

**DECLARATION OF CONFORMITY  
EN 50438:2007 (Sweden)**

Power-One declares under our sole responsibility that the inverters listed below fulfill the requirements of the European standard EN 50438:2007.

Type	Model	Firmware (update ver.)	Serial Numbers which does not require firmware updating
triphas inverter	TRIO-20.0-TL-OUTD-400 TRIO-20.0-TL-OUTD-S2-400 TRIO-20.0-TL-OUTD-S2X-400 TRIO-20.0-TL-OUTD-S2F-400 TRIO-20.0-TL-OUTD-S1J-400 TRIO-20.0-TL-OUTD-S2J-400	52313 (or higher (*))	132429908020 (or higher(*))
	TRIO-27.6-TL-OUTD-400 TRIO-27.6-TL-OUTD-S2-400 TRIO-27.6-TL-OUTD-S2X-400 TRIO-27.6-TL-OUTD-S2F-400 TRIO-27.6-TL-OUTD-S1J-400 TRIO-27.6-TL-OUTD-S2J-400	52313 (or higher(*))	132429908020 (or higher(*))

Note(\*): in case of inverter with older firmware or older Serial Number it is necessary to upgrade its firmware using the software **MANAGER LITE**.

According to EN 50438:2007 Annex A, the following grid protection settings are required for the automatic disconnection device between a generator and the public low-voltage grid in Sweden:

- ) Under voltage limit (stage 2 / U<) : 207 Vac with a clearance time of 60 seconds
- ) Under voltage limit (stage 1 / U<<) : 196 Vac with a clearance time of 0.2 seconds
- ) Over voltage limit (stage 2 / U>) : 243 Vac with a clearance time of 60 seconds
- ) Over voltage limit (stage 1 / U>>) : 264 Vac with a clearance time of 0.2 seconds
- ) Under frequency limit ( F<) : 47.0 Hz Vac with a clearance time of 0.5 seconds
- ) Over frequency limit ( F>) : 51.0 Hz Vac with a clearance time of 0.5 seconds
- ) Under frequency limit ( F>>) : 47.0 Hz Vac with a clearance time of 0.5 seconds
- ) Over frequency limit ( F<<) : 51.0 Hz Vac with a clearance time of 0.5 seconds

The automatic disconnection device is an integral part of the inverters listed above and the protection settings applicable for Sweden can be accomplished by selecting the Country-Code: "EN50438" (rotary switches in position: 2-5) and adjusting the above deviations as described inside the installation manual of the inverters, which can be downloaded at Power-One site: <http://it.power-one.com/renewable-energy>

Terranuova Bracciolini; September 20th / 2013.

**Dr. Marco Trova**



Director of Technical Sales  
Renewable Energy

Power One Italy S.p.A.- Via S. Giorgio, 642

52028 - Terranuova B.ni (AR) – ITALY

e-mail: [marco.trova@power-one.com](mailto:marco.trova@power-one.com)

web: [www.power-one.com](http://www.power-one.com)

**Power-One Italy S.p.a.**

Via San Giorgio, 642 – 52028 Terranuova Bracciolini – Arezzo – Italy

Web Site: [www.power-one.com](http://www.power-one.com)