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UPS-230-180Hx

For Obelux LED Aviation Obstruction Lights

OBELUX

AVIATION LIGHTS

Obelux Oy, Kutumotie 6 B, 00380 Helsinki FINLAND | The information in this document is subject to change without notice.

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Mechanical characteristics

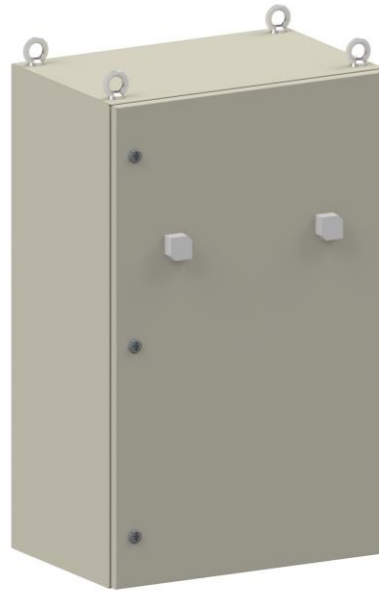
- ▶ **Enclosure:**
Painted Steel (RAL 7035)
Degree of Protection IP 55
Corrosion category C3
Door opening >180° (H3 model only)
- ▶ **Dimensions (W x H x D):**
600 x 950 x 400 mm (cabinet only)
- ▶ **Weight:** <60 kg (without batteries)
- ▶ **Weight:** <165 kg (with batteries)
- ▶ **Cable glands:**
6 x M25 (Ø9-17 mm cable) EMC

Electrical characteristics

- ▶ **Charger type:**
Victron MultiPlus 24/800/16
- ▶ **Input voltage:** 230 V_{AC}
(range 187-265 V_{AC}, 45-65 Hz)
- ▶ **Output voltage:** 230 V_{AC} ± 2 %
50 Hz ± 0,1 %
- ▶ **Operating temperature range:**
-40°C ...+65°C (without batteries)
-30°C ...+50°C (with batteries)
Relative humidity max 95%
- ▶ **Battery charging current:** 16 A
- ▶ **Continuous output power:**
700 W (@ 25°C)
- ▶ **Peak output power:** 1600 W
- ▶ **Internal battery heating:** 70 W
- ▶ **Alarm outputs (dry contact):**
Mains power status
Main circuit breaker status
Over voltage protectors' status
Charger / battery alarm

Battery characteristics

- ▶ **Battery type:**
Victron 12 V 90 Ah GEL (4 pcs)
Lifting ropes at both ends
- ▶ **Nominal battery capacity:** 180 Ah
- ▶ **Battery weight:** 26 kg (per piece)

