

# OJ Microline® range . Type OCC

## Heat•Master

## Clock thermostat

Section  
3

Page  
1.3

Date  
05.01

*Elegant European design  
can be mounted in  
combination with various  
types of light switches*



OJ Microline®

### Heat•Master clock thermostat type OCC

- Surveillance of energy consumption.
- Recommended for control of heating systems for heating comfort with minimum power consumption.
- Electronic on/off control max. 3600W, 16A, of underfloor heating and electrical heating etc.
- Built-in clock function with display for automatic comfort and setback temperature.
- Flush mounting or wall mounting.

### PRODUCT PROGRAMME

Type	Product
OCC-1991H	Clock thermostat incl. floor sensor 3 m Remote sensor can be mounted
OCC-1999H	Clock thermostat with internal room sensor
Accessories	
ETF-944/99-H	Remote room sensor for surface wall mounting
OTN-VH	Baseplate for surface wall mounting

### Thermostat control:

Type OCC is an electronic on/off thermostat for control of temperature by means of internal NTC sensor. The heat output is switched on and off with a difference of only 0.4°C. Red LED indicates when heating is on. In setback function LED will always be green.

### SETBACK FUNCTIONS

Type OCC includes a range of setback functions. All settings are made by means of thermostat button and display.

#### Operational function:

- Clock function with automatic comfort and setback temperature according to setback programmes.
- Manual function for setting of comfort or setback temperature.

#### Setting of setback temperature:

- Setback temperature by means of clock function, e.g. 15°C.
- Setting of comfort temperature can be limited. This function can ensure against overconsumption.
- The thermostat is delivered with 8 individual setback programmes.  
The first two programmes are factory-set as follows:  
P1: Everyday 23.00-06.00  
P2: Monday to Friday 09.00-15.00  
The above mentioned settings can be deleted or changed according to requirement.

OCC calculates when the heating is to be switched on to make sure that the comfort temperature is obtained to the required time (adaptive function).

#### Read-out of heat consumption:

Total switch-on time in percentage can be read-out within the latest 2 days, 30 days, or 365 days.  
This function shows the operational economy and the output of new settings is calculated as follows:

*Operational costs=*

$(\text{Days} \times 24\text{h}) \times \text{kW} \times \text{kWh-price} \times (\text{switch-on time})/100.$



## TECHNICAL DATA

Supply voltage	230V $\pm$ 15%, 50/60 Hz
Output relay SPST	16A, 3600W
Built-in interrupter	Switch-off heating system
Temperature range	+5/+40°C
Limitation of range	Min./max.
Setback temperature	Absolute +5/+40°C
Clock function	8 optional setback programmes (2 factory-set programmes)
Ambient temperature	0/+50°C
On/off differential	0.4°C
Housing	IP 20
Sensor type	NTC
- heating is switched off in case of sensor failure	
Dimensions (H/W/D)	80/80/50 mm

### Backup function:

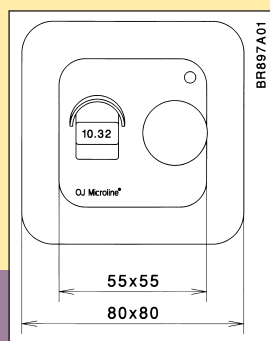
All settings are maintained in case of interruption of the supply voltage. However, in case of interruption for more than 10 hours the current time and date must be set.

### Adjustment of the thermostat:

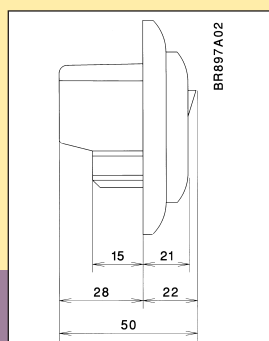
Instructions is included which thoroughly describes how to programme and use the thermostat.

### Read-out of sensor temperature:

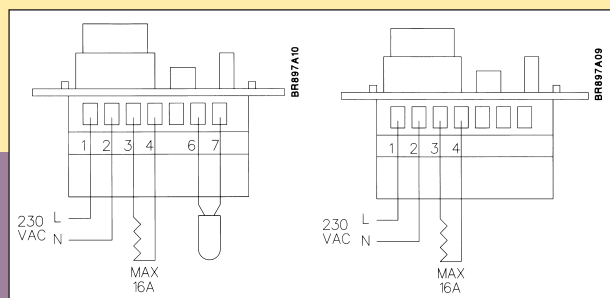
At service of the heating system the actual temperature of the floor sensor can be read-out.



Dimensions



Dimensions



Connection OCC-1991H

Connection OCC-1999H

## MOUNTING

### Mounting of the thermostat:

1	Flush mounting in standard wall socket.
2	In combination with light switch types Busch-Jaeger, Merten, Ensto and Eljo. Relevant type double frame is used.
3	Surface wall mounting with baseplate type OTN-VH.

### Type of temperature sensor:

Type OCC is delivered incl. floor sensor or with internal room sensor. Remote room sensor can be mounted (only on OCC-1991H).

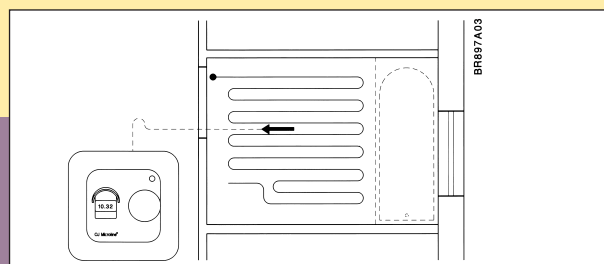
### Mounting of floor sensor:

Floor sensor is used for comfort heating of floor. The sensor is mounted in conduit of consideration to replacement. The conduit is placed between heating cables and is ended towards the floor surface.

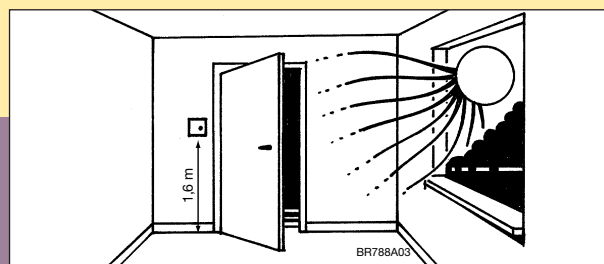
If required, the sensor cable may be extended up to 100 m with standard installation cable.

### Mounting of room sensor:

Room sensor is used for room heating. Thermostat with internal sensor is mounted approx. 1.6 m above the floor. Draught, direct sunlight or any other direct heating outlet must be avoided. If it is not possible to mount the thermostat in the correct position, remote room sensor type ETF-944/99 is recommended. Type of thermostat incl. floor sensor is used, but the room sensor is connected instead of a floor sensor.



Mounting of floor sensor



Mounting of thermostat with internal or remote room sensor

# OJ Microline®

### OJ thermostat programme includes:

- Thermostats for flush mounting
- Thermostats for wall mounting
- Thermostats for DIN rail mounting
- Thermostats for snow melting and frost protection
- Triac thermostat and controllers from 1-44 kW

Please, require catalogue

OJ ELEKTRONIK A/S · Denmark · www.oj.dk