

D-Box

Single-Phase Decentralized Control – Home Control Family

Description

The D-Box is a single-phase energy meter equipped with a remotely controlled switch. It takes control of direct electrical heating systems in order to offer room-by-room control solutions. The D-Box communicates to our Gateway through the power lines (Power Line Communication, PLC).

The switching of the heater is carried out either using a 16 A relay or by synthesizing a “fil pilote” signal (broadly supported by European systems). Our “Silent and Long Lasting” relay technology allows to switch a 16 A load for more than 1 million times in a silent manner (20 dBA LmaxA noise – similar to rustling leaves or whispering). In case of a device failure, it reconnects the heater directly to the power lines restoring it to the former manual control.

The D-Box is installed on the wall next to the heater using a system of Velcro strips, allowing a complete and easy removal. The device itself is not directly connected to the wiring, but to a socket (middle picture) hidden behind the heater. This allows a quick exchange. In case of removal, the heater can be reconnected to the power line using a tap (right picture).



Further Information

The user manual and the declaration of conformity can be downloaded from:
<http://um.tiko.energy/1016>

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Data Sheet D-Box – Home Control Family

Device Characteristics	
Product Number (REF)	CD-01.1014-01-P1 (D-Box L-Shape) CD-01.1016-01-P1 (D-Box T-Shape) CDS-01-P1 (Socket) CATA-01.1103-P1 (Continuity Bridge)
Input / Output Voltage	230 VAC \pm 10 %
Input / Output Relay Current	max. 16 A (not fused)
Input / Output Fil Pilote Current	max. 100 mA (fused)
Wire Specification for Load	1.5 mm ² (AWG 16)
Wire Specification for Fil Pilote	1.5 mm ² (AWG 16)
Frequency	50 Hz
Overvoltage Category	OVC II
Voltage of breaker before D-Box	max. 240 V
Current of breaker before D-Box	max. 16 A
User Interface	1 push button, 1 LED
Connectivity	PLC HomePlug GreenPHY
Dimensions	136 x 134 x 39 mm (REF. CD-01.1014) 160 x 125 x 42 mm (REF. CD-01.1016)
Weight	235 g (REF. CD-01.1014) 251 g (REF. CD-01.1016)
Max. Power Consumption	3 W

Metrology Characteristics	
Power Meter	Active Energy: Class C (\pm 0.5 %) Reactive Energy: Class B (\pm 1 %)
Min. Measurable Current	\pm 0.05 A
Max. Measurable Current	\pm 16 A

	Operating Conditions	Storage Conditions
Temperature (min.)	-10 °C	-20 °C
Temperature (max.)	+55 °C	+70 °C
Relative Humidity	10 % - 85 %, not condensing	5 % - 95 %, not condensing

Product photo may differ from actual product; however, functionalities remain as stated above. Specifications are subject to change without notice.