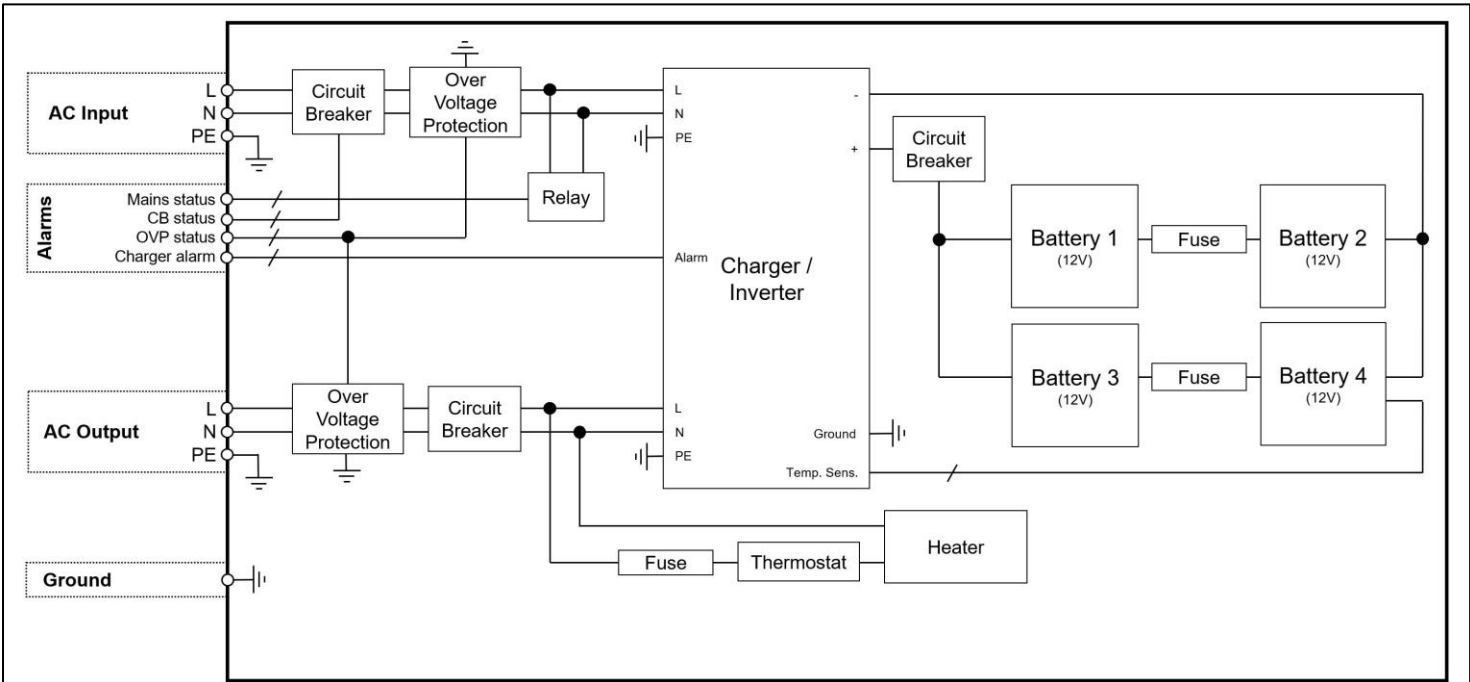


Battery Backup / Power Supply for Cold Climate

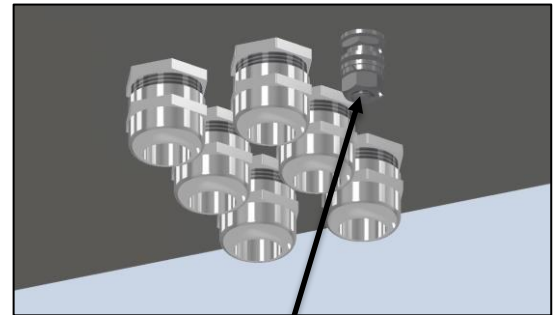
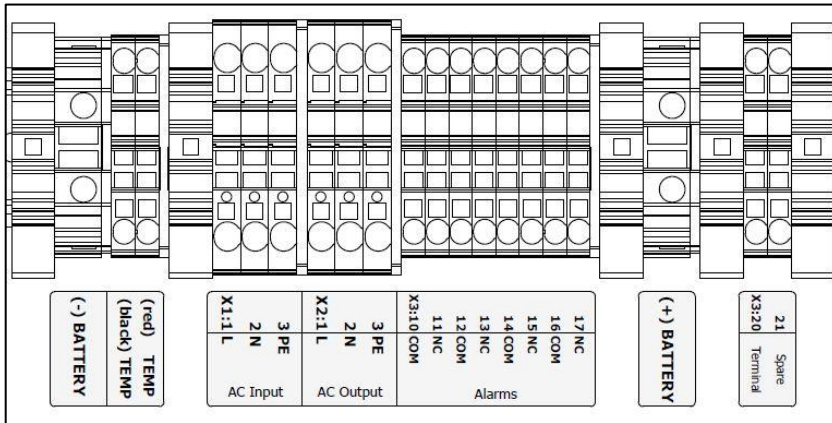
Obelux UPS-230-180Hx is used to provide battery backup for 230 V_{AC} operated Obelux products. The nominal battery capacity is 180 Ah which is achieved by using 4 Victron 12 V 90 Ah GEL battery units. While the individual batteries are 12 V_{DC} the whole battery system operates at 24 V_{DC}. The cabinet is also equipped with thermostat-controlled battery heating to make it suitable for cold climate. Also, approximately 40% of battery capacity is left after discharge to ensure battery survival at -10°C temperature.

