

QUICK START GUIDE

ISC PROBOXX-V2



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1. Housing front view



2. Safety Instructions / General Information

2.1 Safety Instructions

The Proboxx may only be put into operation by trained personnel.

The Proboxx may only be used in conjunction with an electrical back-up fuse for the 24V power supply. The maximum permissible current consumption is 2A.

The short-circuit current must not exceed 4A at 50ms.

The Proboxx is a terminal box that is not short-circuit proof.

The switches may only be configured when the power is off. After changing the configuration, the pins must be checked with a multimeter for the desired configuration.

2.2 General Information

When installing the control unit, it is essential to ensure that no cables are pinched when the cover is closed.

3. Pin assignments

3.1 Connector overview



3.2 PWR-IN / PWR-OUT connectors

PWR-IN:	M12 – male plug – A-coded			PWR-OUT:	M12 – female plug – A-coded	
	Pin 1:	24V (VS1)	→		Pin 1:	24V (VS1)
	Pin 2:	24V (VS2)	→		Pin 2:	24V (VS2)
	Pin 3:	GND (VS1)	→		Pin 3:	GND (VS1)
	Pin 4:	GND (VS2)	→		Pin 4:	GND (VS2)
	Pin 5:	Earth	→		Pin 5:	Earth

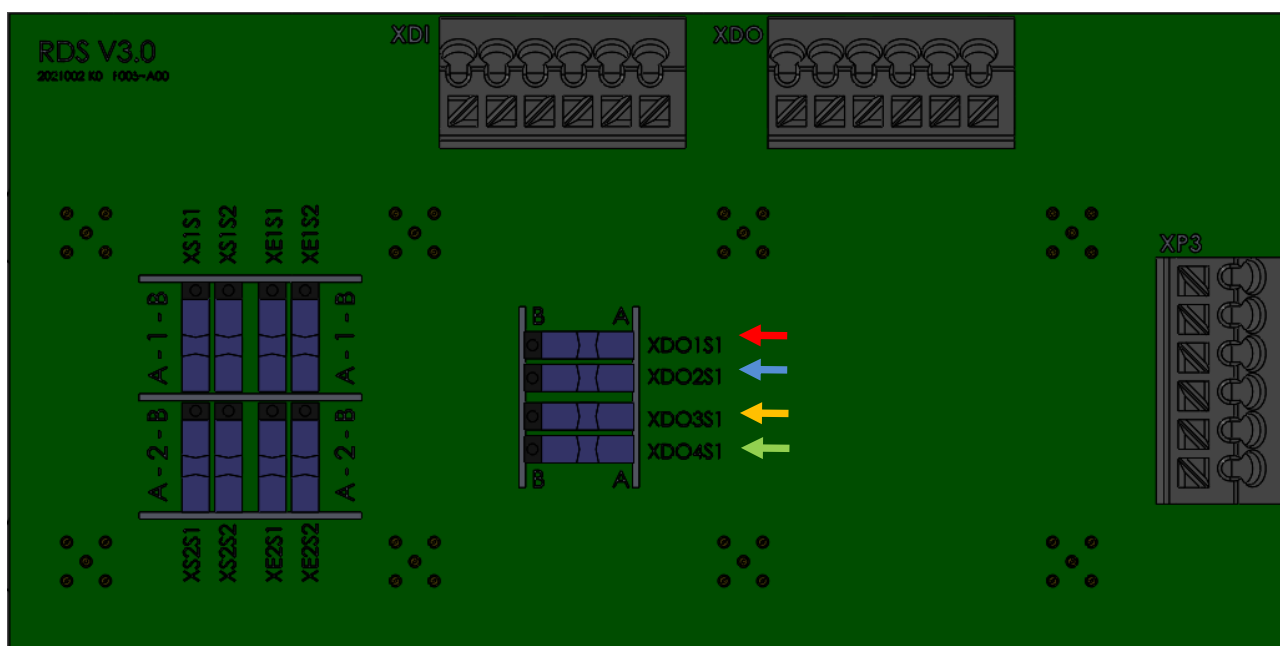
Note: Pins 1 and 3 are used for the power supply of the ISC-B01 control unit.

