OJ Microline®

# ETN4-1999







THERMOSTATS FOR UNDERFLOOR HEATING

# All-in-one Thermostat - For DIN Rail Mounting

An "all-in-one" thermostat with extented temperature control range, suitable for a wide range of applications. Easy to operate and programme.

- The "all-in-one" thermostat is perfect for the application types:
  - Electrical floor heating
  - Frost protection
  - Ice & Snow melting
  - Cooling
- Extended temperature range -19.5° to +70°C.
- Input for night setback and frost protection.
- Now also with cooling application invertible relay function and differential temperature.
- Optimum safety due to built-in 2 pole 16 Amp interrupter.
- Easy menu navigation and programming.
   Programming is easy, ensuring the fastest and easiest set-up.
- Big backlit display.
- Delivered with new thin floor sensor, which makes mounting of sensor more comfortable than ever.

# PRODUCT PROGRAMME

TYPE	PRODUCT	
ETN4-1999	"All-in-one" thermostat for DIN Rail mounting	
	incl. floor sensor	
ETF-944/99-H	Remote room sensor	
ETF-144/99T	Thin floor sensor	
MM-7595	Electronic Day/Week timer for DIN Rail	
ETNK	Cover box for wall	

# "ALL-IN-ONE" NOW MEANS MUCH MORE

#### The "all-in-one" Thermostat

Comes with room sensing, room sensing and floor limitation, floor sensing mode only and regulator mode.

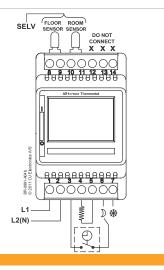
If you need a thermostat for floor heating control, sauna, frost protection of pipes or cooling applications, the ETN4-1999 is an obvious choise.

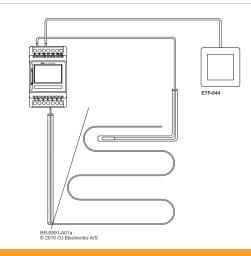
#### **Large Differential Temperature Range**

The thermostat has a large differential temperature range of 6°C, for either lowering the cycle time of the relay or specifically to reduce the number of start cycles.

# **Galvanic Isolation**

The new thin OJ sensor is of course supplied together with this thermostat. Furthermore, there is no restriction in using your current floor sensor even when from another supplier.





#### **Night Setback**

The input for night setback can be set to increase and decrease the temperature.

The thermostat can also decrease the heating period in %, when set to regulator mode.

#### **Frost Protection**

The input for frost protection can be set in thermostat mode as well as in regulator mode.

### **Invertible Relay Feature**

The relay function can be inverted so that the thermostat can be used for cooling applications. Here the variable differential, up to  $6^{\circ}$ C, is also an advantage.

# **Two External sensors**

It is possible to attach two external sensors to the thermostat for controlling a room thermostat with a floor limit sensor, protecting expensive wooden floor coverings from overheating.

# Two individual inputs for setback temperatures

The thermostat has built-in individual connectors for setting night setback and frost protection mode.

MODE	TEMPERATURE
NIGHT SETBACK	Lowering or increasing temperature by 10°C
FROST PROTECTION	Securing temperatures between 0 to +10°C

# Connector for easy "daisy chain" of control wire.

The thermostat can easily be mounted and wired side by side due to the spare live connector.

# **Built-in 2 Pole Interrupter**

The built-in interrupter gives the best safety, and according to local regulations in some countries an external interrupter can be left out.

#### **TECHNICAL DATA**

Supply voltage	230V AC ±10% 50/60Hz
Standby power	0,5 Watt
Output relay SPST	16A, resistive load or
	1A inductive load
Interrupter	2-pole, 16A
Control temperature range (extended)	-19.5 to +70°C
Control accuracy	±0,4°C
Floor limit range	-19,5/+70°C
Ambient temperature	-19,5/+55°C during operation
Night setback relative	-19,5/+30°C
Night setback regulator	1-100%
Frost protection Abs.	0-10°C
Frost protection regulator	1-100%
Regulation principle	PWM / PI or ON/OFF
Housing	IP20
Sensor type	NTC (12 KΩ) 3m. max. 100m
Display	Segment – backlit
Dimensions, (H/W/D)	88,5 / 52,9 / 57,3 mm