Key Features

- ▶ 230 V_{AC} / 230 V_{AC} backup power unit
- ▶ Overvoltage protected input and output
- ▶ Suitable for cold conditions – internal 70 W heating included
- ▶ Operating temperature range -30°C to +50°C
- ▶ Design lifetime of over 25 years (scheduled maintenance required, see manual)
- ▶ Battery type sealed GEL battery 12 V, 90 Ah (4 pcs)
- ▶ Individual rails for each battery, full extension (H3 model only)
- ▶ IP 55 Painted steel cabinet (RAL 7035)



1. Block diagram



M8 grounding bolt

Connector information (AC Input / Output):

Connectors are push-in terminal blocks.

Conductor cross-section: 0,2 – 4 mm² (solid wire max 6 mm²)

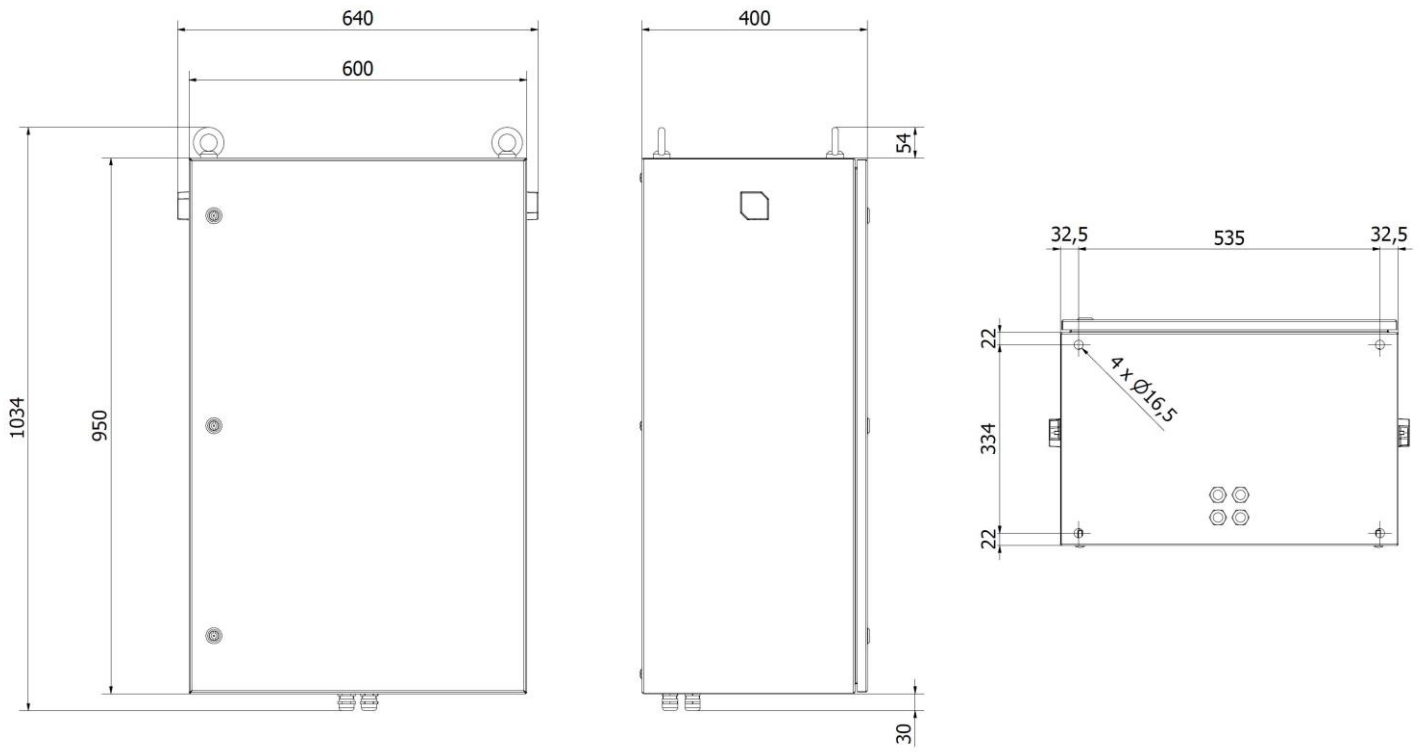
Connector information (Alarms):

Connectors are push-in terminal blocks.