3.3 F-DO connectors

F-DO-A:	M12 – female plug – A-coded			F-DO-B:	M12 – female plug – A-coded	
	Pin 1:	Not connected			Pin 1:	Not connected
	Pin 2:	OUT-OSSD2			Pin 2:	OUT-OSSD4
	Pin 3:	GND			Pin 3:	GND
	Pin 4:	OUT-OSSD1			Pin 4:	OUT-OSSD3
	Pin 5:	Earth			Pin 5:	Earth

Configuration of the display LEDs. The factory setting of the switches is "B".

OSSD 1	XDO1S1	B	red		OSSD 3	XDO3S1	B	red
		A	green				A	green
OSSD 2	XDO2S1	B	red		OSSD 4	XDO4S1	B	red
		A	green				A	green



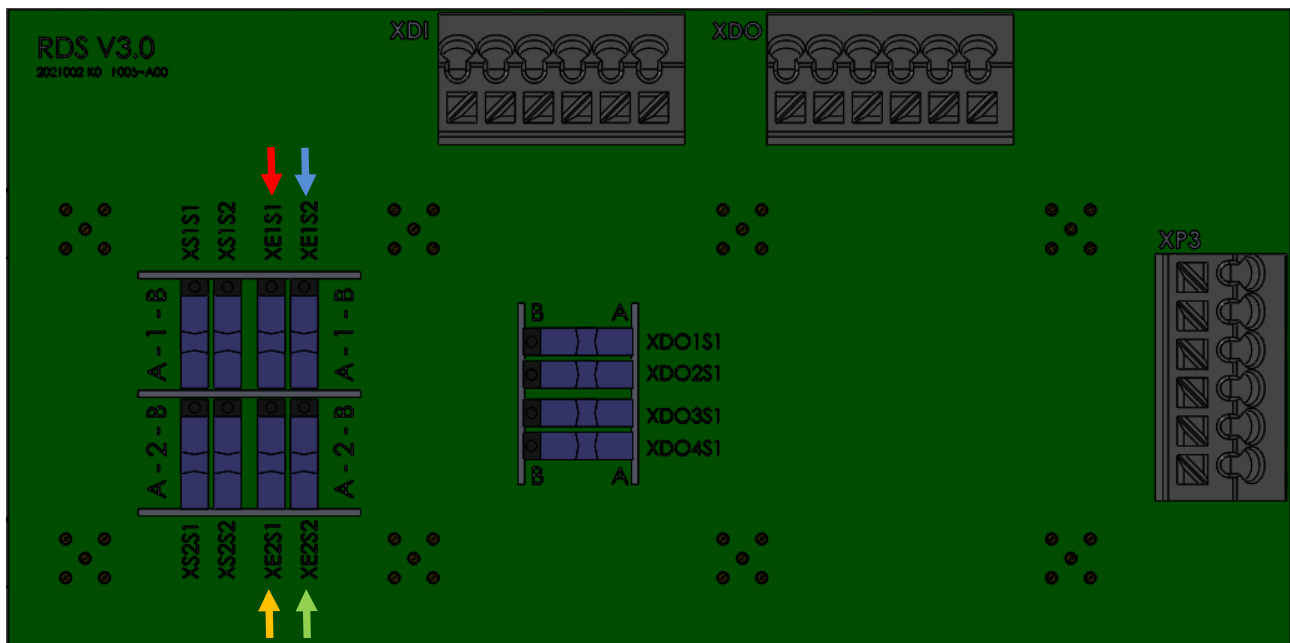
3.4 F-DI connectors

F-DI-A:	M12 – female plug – A-coded				F-DI-B:	M12 – female plug – A-coded		
Pin 1:		24V			Pin 1:		24V	
Pin 2:		IN-OSSD2			Pin 2:		IN-OSSD4	
Pin 3:	XE1S1	B	GND		Pin 3:	XE2S1	B	GND
		A	24V				A	24V
Pin 4:		IN-OSSD1			Pin 4:		IN-OSSD3	
Pin 5:	XE1S2	B	Earth		Pin 5:	XE2S2	B	Earth
		A	24V				A	24V

The factory setting of the switches is "B".

