

FUGA Temperatur Controller Type G 8145 2574

Dupline®
Fieldbus Installationbus



- Dupline® Temperature Controller with display
- Display current room temperature
- Display outdoor temperature
- Turn on/off heating and cooling
- Set wanted room temperature
- Energy Save through night setback temperature
- Channel Programming using GAP 1605

Product Description

G8145 2574 is a temperature controller with a display, 4 user input buttons and 2 LEDs for indication of heat/cool on/off state. The temperature controller is designed for controlling heating and/or cooling in a single room, with continuous display of current room temperature. Other features with the Temperature Controller are:

Show current outdoor tem-

perature, set the wanted room temperature for both normal mode and night setback, turn on/off heating, cooling and night setback. The temperature controller must be used with a Dupline® Master Generator type G3800 xxxx. The temperature controller is part of the Dupline® "Smart House" building automation concept.

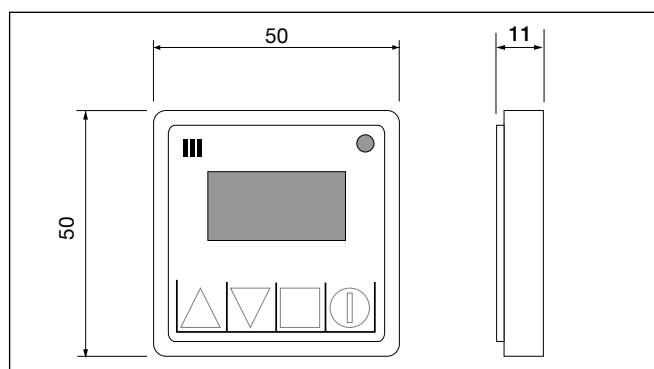
Type Selection

Supply	Colour	Ordering no.
By Dupline®	White	G 8145 2574

Supply Specifications

Power supply	Supplied by Dupline®
Consumption	
LED OFF	< 0.5 mA
LED ON	< 1.2 mA

Dimensions



Ordering Key

G 8145 2574

Type: Dupline® _____
Fuga housing _____
Transmitter _____
2 channels _____
5 inputs _____
Input type _____

General Specifications

Channel programming	By GAP 1605
No. of channels	2 Needed + 3 Optional
Housing	LK FUGA
Environment	
Degree of protection	IP 20
Operating temperature	0 - 50 °C (32 - 122°F)
Storage temperature	-20 - 70°C (-4 - 158°F)
Humidity (non condensing)	20 - 80%
Weight	23 g
Dimensions	
Fuga	50 x 50 x 11 mm (including frame)
Max. wire in terminals	Max. 2 x 0.75 mm²

Input Specifications

Sensor	1 integrated temperature sensor (Factory calibrated)
Range	0 - 50 °C (32 - 122°F)
Precision	± 1°C

Mode of Operation

Channel Programming

Using the GAP 1605 programming unit, each of the 5 channels on the Temperature Controller can be assigned any address between A1 and P8. The programming socket can be accessed from the back of the housing. The allocation of the channels are as follows:

Channel	Description
Needed Addresses	
1	DataLink Data Channel input/output Split I/O
2	DataLink Synchronization Channel input
Optional Addresses	
3	Analink Temperature output.
4	LED for Heat on/off indication (RED) input
5	LED for Cooling on/off indication (BLUE) input

* **Note:** Not programming the 2 optional channels for Heat and Cooling LEDs, will not make the LEDs inactive they are just controlled by the Temperature Controller and will have slower reaction to changes in Heat/Cooling state.

Starting up

When the Temperature Controller is connected to the Dupline® Bus the Display digits will start flashing. The display will continue to flash until a complete status have been received from the Master generator, this will take approximately 1 min. When the Temperature Controller has received a complete status, the display will stop flashing and show the current status and room temperature.

