### Honeywell

## **TheraPro HR90** ELECTRONIC RADIATOR CONTROLLER

#### **PRODUCT DATA SHEET**



#### **MAIN FEATURES**

- New attractive design out of high quality plastic material and high gloss polished surface
- User friendly because of large, adjustable backlight display with sharp contours outstanding readability and text display
- Local language selection
- Fast mounting and taking into operation through simple interlocking and 3 pre-programmed time programs
- Fits on the most common radiator valves of the type M30x1,5
- Different operation modes Holiday, Party, separate time program for particular days
- Additional energy saving features ECO operation, window function and optimization
- Connection of external wired sensors for reading of room temperature and set point value changes, external wired window contact
- Established time program can be copied to further devices
- · Anti-theft protection for batteries and device
- child protection

#### **OVERVIEW**

Honeywell TheraPro HR90 is a electronic radiator controller with a modern design and provides features for convenience and energy saving.

It is used as standalone controller for radiator heating control applications.

For optimized readability of the backlight display. The display position can be adjusted as well. The display is switched On as soon as a button is pressed or the wheel is rotated.

Fast installation due to the simple lock mechanism closing the device at the radiator valve. Up to 3 pre-set standard time programs are selectable.

After the installation the HR90 operates immediately to the factory set program.

The time program can be individually adapted to the customer day-to-day routine. Up to 6 setpoints per day and 3 different set point temperatures which are changeable provide increased comfort.

Different operating modes and particular day functions can be selected if required:

- Automatic, ECO and Manually
- Holiday, Party and Day off

The particular Day off is a separate daily program which can be activated for special days like public holidays.

#### Energy saving features:

-With the auto-window function, the radiator valve is closed when ventilating the room.

-In ECO mode, the room temperature is lowered by 3°C. -Optimised control of the room temperature by start/stop the radiator controller calculates when to open or closing the valve in order to achieve the desired room temperature at the set time.

Radiator controller operating parameters are selectable.

#### **Examples:**

- Select local language
- Switch backlight display On/Off
- Change sensitivity of the window reaction time
- Valve stroke
- Temperature limitation (lower/upper temperature)
- Temperature offset
- Window function Auto or external window contact
- Child protection (device locking)
- Setup weekday for the valve protection cycle

CE

#### **Bedienelemente und Display**



#### **SPEZIFICATION**

#### **ELECTRICAL DATA**

Power supply: **Battery Type:** 

Battery or chargeable batteries LR6, AA, AM3 2x Mignon 1,5V Alternativ: 2x Lithium 1,5V 2x NiMH 1,2V chargeable batteries

#### Display **Backlight display:**

Text based display 9 characters 30x26mm (BxH)

#### **ENVIRONMENTAL AND STANDARDS**

Environmental temperature : Storage temperature: **Humidity:** 

0 ..... +50 °C -20 ...+55 °C 10 ... 90 % relative humidity

For apartments, family houses, business and commercial areas

#### CERTIFICATION

Standards:

CE Konformität, RoHS

- Heating period/setback period in hours 1 Day of the week 1 ... 7 (Monday ... Sunday). 2 Displayed only while the time program is being programmed
- Temperature display: e.g. set point temperature 3 (factory setting) or measured temperature, if configured in Parameter 9
- Text display with 9 characters Button OK: Confirm settings 4
- 5
- Button **PROG**: Select the operating modes, set the 6 time program; Press button >10 seconds): access to the parameter menu; Programming: Back to next level up
- 7 Adjustment dial: Change the set point, navigate menu
- Button AUTO/ECO/MANU: Change between 8 automatic. ECO and manual mode In programming mode: Exit (without storing)
- 9 Battery status
- 10 Operation lock
- 11 Symbol for Comfort temperature 1 🔅,
- Comfort temperature 2 🗮, Setback temperature 🕻

#### **TEMPERATURE CONTROL**

Internal Sensor

Sensor:

NTC

#### MECHANICAL DATA

Dimensions (HxWxD):	60 x 54 x 96 mm
Material:	PC
IP Class:	IP 30
Valve connection:	M30 x 1,5
OPTION	

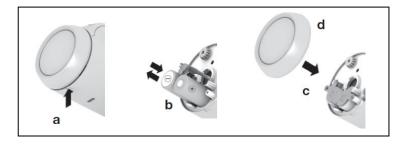
Power Module für external

Power supply:	APS90
Voltage input:	924V AC/DC
Vandalism protection:	AVS90
External room Unit:	HCW23
(Sensor/Setpoint):	
External room sensor:	RF20
External window contact	:: HCA30
Copy cable 0,5m:	ACC90
Connection cable 2,0m:	ACS90
(ext. Sensor/Window contact)	
Front Dial Chromed: VPE 3pcs	AFA90
HR90 EANCODE: HR90 WE EANCODE: HR90EE EANCODE:	5025121383974 5025121383950 5025121383967

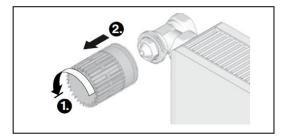
### **Installation HR90**

1. Insert Batteries 2x 1,5V Typ: LR6, AA,AM3

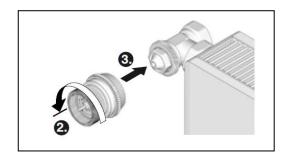
Set language, date and time



#### **2.** Remove Thermostat



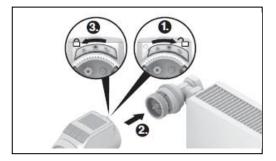
**4.** Put the Valve baseplate on the valve use adaptor if necessary



3. Remove valve baseplate



**5.** Connect the valve baseplate with the controller

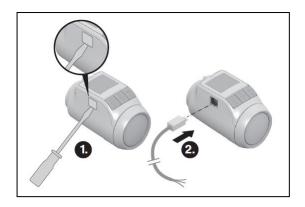


**READY!** HR90 is working with the standard time program

### **Installation HR90**

# HR90 wired with external Sensor/Setpoint adjuster HCW23, RF20 and external Window contact

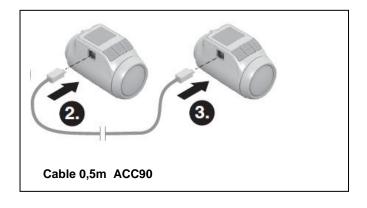
Wiring diagram HCW23 setpoint adjuster white NTC ACS90 green TW/F 2 HCW23 black GND 3 RF20 room sensor white NTC ACS90 black GND green TW/F RF20 room sensor and floating HCA30 window contact white NTC ACS90 black GND green TW/F HCA30 floating window contact white NTC ACS90 black GND green TW/F



Cable 2m ACS90

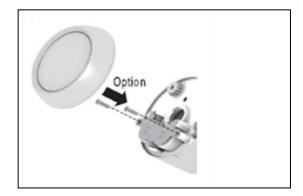
#### Copy time program to other HR90 controllers

If several HR90 radiator controllers are to operate with the same time program, the time program only has to be created at one device (master) and can then be copied to further radiator controllers. The controllers are connected with the cable ACC90



### Options

# The radiator controller and the batteries can be secured against stealing by using the supplied screws





# The color oft he front cover can be replaced with chromed cover

The display can be fixed with display holder (angle 40°)





**Note:** For the various OS numbers HR90/HR90WE and HR90EE the same data are applied

Honeywell Control Systems Newhouse Industrial Estate Motherwell ML1 5SB United Kingdom