



Wels, November 18<sup>th</sup> 2014

## COMPLIANCE PROTECTION PHILOSOPHY FRONIUS GALVO 1.5-1 208-240 – 3.1-1 208-240

### Fronius International GmbH

hereby confirms that the inverters

- / Fronius Galvo 1.5-1 208-240
- / Fronius Galvo 2.0-1 208-240
- / Fronius Galvo 2.5-1 208-240
- / Fronius Galvo 3.1-1 208-240

comply with the following Protection Philosophy:

#### **Internal faults:**

Fronius inverters are designed and tested according to UL 1741 Standard.

#### **External phase and ground faults:**

The inverter switches off immediately at short circuits. It does not provide short circuit current.

#### **Abnormal system conditions:**

At abnormal conditions at the connection to the electric power system the inverter acts in accordance to IEEE 1547 (and is tested according to IEEE 1547.1). This standard explains e.g. response (tripping matrix) to abnormal voltage (chapter 4.2.3, Table 1) and abnormal frequencies (chapter 4.2.4., Table 2).

#### **Islanding:**

Requirements for a protection against unintentional islanding are fulfilled and tested according to IEEE 1547 (1547.1).

#### **Synchronization sequence:**

All grid parameters are monitored and have to be within the parameters according to IEEE 1547 for 5 min before connection or reconnection. There can never be an inrush current >1 per unit.

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