



## **Grid Code Setup Guide- Three Phase Inverter**

**Evershine TLC   Eversol TLC   Zverlution Pro 33K**

**zeversolar**

# Three Phase Inverter Grid Code Setup Guide

## Zeversolar Contact Details

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# 1 Three Phase Inverter – Grid Code Set-Up

## 1.1 Introduction

This standard operating procedure (SOP) details the steps that are required to change the default grid code setting of a Zeversolar three phase inverter.

## 1.2 Assumed Knowledge

This guide assumes the following:

- A Zeversolar three phase inverter has been installed;
- The installation manual has been read and fully understood.

## 1.3 IMPORTANT – CHECK GRID CODE SETTING DURING COMMISSIONING!

The grid code setting should be checked during the commissioning of a PV plant. It is essential to ensure that the correct grid code/safety setting has been selected for the relevant region. Each Zeversolar inverter is set to a default grid code which is based on the serial number suffix that can be found on the label affixed to the inverter and its packaging, see Fehler! Verweisquelle konnte nicht gefunden werden. below.



Figure 1 - Serial Number with UK Suffix

Inverters shipped to Europe have three distinct suffixes and as such the default grid code is set accordingly, please see Table 1.

S/N Suffix	Default Grid Code
DE	VDE-AR-N-4105
UK	G83/2 or G59/3
NL	NEN 50438

Table 1 - Default Grid Code Settings

Therefore it is *necessary* to check the serial number suffix and ensure that the correct grid code is set. For example, an inverter being installed in the UK may have the DE suffix, in this case the inverter grid code should be changed from the “VDE-AR-N-4105” grid code to the relevant UK grid code “G83/2 or G59/3.”

## 1.4 When is Changing the Grid Code Required

As mentioned above it is necessary to change the grid code if the inverter is not installed in the region to which the default grid code is set to. The grid code should also be changed if the inverter is installed in the following countries:-

- Austria, Belgium, France, Greece, Northern Ireland, Poland, Republic of Ireland, Switzerland, Turkey.

*Please note: please refer to the Certificate Overview available from the Zeversolar website to determine for which regions the Zeversolar inverters are certified.*

## 1.5 Hardware Requirements

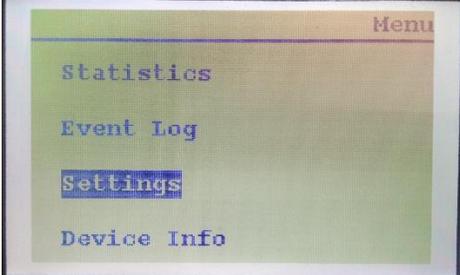
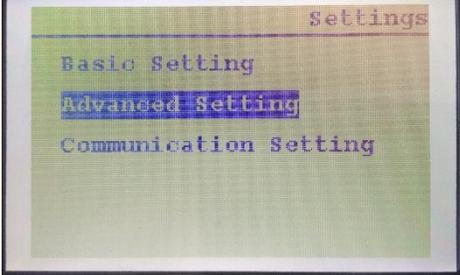
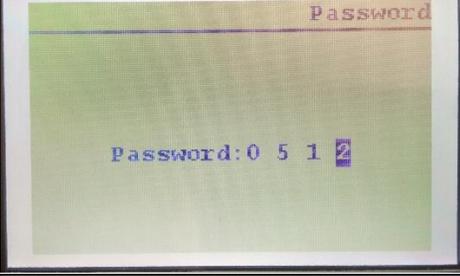
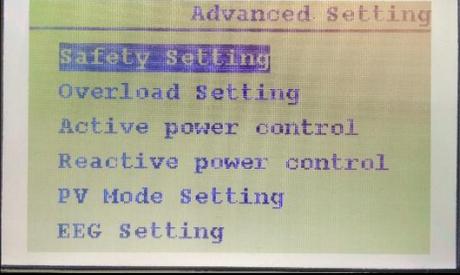
- Evershine TLC;
- Eversol TLC;
- Zevelution Pro 33K.

## 1.6 Basic & Advanced Settings

This guide is intended for inverters that have both the “Basic” and “Advanced” settings which can be selected from the front panel display. If the inverter does not have both menu items then the “Safety Setting” can be accessed by simply selecting “Settings” on the “Menu” screen.

