DCU 305 R3 Control Unit

DCU 305 R3

The DCU 305 R3 is an electronic control unit for control and monitoring of diesel engines used as propulsion engines or gensets.

Switches and senders from the engine are connected to the control unit on the wire terminal card RK-66.

Classification

The DCU 305 R3 is classified by major classification societies.

Configuration

Configuration is easily done by the project engineer with a user-friendly and intuitive windows program; the Rudolf R3. With a click on the mouse, the configuration is downloaded into flash memory in the control unit.

All channels have their own attributes of warning, alarm or shutdown depending on the requirements.

Expandable

Different expansion cards exist to further enhance the flexibility.

Two sizes of extra relay cards can be connected; one 6-channel or one 14-channel card. All relay channels are configurable from a pool of available signals and functions.

For analog expansion, one six-channel card exists. This increases the number of analog channels from the five standard, to 11 channels in all

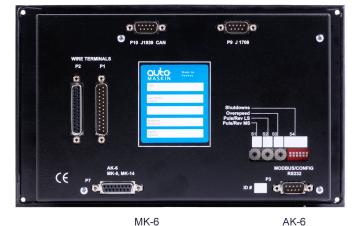
The built-in communication port can be connected to the RSP 305 Remote Panel, or another Remote Panel.

Installation

The DCU 305 R3 consists of three basic items: The control panel itself, the terminal card RK-66 and the two cables that connect these units. These cables are available in two standard lengths.

The control panel is slim enough to be mounted in the smallest of enclosures, and the terminal card fits on a standard 35mm DIN rail.











Features

- Flexible and configurable diesel engine control unit
- IACS Certified by major classification societies
 Graphical and backlit display with intuitive user interface menues
- Built-in backup of shutdown channels
- 12 switch input channels
- 5 analogue input channels, 4 20 mA; can be expanded to 11 channels
- Password protected configuration
- Remote operation possible
- Service interval indication

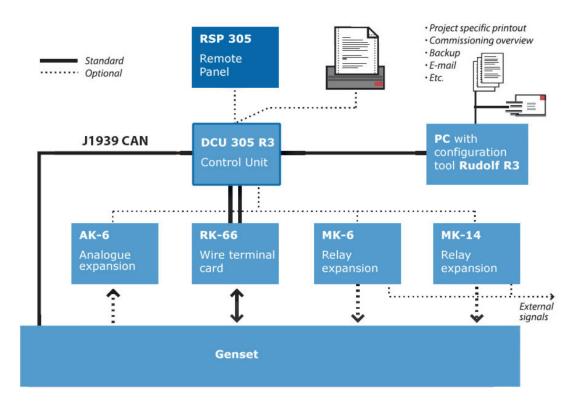
- J1939 CAN interface
- Prelube functionality with timer interval
- Supports 0-2 pickup speed sensors
- Communication port with Modbus
- Log of all events
- Multi-language support
- Four speed relays
- Start battery voltage monitoring and alarm setpoint
- RPM monitoring and overspeed setpoint
- Two configurable inputs
- Two configurable relay outputs; can be expanded with 6 or 14 relays

Ordering Info

Item	Article #
DCU 305 R3 incl. RK-66	1006602
AK-6 Analogue Expansion	1075268
MK-6 Relay Expansion	1075262
MK-14 Relay Expansion	1075263
RSP 305 Remote Panel	1006500



System overview



Technical Specification		
Item	Particulars	
Overall dimensions	160 x 260 x 35 mm (6.3 x 10.2 x 1.4") [H x W x D]	
Cut-out dimensions	146 x 230 mm (5.8 x 9.1") [H x W]	
Supply voltage	24 V smoothed, (18 – 32 V DC)	
Power consumption	Typical: Maximum:	500 mA @ 24 V DC 700 mA @ 24 V DC
Weight	Control unit:	1250 g (2.75 pounds)
Protection level	Front panel: Back panel:	IP54 IP30
Ambient temperature	Operation: Storage:	0 - 70 °C (32 - 158 F) -20 - 70 °C (-4 - 158 F)
Air humidity	Operation: Storage:	< 90 % Dry
RK-66 relays	120 V AC 60 V DC 24 V DC	0.5 A 0.3 A 1 A
EMC	IACS EN EN CISPR IEC	E10, No. 19 60945, 9.3 50081-2 16-1, 16-2 60533, 1977/Rev.

