

DEVlreg™ 850 IV



The DEVlreg™ 850 version IV is an advanced thermostat with LED display used for outdoor ground or roof applications. The sensors provide information about both moisture level and temperature, resulting in an optimal control of the heating system.

The DEVlreg™ 850 IV can handle up to 2 independent areas, in any of the following combinations:

- Single system for roof or ground (1 system, 1–4 sensors).
- Combination system: 1 ground system and 1 roof system (2 systems, 2–4 sensors total, min. 1 sensor per system).
- Dual system: either 2 roof systems or 2 ground systems (2 systems, 2–4 sensors total, min. 1 sensor per system).

In the dual / combination systems it is possible to prioritize between the zones, e.g. if only a limited power output is available.

Benefits:

- Single, combination or dual zones
- Up to 4 sensors
- Moisture and temperature sensing
- Self diagnosing programme
- Safety level adjustment
- Alarm function

Standard compliance:

- EN/IEC 60730-1 (general)
- EN/IEC 60730-2-9 (thermostat)

Approvals:



Type	Value
Operation voltage: PSU 24 VDC DEVlreg™ 850 IV	180–250 VAC, 50–60 Hz / 24 VDC 24 VDC ±10%
Power consumption, max.: DEVlreg™ 850 IV Roof sensor Ground sensor	3 W 8 W (each) 13 W (each)
Relay resistive load, max.: System A / B relay Alarm relay Inductive load each relay, max.	15 A (3450 W) @ 230 V 2 A @ 230 V 1 A @ 230 V, power factor 0,3
Sensing unit	DEVlbus™ connected moisture sensor(s)
Cable specification for terminals max.	1 x 4 mm ² or 2 x 2,5 mm ²
Ball pressure test temperature	75 °C
Pollution degree	2 (domestic use)
Controller type	1 C
Storage temperature	-20 °C to +65 °C
IP class	IP 20
Protection class	Class II - 
Dimensions (H/W/D): PSU 24 VDC DEVlreg™ 850 IV	85 x 73 x 53 mm 85 x 105 x 53 mm
Mounting method	DIN rail
Weight	720 g
Versions (languages)	Latin: GB, CZ, DE, DK, ES, EST, FI, FR, HR, HU, LT, LV, NL, NO, PL, SCG, SE, SI, SK, TR. Cyrillic: GB, BG, RO, RU.

Types

Item no.	Product name	Type	Size, mm	Ambient temperature	EAN no.
140F1084	DEVlreg™ 850 IV Cyrillic with PSU	Without sensors, Cyrillic languages	85 x 105 x 53	-10...+50 °C	5703466210833
140F1085	DEVlreg™ 850 IV Latin with PSU	Without sensors, Latin languages	85 x 105 x 53	-10...+50 °C	5703466209264

Accessories

Item no.	Product name	Type	Size, mm	Ambient temperature	EAN no.
140F1086	Roof sensor	For DEVlreg™ 850, with sensor tube, cable - 15 m	15 x 24 x 216	-50...+70 °C	5703466209271
140F1087	Ground sensor, 2 pcs	For DEVlreg™ 850, with sensor tube, cable - 15 m	Ø 93 x 98	-30...+70 °C	5703466209288
140F1088	Ground sensor	For DEVlreg™ 850, cable - 15 m	Ø 93 x 98	-30...+70 °C	5703466209714
140F1089	Power Supply Unit	PSU CP-D 24/2.5 100-240VAC/24VDC DINrail	85 x 73 x 53	-10...+40 °C	5703466209721
19119977	Sensor tube and cup	For Ground Sensor DEVlreg™ 850	Ø 93 x 98	-30...+70 °C	5703466208359



