





1/2 Ref. TRIO-8.5(7.5)(5.8)-TL-OUTD-(S)-400 (Fimer_VDE-AR-N 4105 Form E6_EN)

VDE-AR-N 4105:2018-11 Certificate of conformity for the NS protection integrated in the inverters	
Manufacturer	Fimer S.p.A. Via Tortona, 25 20144 Milano (MI) – Italy
Type of NS protection	Relay contacts
Integrated NS protection assigned to power generation unit type	Relay
Network connection rule	VDE-AR-N 4105:2018-11 “Generators connected to the low-voltage distribution network” Technical requirements for connection to and parallel operation with low-voltage distribution network
The network and system protection integrated in the power generation units listed in Table 1 meets the requirements of VDE-AR-N 4105:2018-11.	
The setting values and disconnection times (total break times) of the protective functions are as follows: Voltage drop protection $U <$: 184 V \leq 3000 ms Rise-in-voltage protection $U > (*)$: 253 V $<$ 200 ms Rise-in-voltage protection $U >>$: 287,5 V \leq 100 ms Frequency decrease protection $f <$: 47,5 Hz \leq 100 ms Frequency increase protection $f >$: 51,5 Hz \leq 100 ms (*) moving 10-minute average protection according EN 50160 - All requirements of VDE-AR-N 4105:2018-11 are fulfilled and have been confirmed via type tests conducted in Fimer S.p.A. - The conformity is ensured for all products with model name and firmware version as listed in Table 1.	
Terranuova Bracciolini, 19 January 2021	
 Alessandro Rossi (Testing & Laboratory Manager)	 Paolo Casini (Chief Technical Officer)
This certificate of conformity of two pages shall not be used in parts.	
Fimer S.p.A. Via Tortona, 25 – 20144 Milano (MI) – Italy	

FIMER S.p.A.

HQ & Manufacturing Unit: Via J.F. Kennedy – 20871 Vimercate (MB) – Italy
Manufacturing Unit: Via San Giorgio 642 – 52028 Terranuova B.ni (AR) – Italy
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Inverter models	Maximum active power P_{Emax}	Maximum apparent power S_{Emax}	AC rated voltage	Rated current (AC) I_r	Initial short-circuit AC current	Fulfil VDE-AR-N 4105:2018-11 requirements from firmware version
TRIO-8.5-TL-OUTD-(S)-400	8500 W	8500 VA	400 V	14,5 A	14,5 A	Not less than 1930F Standard selection: GERMANY (VDE 4105:2018-11)
TRIO-7.5-TL-OUTD-(S)-400	7500 W	7500 VA	400 V	12,5 A	12,5 A	Not less than 1930F Standard selection: GERMANY (VDE 4105:2018-11)
TRIO-5.8-TL-OUTD-(S)-400	5800 W	5800 VA	400 V	10 A	10 A	Not less than 1930F Standard selection: GERMANY (VDE 4105:2018-11)

TABLE 1. Fimer S.p.A. Grid Tied Solar Inverter in compliance with VDE-AR-N 4105:2018-11

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