Junction Box

For Obelux LED Aviation Obstruction Lights

OBELUX AVIATION LIGHTS

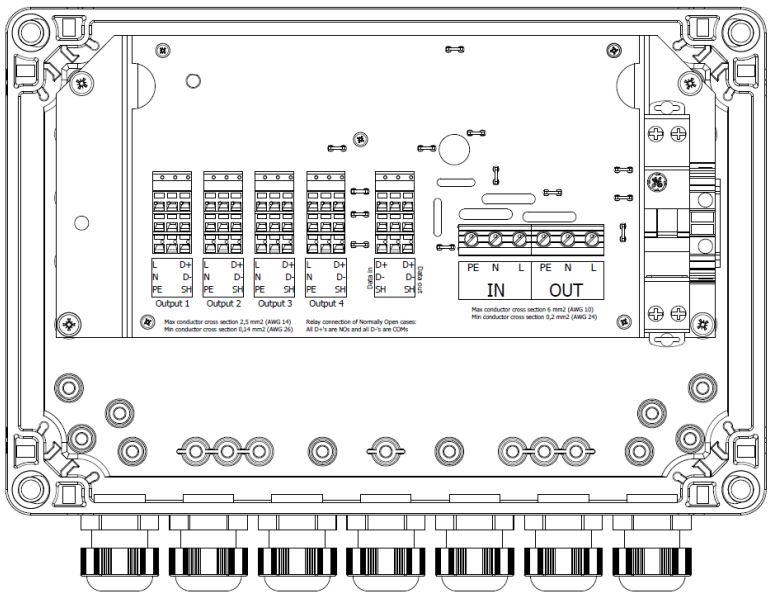
WWW.OBELUX.COM

Mechanical characteristics

- Shock-resistant polycarbonate enclosure (IP65)
- Enclosure dimensions (WxHxD): 300 mm x 200 mm x 132 mm
- Weight <2,2kg
- Cable glands: 7 x M20 (8-14 mm cable diameter

Electrical characteristics

- Operating voltage 100-240VAC or 10-60VDC
- Operating temperature range -40 °C ...+55 °C



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Obelux junction box is used to distribute power and data to Obelux aviation lights. Junction box can connect four (4) lights to one power and data line. Junction boxes can be also connected with each other allowing several levels of lighting through one power and data line. One Obelux controller can control and monitor all the lights individually.

Key Features

- Junction Box for Obelux light heads
- Can connect up to four (4) lights
- Junction Boxes can be daisy-chained to allow larger aviation light systems controlled by one central Obelux controller
- Long maintenance-free lifetime

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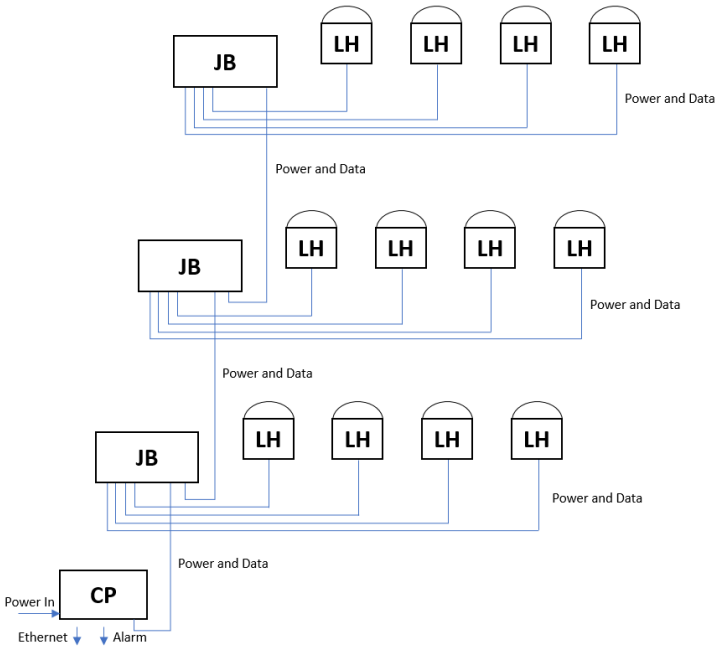
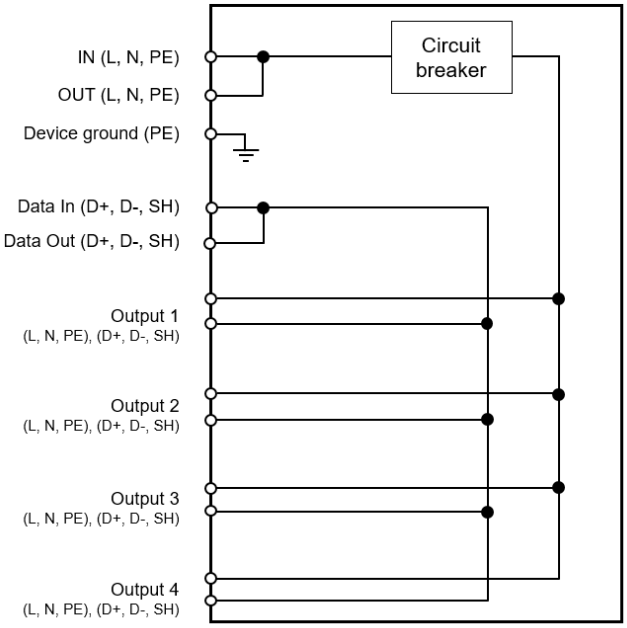
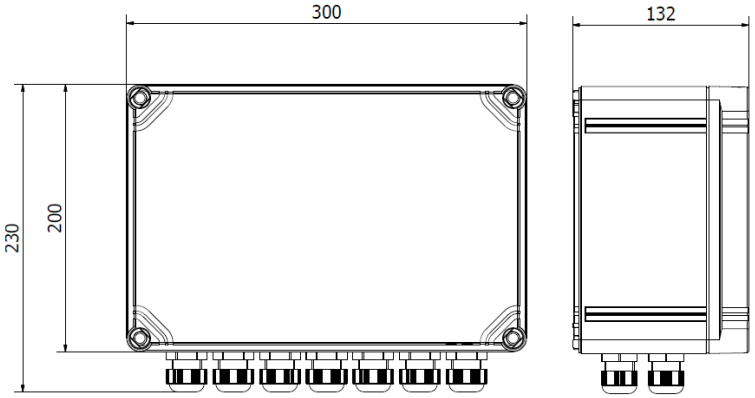


