Intuitive thermostat with built-in Class A GFCI

An “all-in-one” programmable thermostat for electric underfloor heating control where optimal comfort temperature and minimum energy consumption is required.

EFFICIENT, INTUITIVE AND STYLISH
• Simple user interface and thoughtful installation design
• Pre-programmed for quick set-up
• Monitored energy consumption
• Simple operation - no need for manual
• Dual voltage: 120 V or 240 V
• Output relay: 15 A
• Large back-lit display for easy reading
• UDG: single thermostat for all applications (room, floor, room with floor limitation and as regulator)
• Class A GFCI for wet room installation

APPROVED QUALITY
• c-UL-us
• GFCI Class A, 5 mA trip level
• GFCI disconnects line and neutral (L2)

PRODUCT PROGRAM:
• UCG-4991  Incl. floor sensor with 3 m (10 ft) cable
• UDG-4999  Incl. 2 sensors: built-in air sensor and floor sensor with 3 m (10 ft) cable
• USG-4000  15 A power module with built-in Class A GFCI

Thermostat control
The thermostat is an electronic on/off thermostat for controlling temperature by means of a sensor placed either externally or built into the thermostat. The heat output is switched on and off with a difference of only 0.7°F (0.4°C)

The thermostat can be configured for control of floor temperature, room temperature or room temperature with limit switch, and regulator without sensor. It is compatible with existing floor sensors by means of a temperature setting, making it the best thermostat for renovation purposes.

In large applications, UCG and UDG thermostats can be extended with additional USG power modules with built-in Class A GFCI. Output can thus be increased by 15 A per module.
Class A GFCI
The thermostat features a built-in Class A GFCI (Ground Fault Circuit Interrupter). Should a ground fault occur, the GFCI disconnects both lines to the heating element. The thermostat and GFCI are dual voltage models suitable for 120/240 V, 50/60 Hz power supplies.

Built-in clock function
The thermostats are supplied with factory-set 4-event program for automatic comfort and set-back temperatures.

Individual programming of events
The factory-set periods and/or temperatures can be changed according to requirements.

Furthermore, the following programs can be selected:
- 4 events for 5 days and 2 events for days 6+7
- 4 events for 6 days and 2 events for day 7
- 4 events per day

The programmable thermostat features an adaptive function, allowing it to calculate when the heating must be switched on to ensure that the comfort temperature is reached at the required time.

Comfort mode
The room temperature can be temporarily changed for a single event. The comfort mode temperature is reset after a selected number of hours. The thermostat will then return to the scheduled event program.

Manual mode
The scheduled event program can be cancelled, e.g. during holidays, and the temperature set for frost protection purposes instead, e.g. to 41°F (5°C). The new set-point will remain active until manual mode is cancelled.

Monitoring of energy consumption
Total switch-on time in percent can be displayed for the last 2 days, 30 days or 365 days. Overall energy consumption can thus be monitored.

Temperature limitation
UDG-4999 is supplied with a floor sensor which can be used for:
- Max. temperature limitation: For the protection of wood floors, etc.
- Min. temperature limitation: For better heating comfort.

Backup function
In the event of a power failure, an internal circuit will maintain the programming and time. However, the time must be reset if the power failure exceeds two hours.

TECHNICAL DATA
Supply ................................................... 120/240 Vac 50/60 Hz
Load ............................................... 15A maximum (resistive load)
Power ........................................... 1.800 W at 120 Vac / 3.600 W at 240 Vac
GFCI .................................................. Class A (5 mA trip level)
Temperature range ..................... +41 to +104°F (+5 to +40°C)
Floor limit range ......................... +41 to +104°F (+5 to +40°C)
Amb. Temp. range ....................... +32 to +104°F (0 to +40°C)
Clock function ............................... 4-event program
On/Off differential ........................ 0.7°F (0.4°C)
Regulation principle ......................... PWM / PI
Housing ................................................. Nema 2 (IP21)
Floor sensor type ......................... NTC (12 KΩ) 10 ft (3 m.)
Dimensions(H/W/D) ...................... 4.8/3.0/1.0 inch (123/75/25mm)
c-UL-us according to the following standards:
Thermostat: UL 873
CSA C22.2 No. 24
UL E-file: E157297
GFCI: UL 943
CSA C22.2, No. 144. 1-06