

Installation Instructions for the electrical equipment cubicle, TBLZ-1-59, All Year Comfort, GOLD LP/COMPACT

1. General

The electrical equipment cubicle for the All Year Comfort function consists of an IQnomic Plus module mounted in a metallic enclosure.

The necessary terminals for external connections are provided. The metallic cubicle has screw caps for cable glands.

See also the separate function guide entitled All Year Comfort.

2. Range of Application

The *All Year Comfort* function is designed for controlling the primary water circuit for supplying cooling energy/or heat to climate beams, perimeter climate systems, etc.

3. Installation

The electrical equipment cubicle can be mounted on a wall, air handling unit or some other suitable place. The module should be secured by means of four bolts (not included in the supply).

Connect the communication cable, supplied with the unit, to one of the connections on the module. It is not important which connection is used. The reason why there are two connections is to make it possible to connect several IQnomic in series.

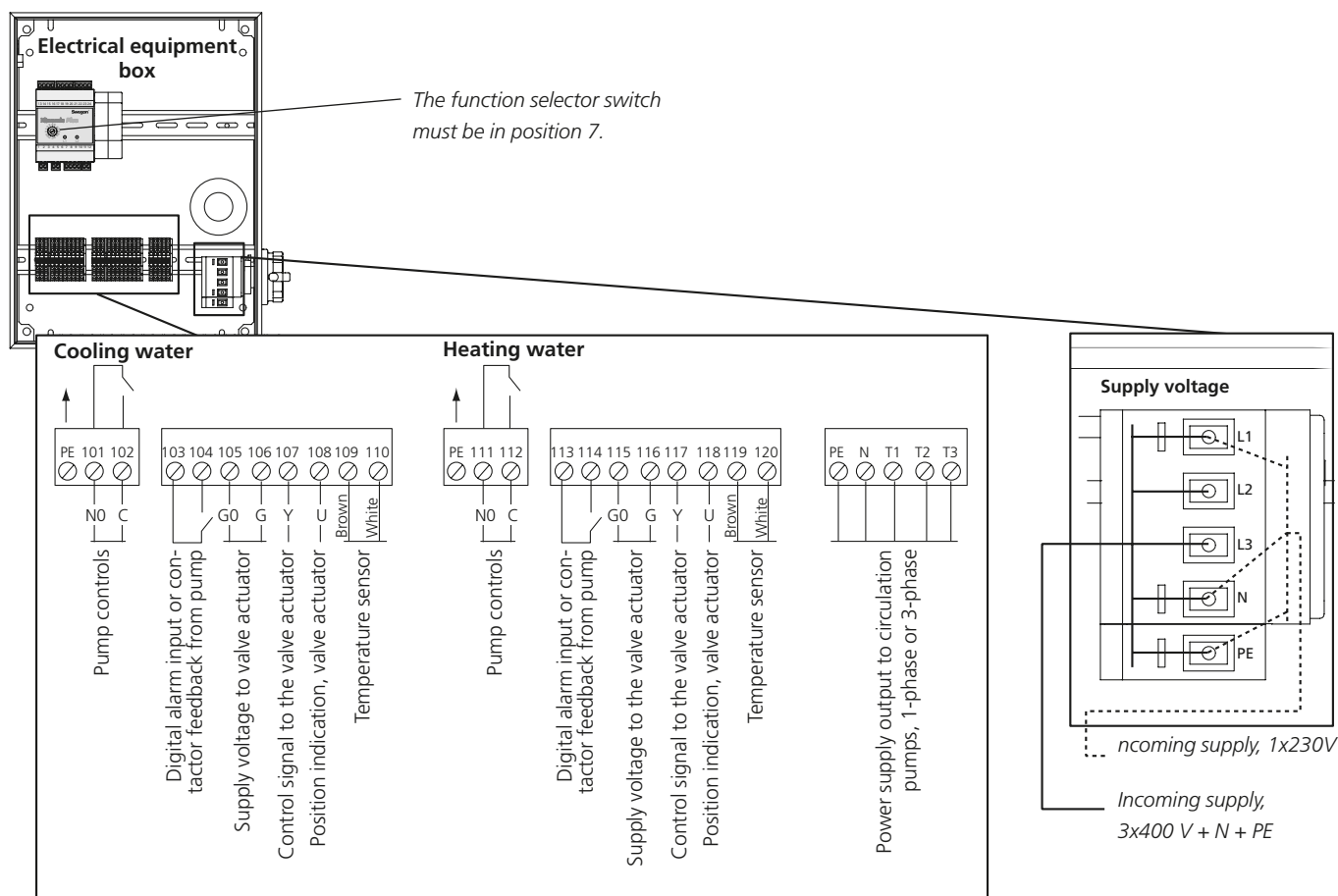
Connect the other end of the communication cable to one of the connections of the control unit, marked Internal EIA-485.

4. Technical Details

Supply voltage	230 V AC or 400 V AC, max. 10 A
CE-approved to	EN 61000-6-2, EN 61000-6-3
Enclosure class	IP 65
Ambient temperature	-20 °C – +40 °C
at relative humidity	10 – 95%
Relay contacts	5 A/AC3, 12 A/AC1
Weight	7.7 kg
Dimensions (Width x Height x Depth)	300 x 400 x 120 mm
Fuse protection	2-pin connector, 0.25 A, C characteristic
Transformer	24 V AC/24 VA



5. Electric Connections



The wiring must be carried out by a qualified electrician in accordance with local electrical safety regulations. The function selector switch must be set to position 7, see the figure above.

5.1 Cooling water

The function can be activated via the air handling unit's hand-held micro terminal or from the homepage at the website. The module controls supply flow temperature in the cooling water circuit.

Cooling water pump

Connect the pump controls to terminal 101 (NO) -102 (C). Connect the digital alarm input to terminals 103 - 104.

Valve actuator

Connect the supply voltage to terminals 105 (24 VAC (GO)) and 106 (24 VAC (G)). Connect the control signal, 0-10 VDC (Y), to terminal 107. Connect the position indication, 0-10 VDC (U), to terminal 108.

Temperature sensor for cooling water

Connect to terminals 109 (brown) and 110 (white).

5.2 Heating water

The function can be activated via the air handling unit's hand-held micro terminal or from the homepage at the

website. The module controls the supply flow temperature in the heating water circuit.

Heating water pump

Connect the pump controls to terminal 111 (NO) -112 (C). Connect the digital alarm input to terminals 113 - 114.

Valve actuators

Connect the supply voltage to terminals 115 (24 VAC (GO)) and 116 (24 VAC (G)). Connect the control signal, 0-10 VDC (Y), to terminal 117. Connect the position indication, 0-10 VDC (U), to terminal 118.

Temperature sensor for heating water

Connect to terminals 119 (brown) and 120 (white).

5.3 Supply voltage

Connect the supply voltage directly to the main switch. The zone control box has provision for supply voltage 3 x 400V + zero + earth. If 3-phase supply is not needed (for pump operation) a 1-phase supply voltage can also be wired. Max. recommended fuse protection is C10A. The zone control box contains neither fuses nor motor protection for the circulation pumps. Space is available for installation. Supply voltage to the pumps is obtainable on terminals T1, T2, T3 and PE. Max. load for the 24V AC actuator is 24 VA