Note: Pin 3 can be set to 24V or GND depending on the switch position XE1S1 and XE2S1! Pin 5 can be set to earth or 24V depending on the switch position XE1S2 and XE2S2!

Set and check the switch on the circuit board when it is de-energized. There is a risk of short circuits if the configuration is incorrect. The designation on the circuit board for the configuration of the M12 sockets with OSSD inputs are labeled XE (receiver).

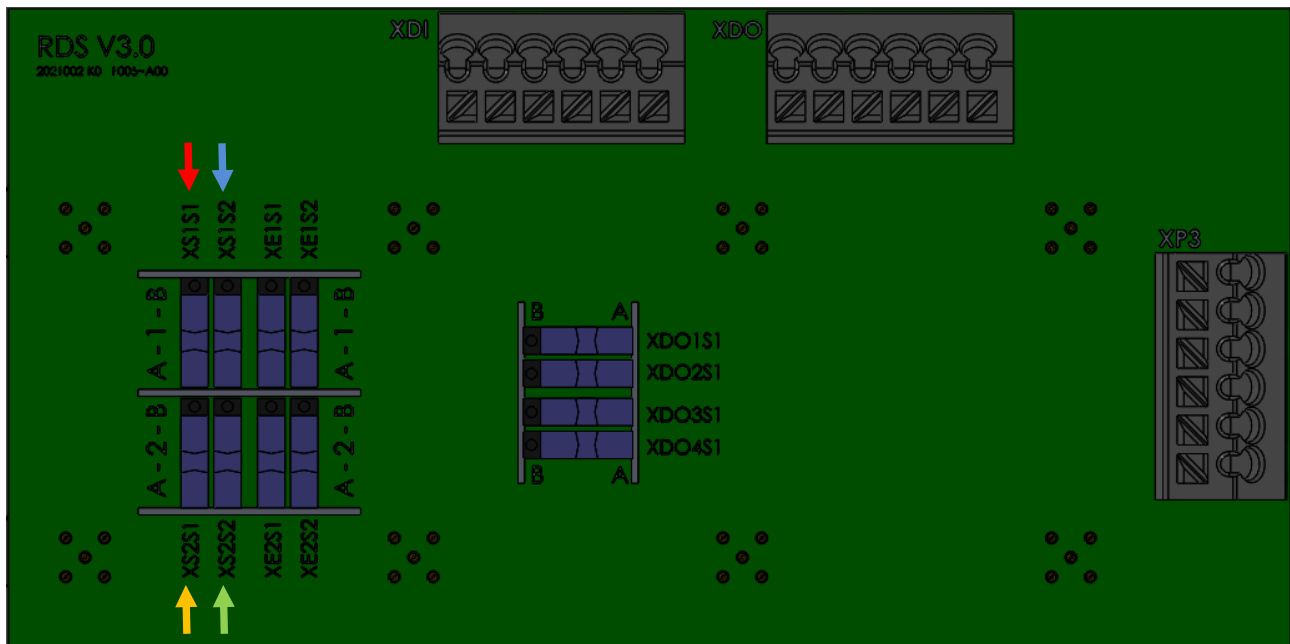


3.5 XE connectors

XE-A:	M12 – female plug – A-coded			XE-B:	M12 – female plug – A-coded	
Pin 1:		24V		Pin 1:		24V
Pin 2:	XS1S1	B GND		Pin 2:	XS2S1	B GND
		A 24V				A 24V
Pin 3:		GND		Pin 3:		GND
Pin 4:	XS1S2	B GND		Pin 4:	XS2S2	B GND
		A 24V				A 24V
Pin 5:		Earth		Pin 5:		Earth

Note: Pin 2 and Pin 4 can be set to 24V or GND depending on the switch position XS1S1 and XS2S1!

Set and check the switch on the circuit board when it is de-energized. There is a risk of short circuits if the configuration is incorrect. The designation on the circuit board for the configuration of the M12 sockets intended for supplying light curtains are marked with XS (transmitter).