Function description

After starting up has been finished, normal operation will commence. In normal operation (Normal mode) the user has the following options:

Button	Description
<input type="checkbox"/>	Show outdoor temperature.
<input type="radio"/>	Turn on/off Heating/cooling.
<input type="triangle-up"/>	Adjust a temperature set point.
<input type="triangle-down"/>	Adjust a temperature set point.

Outdoor temperature option

When pressing the square button the current outdoor temperature is shown in the display. A tree symbol is also shown in the display to indicate outdoor temperature. The Temperature Controller will automatically go back to show current room temperature (Normal mode) after the buttons are all idle for approximately 5 sec.

***Note:** For this option to work correct an outdoor temperature sensor must be connected to the Dupline® bus and the option must be set up in the Master generator. If this is not done the display will show 60.0 when this option is selected.

Turn on/off Heating/cooling option

When pressing the circle button the Turn on/off option is selected, in this option there are four possibilities:

1. Turn on/off Heating (Heat symbol in the display).
2. Turn on/off Night setback for Heating applications (Sun and Moon symbols in the display).
3. Turn on/off Cooling (Frost symbol in the display).
4. Turn on/off Night setback for Cooling applications (Sun and Moon symbols in the display)

When first entering this option the currently used state will flash three times, for example if an Heating application is currently running the Heat symbol will flash three times and settle on the current state. To change the current state the circle button must be held for approximately 1 sec. for example if heat is on (heat symbol shown) the heat will go off (heat symbol not shown). To change another of the four possibilities single press the square button, to cycle through the 4 possibilities. Any changes made will take effect when the buttons are all idle for approximately 10 sec, here the Temperature Controller will go back to normal mode.

* **Note.** If a heating application is selected in the Master generator it's only possible to turn on/off heat and to turn on/off night setback for heating applications. The same goes for a cooling application.

Adjust a temperature set point option

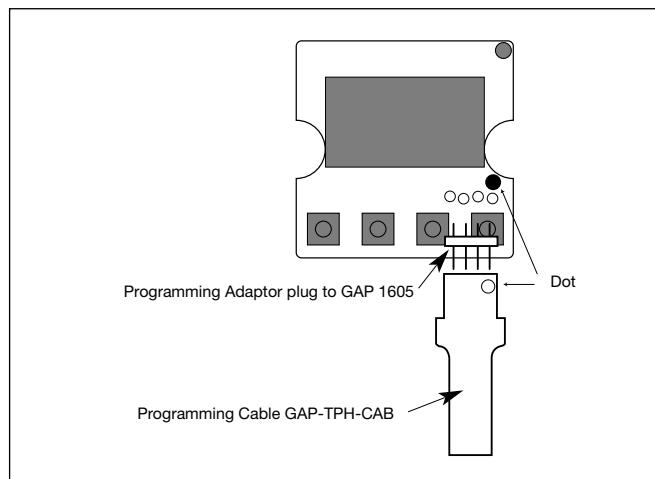
When pressing the arrow up or the arrow down button the adjust temperature set point option is selected, in this option there are four possibilities:

1. Adjust the Heat set point (The wanted daytime room temperature, heat and sun symbol shown).
2. Adjust the Night setback Heat set point (The wanted night time room temperature, heat and moon symbol shown).
3. Adjust the Cool set point (The wanted daytime room temperature, frost and sun symbol shown).
4. Adjust the Night setback Cool set point (The wanted night time room temperature, frost and moon symbol shown).

When first entering this option the currently used set point will start flashing, for example if heat is currently on and it's day time the heat and sun symbols will start flashing. To adjust the selected setpoint press the arrow up or arrow down button, the temperature will be adjusted 0,1 °C per activation, press and hold the button for auto increment/decrement. To change another of the four possibilities single press the square button, to cycle through the 4 possibilities. Any changes made will take effect when the buttons are all idle for approximately 10 sec, here the Temperature Controller will go back to normal mode.

* **Note:** If a heating application is selected in the Master generator it's only possible adjust heat set point and night setback heat set point. The same goes for a cooling application.

Wiring Diagram



Accessories

Programming cable
to GAP 1605

GAP-TPH-CAB