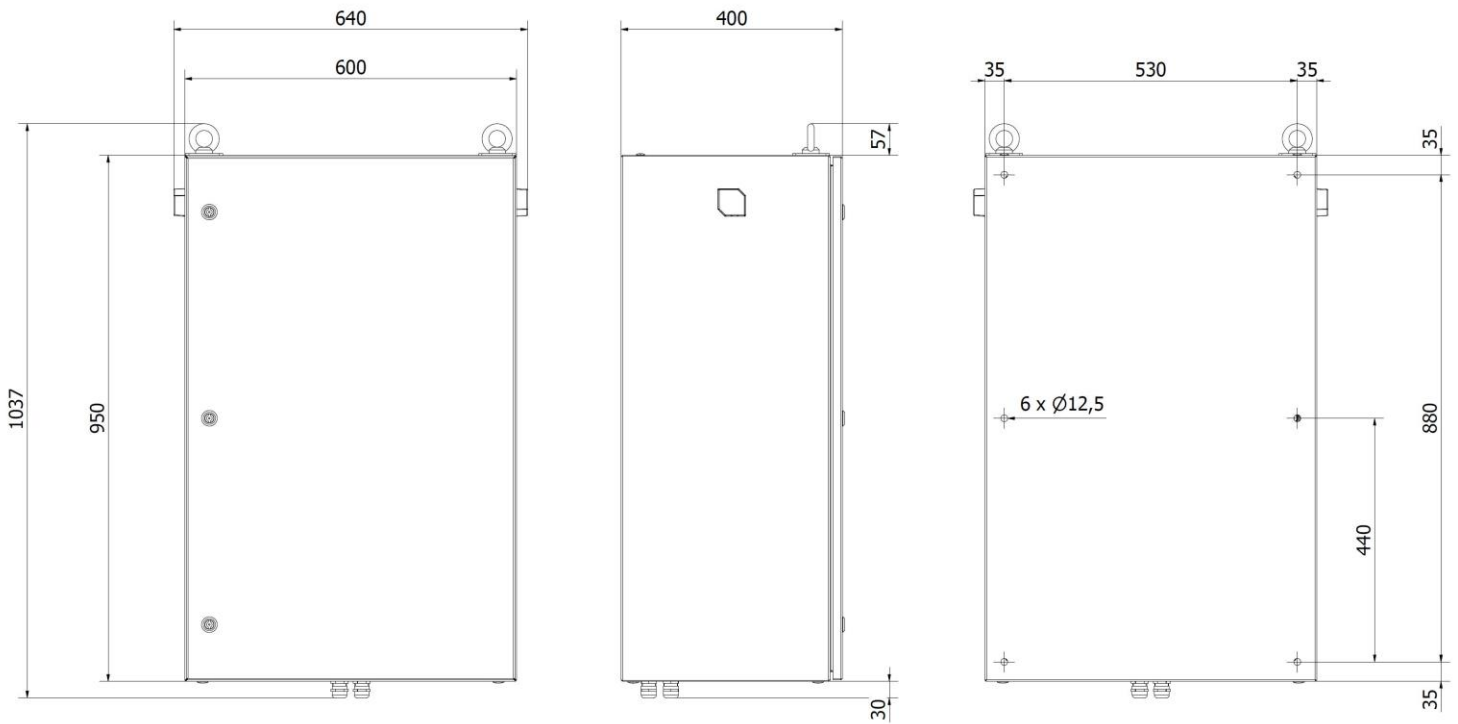
Conductor cross-section: 0,14 – 2,5 mm² (solid wire max 4 mm²)