## 1.7 Grid Code Set-Up

It is necessary to ensure that the inverter has been isolated from the AC supply. To change the grid code please follow the steps outlined in Table 2.

Steps	Images
<p>1. Navigate to the “Menu” screen by pressing the Enter button on the front panel.</p>	
<p>2. When the “Menu” screen is displayed, highlight “Settings” and press the Enter button.</p>	
<p>3. On the “Settings” screen select “Advanced Settings” and press the Enter button.</p>	
<p>4. On the “Password” screen enter “0512” using the arrow keys to scroll through the digits and the Enter button to move to the next digit. Pressing Enter after the last digit is entered will display the “Advanced Setting” menu.</p>	
<p>5. On the “Advanced Setting” screen highlight and select “Safety Settings” and press the Enter button.</p>	

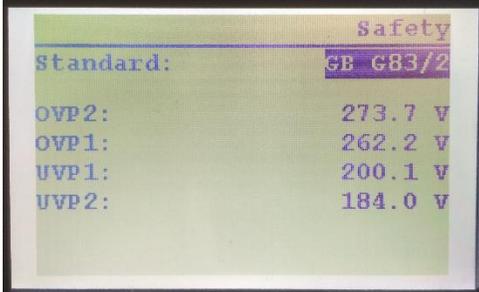
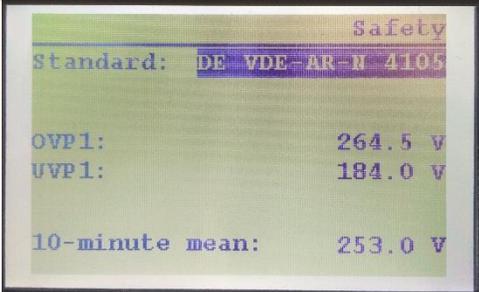
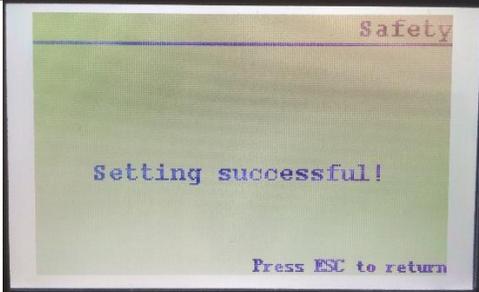
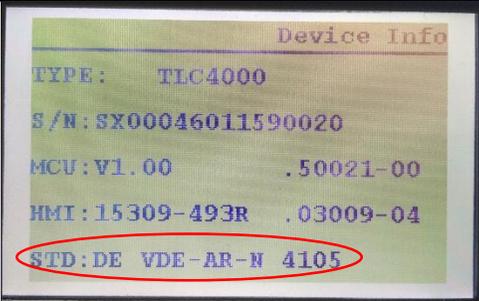
<p>6. On the “Safety” menu the grid code shown as “Standard” will be the first item highlighted.</p>	 <p>Safety Standard: <b>GB G83/2</b> OVP2: 273.7 V OVP1: 262.2 V UVP1: 200.1 V UVP2: 184.0 V</p>
<p>7. To change the “Standard” use the arrow keys to scroll through the list of grid codes. When the correct grid code is selected, press the enter button repeatedly to scroll through to the end of the parameter list.</p>	 <p>Safety Standard: <b>DE VDE-AR-N 4105</b> OVP1: 264.5 v UVP1: 184.0 v 10-minute mean: 253.0 V</p>
<p>8. When the entire parameter list has been scrolled through the “Safety” screen will display “Setting Successful!”. Press ESC to return to the “Advanced Settings” screen.</p>	 <p>Safety Setting successful! Press ESC to return</p>
<p>9. To confirm the safety setting change navigate to the “Device Information” screen and verify that the “Standard” has been changed.</p>	 <p>Device Info TYPE: TLC4000 S/N: SX00046011590020 MCU: V1.00 .50021-00 HMI: 15309-493R .03009-04 <b>STD: DE VDE-AR-N 4105</b></p>

Table 2 – Grid Code Set-Up

## 1.8 Zeversolar Contact Details

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