



Technical Bulletin (TB-0066-1)

ECOSTAR Quick Start Guide

Version 2, April 2020

Download the BEST Software Prior to Commissioning

For the most user friendly and efficient interface with the ECOSTAR controller, it is recommended to download the BEST Software to a laptop and view the on-line tutorial. The BEST Software is available for free at the BITZER website. Use the link below for access to the file.

<https://www.bitzer.de/us/us/service/software/software/versions-best.jsp>

The BEST Software is not necessary for commissioning of ECOSTAR. User level parameters can be adjusted with the integrated display on the ECOSTAR controller.

It is also recommended to review document KT-203 (Technical Information) and KB-203 (Operating Instructions) and the on-line installation video.

<https://www.youtube.com/watch?v=NB8IPimH2zo>

For commissioning, it is recommended to use a hard wired connection from the laptop to the Lodam controller. A USB to Mini B USB cable is required. (max. length – 6ft). Bluetooth connectivity is also available.

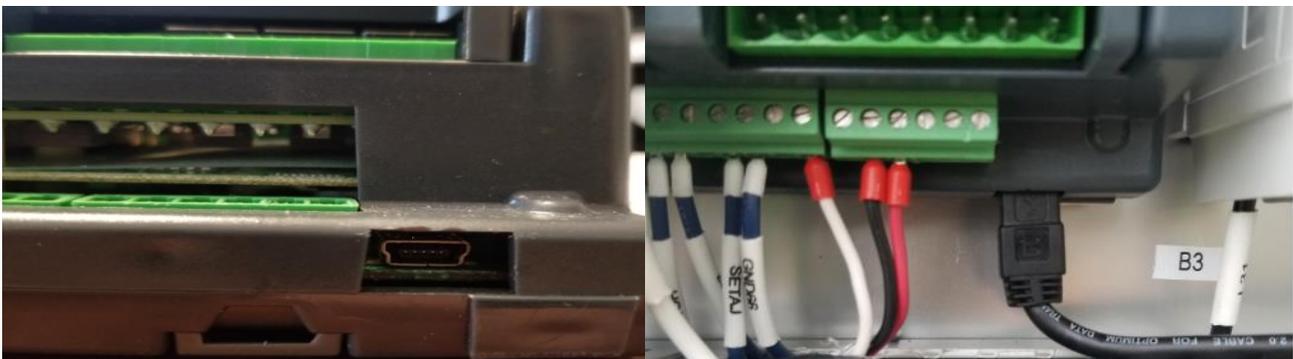


Physical Checks

1. Verify all wiring to the ECOSTAR unit prior to switching on power to the unit.
2. Verify the transport locks on the compressor mounting feet have been removed.
3. Verify the electrical supply has a neutral.

ECOSTAR Controller Setup (w/Mini USB)

1. Open the control box and connect to the controller using a Mini USB cable.

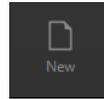


2. Switch on the power to the controller using the main switch in the control box.

3. Open the BEST Software on the laptop



4. Select the **New** icon at the top left corner of the screen

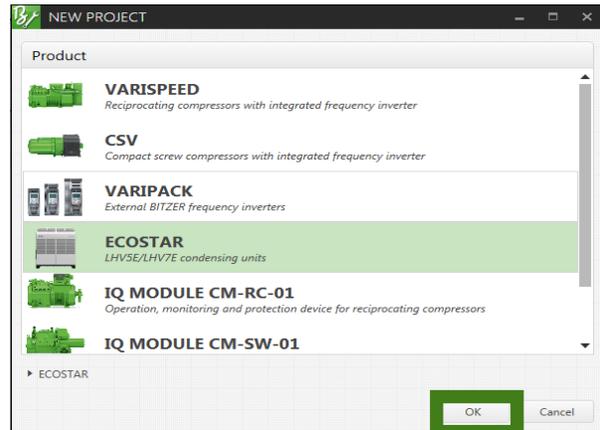


5. Select **ECOSTAR** and **OK**



6. Select the **Connect** icon

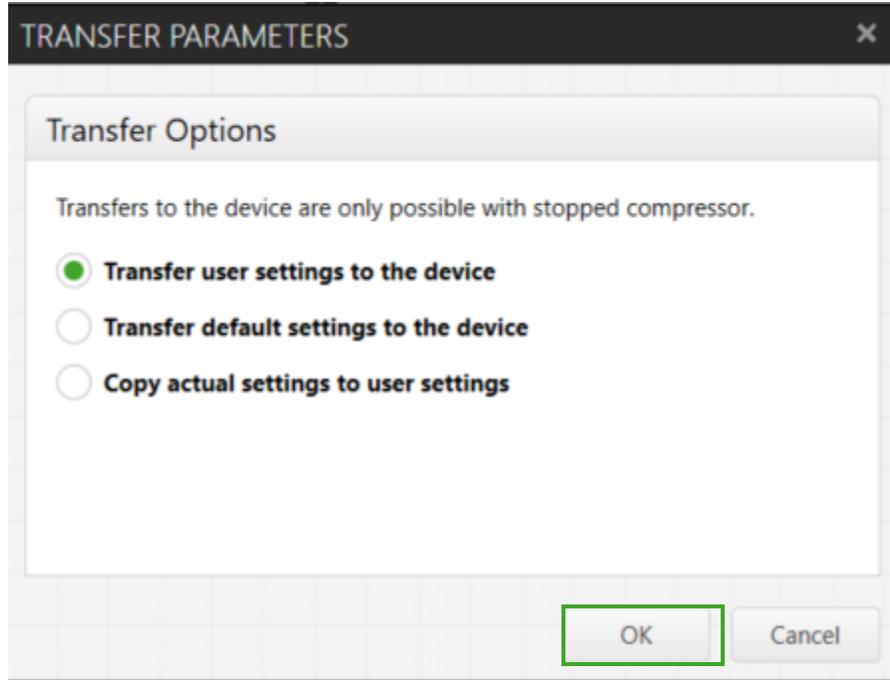
7. Select the **Mini USB cable** option



8. Select the **Configuration** tab, adjust the compressor m/n parameter under **User Settings**. and transfer the data to the ECOSTAR by selecting the **Transfer** icon. The top circle should be green. Select OK.

The screenshot shows the BEST Software interface. The top toolbar includes icons for New, Open, Save, myBITZERcloud, Settings, Disconnect, Datalogs, Update Firmware, Transfer... (highlighted with a green box), Selftest, and Device Password. The left sidebar shows navigation options: Overview, Monitoring, Configuration (selected), Alarms, Documentation, and Project Properties. The main area displays the Configuration tab with a table of parameters. The 'Compressor model' parameter is highlighted, and its 'User Setting' dropdown menu is open, showing '4DE-7.F3' selected. The 'Transfer...' icon in the top toolbar is highlighted with a green box.

Parameter	Unit	Default Setting	Actual Setting	User Setting
Main Setup				
ECOSTAR model	?		LHV7E	
Compressor model	?		4DE-7.F3	4DE-7.F3
Refrigerant	?		R404A	
ECOSTAR operating mode	?	Off	Off	
Control mode	?	Suction Pressure	Suction Pressure	
Setpoint evaporating or cold room temperature	? °F	14.0	-10.0	
Fan operation mode	?	Eco	Eco	
Date		4/2/2020	4/2/2020	
Time		11:00:29 AM	10:59:23 AM	
Daylight saving time		Manual	Manual	
Language of the controller display		English	English	
Dimensional units on the controller display and webserver		SI	SI	
Setup of A/D inputs and related features				
Suction pressure increase (Setpoint adjustment)	?	Off	Off	
Digital input 1		2nd Setpoint	2nd Setpoint	
Digital input 2		Off	Off	
Digital input 4	?	Night mode	Night mode	
2nd setpoint	? °F	17.6	17.6	



9. Select **On** in **User Settings** column of **ECOSTAR operating mode** parameter. Select transfer icon, **Transfer user settings to the device** , then select “OK”. After a 60s time delay and a cooling demand, the unit will turn on.

