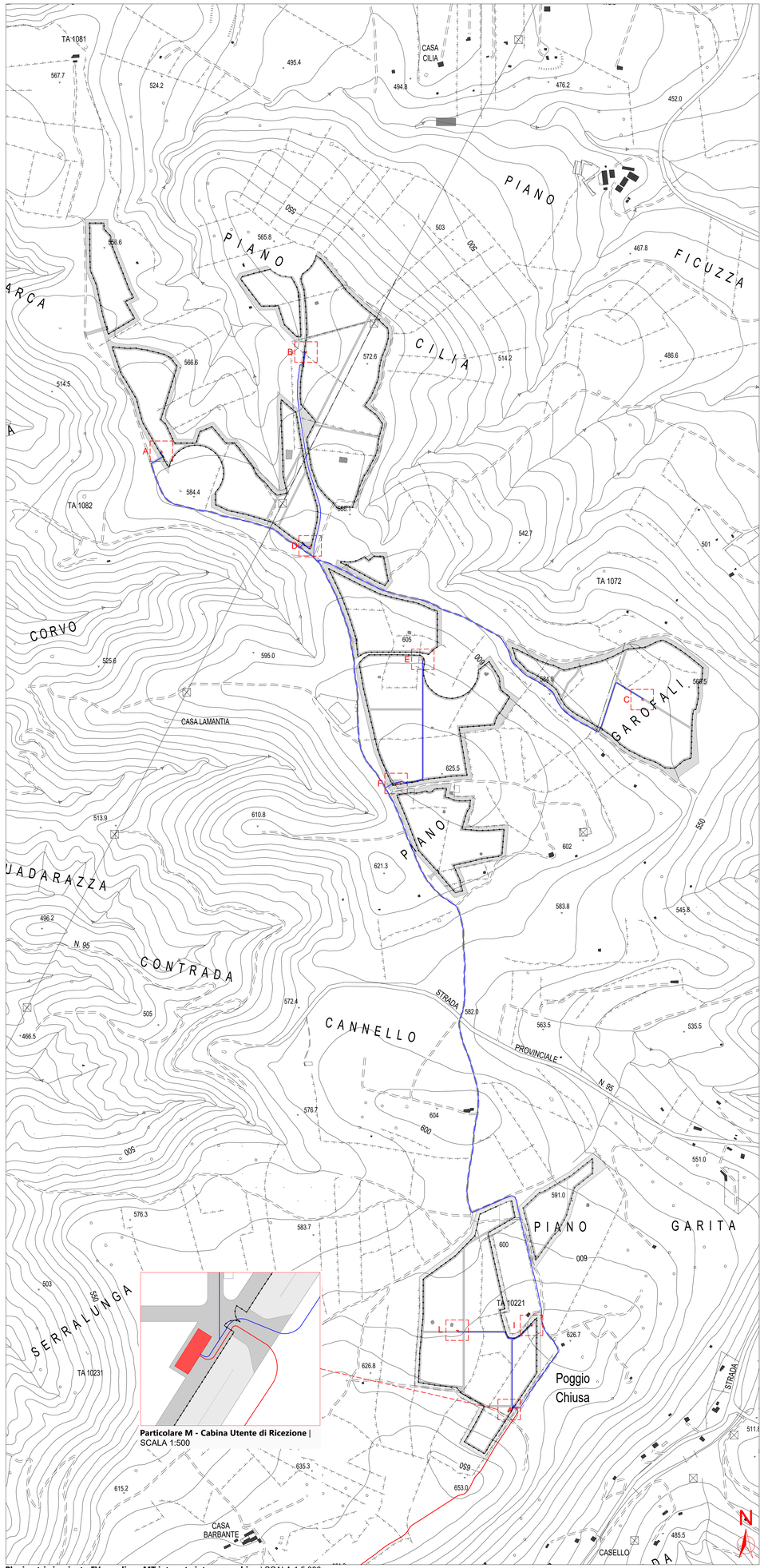
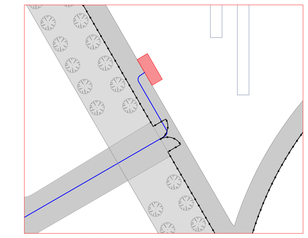
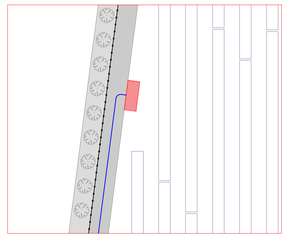


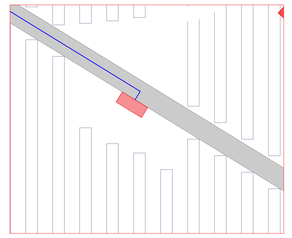
Planimetria impianto FV con linee MT interrate interne e cabine | SCALA 1:5.000