2. Electrical interface

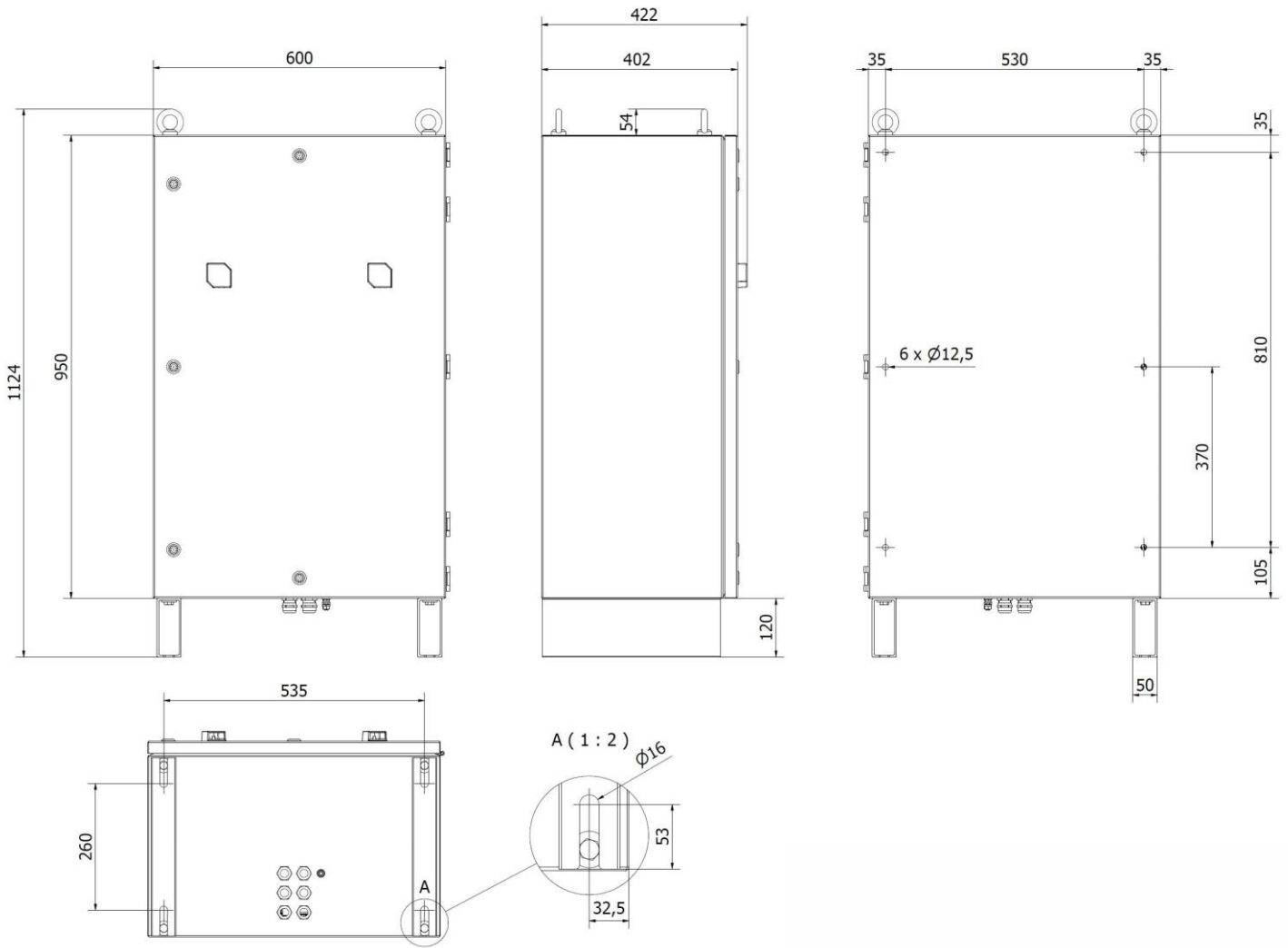
Order code:	Input voltage:	Output voltage:	Output power:	Battery capacity:	Battery rails:	Lifting eyes:	Mounting point:
UPS-230-180H1	187-265 V _{AC}	230 V _{AC}	700 W	180 Ah	No	4 pcs	Bottom
UPS-230-180H2	187-265 V _{AC}	230 V _{AC}	700 W	180 Ah	No	2 pcs	Back
UPS-230-180H3	187-265 V _{AC}	230 V _{AC}	700 W	180 Ah	Yes	4 pcs	Back, bottom stand



3. Cabinet and mounting points dimensions (UPS-230-180H1)



4. Cabinet and mounting points dimensions (UPS-230-180H2)



5. Cabinet and mounting points dimensions (UPS-230-180H3)