3.6 CAN Connections for radar sensors

CAN1:	M12 – female plug – A-coded		CAN2:	M12 – female plug – A-coded	
	Pin 1:	Earth		Pin 1:	Earth
	Pin 2:	V+		Pin 2:	V+
	Pin 3:	V-		Pin 3:	V-
	Pin 4:	CH		Pin 4:	CH
	Pin 5:	CL		Pin 5:	CL

Note: CAN1 and CAN2 are wired parallel to the ISC-B01 controller.

3.7 Service – connector

Field & Service:	M12 – female plug – D-coded		RJ45
	Pin 1		Pin 1
	Pin 2		Pin 3
	Pin 3		Pin 2
	Pin 4		Pin 6

Note: Service is patched to port ETH of ISC-B01 controller.

3.8 Field connectors

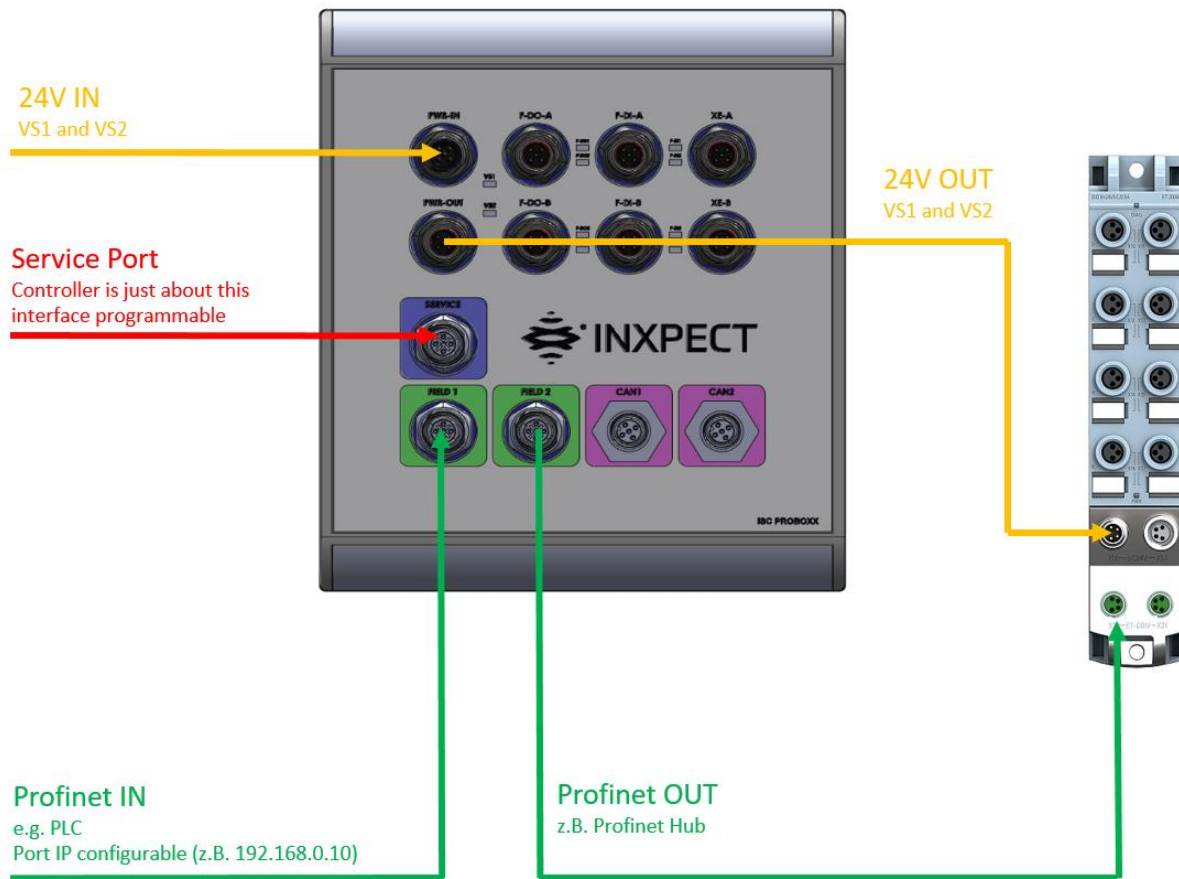
Field1:	M12 – female plug – D-coded		RJ45
	Pin 1		Pin 1
	Pin 2		Pin 3
	Pin 3		Pin 2
	Pin 4		Pin 6

Note: Field1 is patched to connector X1 of the ISC-B01 controller.

