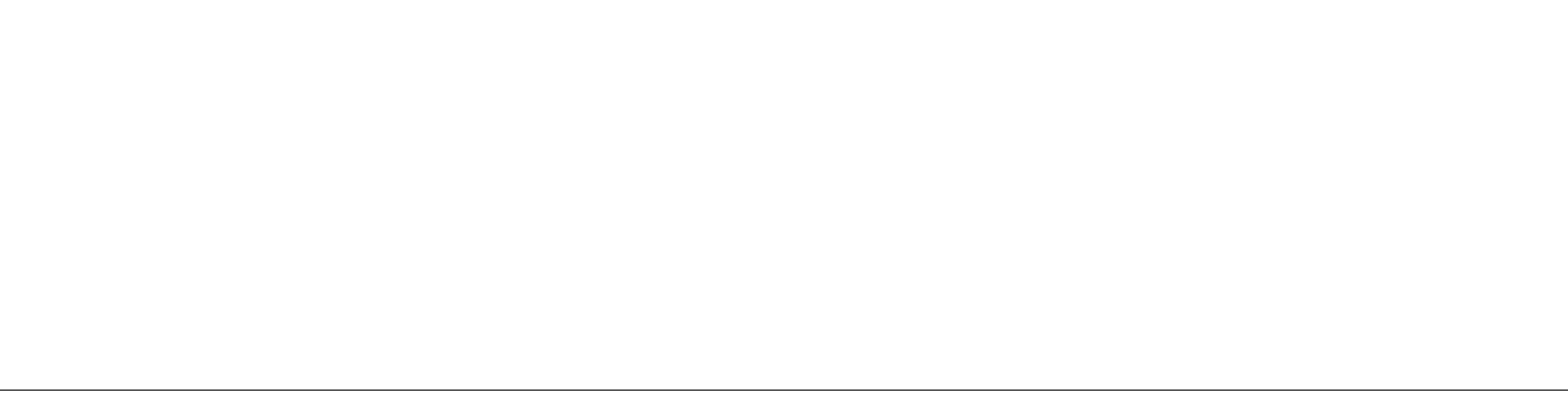
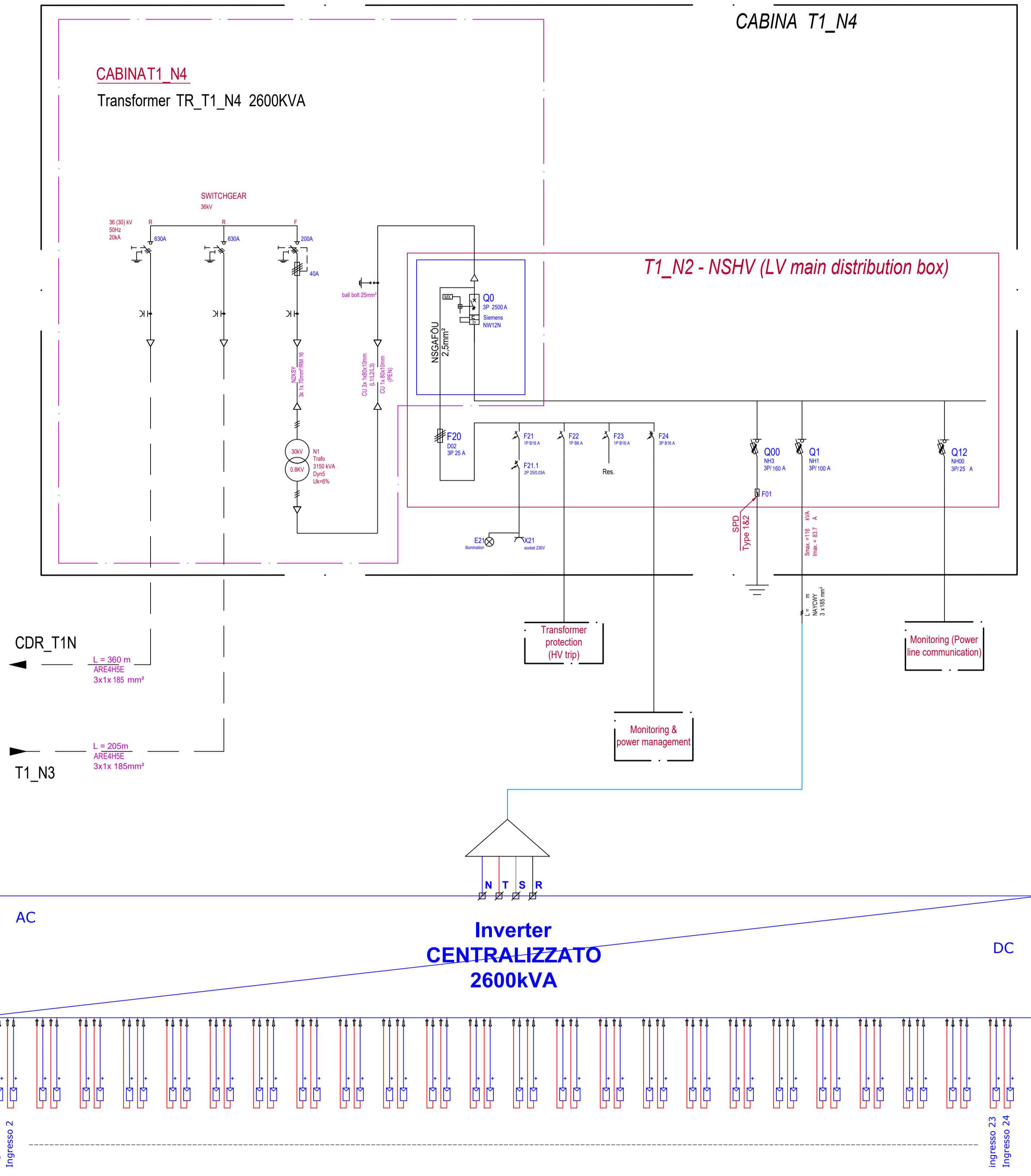


