+ version only) connection; control of multiple gen-sets; RS485 / ModBus support for direct connection; Analog/GSM/ISDN/CDMA modem support; modem callback function)
- **I-CB** interface to electronic engine control units not compatible with protocol J1939 (e.g. MDEC/MTU, CCM/CAT)
- **DriveMonitor** – free PC SCADA software for supervision of single or multiple controllers (IG/IS-NT, IG, IS, ID); configurable site structure; easy site overview, common history log; direct / modem / Internet connection
- **WinScope** – a high-performance PC tool, which is used for monitoring and archiving trends of the controllers' parameters and values. It can be used for all ComAp controllers including ECON, INCON and EMCON5.
- **DriveConfig** – an off-line PC configuration tool for InteliDrive controller customizing.

Communication interface ID-COM

- Multi-controller and/or Remote display communication and/or IG-IB and/or I-LB / I-LB+
- Redundancy line J1708/J1587

Extension modules and remote display

- up to 4× **I-AOUT8** (8 analogue configurable outputs)
- up to 4× **IGL-RA15** (15 green / amber / red LED indicators)
- up to 4× **IGS-PTM** (4 analogue inputs, 1 analogue outputs; 8 binary inputs, 8 binary outputs)
- up to 4× **IS-AIN8** (8 analogue configurable inputs; 2 or 3 wire resistive sensors; voltage, current sensors; thermocouples)
- up to 4× **IS-BIN16/8** (16 binary inputs, 8 binary outputs; galvanic separated I/O)
- up to 2× **I-RD-CAN** (I-RD-CAN is a remote panel for InteliDrive DCU Industrial and InteliDrive DCU Marine controllers)
- up to 3× **InteliVision** (Controller COLOUR DISPLAY unit)

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

BASIC TYPE TABLE	BINARY INPUTS	BINARY OUTPUTS	ANALOG INPUTS	ANALOG OUTPUTS	COMMUNICATION PORTS	REMOTE DISPLAYS	INTEGRATED PLC
ID Lite	6 + 1 RPM / 14*	6 / 14+15 (IGL-RA15)*	3 / 7*	— / 9*	1× CAN, 1× RS232**, 1× RS485**, 1× USB**	1× IG-Display	—
ID DCU Industrial	14 + 1 RPM / 78*	14 / 78*	8 / 40*	— / 32*	2× CAN, 1× RS232	up to 3× InteliVision	YES
ID DCU Marine	14 + 1 RPM / 78*	14 / 78*	8 / 40*	— / 32*	2× CAN, 1× RS232, 1× J1708	up to 3× InteliVision	YES
ID Mobile	22 / 32*	20 / 32*	8–16 / 16–32*	0–8 / 0–16*	2× CAN, 1× RS485	CANtrak, BODAS, InteliVision	YES

* with additional modules
** according to used plug-in module

InteliDrive Lite

engine controller for general purposes

InteliDrive DCU Industrial

modular engine controller for industrial applications

InteliDrive DCU Marine

modular engine controller for marine applications

InteliDrive Mobile

electronic controller for mobile applications

For more information about our products and solutions visit our web-page

www.comap.cz

MANUFACTURER:

ComAp, spol. s r.o.
Czech Republic
Phone: + 420 246 012 111
Fax: + 420 266 316 647
E-mail: info@comap.cz
Internet: www.comap.cz

LOCAL DISTRIBUTOR / PARTNER: