



RDC EVO

RADIO CAN BUS MODULE



- Bi-directional radio module for remote machinery control equipped with a CANbus network
- Designed to operate in systems with high safety level architectures
- Compatible with SIL2 and PLd standards.
- Integrated adjustable antenna
- Polyurethane resin wrap and the DEUTSCH type connector

TECHNICAL FEATURES

MASTER CODE	RDC.438
POWER SUPPLY	9-30 VDC CURRENT CONSUMPTION: 30 mA (min) – 100 mA (max) @ 24VDC
COMMUNICATION PORTS	NETWORK: CAN BUS 2.0B COMPLIANT – (11, 29 BIT) – ISO 11898-2 UP TO 1Mbit/s RADIO: 868 MHz / 434 MHz BAND
CAN BUS PROTOCOLS	CAN OPEN protocol (CIA DS401 DEVICE PROFILE FOR GENERIC I/O MODULE, WITH DS306 EDS FILE) Baud rate: 10, 20, 50, 100, 125, 250, 500, 1000 kbps (Default = 250 kbps)
RADIO FEATURES	BAND: 868 MHz (869.700-870.00 MHz) / 434 MHz (433.050-434.790 MHz) CHANNELS: 12 (AUTOMATIC FREQUENCY SCAN) MODULATION: 2-GFSK ANTENNA: EXTERNAL or INTEGRATED (only for 868 MHz)
RADIO PROTOCOL	PACKET TRANSMISSION PROTOCOL BIDIRECTIONAL LINK HAMMING DISTANCE = 4 SAFETY STOP INTERVENTION TIME < 0,5s
CONNECTIONS	MAIN: TE DEUTSCH DTF13-6P ANTENNA: SMA socket
CASE	ENCAPSULATED IN PUR RESIN - SELF-EXTINGUISHING UL94 (V0)
PROTECTION	INTEGRATED ANTENNA: IP68 SMA ANTENNA: IP65
WORKING TEMPERATURE	-40°C +85°C



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ELECTRONIC FEATURES

SLAVE USAGE	EDS FILE
PROGRAMMING	FIRMWARE UPLOAD BY CAN BUS WITH ALOADER SOFTWARE TOOL
CYCLE TIME	RADIO CONNECTION: 50 ms LOGIC: < 1 ms
INTERNAL SYSTEM CONTROL	DUAL REDUNDANT CPU WITH WATCHDOG SELF CHECKED SAFETY OUTPUT RELAY

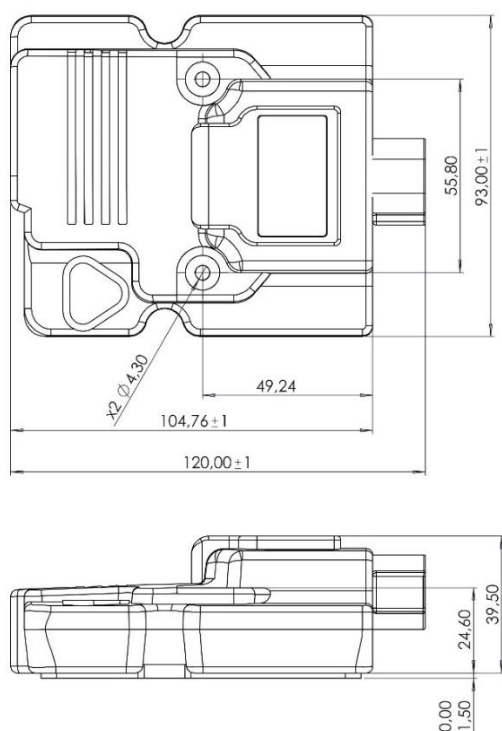
STANDARDS

ELECTROMAGNETIC (EMC)	ACCORDING TO DIRECTIVE 2014/30/EU: EN 61000-6-4 EN 61000-6-2 EN 50498
ROAD VEHICLES	ISO 7637-2: 2011 ISO 11452-1: 2005
INFORMATION TECHNOLOGY EQUIPMENT – SAFETY	EN 60950-1
RADIO SPECTRUM MATTERS (RED)	ACCORDING TO DIRECTIVE 2014/53/EU: ETSI EN 300.220-1 ETSI EN 300.220-2 ETSI EN 301.489-1 ETSI EN 301.489-3
PERFORMANCE AND SAFETY INTEGRITY LEVEL	EN ISO 13849-1 PLd – SIL2 (DUAL-CHANNEL INTERNAL SCHEME)