2 Typical use of Junction Box in ModBUS application



1 Block diagram



3 Enclosure dimensions

Recommended cables

FACAB EFK SERVO-CP 4G1,5+(2x1,5) or similar

Order Code: **CBL-PDNL-xxxx**

x = length

Order code	Operating voltage	Max. number of lights	Packing dimensions
JB-ACW-MB-P	100-240VAC	4	330x330x150mm, 2.5kg
JB-DCW-MB-P	10-60VDC	4	330x330x150mm, 2.5kg
CBL-PDNL-xxxx	CABLE		

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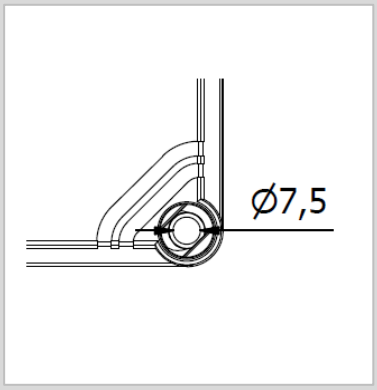
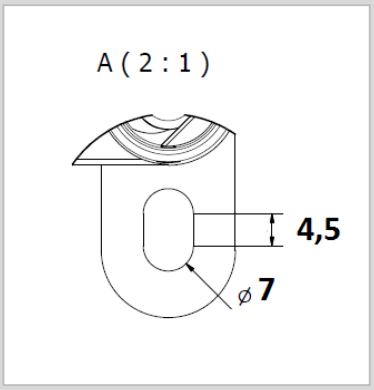
Installation specifications

- Cable glands: 7x M20 (8-14 mm cable diameter)
- Cable wire diameter 0,2 – 2.5mm^2
- Power input/output wire diameter 0.2-6mm^2
- Data input/output wire diameter 0.2-2.5mm^2
- Light head outputs wire diameter 0.2-2.5mm^2

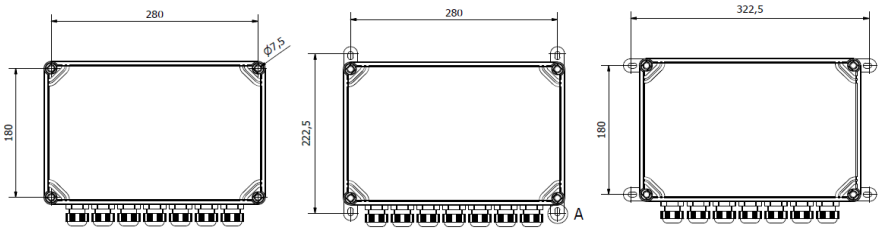




Mounting points

Installation instructions

Mount the device to the selected mounting point using quality made fasteners. When the cover door is open, check that there is no inflow of water (incl. hail and snow) into the cabinet.