Field2:	M12 – female plug – D-coded		RJ45
	Pin 1		Pin 1
	Pin 2		Pin 3
	Pin 3		Pin 2
	Pin 4		Pin 6

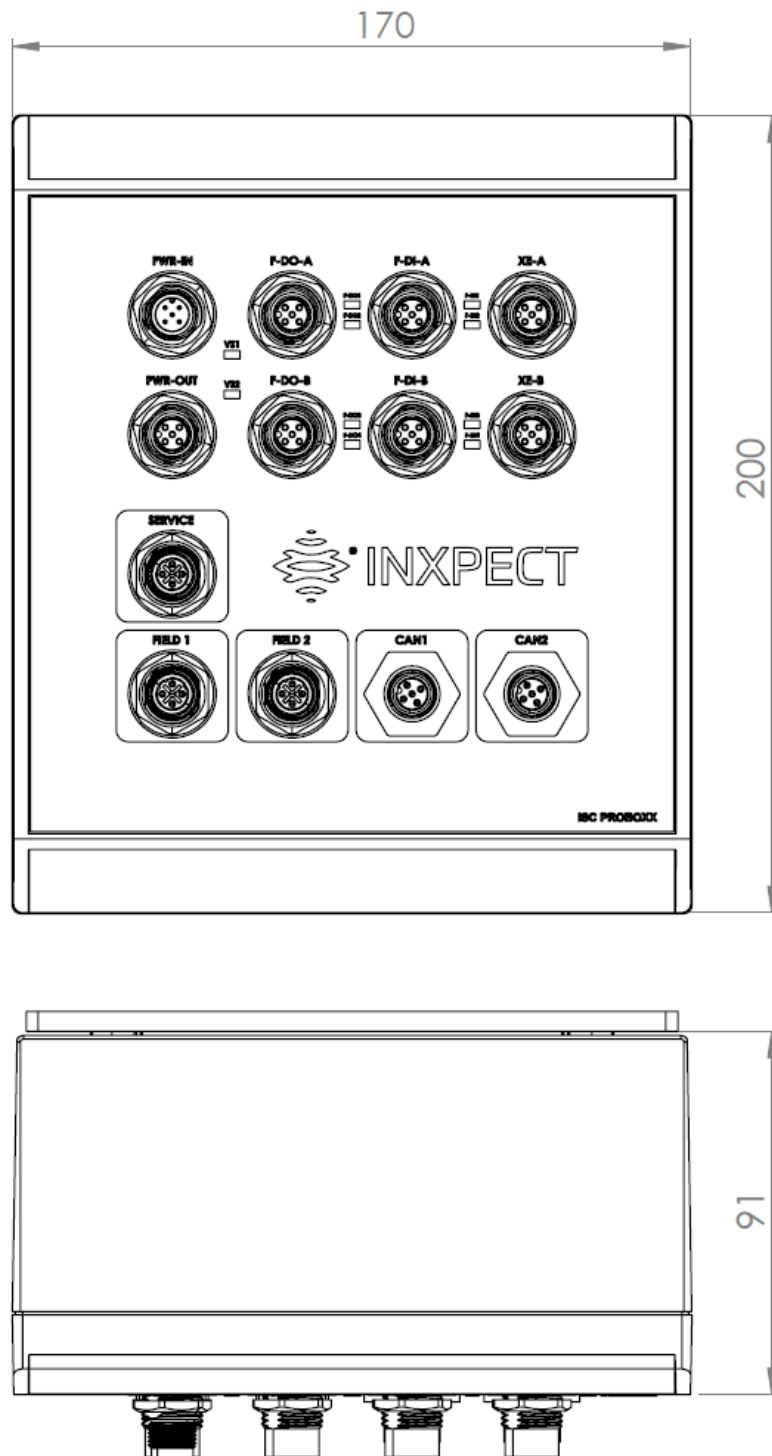
Note: Field2 is patched to connector X2 of the ISC-B01 controller.