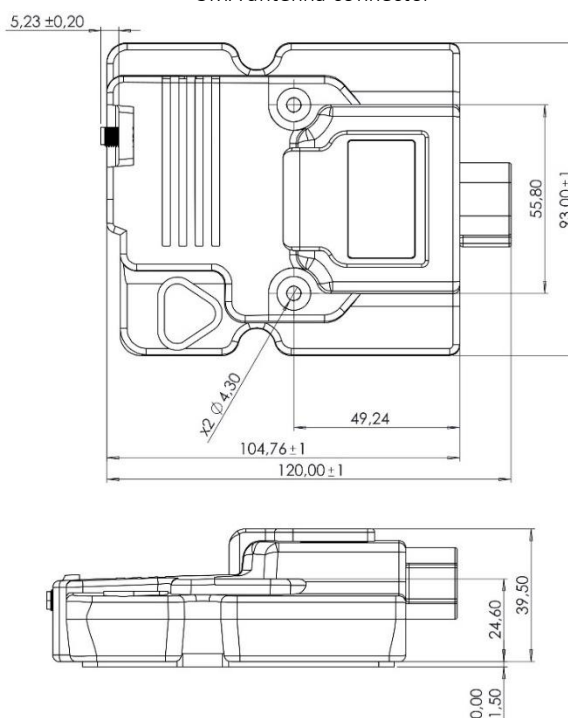


SIZE (mm)

Integrated antenna



SMA antenna connector



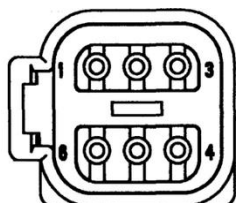


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CONNECTOR PINOUT

MAIN CONNECTOR



PIN	DESCRIPTION
1	POSITIVE POWER SUPPLY
2	SAFETY DRY CONTACT OUT
3	SAFETY DRY CONTACT IN
4	CAN L
5	CAN H
6	GND

MATING CONNECTOR CODES

CONNECTOR: DT06-6S

TERMINALS: 1062-16-1422/1062-16-1222 or similar (x6)

CAP: W6S



DT06-6S



TERMINALS



W6S

SMA EXTERNAL CONNECTOR



WHIP ADJUSTABLE ANTENNA

SMA PLUG

868 / 433 MHz BAND

Housed in a rugged flexible plastic



PUK RUGGED ANTENNA

SMA PLUG with RG174 CABLE LENGHT 1,5 m

868 & 433 MHz BAND

Housed in waterproof IP67 rugged low-profile

Fixed through M14



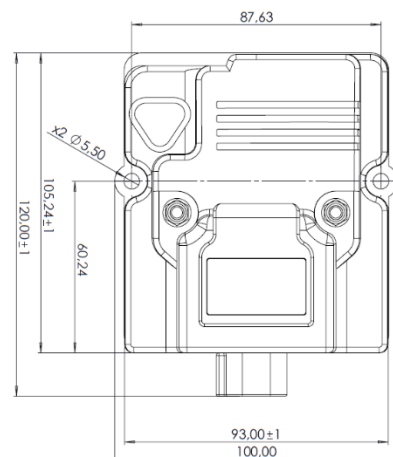
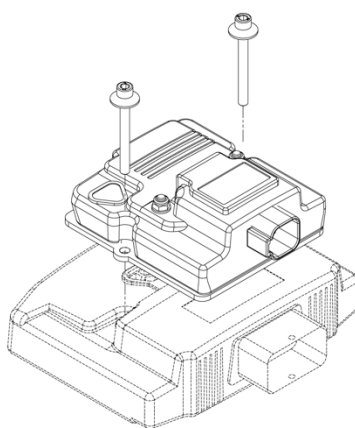
FEATURES

OPTIONAL:

RETRO-FIT KIT

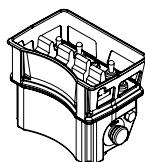
For RD.CAN.S02/03/11/15 replacement composed by:

- STEEL BASEHOLE ADAPTER PLATE
- RETROFIT ADAPTER CONNECTOR



RADIO PAIRING WITH ALMEC PRODUCTS:

- AL50RC radio console series with proportional controllers
- ALNWR radio pushbutton series
- RDC EVO device for point-to-point radio link



a)



b)



c)



c)



NOTE