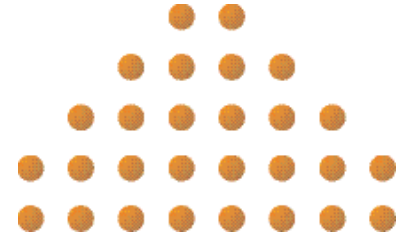


OJ Microline®
OCD2



THERMOSTATS FOR COMFORT HEATING

4-event Clock Thermostat incl. 2 sensors

Recommended for control of heating systems for heating comfort with minimum power consumption.

- On/off control up to 3,600W, 16A.
- With limitation sensor. For optimal comfort avoiding cold tiles during spring and autumn, or as protection against damaging wooden floors.
- Built-in clock function for automatic comfort and setback temperature.
- Set only time and day at installation. Delivered with factory-set program.
- With built-in 2-pole interrupter for convenient switching off at airing the room and at summer times.
- Adaptive control ensuring comfort temperature at the required time.
- Inclined backlit display for better read-out.
- Flush mounting in a standard wall socket.

- Snap-mounting of front cover for easy installation.

Elegant European Design

Can be mounted in combination with various types of light switches.

PRODUCT PROGRAM

TYPE	PRODUCT
OCD2-1999H1	Clock thermostat with built-in sensor and incl. limitation sensor 3 m
ACCESSORIES	
OTN-VH	Baseplate for surface wall mounting
ACC-001	Backing plate 86x86 mm for large wall sockets (10 pcs.)

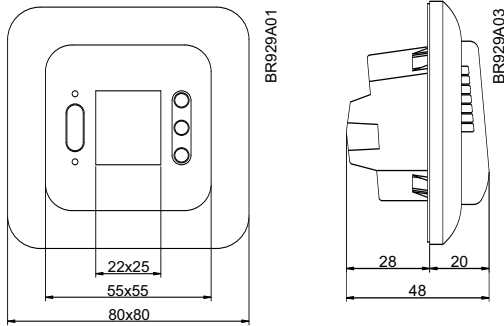
Thermostat Control:

Electronic on/off thermostat for control of room temperature by means of an NTC sensor. The heating output is switched on and off with a differential of only 0.4°C.

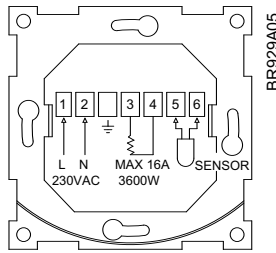
Temperature Limitation:

The OCD2 is delivered with a floor sensor which can be used for:

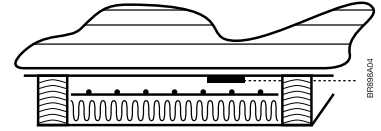
- Max. temperature limitation:** Protection of i.e. wooden floors
- Min. temperature limitation:** For better heating comfort



Dimensions (mm)



Connections



Mounting of limitation sensor



Housing IP 21:

Can be mounted in bathrooms and other humid rooms.

Monitoring of Energy Consumption:

Total switch-on time in percentage can be read out within the latest 2 days, 30 days or 365 days. In this way the heating consumption can be controlled.

Factory-set Events:

The OCD2 is delivered with factory-set programs as follows:

DAY 1-5	EVENT	TIME	TEMPERATURE
	1	06:00-08:00	Comfort 20°C
	2	08:00-16:00	Setback 15°C
	3	16:00-22:30	Comfort 22°C
	4	22:30-06:00	Setback 15°C
DAY 6-7	EVENT	TIME	TEMPERATURE
	1	08:00-23:00	Comfort 22°C
	4	23:00-08:00	Setback 15°C

Individual Programming of Events:

The factory-set periods and/or temperatures can be changed according to requirement. Furthermore, the following programs can be selected:

- 4 events 6 days and 2 events day 7
- 4 events per day

OCD2 is with adaptive function meaning the thermostat calculates when the heating has to be switched on to make sure that the comfort temperature is obtained at the required time.

Comfort Mode:

The temperature can be temporarily changed for a single event. The comfort mode temperature is reset at the next event, and the thermostat will return to the scheduled event program.

Manual Mode:

The scheduled event program can be cancelled e.g. during holidays, instead the temperature can be adjusted to e.g. 5°C for frost protection. The new setpoint is valid until the manual mode is cancelled.

Backup Function:

All settings and the clock are maintained in case the thermostat is switched off on the built-in interrupter. In case the main power supply is interrupted for more than 50 hours the current time and date must be adjusted. In power term installations with daily disconnection of the main power to the heating installation, it is recommended to connect the thermostat to the primary line that is not disconnected, and connect the heating installation over an external relay.

Changing of Type:

Via the software menu the thermostat can be modified to one of the following thermostats:

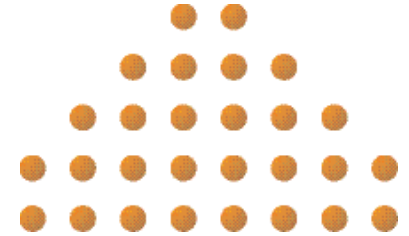
TYPE	PRODUCT
OCC2-1991H1	Clock thermostat incl. floor sensor 3 m
OCC2-1999H1	Clock thermostat with built-in room sensor

At factory reset the thermostat will return to an OCD2 type for security reasons. In case the limitation sensor has been removed it will generate a failure code "E2".

