## Communicator Dialog 2F



### Use possibilities

Communicator DIALOG 2F is designed for communication between heating / cooling controller and external air/water Fujitsu heat pump (HP) unit.

Communicator supports multiple types of Fujitsu HP units (AOYG, WOYK...)

(for more information please contact the manufacturer).

Communicator converts signals (warm pump strength, warm/cool...) into a special serial protocol, which is sent to the outdoor (HP) unit through a high voltage (power line) connection.

Communicator receives information from the outdoor unit about the status thereof (defrost, error ...) and forwards them to the controller or the user by using the green / red LED lights.

Read and follow the instruction manual carefully. The manufacturer shall not be liable for damage, if instructions are not followed or if the communicator is used for other purposes.

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#### **Functioning**

Communicator converts information about the warm pump strength (0-10V), information heat / cool (open / closed contact) and information on the temperatures measured by. Communicator sends all the information to the heat pump outdoor unit.

Sent information can also be monitored using the LED lights, installed on the top of the communicator.

The communicator is powered and communicates by three wires that are connected to the heat pump outdoor unit. These are wires L, N, and C, their cross section must be at least 0.75 mm2.

The communicator controls the operation of the heat pump with a 0-10 VDC signal (warm pump strength) and with a switch (overheat/cool).

(See the wiring diagram)

There can be three additional external signals (IX1, Ix2, Ix3) connected to the controller. They may be temperature or other sensors.

(Contact the manufacturer)

The communicator also has three additional outputs (QX1, Qx2, QX3), which can signal a variety of information on the functioning of the heat pump (defrost, fault ...).

(Contact the manufacturer)

Communicator needs no temperature sensor for its functioning. But if the sensor is connected (see wiring diagram), automatic protection function is activated. This function protects the system against high or low temperatures (upper and lower limits). The default is 10 and 55 degrees C.

The communicator uses an especially designed program to monitor the operation of the heat pump and to set communicators parameters. The program can be installed in a Windows environment, but what you need adequate camel with a converter to USB.

## User Interface overview

Communicator displays its operation using a two-color (green / red) LED lights.

The signaling is carried out according to the principle of the lighthouse and in a package with four flashes. Flashes can be short and they read as 0 or long and they read as 1.

The functioning information of the heat pump is as follows:

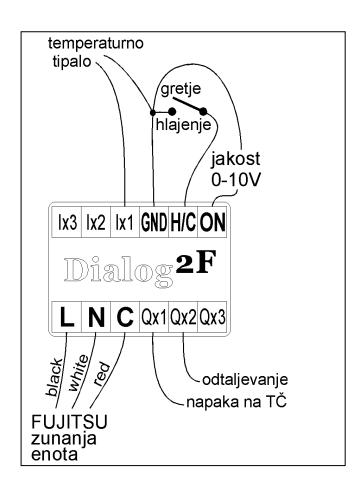
```
0 0 0 0 0 -> warm pump strength is 0 0 0 0 1 -> warm pump strength is 1 0 0 1 0 -> warm pump strength is 2 .

1 1 0 1 -> warm pump strength is 13 1 1 1 0 -> warm pump strength is 14 1 1 1 1 -> warm pump strength is 15
```

Red flashes mean that the heat pump heats, green flashes mean that the heat pump cools.

Constant red LED light indicates that an error in the operation of the heat pump has occurred.

### Wiring diagram



# Installation and activating

Installation, electrical connection and activating of the communicator can be carried out only by qualified personnel.

## For further help and advice please contact the address below!!

## Technical information

| Supply voltage             | 230VAC, 50Hz                  |
|----------------------------|-------------------------------|
| Consumption                | 0,1VA                         |
| Working temperature        | 0°C to 50°C                   |
| Storage temperature        | -20°C to 70°C                 |
| Compliance with standards: | EN 60715                      |
|                            | DIN43880                      |
| Dimensions of the housing  | 36 x 108 x 58mm               |
| Housing material           | ABS                           |
| Weight                     | 65 g                          |
| Controller inputs          | 4 x analog + 1x digital       |
| Temperature sensors        | NTK                           |
| Controller exits           | 3 x galvanically isolated     |
| Maximum load               | 1 x relay (250VAC, 2A)        |
|                            | 2 x optotriak (250VAC, 100mA) |
|                            |                               |
|                            |                               |
|                            |                               |
|                            |                               |

## Ordering information

Type: Dialog 2F

Temperature sensors: NTK

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