Installation Guide

Bluetooth Adapter
Type **EKA 202** & **EKA 203**

080R4219

AN404136884216en-000202

Bluetooth Adapter (EKA 202 & EKA 203) is a plug in type device for ERC and EETa range of controllers to provide bluetooth connectivity with companion mobile application 'KoolConnect'.

- Bluetooth Low Energy 5.2
- Simple Plug and Play module
- Powered from controller
- Data logging for 15 days
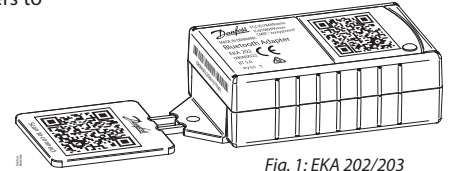- Real time clock with power back up option

Fig. 1: EKA 202/203

Technical specifications:

Specifications		EKA 202	EKA 203
Input voltage		5 V DC / 12 V DC	5 V DC / 12 V DC
Max Current		70 mA	76 mA
Bluetooth version		5.2	5.2
Bluetooth range (without any obstruction around)		10 m	10 m
Data storage duration		15 days	15 days
RTC power back up		**No power backup**	**36 hours (approx.)**
Communication interface with controller		UART, One wire	UART, One wire
Operating temperature		-25 – +55 °C	-25 – +55 °C
Maximum humidity		<90% RH (Non-condensing)	<90% RH (Non-condensing)
Storage temperature		-40 – +70 °C	-40 – +70 °C
Ordering code	Bluetooth adapter	080N0022 (Single Pack) | 080N0026 (I Pack)	080N0023 (Single Pack) | 080N0027 (I Pack)
	Interface cable	080N0329 (ERC 11x) | 080N0327 (ERC21x) | 080N0325 (EETa)	
Supported Controllers		ERC11x, ERC21x (080G34xx series only) and EETa	
Approvals[1]		CE, UL, FCC, ISED	

[1] For latest approval status and other local approvals, please check at danfoss.com or contact your local Danfoss representative.

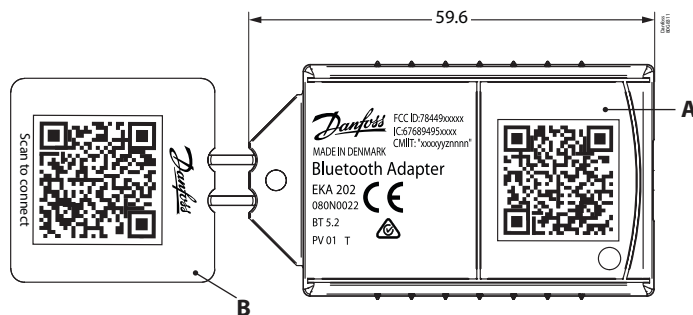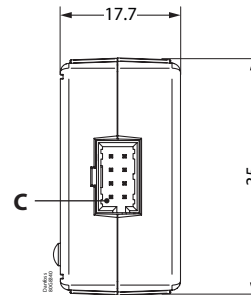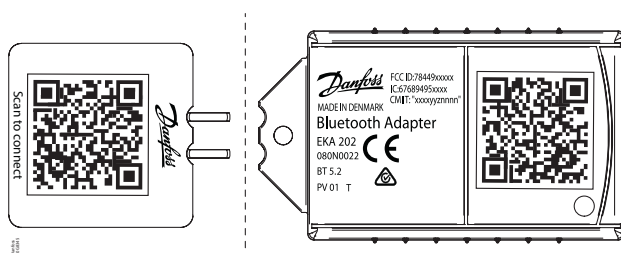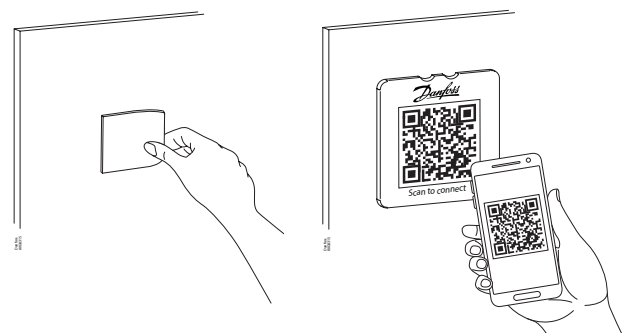**Dimensions** (units are in mm)

