

Data Sheet

Danfoss Link™ HC - Hydronic Controller

Application



Danfoss Link™ HC is a part of the Danfoss Link™ system.

The Danfoss Link™ system is used for wireless linking and control of heating systems in residential and light commercial buildings.

The Danfoss Link™ HC allows control of hydronic floor heating systems. This system offers a large range of extended functionality for optimal comfort and energy saving with individual room temperature control. The Hydronic Controller includes features like: 2-way wireless transmission, up to 10 short-circuit protected outputs for 24 V NC or NO actuators, relays for both pump and boiler control, self diagnosing program, contact for away function, heating/cooling function, regulation by ON/OFF or pulse width modulation principles (PWM) etc. The system can consist of up to three Hydronic Controllers offering a possibility of up to 30 outputs for even larger systems. The Hydronic Controller has easy connection directly to 230 V power supply without the need for further transforming, supplying all actuator outputs with 24 V.

Systems of up to three Hydronic Controllers can be accessed wirelessly by Danfoss Link™ CC - Central Controller. The Central Controller gives

access to even more functionality and features like individual settings for each Hydronic Controller output, override and locking of local room temperature settings, setback and period programming, system status etc.

- 2-way wireless transmission at 868.2 MHz, for higher transmission certainty and direct link test option on each system component like Room Sensors, etc.
- 10 short-circuit protected outputs with LED indication.
- Outputs for 24 V NC or NO actuators.
- Valve motion for all outputs for approx. 12 min. every 14th day with no heat demand.
- Regulation by PWM (Pulse Width Modulation) principle.
- Input (On/Off) for heating / cooling.
- Input (On/Off) for Away function. When On, each room thermostat is set for 15°C.
- Relay for pump control with automatic pump motion every 3rd day for 1 min. to avoid damage during stand by periods.
- Relay for boiler control, activated only at heat demand.
- Easy cable fixing at each actuator output for several cable types (squared or circular).
- Automatic self diagnosis providing indication of several error possibilities like missing wireless connection or missing/non-functional actuator on output, etc.

Ordering

Product	Type	Supply voltage	Output voltage	Order no.
Danfoss Link™ HC	HC	230 VAC	24 VDC	014G0100
External antenna, with 2 m cable	CF-EA	-	-	088U0250

Technical Data

Supply voltage	230 VAC
Number of outputs and voltage	10 / 24 VDC
Transmission frequency	868.42 MHz
Transmission range (up to)	30 m (in normal buildings)
Transmission power	< 1mW
Max. running load of actuator output	35 VA in total for all outputs
Max. load for pump relay	230 V and 8 A / 2 A (inductive)
Max. load for boiler relay	230 V and 8 A / 2 A (inductive)
Protection class	IP 30
Mains cable	1.5 m
Weight	700 g
Dimensions (l x h x d)	325 mm x 78 mm x 47 mm

Wiring

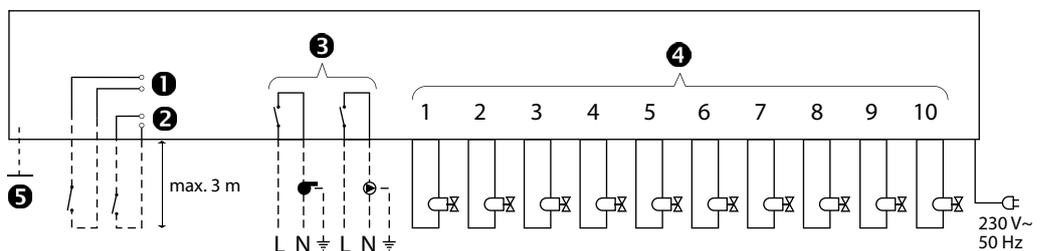


Fig. 1: Wiring Diagram for Danfoss Link™ HC

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|--------------------------------|----------------------|
| 1. Input 2, Away function. | 4. Actuator outputs. |
| 2. Input 3, Heating / Cooling. | 5. External antenna. |
| 3. Relays. | |

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