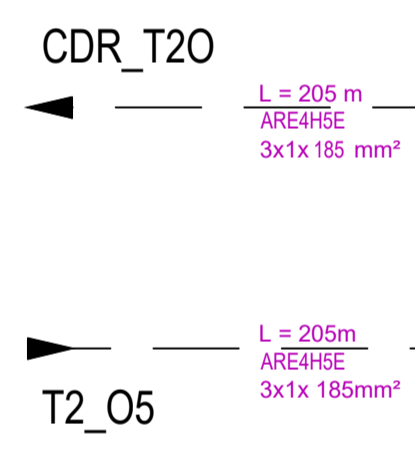
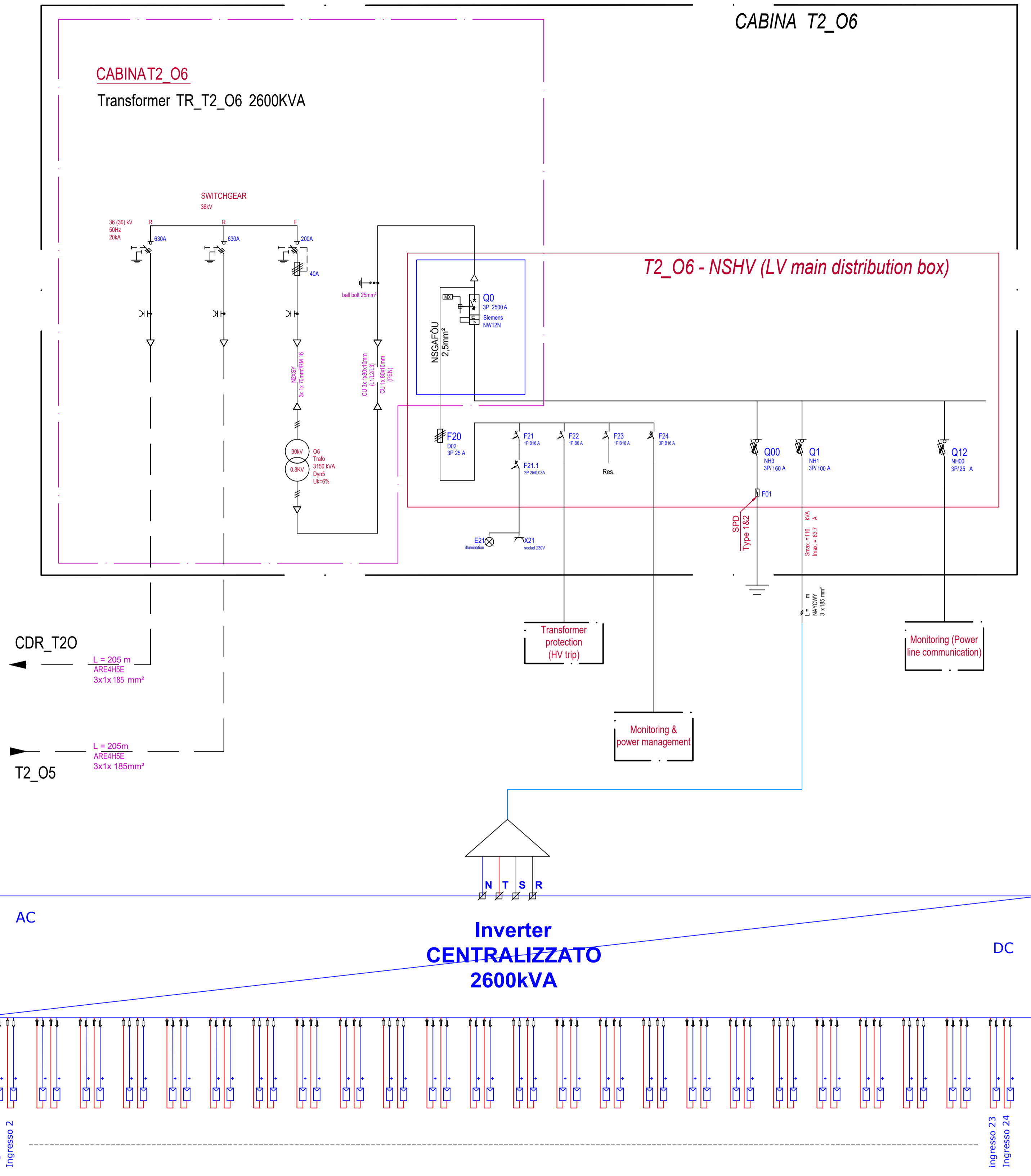
