

Title (en)  
THERMOSTAT DEVICE AND METHOD FOR DETECTING MIS-WIRING IN A THERMOSTAT DEVICE

Title (de)  
THERMOSTATVORRICHTUNG UND VERFAHREN ZUM FESTSTELLEN EINER FEHLVERKABELUNG BEI EINER THERMOSTATVORRICHTUNG

Title (fr)  
DISPOSITIF À THERMOSTAT ET PROCÉDÉ DE DÉTERMINATION D'UN DÉFAUT DE CÂBLAGE DANS UN DISPOSITIF À THERMOSTAT

Publication  
**EP 3240972 B1 20190227 (DE)**

Application  
**EP 16701088 A 20160103**

Priority  
• DE 102015000079 A 20150104  
• EP 2016000004 W 20160103

Abstract (en)  
[origin: WO2016107931A1] A thermostat device for controlling a heating system comprises a first, a second and a third electrical terminal for connection to a heating system, and a control device which can generate a heating control command and can output this command either in the form of an analogue voltage at the third electrical terminal or in the form of a modulated digital voltage or a modulated digital current via the first and/or second electrical terminal. The thermostat device also comprises voltage and current measuring means which are arranged to read digital signals from the heating system such that a voltage and a current can be measured between the first terminal and the second terminal. The voltage measuring means can also measure a voltage at the third electrical terminal. In order to detect incorrect connection of wires of a heating system to the electrical terminals, the control device can enter a mis-wiring check mode. In this mode, the voltage measuring means measures a voltage at the third electrical terminal, the control device compares the measured voltage with at least one reference value and the control device generates a mis-wiring detection signal on the basis of a result of the comparison. A corresponding method for controlling a heating system having a thermostat device is also disclosed.

IPC 8 full level  
**F24D 19/10** (2006.01); **G05D 23/19** (2006.01); **H01R 3/00** (2006.01)

CPC (source: EP US)  
**F24D 19/1009** (2013.01 - EP US); **F24D 2220/0257** (2013.01 - EP)

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)  
**DE 102015000079 A1 20160707**; EP 3240972 A1 20171108; EP 3240972 B1 20190227; WO 2016107931 A1 20160707

DOCDB simple family (application)  
**DE 102015000079 A 20150104**; EP 16701088 A 20160103; EP 2016000004 W 20160103