APPLICATION GUIDE

FRONIUS GEN24 & TAURO SERIES – EARTH FAULT ALARM SETUP AS PER AS/NZS 5033

Application Note
© Fronius Australia Pty Ltd.
Version 1.0/2021

1. CHANGE LOG

Date	Version	Comments	Author
08/10/21	1.0	Initial release	Fronius Australia

2. SCOPE

This document aims to provide instructions on how to setup the Fronius GEN24 & Tauro series inverters for compliance to the AS/NZS 5033 Earth Fault Alarm requirement.

AS/NZS 5033 stipulates the following requirement for an Earth Fault Alarm where the PV Array is >120Vdc:

The alarm system shall continue repeating its operation at least at hourly intervals until the earth fault is corrected or until the fault is acknowledged.

The earth fault alarm shall be at least one of the following types:
(a) Remote communication (such as email, SMS or similar).
(b) Local indication

The Fronius GEN24 & Tauro series inverters are ONLY able to provide a "Remote Communication" option via Email or SMS. The option of a local audible or visible alarm is NOT possible with the Fronius GEN24 & Tauro series.

In the event of a detected earth fault, notification of an Earth Fault is sent to the nominated contacts every hour until the fault is acknowledged

3. GENERAL REQUIREMENTS

Basic requirements for enabling this functionality are:

/ Inverter fully commissioned, operational and latest firmware installed
/ Functional & reliable internet connection of the inverter,
/ Inverter / System registered & configured in Fronius Solarweb.

NOTE: In general our warranty terms & conditions stipulate that an internet connection is available and maintained during the warranty period.

4. INVERTER SETUP PROCEDURE (ONSITE)

Commission the inverter as per the standard process.
Ensure the inverter is connected to the internet and indicates that it is online.

No dedicated additional settings or setup are required onsite to enable the Earth Fault Alarm.
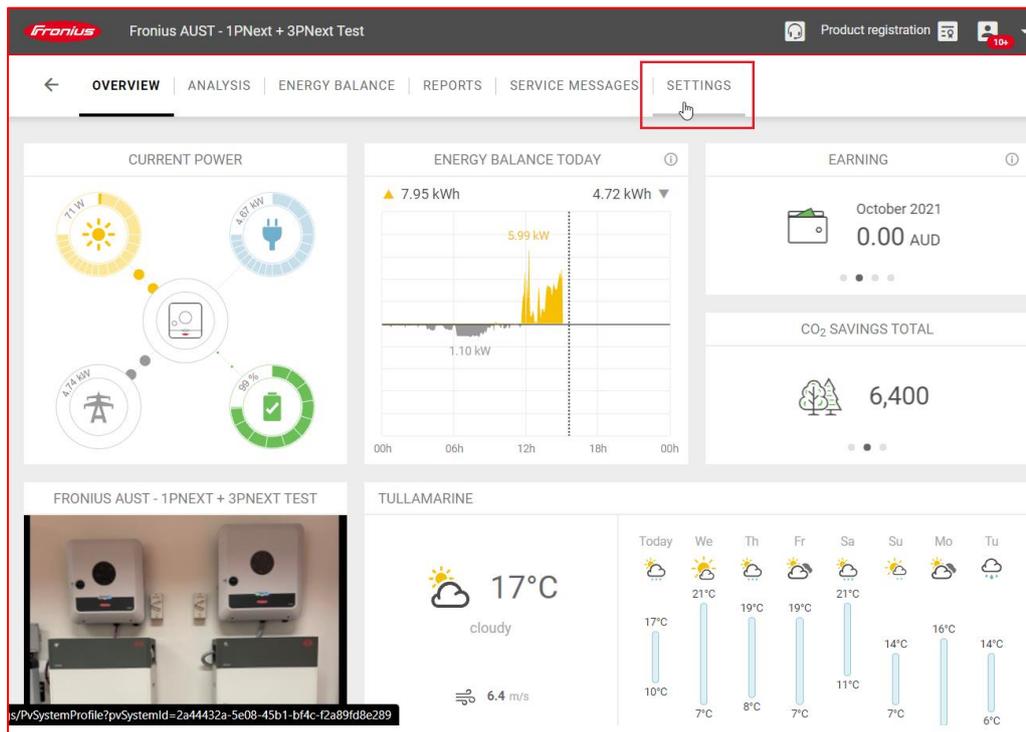
5. SOLARWEB SETUP PROCEDURE
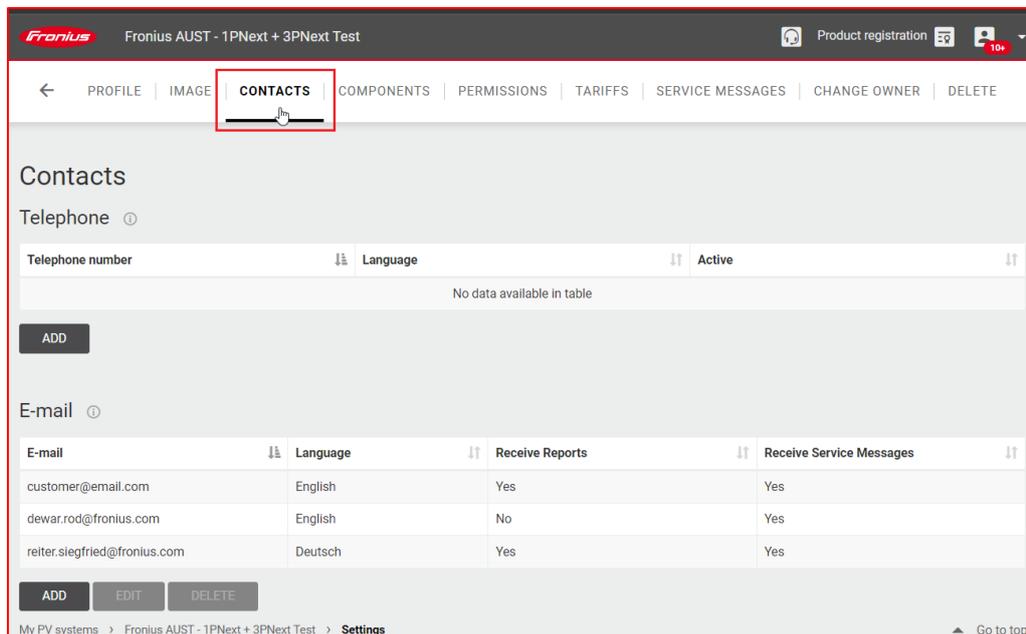
5.1 Create PV system in Solarweb