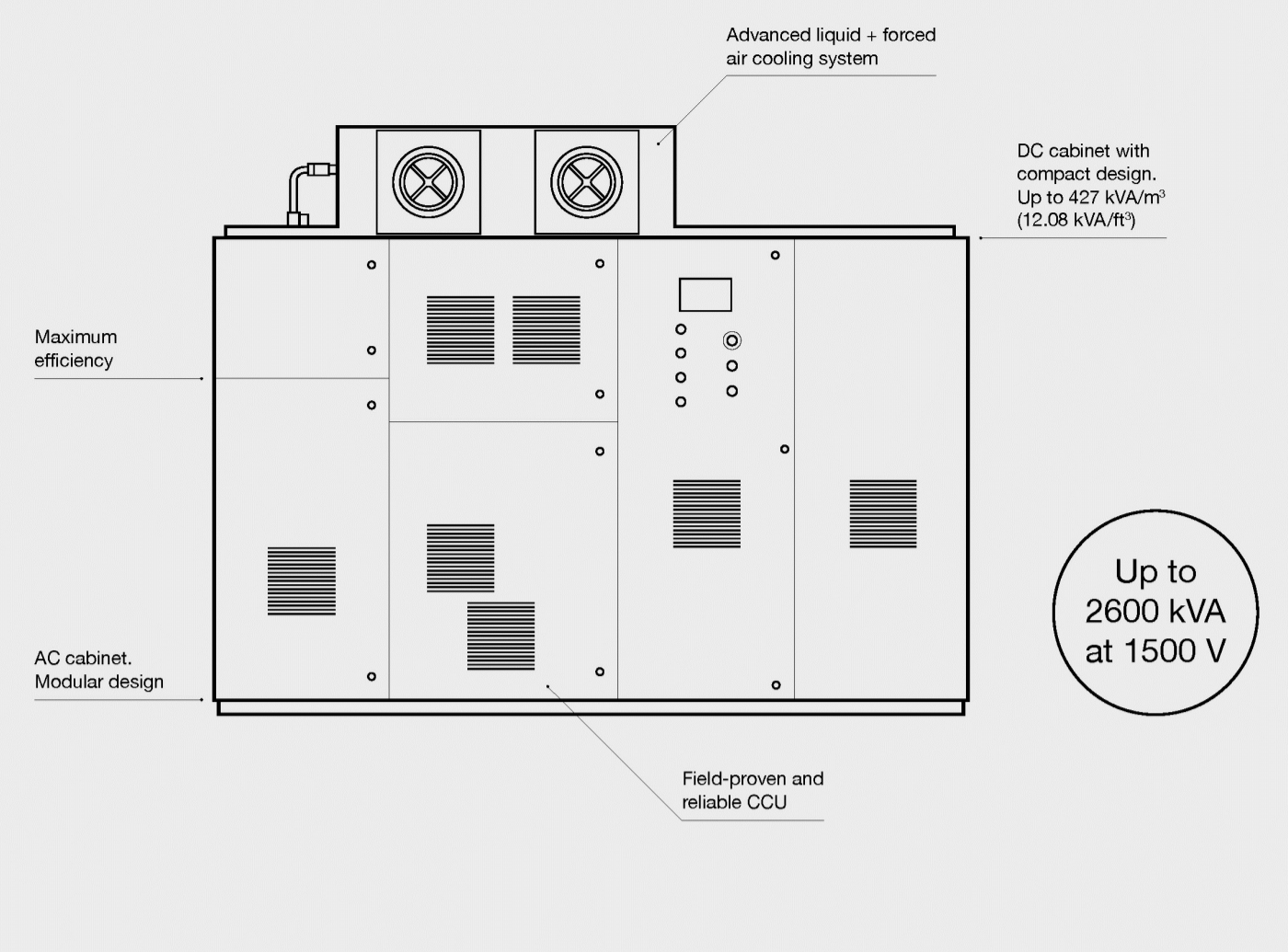