Route cables using cable glands on the bottom side of the device. Connect the cable wires securely to appropriate terminal block connectors.

Place the cover properly on its place and securely tighten all four screws on all corners of the cover. Make sure that all unused glands or gland holes are plugged shut.

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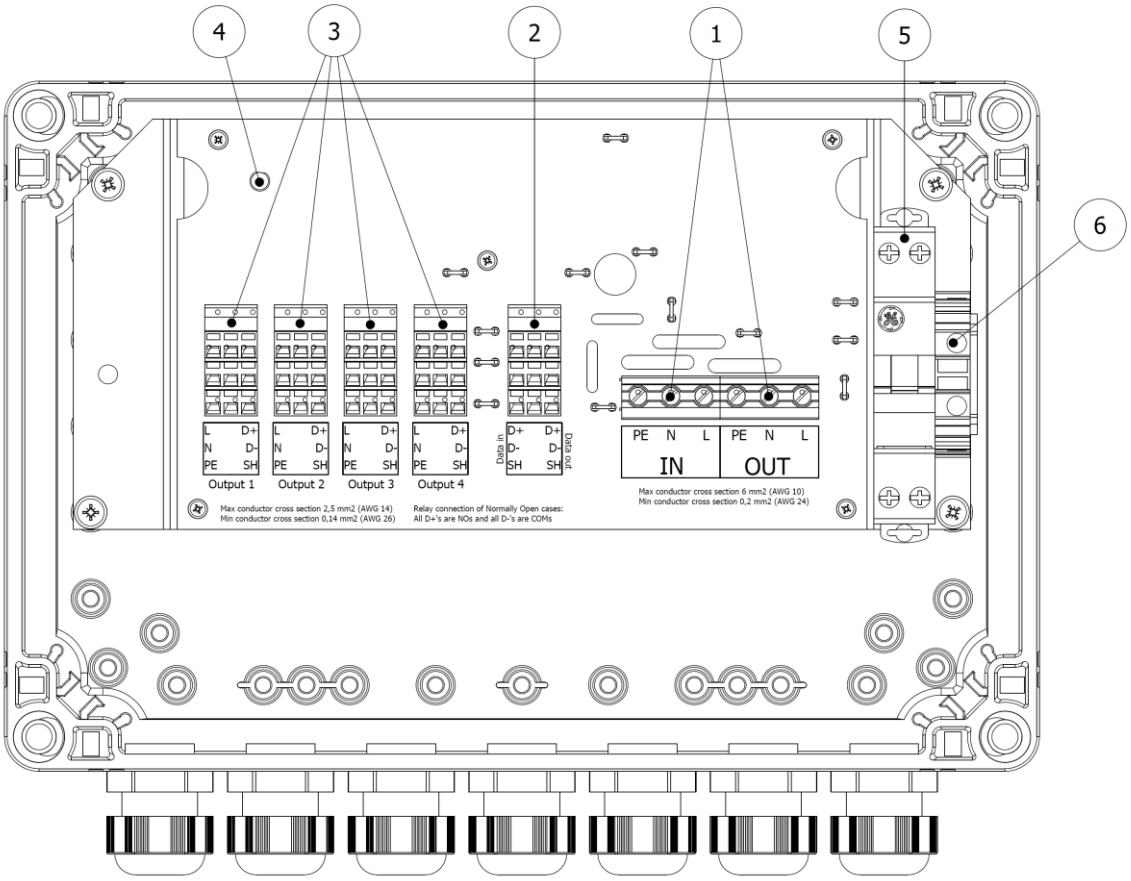

1 Power input and output

Mark	Description	Information
PE	Protective earth	PE line is typically indicated with yellow/green colour.
N	Neutral terminal	Colour typically blue.
L	Live terminal	Colour typically brown.

Connector is a screw connection terminal block.

2 Data input and output

Mark	Description	Information
D+	Data +	RS485 non-inverting pin
D-	Data -	RS485 inverting pin
SH	Shield	Shield

Connector is spring-cage terminal block.

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3 Light head outputs 1-4

Mark	Description	Information
PE	Protective earth	PE line is typically indicated with yellow/green colour.
N	Neutral terminal	Colour typically blue.
L	Live terminal	Colour typically brown.
D+	Data +	RS485 non-inverting pin
D-	Data -	RS485 inverting pin
SH	Shield	Shield

Connector is spring-cage terminal block.

4 LED indicator

LED indicator for power input.

Orange: AC connected correctly
Green: DC connected correctly
Red: DC connected incorrectly

5 Circuit breaker

Circuit breaker for light head outputs

6 Device ground

Connect PE Out to a good ground point.