MPHI

SMART CONTROLLER
FOR RADIANT PANEL HEATER

Interchangeable controller module without dismantling the device, back-lit screen, auto-programmable with self-learning process and dual optimization feature, occupancy detection, opened window detection, gauge and power consumption indication in kWh

Eligible for
CEE
Energy savings certificates

Overview

Main features

- Ambient temperature control
- Desired temperature setting
- Power On / Standby
- Operating modes selection
- Automatic and self-learning programming, customized integrated programming or can be programmed remotely using the 6-order pilot wire

Application

- Radiant panel heater

Benefits

- **Ingenious design:** the interchangeable top module ensures flexibility in upgrading or customising the command interface without dismantling the device
- **Ergonomic settings:** the controls are located on the top
- **Backlit screen:** easy to read
- **"Smart" electronic control:** this means stable and accurate temperature in the room all year round
- **Energy Saving Pack: comfort, performance, energy savings**
- **Auto-programming:** automatic programming by self-learning of the lifestyle
- **Active memory:** clock and settings are saved by EEPROM in case the mains power supply goes off
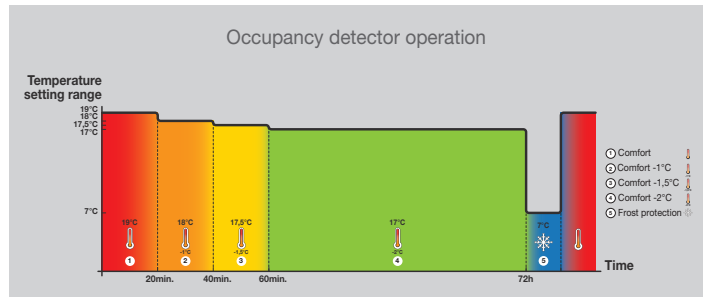
Functional specifications

Use

Desired temperature setting	Preset at 19°C, adjustable from +7°C to+30°C by interval of 0,5°C
Operating modes	Auto (Programming), Comfort, Eco (Economy), Frost protection, Standby mode
Energy consumption gauge	Automatic indication of the level of energy consumption according to the setting temperature
Power consumption indication in kWh	Posting of the estimated amount of energy consumed in kWh since the last reset to 0 of the energy meter
Opened window detection	Automatic switching to Frost protection mode when a significant drop in temperature is detected
Window airing feature	Manual window airing can be enables at any time
Occupancy detection	During an unoccupied period, the setting temperature is automatically and progressively decreased
Auto-programming	As soon as the device is switched on and without any initial adjustment, the device is in learning mode to understand and memorize the user's lifestyle. The integrated smart algorithm is going to analyze this information in real time in order to optimize and adapt the programme for the coming weeks
7 day and daily programme	- **Five different pre-set program profiles for each day of the week:** P1, P2, P3, non-stop Comfort Mode, non-stop Eco (economy) Mode - Mode P1, P2 and P3 can be customised - Manual and temporary overriding of a programme
Dual optimization feature	Depending on different parameters of the room, the controller calculates and optimizes the programming of Comfort and economy periods (Eco) according to the choice of the user; **Eco oriented**, priority to savings or **Comfort oriented**, priority to comfort

Occupancy detector operation

Help for the visually impaired	- **The button power on/standby mode is in relief** to be easily identifiable to the touch - **Audible beeps** indicating the change from the standby mode to active mode

Safety	- **Child anti-tamper** keypad locking
	- **Settings safety:**
	  - Min. and Max limits of the adjustment range of the Comfort setting temperature
	  - Customizable PIN code locking (prevents access to the Comfort mode, advanced and expert settings)
	- **Backup in case the mains power supply goes off :**
	  - The whole of settings and programming : permanent backup
	  - Current time and date : backup time of 16hrs typical
	- **Internal protection against any overheating**

Installation

Easily interchangeable module	Direct assembly on the heating device: - Easy positioning of the controller in the housing provided - Man machine interface (top module) fixed by a single screw	
Protected access to the electrical connection	- Protective cover housing the connectors and covering the connection area - Grommets for the two power supply cables	
Connection to the electrical resistance	Electrical connection via Faston connectors	

Advanced settings

Min. setpoint temperature	**Preset at +7°C,** adjustable from +7°C to +15°C
Max. setpoint temperature	**Preset at +30°C,** adjustable from +19°C to +30°C
Eco mode temperature lowering level	**Preset at -3,5°C,** adjustable from -1°C to -8°C
Frost protection temperature	**Preset at +7°C,** adjustable from +5°C to +15°C
Occupancy detection	**Enabled by default,** can be disabled
Automatic window-opening detection	**Enabled by default,** can be disabled
Dual optimization feature	**Comfort oriented by default,** Eco oriented or can be disabled
Backlighting	**3 settings:** - **Temporary backlighting 1 (default setting):** backlight of the screen when a button is pressed or during occupancy detection - **Temporary backlighting 2:** backlight of the screen when a button is pressed - **Non-stop backlighting:** backlight of the screen all the time
PIN code locking	Initialization - Customization - Activation and deactivation
Return to the advanced and user factory settings	

Expert settings

Temperature adjustment	Ambient temperature sensor adjustment

Technical specifications

Dimensional and finish specifications

Height	239,5 mm
Width	116,3 mm
Depth	105 mm
Color	Anthracite grey
Net weight	582 g

Power supply

Operating voltage	230V AC+/-10% 50Hz
Maximum power	2000W resistive load
Power cord	900mm: 3 conductors

Control

Control type	Electronic PID (Proportional Integral Derivative), triggered by a triac

Environment

Protection rating	IP24 after installation under the responsability of an integrator
Class	Class II after installation under the responsability of an integrator
Operating temperature	0°C to 60°C
Temperature setting range	+7°C to +30°C
Storage temperature	-20°C to +70°C
Programming	5 programming profiles
NTC electronic temperature sensor	

Applicable directives

EMC	2014/30/EU
LVD	2014/35/EU
RoHS	2011/65/EU

Applicable standards

EMC	EN55014-1 ; EN55014-2 ; EN61000-3-2 ; EN61000-3-3
LVD	EN60335-1 ; EN60335-2-30 ; EN62233
RoHS	EN IEC 63000
Manufacturing	On certified site ISO 9001 V2015

Product code

The controller (complete kit) consists of a power module and a self-programmable logic module (upper part with control interface).

Codes	Description
Complete kit	
MPHIDGA	Control unit for CLII panel heater, self-programmable with occupancy detection, 6-order pilot wire
Power module	
MPHPOWDGA	Control subassembly, power module, anthracite grey
Logic module - User interface	
MPHTOPIDGA	Control subassembly, logic module, self-programmable with occupancy detection, anthracite grey
MPHTOPIEDGA	Connected control subassembly, logic module, self-programmable with occupancy detection, anthracite grey

Product customization (style, features) possible on request. Please contact us.