In order to setup the Earth Fault Alarm notification via Solarweb a system must be created on the Fronius Solar.web portal as per the standard process.
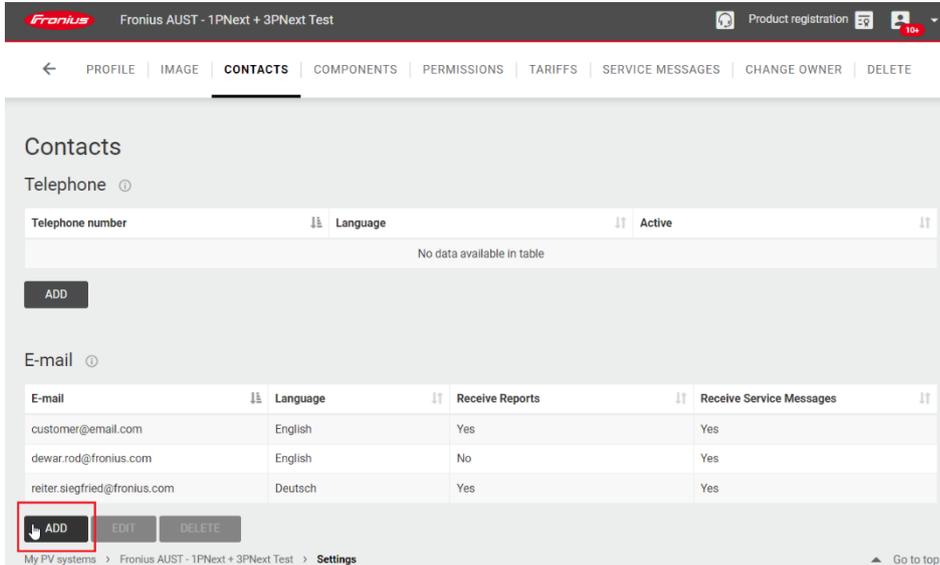
5.2 Add system operator as Contact