# SCHEMA TIPICO DI CONNESSIONE LATO AC - BT/MT "SUBCAMPO T1\_N4"



## Inverter DC/AC 2600kVA

Advanced liquid + forced air cooling system

DC cabinet with compact design. Up to 427 kVA/m<sup>2</sup> (12.08 kVA/ft<sup>2</sup>)

Up to 2600 kVA at 1500 V

Field-proven and reliable CCU

AC cabinet. Modular design

Maximum efficiency

	Gamesa Electric PV 2500	Gamesa Electric PV 2250
<b>Input (DC)</b>		
Recommended PV-Power	3250 kWp	3000 kWp
DC Voltage Range	900-1500 V	900-1500 V
DC Voltage Range MPPT	900-1300 V	900-1300 V
DC Maximum Voltage	1500 V	1500 V
Max. DC Current @25°C (77°F)	2936 A	2936 A
Max. DC Current @40°C (104°F)	2880 A	2880 A
Max. DC Current @50°C (122°F)	2823 A	2800 A
Max. DC Short-Circuit Current	3600 A	3600 A
Number of DC Ports	Up to 24	Up to 24
<b>Output (AC)</b>		
Number of Phases	Three-phase without neutral point	Three-phase without neutral point
Nominal AC Power @25°C (77°F)	2600 kVA	2500 kVA
Nominal AC Power @40°C (104°F)	2550 kVA	2350 kVA
Nominal AC Power @50°C (122°F)	2500 kVA	2250 kVA
Maximum AC Current @25°C (77°F)	660 Arms	660 Arms
Nominal AC Voltage	±1-10%	±1-10%
Voltage Allowance Range (2)	±1-10%	±1-10%
Frequency Range	47.5-53.57-63 Hz	47.5-53.57-63 Hz
THD of AC Current	<3% @50	<3% @50
Power Factor Range	1/0 (leading to 0 lagging)	1/0 (leading to 0 lagging)
<b>Performance</b>		
Max. Efficiency	99.0%	99.1%
Euro-Efficiency	98.8%	98.8%
Stand-by Power Consumption	<200 W	<200 W
Energy Production from	0.5% Pn approx.	0.5% Pn approx.
<b>General Data</b>		
Temperature Range - Operation	-20°C/+50°C (80°C/-4°F/+122°F (140°F))	-20°C/+50°C (80°C/-4°F/+122°F (140°F))
Temperature Range - Storage	-20°C/+70°C (-4°F/+158°F)	-20°C/+70°C (-4°F/+158°F)
Maximum Altitude	<2000 m (±6561 ft) without derating	<2000 m (±6561 ft) without derating
Cooling System	Liquid + forced air cooling	Liquid + forced air cooling
Relative Humidity	95% without condensation	95% without condensation
Protection Class	IP 20	IP 20
Dimensions (W/H/D)	2800 x 2238 x 875 mm (110.2 x 87.8 x 38.4 in)	2800 x 2238 x 875 mm (110.2 x 87.8 x 38.4 in)
Power Density @25°C (77°F)	427 kVA/m <sup>2</sup> (12.08 kVA/ft <sup>2</sup> )	410 kVA/m <sup>2</sup> (11.80 kVA/ft <sup>2</sup> )
Power Density @50°C (122°F)	410 kVA/m <sup>2</sup> (11.80 kVA/ft <sup>2</sup> )	370 kVA/m <sup>2</sup> (10.47 kVA/ft <sup>2</sup> )
Weight	2400 kg (5291 lbs)	2400 kg (5291 lbs)
<b>Features</b>		
Communications	Modbus TCP-IP, Ethernet, RS-485, CAN Bus, I/O, Interbus	Modbus TCP-IP, Ethernet, RS-485, CAN Bus, I/O, Interbus
Reverse Polarity Detection	Included	Included
DC Overvoltage Protection Class II	Included	Included
AC Overvoltage Protection Class I + II	Optional	Optional
AC Overvoltage Protection Class II	Included	Included
AC Overvoltage Protection Class I + II	Optional	Optional
AC and DC Short-Circuit Protections	Included	Included
Over-temperature Protections	Included	Included
Ground-Fault & Insulation Monitoring	Included	Included
DC Side Disconnection	Motorized DC section breaker (on-load)	Motorized DC section breaker (on-load)
AC Side Disconnection	Motorized AC circuit breaker	Motorized AC circuit breaker

