GRÄSSLIN
by Intermatic

thermio™ essential - thermio™ essential Brf
Item No 04.46.0025.1 / EAN Code 4010940045388

PRODUCT DESCRIPTION

The thermio™ essential Brf is a digital radio room thermostat of ErP class I. Its wireless radio technology allows it to be placed anywhere in the room without laying electrical cables and thereby enables extremely convenient control and monitoring of the room temperature. Its integrated frost protection function is activated automatically as soon as ambient temperatures drop below the saved temperature setpoint. Up to 16 receivers can be connected to the transmitter. In case of poor radio communication, manual operation is possible using an ON/OFF switch. An additional mounting plate not only enables quick and easy on-wall mounting, but also contributes towards an elegant appearance.

► The wireless radio technology allows individual placement in rooms without laying electric cables
► Signalling and control accuracy ensured through high frequency radio signal range of up to 30 metres inside buildings
► Long battery life through efficient energy management
► Monitoring the battery status and display with the required battery change
► The frost protection function prevents the freezing of radiators or icing of piping, even when switched OFF
► Cost reduction and efficient energy management through high level of control accuracy
► Very easy and convenient to use through large LC display, manual ON/OFF switch and reset button
► High fexibility – up to 16 receivers can be connected to the device
► Increased comfort through a wide temperature control range of +5°C to +35 °C
► Fast, simple and safe installation through surface mounting

APPLICATIONS

► Gas boiler

CE ErP I (1%) energy saving trust listed

TECHNICAL DATA

thermio™ essential H rf

Electrical Data	
Supply voltage	DC 3 V (2 x 1.5 V AA LR6 alkaline battery)
Battery life	2 years (depending on switching frequency)
Rated impulse withstand voltage (Uimp)	4 kV
Power consumption	5 VA
Control function	Heating
Control type	2- Point (ON/OFF)
Hysteresis	±0,4 K (±0,2 K ... ±1 K)
Control range	+5 °C (frost protection)
	+5 °C ... +35 °C
control accuracy	±1 °C

Communication method	
Radio signal	868,3 MHz
Range	30 m (inside building)

Operating specifications	
Operating mode	OFF-Mode (5 °C frost protection)
	Reset function
	temperature reduction mode/AUTO
Manual switch	ON/OFF

Display and format	
Resolution	Room temperature 0.1 °C
	temperature setpoint 0.2 °C
Display Update	every 60 seconds
Room temperature display	+0 °C ... +50 °C
Status indicator	Battery state
	Operation mode
	radio signal strength indication
	Status display heating (flame symbol)

Operating conditions

Humidity (operating)	10 % ... 90 % relative humidity, non-condensing
Humidity (storage)	10 % ... 90 % relative humidity, non-condensing
Temperature (operation)	-10 °C ... +50 °C
Temperature (storage)	-20 °C ... +45 °C

General specifications

Colour	White/Grey
Weight	178 g
Material	Thermoplastics, self-extinguishing & high-temperature resistant
	Plastic ABS
Dimension	74 x 74 x 28 mm
Mounting	Surface mounting (4-hole mounting on flush-mounted box)
	Surface mounted
	Flush mounting BS 4662
	On-wall BS 5733

Compliance with standards

ErP class	I
ErP function	ON/OFF room thermostat
ErP Description	A room thermostat that controls the ON/OFF operation of a heater.
ErP contribution to seasonal characteristic space heating energy efficiency	1 %
Protection type	IP20
Protection class	II, according to corresponding mounting
Pollution degree	2
Approval mark	CE
	Energy Saving Trust
Standards and guidelines	EN 60730-1
	Mode of operation and additional properties: Type 1.B

Scope of delivery

Housing	Bezel
	Installation material
Sensors	2 x 1,5 V AA LR6 Alkaline

RecFM/2 rf

Electrical Data

Supply voltage	AC 230 V ± 10% 50-60 Hz
Curret output	Changeover, potential free
Current capacity - ohmic load	16 A / 250 V AC
	20 A / 125 V AC
	16 A / 30 V DC
Current capacity - inductive load cos.phi 0.6	8 A / 250 V AC
	8 A / 125 V AC
Rated impulse withstand voltage (Uimp)	4 kV
Power consumption	5 VA

Power connection

Device	Flat connection DIN 6.3

Communication method

Radio signal	868,3 MHz
Range	30 m (inside building)
Status indicator	LED

Operating specifications

Manual switch	ON/OFF
Program	Manual

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Display and format

Status indicator	Operation mode
	radio signal strength indication
	Status display heating (LED)

Operating conditions

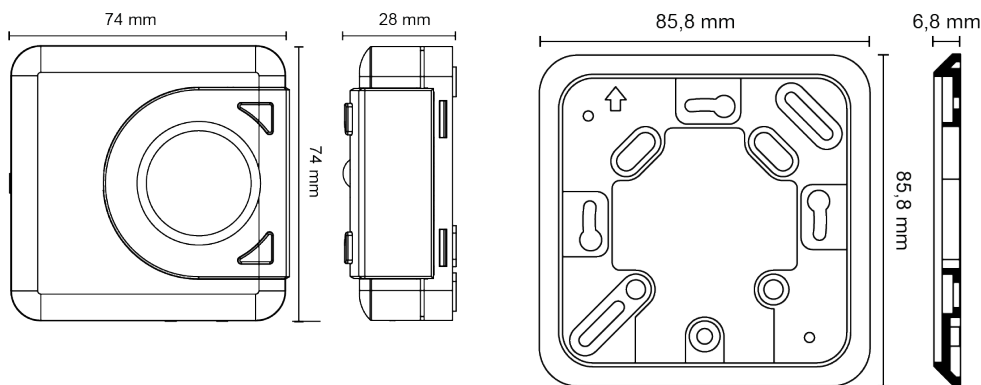|	
Humidity (operating)	10 % ... 90 % relative humidity, non-condensing
Humidity (storage)	10 % ... 90 % relative humidity, non-condensing
Temperature (operation)	±0 °C ... +50 °C
Temperature (storage)	-10 °C ... +60 °C

General specifications

Colour	White
Weight	110 g
Material	Thermoplastics, self-extinguishing & high-temperature resistant
Dimension	60 x 60 x 32,5 mm
Mounting	Installation

Compliance with standards

Protection type	IP20
Protection class	II, according to corresponding mounting
Pollution degree	2
Approval mark	CE
	Energy Saving Trust
Standards and guidelines	EN 60730-1
	Mode of operation and additional properties: Type 1.B

DIMENSIONAL DRAWINGS

74 mm · 74 mm · 28 mm · 85,8 mm · 85,8 mm · 6,8 mm

CIRCUIT DIAGRAMS

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