TECHNICAL DATA

SUPPLY VOLTAGE	OUTPUT RELAY SPST	BUILT-IN INTERRUPTER
230V ±15%, 50/60Hz	16A, 3,600W resistive load or 1A inductive load	2-pole, 16A
TEMPERATURE RANGE	LIMITATION OF RANGE	CLOCK FUNCTION
+5/+40°C	5 / 55°C, Factory setting min. 15°C/max. 28°C	4-event program
AMBIENT TEMPERATURE	ON/OFF DIFFERENTIAL	HOUSING
0/+40°C	0.4°C	IP21
SENSOR TYPE	DIMENSIONS (H/W/D)	SIZE OF DISPLAY (H/W)
NTC, 3 m	80/80/48 mm	25/22 mm

OJ Microline®
OTN



THERMOSTATS FOR COMFORT HEATING

Thermostat with Setback Mode

Recommended for control of underfloor heating and electrical heating.

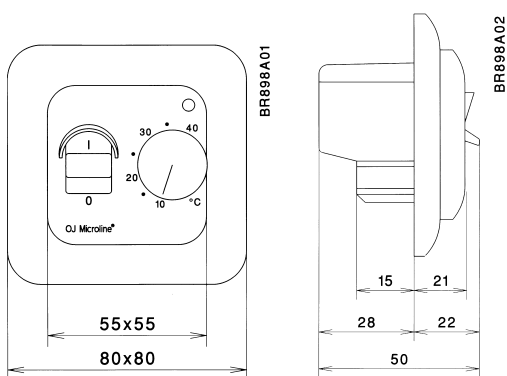
- Flush mounting in a standard wall socket.
- With built-in interrupter for convenient switching off at airing the room and at summer times.
- On/off control up to 3,600W, 16A.
- With graduated scale, making it easy to set the required floor or room temperature. If required the scale can be adjusted and furthermore limited for max. or min. temperature.
- Built-in setback mode for automatic comfort and setback temperature via remote timer.
- Electronic thermostat for accurate temperature regulation ensuring a high comfort of the floor surface or the room temperature.

Elegant European Design

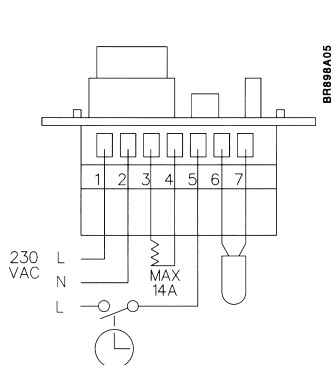
Can be mounted in combination with various types of light switches.

PRODUCT PROGRAM

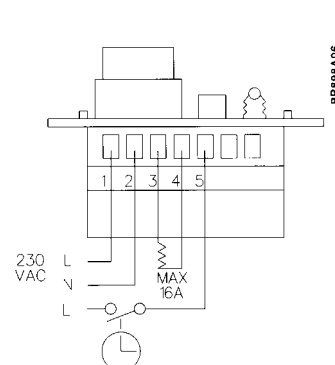
TYPE	PRODUCT
OTN-1991H11	Thermostat IP21 with setback mode 5°C incl. floor sensor 3 m
OTN-1999H	Thermostat with setback mode 5°C with built-in room sensor
ACCESSORIES	
ETF-944/99-H	Remote room sensor for surface wall mounting
OTN-VH	Baseplate for surface wall mounting
ACC-001	Backing plate 86x86 mm for large wall sockets (10 pcs.)
MM-7595	Electronic day/week timer for DIN-rail



Dimensions (mm)



Connections OTN-1991H11



Connections OTN-1999H

Thermostat Control

Type OTN is an electronic on/off thermostat with control of temperature by means of an NTC sensor. The heat output is switched on and off with a differential of only 0.4°C. Red LED indicates when heating is on.

Temperature Setback

Type OTN with setback mode 5°C which is activated with a day/week timer, e.g. MM-7595. The timer is programmed with the required comfort and setback periods.

Housing IP21

Type OTN-1991H11 can be mounted in bathrooms and other humid rooms.

Adjustment of the Thermostat

Temperature range +5/+40°C for easy setting of required temperature. With the locking rings behind the thermostat button the min./max. temperature setting can be selected

TECHNICAL DATA

SUPPLY VOLTAGE	OUTPUT RELAY	
230V +10/-15% 50/60 Hz	OTN-1991H11:	14A, max. 3,200W
	OTN-1999H:	16A, Max. 3,600W
BUILT-IN INTERRUPTER	TEMPERATURE RANGE	SETBACK MODE
1-pole	+5/+40°C	5°C (via remote timer)
ON/OFF DIFFERENTIAL	HOUSING	
0.4°C	OTN-1991H11:	IP21
	OTN-1999H:	IP20
AMBIENT TEMPERATURE	DIMENSIONS (H/W/D)	SENSOR TYPE
0/+50°C	80/80/50 mm	NTC

Heating is switched off in case of sensor failure



OJ Thermostat Program 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
- Thermostats adjusted to the individual market's needs for design, approvals and standards for electrical material