Title (en)

ELECTRONIC THERMOREGULATOR CONFIGURED TO CONTROL A PROFESSIONAL REFRIGERATION APPLIANCE

Title (de)

ELEKTRONISCHER THERMOREGULATOR DER ZUR STEUERUNG EINES PROFESSIONELLEN KÄLTEGERÄTS KONFIGURIERT IST

Title (fr)

THERMORÉGULATEUR ÉLECTRONIQUE CONÇU POUR COMMANDER UN APPAREIL DE RÉFRIGÉRATION PROFESSIONNELLE

Publication

EP 4170269 A1 20230426 (EN)

Application

EP 22202455 A 20221019

Priority

IT 202100026828 A 20211019

Abstract (en)

Electronic thermoregulator (1) comprising first output terminals (7) connected to electrical/electronic loads/devices (5), a second output terminal (8) connected to an LED lighting device (6), a first circuit branch (9) having a first power supply voltage (VI), an SMPS switched-mode power supply (10) which is designed to supply a second voltage (V2) corresponding to a low direct voltage less than the first voltage (VI), a second circuit branch (11) which is electrically connected to the output terminal of the SMPS switched-mode power supply (10), of the relays (12) to connect the first circuit branch (9) to a first output terminal (7), an electronic switch (13) configured to switch on the basis of a relative second command signal (SI) in order to connect the second circuit branch (11) to the second output terminal (8), and a control module (14) which generates the first command signals (Ki) and the second command signal (SI) to switch the relays (12) and the electronic switch (13).

IPC 8 full level

F25D 29/00 (2006.01); **F25D 27/00** (2006.01)

CPC (source: EP)

F25D 29/00 (2013.01); F25D 27/005 (2013.01); F25D 2400/40 (2013.01)

Citation (search report)
- [XI] KR 100539599 B1 20051229
- [XI] US 2005011205 A1 20050120 - HOLMES JOHN S [US], et al
- [XI] JP 2010121901 A 20100603 - DAIWA INDUSTRIAL LTD
- [A] PEREZ EDGAR VILLA ET AL: "IoT Circuit Design to Monitor Cold Chain Refrigerators", 2019 LATIN AMERICAN ELECTRON DEVICES CONFERENCE (LAEDC), IEEE, vol. 1, 24 February 2019 (2019-02-24), pages 1 - 5, XP033550407, DOI: 10.1109/LAED.2019.8714747

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 ME MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA

Designated validation state (EPC)

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