SCHEMA TIPICO DI CONNESSIONE LATO AC - BT/MT "SUBCAMPO T2_04"



Inverter DC/AC 2600kVA



Gamesa Electric PV 2250/2500 Photovoltaic Inverter

- Maximum energy production:** Market leading energy efficiency of 99.1% (IEC 61683). 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.
- Reliability:** Smart liquid & air cooling system that allows critical components to work at temperature level far below the limit, ensuring product life span. Tier I suppliers for critical components with best-in-class MTBF values. "Easy to support" concept, with heavy components in removable trays, reducing maintenance and repair time (MTTR).
- Grid compliance:** An extensive list of grid-code compliances, including the most demanding ones, such as Germany, Mexico, South Africa and more. 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.

	Gamesa Electric PV 2500	Gamesa Electric PV 2250
Input (DC)		
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
Output (AC)		
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 (S)	±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)
Performance		
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.
General Data		
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/m² (12.08 kVA/ft²)	410 kVA/m² (11.80 kVA/ft²)
Power Density @50°C (122°F)	410 kVA/m² (11.80 kVA/ft²)	370 kVA/m² (10.47 kVA/ft²)
Weight	2400 kg (5291 lbs)	2400 kg (5291 lbs)
Features		
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
Standards/Directives		
IEC 61000-6-2	Optional	DC Ground Connection Kit
IEC 62109-1	Included	Low Temperature Kit (<-20°C / <-4°F)
IEC 62109-2	Included	Touch Display (HMI - Human Machine Interface)
EN 55011	Included	Current Monitoring of DC Inputs
IEC 61683	Included	
IEEE 519	Included	
IEC 62116	Included	
IEEE 1547	Included	
UL 1741: 2011	Included	
C22.2 No. 107.1-01-2001	Included	

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**

Main electrical characteristics

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	38 kV BIL 1 (145 / 70 kV)												
HV tapping range	±1.2.5% and/or ±1.5%												
Vector group	Dyn 11, Dyn 5, 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 _{10A}	53	56	58	59	60	61	63	64	66	67	69	70	73
- pressure L _{10A} (1m)	40	43	45	46	47	47	49	49	50	52	53	54	55

Dimensions* and weights

Without enclosure (IP00)

Rated power (kVA)	160	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150
Without enclosure IP00													
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	820	820	820	820	820	1070	1070
Total weight (kg)													
	1450	1450	1500	1720	1820	1980	2410	2800	3320	4110	4650	6510	7220
With IP31 metal enclosure													
Dimensions (mm)													
A1	2090	2090	2090	2090	2090	2090	2340	2340	2340	2340	2440	2700	2700
B1	1180	1180	1180	1180	1180	1180	1280	1280	1280	1280	1320	1400	1400
C1	2330	2330	2330	2330	2330	2330	2700	2700	2700	2700	2800	2700	2800
Weight enclosure (kg)													
	220	220	220	220	220	220	270	270	270	270	280	320	320
Total weight (kg)													
	1670	1670	1720	1940	2040	2200	2630	3070	3590	4380	4920	6790	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!

Proprietari: REGIONE PUGLIA, PROVINCIA di FOGGIA, COMUNE di FOGGIA, COMUNE di MANFREDONIA

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Progetto definitivo per la realizzazione dell'impianto agro-fotovoltaico "TAVOLIERE 2" integrato con potenza di picco pari a 37,362MWp e potenza ai fini della connessione pari a 30MW sito nel comune di FOGGIA, alle località "Posta de Piede - Vigna Croce" nonché delle opere connesse e delle infrastrutture indispensabili alla costruzione e all'esercizio dell'impianto nel Comune di Manfredonia (FG)

Folder:	LE6F5X5_Elaborati grafici del progetto definitivo	Sez. D			
Nome Elaborato:	LE6F5X5_ElaboratoGrafico_09.pdf	Codice Elaborato: D09			
Descrizione Elaborato:	Grafo a blocchi della distribuzione generale lato AT				
00	Novembre 2021	Emissione progetto definitivo	P.I. Spada	Ing. Mezzina	OPDE TAVOLIERE 2 s.r.l.
Rev.	Data	Oggetto della revisione	Elaborazione	Verifica	Approvazione
Formato:	A1	Scala:	/	Codice Pratica	LE6F5X5
				Codice Pratica	TERNIA
					201900197