Fig. 2: Top view

Fig. 3: Rear view

A. Bluetooth Adapter
B. QR code chip
C. TTL port for connection with controller
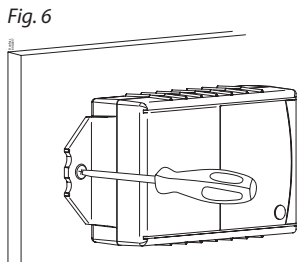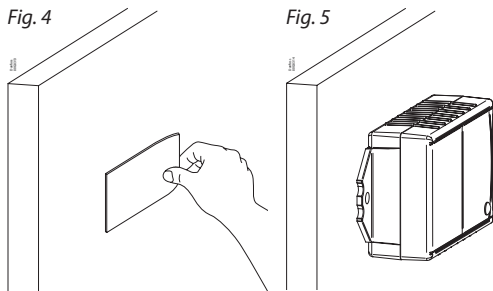
Procedure for adapter installation

1. Detach the QR code chip from the Bluetooth Adapter by breaking. The QR code chip is used for pairing with mobile application.

2. Attach the QR code chip to the door or any clean part of the cabinet that can be easily accessed for the pairing procedure.
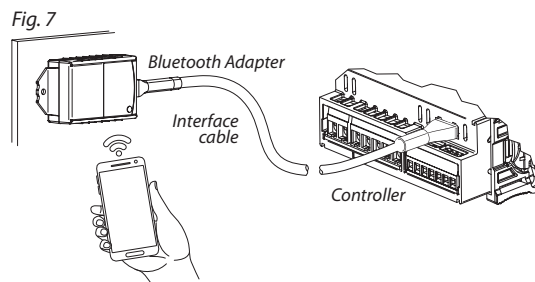
3. Secure the Bluetooth Adapter in a convenient location using double sided tape (*Fig. 4-5*) or by screw mounting (*Fig. 6*)

Fig. 4

Fig. 5

Fig. 6

4. Power off the controller by switching off the main supply to the controller.
5. Connect the Bluetooth Adapter to communication port of controller using interface cable (*Fig. 7*)
   – TTL port in ERC21x and EETa
   – DI port in ERC11x

Fig. 7

Bluetooth Adapter

Interface cable

Controller

⚠ **Warnings / Note:**
- The installation of Bluetooth Adapter should be performed while the Cooler is switched off.
- Ensure the Bluetooth Adapter is installed away from heating source, direct sunlight, dripping water, dusty environment.
- Do not mount the adapter directly in food compartment in case of cold space installation.
- Avoid any obstruction around the adapter that impacts Bluetooth communication.
- Interface cable ordered separately for the respective controller to be used for connecting Bluetooth Adapter to Controller.
- Ensure that cables are always strain relieved and tied up by other means to cabinet.

Power up sequence and connection with mobile application:

Function	Description	Illustration	LED info
Power-up	Power up the controller connected with Bluetooth Adapter. Bluetooth Adapter starts power up initialization (it gets power from connected controller).	Blue Red Green / Green	• White – Blue – Red – Green LED blinking in sequence indicates power up initialization. • After few seconds, Green LED rapid flashes indicating controller detection is in progress.
Established communication with controller and broadcasting.	After power up initialization, the adapter establishes communication with connected controller and start broadcasting.	Green	• Green LED slow flashes (1s/1s)
	Unsuccessful identification/communication with controller.	Red	• Red LED rapid flashes.
Connection with mobile app and Real time clock (RTC) update	Search and connect broadcasting adapter using KoolConnect companion app. Click on "Set time" when mobile app shows alert message to synchronize the adapter time with mobile time.[1]	Blue	• LED turns to constant Blue indicating Bluetooth is connected.

[1] Note:
1. Ensure that the module is connected to the mobile app after final power up and installation to finalize the setup properly. If the module is not connected after final power up at customer's site, the module will log the data without the correct time stamp.
2. If the Bluetooth Adapter is changed from one controller model to another (ex: ERC112C to ERC112D or EETa 3W), all the logged data from previous controller are erased and start logging afresh from new controller. The data from previous controller is retained if one code no. is changed to another code no. within the same controller model.

EU CONFORMITY NOTICE
Hereby, Danfoss A/S declares that the radio equipment type (CRO) Bluetooth adapter is in compliance with Directive 2014/53/EU.
The full text of the EU declaration of conformity is available at the following internet address: ID411846615416-0101

Scan QR Code below for KoolConnect mobile app download, regulatory and other informations:

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KoolConnect