

Intel RPU

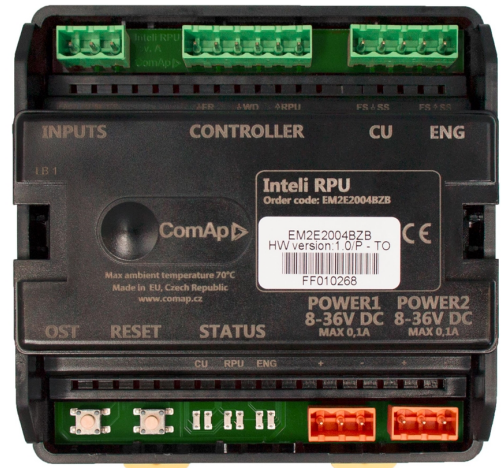
Datasheet

Product description

- ▶ Redundant Protection Unit designed for Marine Applications
- ▶ Robust & easy-to-use
- ▶ Ensuring basic functionality when the main unit fails
 - Fuel solenoid and Stop solenoid control
 - Overspeed protection with analog RPM setting
- ▶ Built-in self-diagnostics

Key features

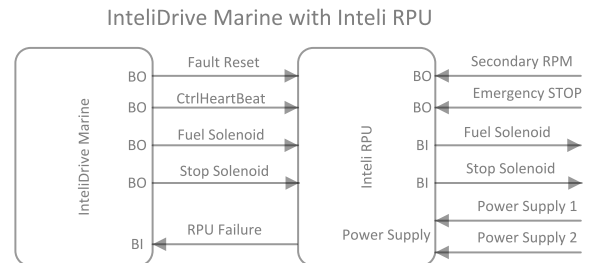
- ▶ Ensures basic function of an engine when main controlling unit fails
 - Fuel solenoid control
 - Stop solenoid control
- ▶ Basic protections support
 - Overspeed
 - Emergency stop
- ▶ Automatic fault reset & Conditioned main unit control return
- ▶ Dedicated WatchDog for main unit monitoring
- ▶ Two independent Power supply inputs
- ▶ System status indication by LED
- ▶ Robust analog Overspeed level setting (dip-switch)



Order code: EM1RPUXXBZB

Redundant Protection Unit

Application overview



Technical data

Power supply

Power supply range	8-36 VDC
Power consumption	0.1 A / 8 VDC
	0.07 A / 12 VDC
	0.04 A / 24 VDC
	0.03 A / 36 VDC
Fusing	1 A

Operating conditions

Operating temperature	-40°C to +70°C
Storage temperature	-40°C to +80°C
Operating humidity	95 % w/o condensation
Vibration	2 - 25 Hz, ± 1.6 mm
	25-100 Hz, a = 4 g
Shocks	a=500 m/s ²

Binary input ES

Number	1 non-isolated (ESTOP dedicated)
Close indication	Negative Power supply terminal
Emergency stop condition	Open contact

Binary inputs CU

Number	2 direct to binary outputs via relay
Close/Open indication	N/A, wired directly to outputs via relay

Binary inputs CONTROLLER

Number	2 isolated
Close/Open indication	0 - 2 V - close contact
	4 V - Vs - open contact

Binary outputs CONTROLLER

Number	1 isolated
Max current	10mA continuous
Type	OptoRelay

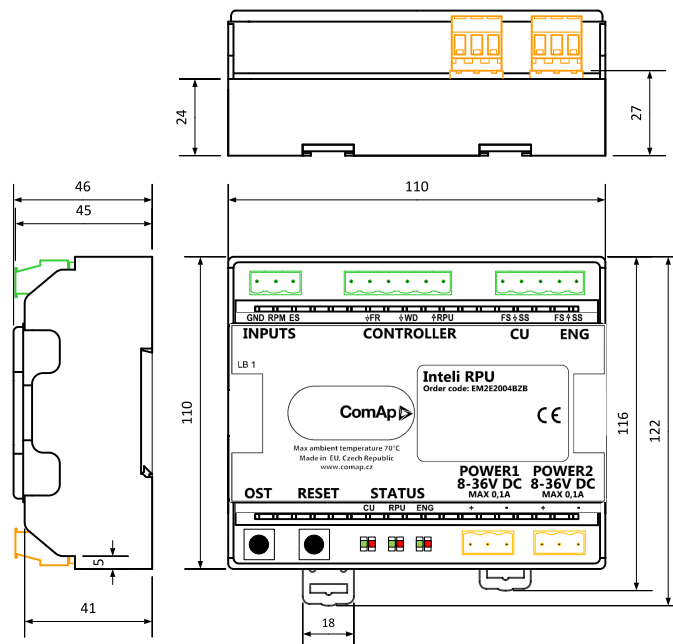
Binary outputs ENG

Number	2 Non-isolated
Max current	0.5A continuous
Type	Low-side switch (controller switches output to negative power supply terminal)

Magnetic pick-up

Voltage input range	4 Vpk-pk to 50 Vpk-pk (@4Hz to 1kHz) 6 Vpk-pk to 50 Vpk-pk (@1kHz to 5kHz) 10 Vpk-pk to 50 Vpk-pk (@5kHz to 10kHz)
Frequency input range	4 Hz to 10 kHz
Frequency measurement tolerance	0.2 % from range 10kHz

Dimensions, terminals and mounting



Note: This unit is DIN rail mounted.

Related products

Product	Description	Order code
Any ComAp engine controller	This redundant unit can be used in combination with any ComAp controller that controls engine	N/A

Functions and protections

Description	ANSI code
Emergency stop	5
Overspeed	12

Certificates and standards (pending)

▶ ISO 16750-2_4.6.2	▶ GL2012 Guidelines for the performance of type approvals tests	▶ IEC 60068-2-1_Ad
▶ IEC 60533_7.2	▶ IEC 60529	▶ IEC 60068-2-1_Ab
▶ IEC 60533_7.2.4	▶ UL508	▶ IEC 60068-2-30_Db
▶ EN 61000-4-29	▶ EN 60068-2-14	▶ IEC 60092-504
▶ EN 60068-2-6_Fc	▶ EN61000-4-3_ed3	▶ EN 61000-4-2
▶ EN 60068-2-27_ed2	▶ EN61000-4-4_ed2	▶ EN61000-4-6_ed3
▶ UL764C	▶ EN61000-4-5_ed2	▶ EN61000-4-8
▶ IEC 60068-2-2_Bd		▶ EN61000-6-4