4. Network connectivity options

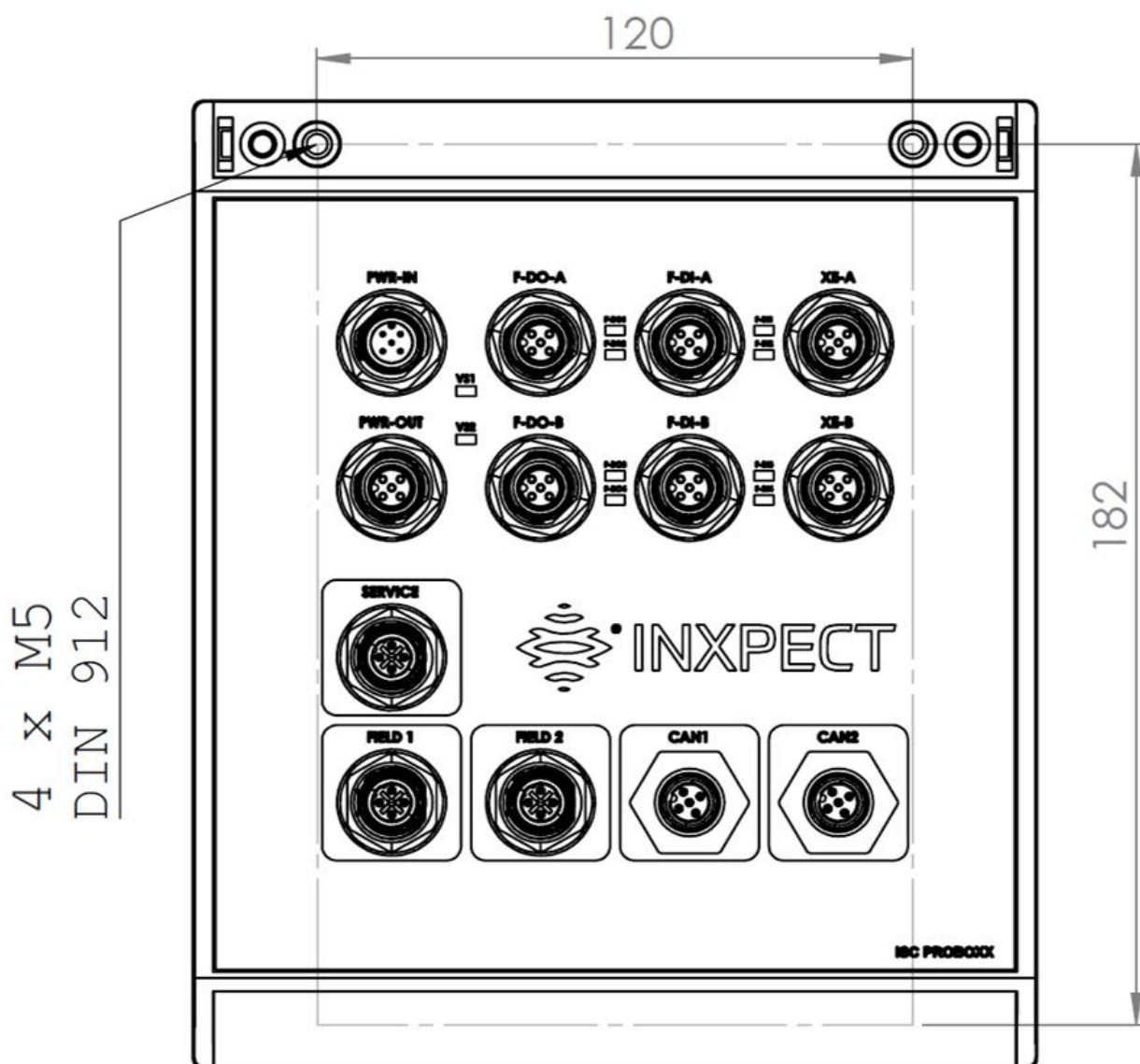


5. Controller dimensions

5.1 Housing dimensions



5.2 Connection dimension



5.3 Connection plate (optional)