ECOSTAR Controller Setup Using Integrated Display

1. Use the Arrow keys on the integrated display to navigate, select and enter new values.

Reference Information

Parameters that require verification:

- Date and Time: Default = Central European Time
- Refrigerant: Default = R134a
- Saturated Suction Set point: Default = -10°C (14°F)

Alarm Code Nomenclature:

W = Warning – Unit continues to operate

A = Alarm – Unit shuts down, automatic restart when alarm clears

C = Critical Alarm – unit shuts down, manual fault reset required to restart

lower case = Historical Alarm(s)

UPPER CASE = Active Alarm(s)

Authorization Levels (Code):

- Guest Mode: Code = 0, View parameter only
- User Mode: Code = 1, View parameter and adjust set point (Temperature Control only)
- Installer: Code = 2, View parameters and adjust all parameters

Other Factory Defaults:

- Language: English
- Compressor Control: Suction Pressure
- Fan mode: Eco (Higher efficiency, higher noise level)
- Control Mode: Off (Compressor won't start until this is changed to On)
- Winter Start Mode: On
- Oil Return Mode: Off

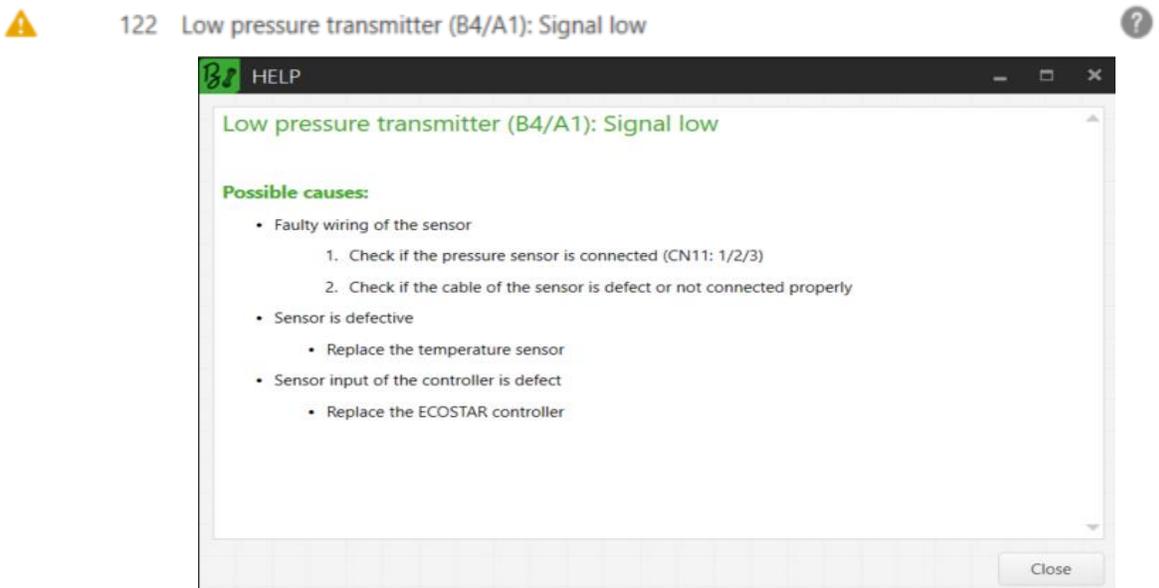
External to LODAM Liquid Line Solenoid Control for Pump Down.

Liquid line solenoid is used with an external temperature control, e.g. thermostat & defrost clock or using the I/O board relay output on a controller board to control the solenoid. The compressor will pump down to 8" to 10" vacuum and then shut off in pump down.

Alarms:

- If there are any alarms generated go to the alarm tab. To the right of the alarm will be a 
- Select the question mark & a troubleshooting guide box will open.

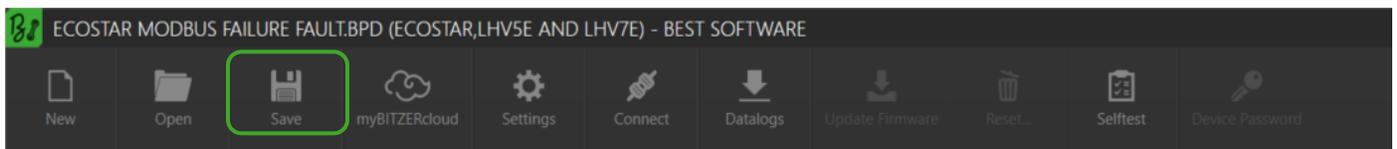
Examples:





- Please contact Bitzer tech support at 770-503-9226 or email Bitzer @ techsupport@bitzerus.com

If you choose to email Bitzer please download the Ecostar BEST file and email it with your questions. The following is the procedure on how to “save to PC.”



A drop down box will appear when “save” is selected. Select “save to PC” in the drop downbox. Save to documents and then attach to the email.