DEVIreg™ 850 IV with PSU



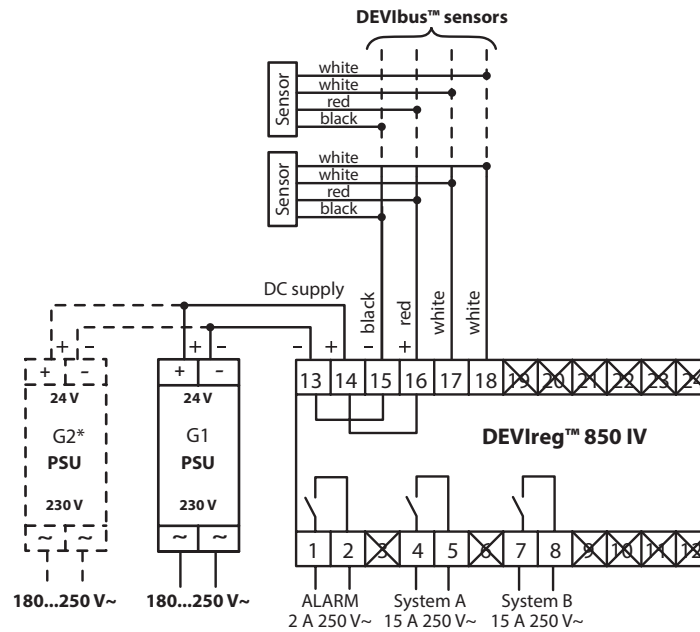
Roof sensor



Ground sensor


 Sensor tube and cup
for Ground sensor

Connection scheme DEVIreg™ 850 IV



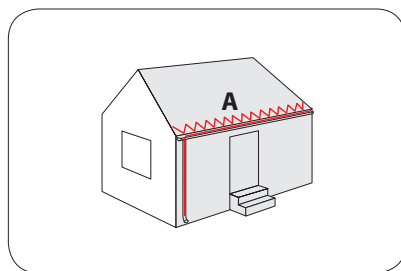
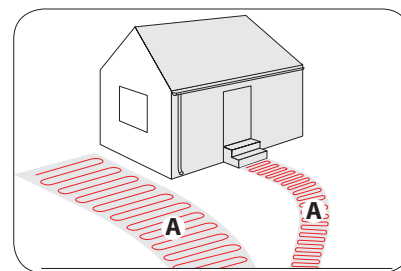
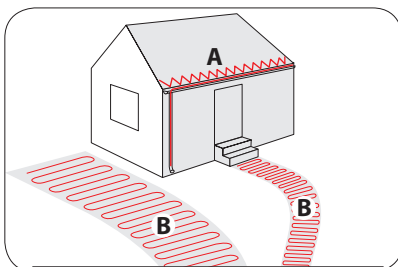
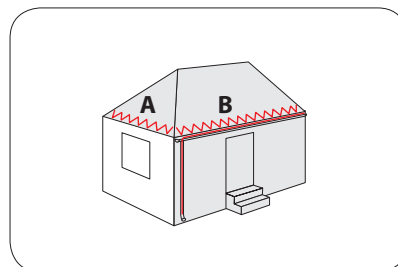
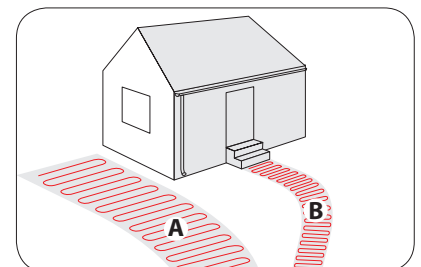
* Additional PSU, if PSU output is less than 42 W and if number of sensors is 3 or 4.

Note! Check PSU Data Sheet / Quick Guide for possibility to connect 2 PSU in parallel.

System configurations

Zone support saves energy

DEVIreg™ 850 lets you divide your area in to 2 zones, e.g. a North and South side. In this way it is possible to save energy, when the South side is free of ice and snow faster because of the heat from the sun.


 Single zone system for roofs
(system A)

 Single zone system for ground
(system A)

 Combined system -
one zone for roof (system A),
one zone for ground (system B)

 Two zone system for roofs
(systems A and B)

 Two zone system for ground
(systems A and B)