

APPLICATION GUIDE: VIC - VICTORIAN DNSP INVERTER SETTINGS

as of 1st Dec 2019

Application Guide

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1. GENERAL

This Application Guide covers the procedure on how to set the Fronius SnapINverter range to comply with the *Victorian Distribution Network Service Provider (DNSP) Basic Micro EG Connections Power Quality Response Mode settings* requirements as of 1st December 2019.

The following listed instructions ONLY describe required alterations to the AS/NZS 4777.2:2015 default settings. All non-listed settings remain unchanged from their default value.

The parameters are altered in PROFI Service Menu on the Fronius SnaplNverters (Galvo, Primo, Symo, Symo Hybrid, ECO) and are accessed via the inverter's display with use of a password. The password must be obtained from Fronius Technical Support upon the completion of the

"Request_for_Access_code_Grid_parameters_Fronius_Inverters" form.

Once this form has been completed and logged, Fronius Technical Support will provide the PROFI MENU access code.

For more detailed information regarding the Service Menu settings, please request the *Service Menu Manual* from Fronius Australia Technical Support. Contact details are at the end of this document

2. ACCESSING THE PROFI MENU

2.1 Enter the hidden 'PROFI' service menu



Type in the access code for the hidden PROFI menu*



*Available only upon request from Fronius Technical Support.

When in the PROFI Menu the following screen will appear





3. SETTINGS

3.1 Sustained operation for voltage variations:

Fronius mode description: U Longtime Limit – 10min average over-voltage setting

Required changes: change limit from 255Vac → 258Vac

In the main PROFI Menu, scroll to "U Longtime Limit" and enter 258.00V then press Enter





3.2 Volt-var response mode:

Fronius mode description: **Reactive P Mode Q** / **(U)** – Reactive Power (Q) with reference to Voltage (U) Function Reference voltage = 230Vac (100%)

Required changes:

Table 1: Mandatory: volt-var response mode settings

Reference	Voltage in Volts	Var % Rated VA
V1	208	44% leading (exporting vars)
V2	220 (default)	0%
V3	241	0%
V4	253	44% lagging (sinking vars, 3.7% per volt, 0.9 power factor)

In the PROFI Menu, scroll to "Reactive Power Mode" and press Enter





Enter "React. P. Mode" select "Q / U" and press Enter



Scroll down to "CH Q (U) 0-0" and enter 090.4 (%) and press Enter



Scroll down to tab "CH Q (U) 0-1" and enter +44.00 (%) and press Enter





Scroll down to tab "CH Q (U) 1-0" and enter 095.6 (%) and press Enter





1

Scroll down to tab "CH Q (U) 1-1" and enter +00.00 (%) and press Enter





Scroll down to tab "CH Q (U) 2-0" and enter 104.7 (%) and press Enter









Scroll down to tab "CH Q (U) 2-1" and enter 00.00 (%) and press Enter





PROFI

3-0

Ch Q(U)

1

Scroll down to tab "CH Q (U) 3-0" and enter 110.0 (%) and press Enter





Scroll down to tab "CH Q (U) 3-1" and enter -44.00 (%) and press Enter



***NOTE – The above screenshots show the smaller chassis inverter range display characteristics. Larger inverters only have 1 x digit after the decimal point, but the setting value remains the same.

3.3 Volt-Watt response mode:

Fronius mode description: **Volt dep. Power Red** – (GVDPR) Grid Voltage Dependant Power Reduction

Required changes: change V₃ from 250V → 253V & change Derating Gradient from 5.33% → 13.33%

Table 2: Mandatory volt-watt response mode settings

Reference	Voltage in Volts	Power % rated Power
V1	207 (default)	100% (default)
V2	220 (default)	100% (default)
V3	253	100% (default)
V4	259	20% (default, 5.3%/volt)



In the PROFI Menu, scroll to "Volt. Dep. Power Red" and press Enter



Scroll to "Enable Limit" and then enter "253,00v" and press Enter



Scroll down to "Derating Gradient" and enter 013,33 (%) and press Enter



4. SETTINGS VARIFICATION

The above settings can be checked in the INFO menu of the inverter display

Go to the INFO Menu, scroll to "Device Info" and press Enter







Check the following setting match the inverter display





END OF DOCUMENT

Fronius Australia Technical Support Email: <u>PV-Support-Australia@fronius.com</u> Phone: 03 8340 2910

For more detailed information see the operation manual available on the product specific page on http://www.fronius.com/en-au/australia