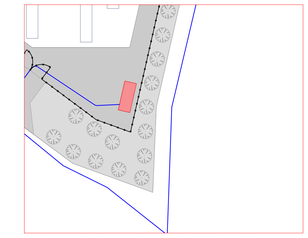
Particolare A - Inverter Campo 1 | SCALA 1:500



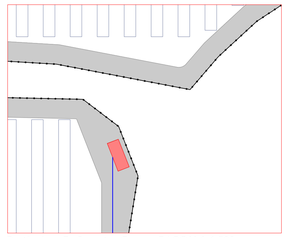
Particolare B - Inverter Campo 2 | SCALA 1:500



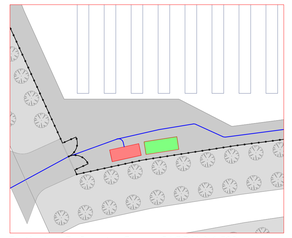
Particolare C - Inverter Campo 3 | SCALA 1:500



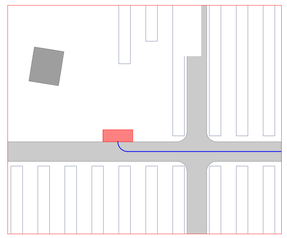
Particolare D - Inverter Campo 4 | SCALA 1:500



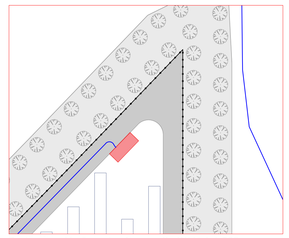
Particolare E - Inverter Campo 5 | SCALA 1:500



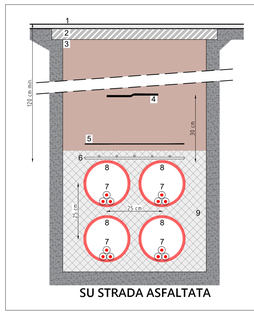
Particolare F - Inverter Campo 6 | SCALA 1:500

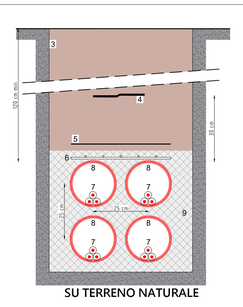


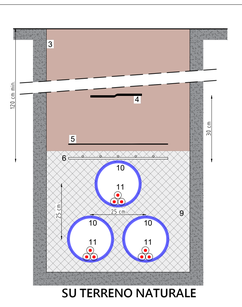
Particolare G - Inverter Campo 7 | SCALA 1:500



Particolare H - Inverter Campo 8 | SCALA 1:500







SEZIONE TIPO | Linea MT

1 - Manto d'usura (3cm)
2 - Binder (7cm)
3 - Materiale di scavo o altro materiale idoneo (100cm)
4 - Nastro monitore
5 - Rete in PVC
6 - Rete in acciaio elettrosaldata
7 - Cavo in Al 3x1x300 mm² ARE4H5EX 20,8/36 kV
8 - Tubo PEAD ⌀200
9 - CLS Rck 200 kg/cm² - Cemento R=325
10 - Tubo PEAD ⌀160
11 - Cavo in Al 3x1x185 mm² ARE4H5EX 20,8/36 kV

Sezione tipo Linea MT interrata di connessione alla S.E. di Vizzini Max n. 4 cavidotti

Sezione tipo Linea MT interrata di colleg. tra Inverter e Cab. Utente Max n. 3 cavidotti

Stralcio I.G.M. con linea MT di connessione | SCALA 1:25.000

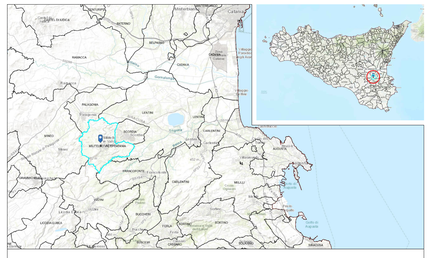
Scheda tecnica Inverter
SMA MV POWER STATION 4400-S2
SMA MV POWER STATION 2660-S2