**Gamesa Electric PV 2250/2500 Photovoltaic Inverter**

- Maximum energy production**: Market leading energy efficiency of 99.1% (IEC 61683)
- Reliability**: Smart liquid & air cooling system that allows critical components to work at temperature level far below the limit, ensuring product life span
- Grid compliance**: An extensive list of grid-code compliances, including the most demanding ones, such as Germany, Mexico, South Africa and more

**Up to 50°C (122°F) and 2000 m (6561 ft) with no power derating**

**Enhanced MPPT algorithm to achieve outstanding MPPT efficiency values at static and dynamic states**

**"Easy to support" concept, with heavy components in removable trays, reducing maintenance and repair time (MTTR)**

**Full operating range reactive power supply for both day and night operation through the so-called Statcom mode**

**Non-characteristic harmonics cancellation over distorted and unbalanced grids**

## Caratteristiche tecniche tipiche apparecchiature AC bT-MT Trasformatore bT/MT 30kV - 3150kVA

### Trihal - Cast Resin Transformer Up to 3150 kVA - 36kV - C4 E4 F1 5pC\*\* - BIL 1

Power kVA	160	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150
Primary voltage	30 kV												
Secondary voltage	600V between phases (at no load)												
HV insulation level	36 kV BIL 1 (145 / 70 kV)												
HV tapping range	±1.2.5% and/or ±1.5%												
Vector group	Dyn T1, Dyn S, Dyn 1 (other vector groups upon request)												
No-load losses (w)	414	538	641	776	934	1139	1346	1604	1863	2277	2691	3209	3933
Load losses at 120°C (w)	2860	3740	4264	4950	6193	7810	8800	9900	12100	14300	17600	20900	24200
Impedance voltage (%)	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
Acoustic Level dB(A):													
- power L <sub>10k</sub>	53	56	58	59	60	61	63	64	66	67	69	70	73
- pressure L <sub>1k</sub> (1m)	40	43	45	46	47	47	49	49	50	52	53	54	55

### Dimensions\* and weights

Without enclosure (IP00)	With IP31 metal enclosure
<b>Rated power (kVA)</b>	
<b>Without enclosure IP00</b>	
Dimensions (mm)	
A	1470 1440 1440 1490 1470 1510 1590 1660 1720 1930 1970 2050 2290
B	950 950 950 950 950 950 950 950 950 950 950 1270 1270
C	1710 1710 1730 1870 1890 1930 2080 2100 2270 2180 2370 2450 2530
D	520 520 670 670 670 670 670 670 820 820 820 820/1070 820/1070
Total weight (kg)	1450 1450 1500 1720 1820 1980 2410 2800 3320 4110 4650 5510 7220
<b>With IP31 metal enclosure</b>	
Dimensions (mm)	
A1	2080 2090 2090 2090 2090 2090 2090 2340 2340 2340 2340 2440 2700
B1	1180 1180 1180 1180 1180 1180 1180 1280 1280 1280 1320 1320 1400
C1	2330 2330 2330 2330 2330 2330 2330 2700 2700 2700 2800 2700 2800
Weight enclosure (kg)	220 220 220 220 220 220 270 270 270 270 280 280 320
Total weight (kg)	1670 1670 1720 1940 2040 2200 2630 3070 3590 4380 4930 5790 7540

\* Dimensions and weights without enclosure housing (IP00 & IP31)  
 Dimensions and weights are for guidance only and are NON CONTRACTUAL. Only the definitive drawings following from the order will commit us contractually.  
 For other voltages, impedance voltages and dual-voltages, weights and dimensions are different (consult us).  
 \*\* Refer Page 4 Overview for more detail!

**REGIONE PUGLIA**

**COMUNE di FOGGIA**

**PROVINCIA di FOGGIA**

**COMUNE di MANFREDONIA**

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**Opera**  
 Progetto definitivo per la realizzazione dell'impianto agro-fotovoltaico "TAVOLIERE 1" integrato con potenza di picco pari a 43,762MWp e potenza ai fini della connessione pari a 34MW sito nel comune di FOGGIA, alle località "C. Savano - C.se De Martino" nonché delle opere connesse e delle infrastrutture indispensabili alla costruzione e all'esercizio dell'impianto nel Comune di Manfredonia (FG).

**Opere**  
 Folder: UR76F98\_Elaborati grafici del progetto definitivo  
 None Elaborate: UR76F98\_ElaboratoGrafico\_09.pdf  
 Descrittive Elaborate: Grafico a blocchi della distribuzione generale lato AC

**Sez. D**

**00** Ottobre 2021 Emissione progetto definitivo Ing. Merino Ing. Mezzina OPDE TAVOLIERE 1 s.r.l.

**Rev.** Data Oggetto della revisione Elaborazione Verifica Approvazione

**Formato:** A1 **Scala:** / **Codice Pratica:** UR76F98 **Codice Pratica TERNA:** 201900200