

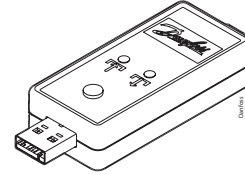
## User Guide

# KoolKey

### Principle

KoolKey is an interface and programming device to:

- Connect EET Controller with PC and act as a gateway when working online using KoolProg® application on the PC.
- Act as programming key to program settings into EET controllers in the production and the field.

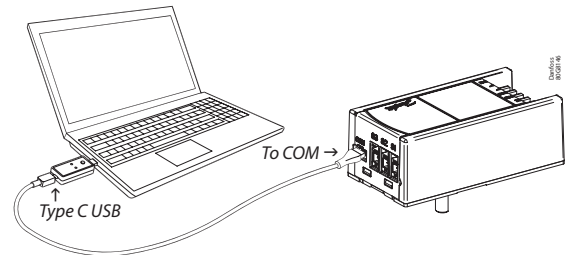


### KoolKey as a Gateway

Gateway mode enables to work online with the connected controller through KoolProg® on a PC.

KoolProg® allows following functions:

- Set Parameters – Create, view and edit controller settings.
- Copy to Controller – Program settings file created offline to connected controller.
- Online service – Monitor real time operations of the controllers and make adjustments to the settings while connected.



Connection:

- Connect the KoolKey to USB port of PC installed with KoolProg® software
- Connect the controller to KoolKey using KoolKey cable

(Refer KoolProg® [User Guide](#) for detailed instructions on how to use KoolProg. Download KoolProg® at: [koolprog.danfoss.com](http://koolprog.danfoss.com))

### KoolProg® as Programming Key

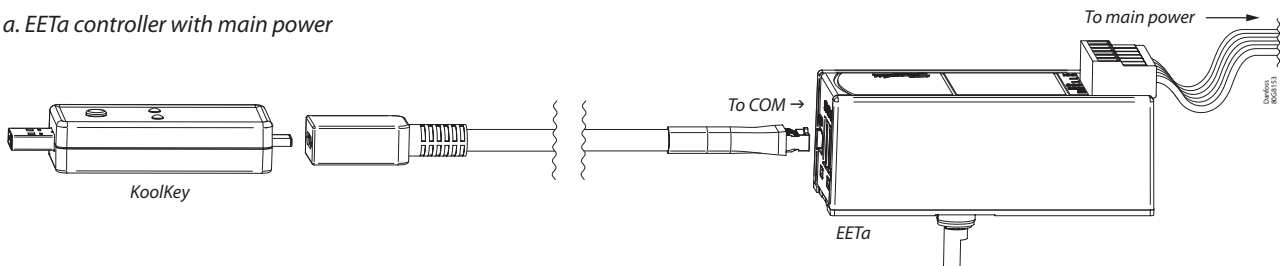
Programming key function is used for transferring parameter files from key to controller and vice versa.

#### Programming a powered-up controller:

- Power up the controller using 120 V / 230 V power supply
- Connect the koolKey to controller TTL port using KoolKey cable

**Note:** EET compact (EETc) does not support this option.

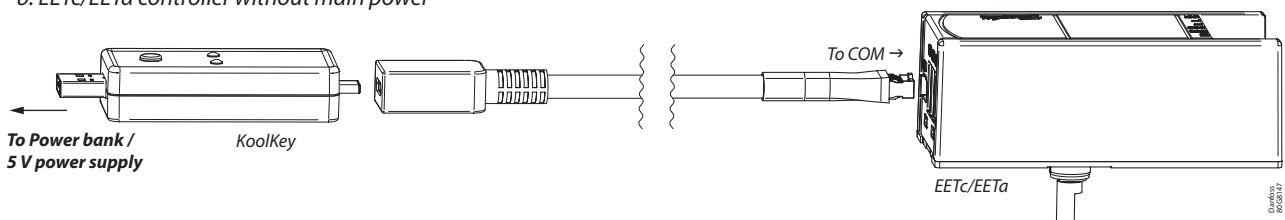
#### a. EETa controller with main power



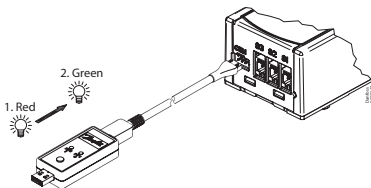
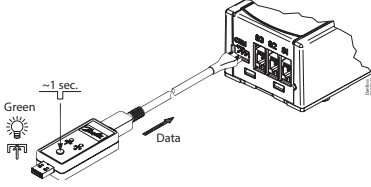
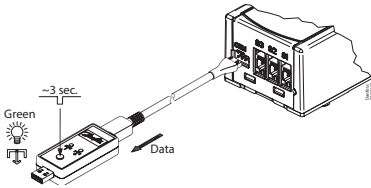
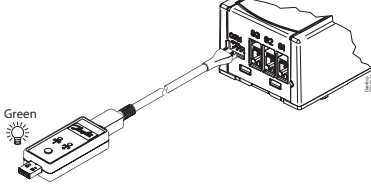
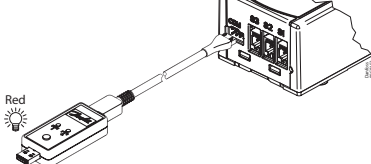
#### Programming an unpowered controller:

- Connect Power bank or 5 V power supply to KoolKey USB type A port.
- Connect the Koolkey to controller TTL port using KoolKey cable.

#### b. EETc/EETa controller without main power



**Parameter file transfer steps:**

Step	Action	Illustration	LED info
1.	Power up KoolKey by either connecting to an external power bank or to a powered up controller.		<ul style="list-style-type: none"> <li>The LED will flash red indicating KoolKey is powered up.</li> <li>After few seconds LED would turn green indicating successful connection and data transfer readiness</li> </ul>
2.	<p>a. Write funtion: Short press the button (1 sec) to transfer data from the KoolKey to the controller.</p> <p><b>Note:</b> When KoolKey is connected to power bank, the write functions gets initiated automatically as soon as the KoolKey is connected to controller without pressing the button.</p>		Green LED flashes – Indicating parameter file upload
	<p>b. Read Function: Long press the button (3 sec) to transfer data from the controller to the KoolKey.</p> <p><b>Note:</b></p> <ul style="list-style-type: none"> <li>Read function is not supported when KoolKey is powered up from a power bank.</li> <li>Make sure that an xml file with the same name is already saved in KoolKey before executing the read function.</li> </ul>		Green LED flashes – Indicating parameter file download
3.	Successful file transfers (This could take around 5 – 8 sec for read and write functions to successfully complete.		Constant green
	Unsuccessful file transfer (Check connection and compatible proگرامing file).		Red flashes

**Note:** Do not leave the cable hanging when connected to a live controller.