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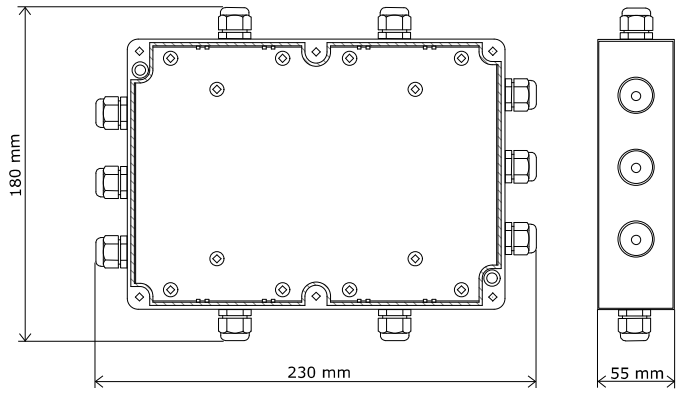
# DRV D – control module for LEO D

## DIMENSIONS




## GENERAL INFORMATION

The DRV D control module is dedicated to LEO D destratificators;

Features:

- Integration to the SYSTEM FLOWAIR;
- Communication with BMS;
- Possibility to integrate the T -box;
- Possibility to connect two external PT-1000 temperature sensor (one under the ceiling and one in user area)
- Posibility to work in automatic destratification mode;

## INSTALATION AND MAINTENANCE

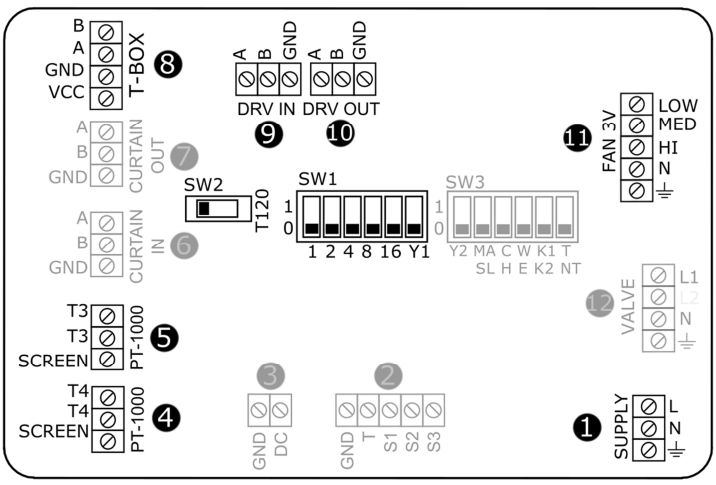
| | |
|---|---|
| Operating temperature range | -10 ÷ +60 [°C] |
| Protection | IP54 |
| Installation | Surface mounted |
| Max. size of the wire | 2,5 mm² |
| Weight | 0,75 kg |
| Colour | Grey |

## INSTALATION AND MAINTENANCE

**WARNING!**
Before starting any installation work, remember to disconnect power.

- DRV module can only be installed indoors;
- Signal wires should be secured by sleeves;
- Wire size should be selected by the designer.

## CONNECTOR DESCRIPTION

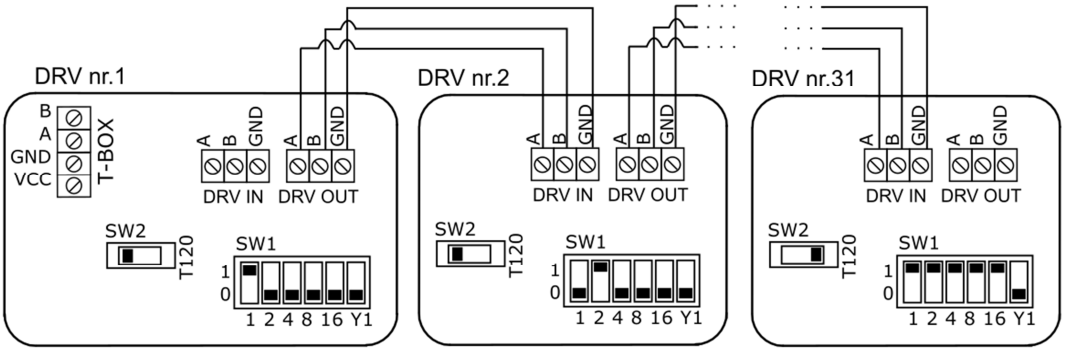



❶ Power supply 230V/50Hz;
❹ External temperature sensor PT-1000 in user area;
❺ External temperature sensor PT-1000 under the ceiling; (in set with DRV D, connected);
❽ controller T-box;
❾ BMS or previous DRV module;
❿ next DRV module;
⓫ 3-step fan;

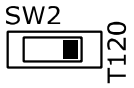
**CAUTION:** Non described connectors are active in other versions of the DRV control unit.

## CONNECTING DRV MODULES

- It is possible to connect up to 31 modules DRV and control them with one T-box controller .




- In last DRV in line, DIP-switch SW2 has to be switched to the right -T120W




**CAUTION:** If the system consists only one module DRV DIP-switch SW2 also must be set in the right position T120

## SETTING THE ADDRESS

When connecting DRV modules to the T-box controller or BMS, you have to binary set addresses on each (each DRV must have individual address) DRV module by DIP-switch SW1. To address modules check if the power supply is turned off, than set then the addresses as shown in the table, than turn on the power supply .

Down position

Up position

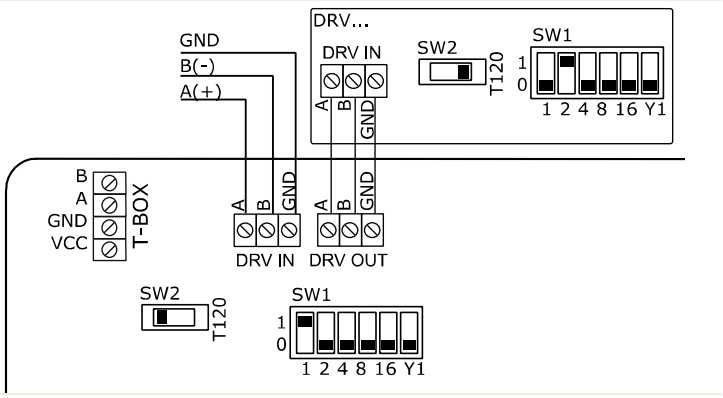
| Address DRV | | | | | | |
|---|---|---|---|---|---|---|
| 1 | | | | | | |
| 2 | | | | | | |
| 3 | | | | | | |
| ... | | | | | | |
| 31 | | | | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 |
| | 1 | 2 | 4 | 8 | 16 | Y1 |

## BMS CONNECTION DIAGRAM

DRV modules can be connected to the BMS (Building Management System).

Communication parameters:

| Name | Description |
|---|---|
| Physical layer | RS485 |
| Protocol | MODBUS-RTU |
| Baud rate | 38400 [bps] |
| Parity | Even |
| Number of data bits | 8 |
| Number of stop bits | 1 |




**CAUTION:** In last DRV in line, DIP-switch SW2 has to be switched to the right -T120W.

**CAUTION:** The connection must be carried out with 3 -wire (recommended UTP ) to connectors DRV IN

## CONNECTION DIAGRAM OF DRV WITH DEVICES