

# All-in-One DIN Rail Thermostat with Schedule



## ECD4-1991

- Built-in clock with battery backup.
- Intuitive display for quick installation, programming, and operation.
- Extended temperature control range -20° to +80°C.
- Suitable for cooling application – invertible relay function and differential temperature.
- Eco Design Directive compliant without additional external controls.

### All-in-One Thermostat – For DIN Rail Mounting

An “all-in-one” thermostat with extended temperature control range, suitable for a wide range of applications. Easy to operate and program.

- The “all-in-one” thermostat is perfect for these application types:
  - Electrical floor heating\*
  - Frost protection
  - Pipe protection
  - Ice & Snow melting
  - Cooling
- Extended temperature control range -20° to +80°C.
- Input for night setback and frost protection.
- Includes cooling application.
  - invertible relay function and differential temperature.
- Optimum safety due to built-in 2 pole 16 Amp interrupter.
- Intuitive graphical interface for easy menu navigation and programming. Programming is easy, ensuring the fastest and easiest set-up.
- Delivered with new thin floor temperature sensor, which makes mounting the sensor more comfortable than ever.

### Extensive program of temperature control modes

Supports room temperature control, room temperature control with floor temperature limitation, floor temperature control and regulator mode.

### 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.

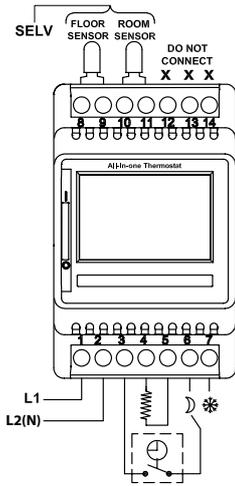
### Versatility regarding temperature sensing

The thin floor temperature sensor provided with the thermostat is the obvious choice for new installation. There is however no restriction in using an already installed OJ-sensor. This flexibility together with the optional use of a compatible 3rd party sensor makes the ECD4 an outstanding offer for upgrading existing systems to the newest standard.

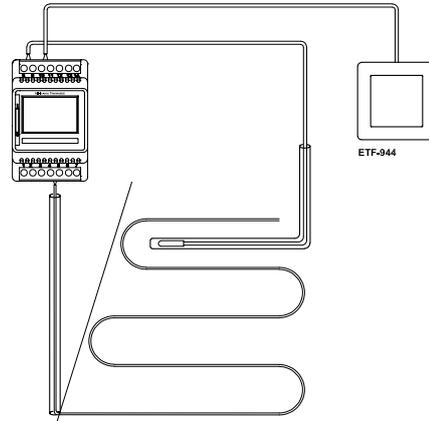
### Built-in clock with power backup

Comes with built-in 6-event program for automatic comfort and setback temperature. The clock and calendar have built-in battery backup, eliminating the need to set the clock after power interruptions.

\*Specific requirements of the European Ecodesign Directive (EF2009/125/EF) regarding local space heaters must be observed.



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### Graphical display

Unique user interface with graphical menus and button-based navigation ensures easy installation, programming, and readout of data. 10 languages.

### 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.

### Pipe protection

Dedicated pipe protection mode regulates the heating element within a temperature range defined by a maximum and minimum temperature.

### 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°C, is also an advantage.

### 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.

### Eco Design Compliant

Fully compliant with the European Ecodesign Directive (EF2009/125/EF) regarding local space heaters

### PRODUCT PROGRAMME

Type	Product
ECD4-1991	"All-in-one" DIN rail thermostat with schedule
ETN4-1999	"All-in-one" thermostat for DIN Rail mounting inkl. floor sensor
ETF-944/99-H	Remote room sensor
ETF-144/99T	Thin floor sensor

### 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)	-20.5 to +80°C
Control accuracy	±0.4°C
Floor limit range	-19.5/+70°C
Ambient temperature	-10/+55°C during operation
Night setback relative	-19.5/+30°C
Night setback regulator	1-100%
Frost protection Abs.	Frost protection Abs.
Frost protection regulator	1-100%
Regulation principle	PWM / PI or ON/OFF
Housing	IP20
Sensor type	NTC (12 KΩ) 3m max. 30m
Display	100x64 pixel STN – white backlight
Dimensions, (H/W/D)	88.5 / 52.9 / 57.3 mm
Warranty	3 years