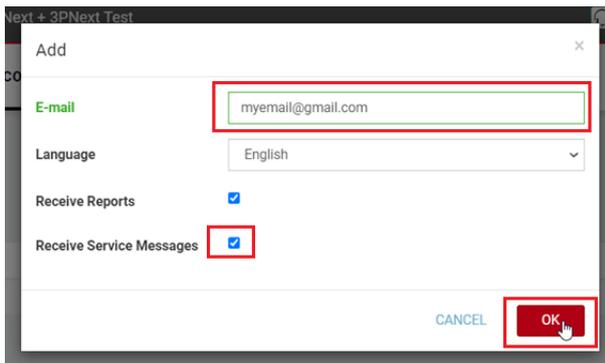Select the PV System to be configured, and navigate to *"SETTINGS"*.
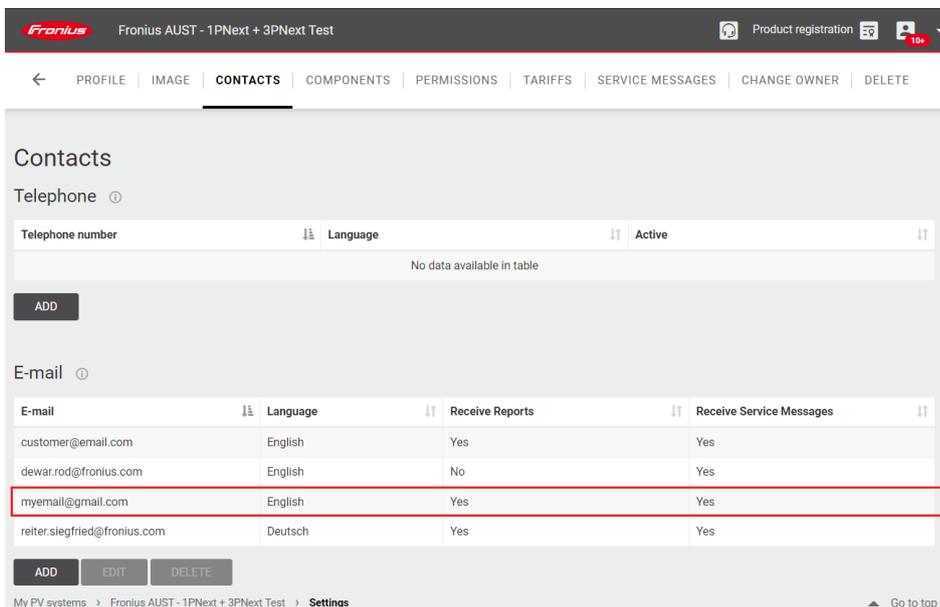

Then go to *"CONTACTS"*.

Under *"E-mail"* click *"ADD"*

Enter the required email address in the *"E-mail"* field, tick *"Receive Service Messages"*, and click *"OK"*.

Confirm the email has been successfully added by seeing a new line appear under *"E-mail"* section with your email address. A Test Email is sent to the contact after saving.

6. CHECKING FOR SERVICE MESSAGE IN SOLAR.WEB

Once alarms occur the system will automatically send email messages to the contact nominated (as nominated under *E-mail* section in *CONTACTS*). It is also possible for the user to check and filter past errors/alarms for the relevant system. To do so follow steps below.

a) Open Solar.web, select the appropriate system and navigate to *"SERVICE MESSAGES"*.

b) Historical alarms including Earth Fault Alarms will be shown in the window marked in red below. An Earth Fault Alarm will be shown with the status code **1083**, with the description **"Warning – Isolation value too low"**

NOTE: the historical alarms/messages (if any) are shown under the red marked area above. They will be relevant to the time selected in the data/time selector tool marked with blue. Time selection can be adjusted based on your requirements.

END OF DOCUMENT

Fronius Australia Technical Support
Email: PV-Support-Australia@fronius.com
Hotline: +61 3 8340 2910

To access Technical articles, Quick guides, Whitepapers and other technical documents, please visit the
Tech Support Area for Installers on our website