

Smart A-Cool

Appliance Interface (AI)

User manual

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Compliance statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

RF exposure statement

The requirements for determination of compliance and the preparation of an Environmental Assessment regarding human exposure to levels of radiofrequency radiation is regulated in CFR 47 1.1307(b). Such a study is necessary only for facilities, operations and transmitters that fall into the categories listed in table 1 of 1.1307 or those specified in paragraph (b)(2) of the same section.

Smart A-Cool Appliance Interface does not fall into any of the categories listed in 1.1307(b)(2).

Consequently Smart A-Cool Appliance Interface is categorically excluded from making a determination of compliance with the exposure limits in 1.1310 or 2.1093 and preparing eventually an Environmental Assessment.

With reference to "447498 D01 Mobile Portable RF Exposure Smart A-Cool Appliance Interface is classified as a mobile device and does not allow simultaneous transmission. The average output power of Smart A-Cool Appliance Interface is 0.180 mW EIRP, which is below $60/f_{\text{(GHz)}}$ mW. Therefore Smart A-Cool Appliance Interface is considered compliant with the rules for RF exposure without further test or analysis

User manual

1.1 General

This appliance features a "Smart Grid" function. This function can be used if local utility companies support "Smart Grid".

1.2 Functional description

Smart A-Cool Appliance Interface sends/receives data to/from the DIEHL Controls central unit and also can be remote controlled by it. The Smart A-Cool appliance interface module with integrated Z-Wave radio and can operate only with below listed home appliances and has the following function:

"Smart Grid" controls the appliance in such a way that the functions which consume most energy occur at a time when the electricity prices of the utility companies are most favourable. This is usually during the night. Therefore the energy costs can be reduced.

	B/S/H/ device type
1.	T36BT810NS
2.	T36BT820NS
3.	T36IT800NP

To be able to use the above described functions of the appliance, "Smart Grid" network availability is necessary. You will also require the correct communication devices (DIEHL Controls Central Unit) to activate the function.

1.3 RF Specifications

Frequency range: 908.40MHz – 916.00MHz (HW assisted multi-channel operation with 3 channels)

Modulation: FSK/GFSK

Data rate: 9.6 / 40 / 100kbit/s

channel	carrier frequency, [MHz]	data rate, [kbit/s]	typ. Pout, [mW]	typ. receiver sensitivity, [dBm]
1	908,42	9,6	0,125	-99
2	908,4	40		-97
3	916	100		-95

1.4 Network binding procedure (Switching on)

1. Press Setup button.
2. Press selection button > until SMGRID and the current setting (OFF) are displayed.
3. Press setting button + to change the setting.

The smart-grid function status is visible in setup menu "SMGRID". If the function is on, the "on" symbol in the right-bottom corner of the display is set to active.



4. Press Setup button to save the setting. @ is indicated in the display field.



1.5 Removing the Smart A-Cool AI from network (Switching off)

1. Press Setup button.
2. Press selection button > until SMGRID and the current setting (ON) are displayed.
3. Press setting button + to change the setting.



4. Press Setup button to save the setting.

The smart-grid function is now turned off and after leaving the setup-menu no "@" symbol is active anymore.



1.6 Host device labeling

Because the FCC identification number is not visible after the module is installed inside the host device, the outside of the device into which the module is installed must also display a label referring to the enclosed module. This exterior label can use wording such as the following: "Contains Transmitter Module FCC ID: QR6-AI005SH" or "Contains FCC ID: QR6-AI005SH."