Technical Data	MVPS 2660-S2-U5	MV Power Station 4400-S2
Input (DC)		
Available inverters	1 x SC 2660 UP-U5 / 1 x SCS 2300 UPXT-U5	1 x SC 4400 UP
Max. input voltage	1500 V	1500 V
Number of DC inputs	dependent on the selected inverter	
Integrated zone monitoring	○	
Available DC fuse sizes (per input)	200 A, 250 A, 315 A, 350 A, 400 A, 450 A, 500 A	
Output (AC) on the medium-voltage side		
Rated power with SC UP-U5 (at -25 °C to + 35 °C / 40 °C optional 50 °C)[1]	2667 kVA / 2400 kVA	4400 kVA / 3960 kVA
Charging power with SCS UPXT-U5 (at -25 °C to + 25 °C / 40 °C optional 50 °C)[1]	2390 kVA / 2000 kVA	–
Discharging power with SCS UPXT-U5 (at -25 °C to + 25 °C / 40 °C optional 50 °C)[1]	2665 kVA / 2270 kVA	–
Typical nominal AC voltages	12 kV to 34.5 kV	22 kV to 33 kV
AC power frequency	50 Hz / 60 Hz	
Transformer vector group Dy11 / YNd11 / YNy0	● / ○ / ○	
Transformer cooling methods	KNAN[2]	
Transformer efficiency: Standard / Eco Design 1 / Eco Design 2	● / ○ / ○	● / ○ / ○
Max. total harmonic distortion	< 3%	
Reactive power feed-in (up to 60% of nominal power)	○	
Power factor at rated power / displacement power factor adjustable	1 / 0.8 overexcited to 0.8 underexcited	
Inverter efficiency		
Max. efficiency[3] / European efficiency[3] / CEC weighted efficiency[4]	98.7% / 98.6% / 98.5%	98.8% / 98.7% / 98.5%
Protective devices		
Input-side disconnection point	DC load-break switch	
Output-side disconnection point	Medium-voltage vacuum circuit breaker	
DC overvoltage protection	Surge arrester type I	
Galvanic isolation	●	
Internal arc classification medium-voltage control room (according to IEC 62271-202)	IAC A 20 kA 1 s	
General Data		
Dimensions equal to 20-foot HC shipping container (W / H / D)	6058 mm / 2896 mm / 2438 mm	
Weight	< 18 t	
Self-consumption (max. / partial load / average)[1]	< 8.1 kW / < 1.8 kW / < 2.0 kW	
Self-consumption (stand-by)[1]	< 370 W	
Degree of protection according to IEC 60529	Control rooms IP23D, inverter electronics IP54	
Environment: standard / harsh	● / ○	
Degree of protection according to IEC 60721-3-4 (4C1, 4S2 / 4C2, 4S4)	● / ○	
Maximum permissible value for relative humidity	95% (for 2 months/year)	
Max. operating altitude above mean sea level 1000 m / 2000 m	● / ○	
Fresh air consumption of inverter	6500 m³/h	
Features		
DC terminal	Terminal lug	
AC connection	Outer-cone single plug	
Tap changer for MV-transformer: without / with	● / ○	
Shield winding for MV-Transformer: without / with	● / ○	
Station enclosure color	RAL 7004	
Transformer for external loads: without / 10 / 20 / 30 / 40 / 50 / 60 kVA	● / ○ / ○ / ○ / ○ / ○ / ○	
Medium-voltage switchgear: without / 3 feeders	○	
2 cable feeders with load-break switch, 1 transformer feeder with circuit breaker, internal arc classification IAC A FL 20 kA 1 s according to IEC 62271-200	● / ○	
Short circuit rating medium-voltage switchgear (25 kA 1 s)	○	
Integrated oil containment: without / with	● / ○	
Industry standards (for other standards see the inverter datasheet)	IEC 60076, IEC 62271-200, IEC 62271-202, EN50588-1 IEEE C37.100.1, IEEE C57.12, C37.20.9, UL 1741 listed, CSC Certificate, UL 347	
● Standard features ○ Optional features – Not available		
Type designation	MVPS-2060-S2-U5	MVPS-4400-S2

LEGENDA

- Fascia Arborea perimetrale (L min. 10m)
- Viabilità interna in progetto in terra battuta (L 4m)
- Linea AT aerea esistente e fascia di rispetto (L 30m)
- Linea MT aerea esistente e fascia di rispetto (L 13m)
- Fabbricato esistente e relativa fascia di rispetto (L 10m)
- Vasca di raccolta acque esistente e fascia di rispetto (L10m)
- Recinzione metallica perimetrale
- Linea MT interrata di colleg. tra Cab. Inverter e Cab. Utente di Ricezione
- Linea MT interrata di connessione tra Cab. Utente di Ricezione e Nuova S.E. di Vizzini
- Cabina Utente di Ricezione
- Inverter SMA MV Power Station 4400-S2
- Cabina Servizi Ausiliari

PER I PARTICOLARI DELLE CABINE ELETTRICHE SI RIMANDA AD ELAB. 8975-7570-DP-035



COORDINATE AREE IMPIANTO DI PRODUZIONE:
37°15'48"N - 14°46'22" E (Centro ultima area a Sud)

REGIONE SICILIA
Provincia di Catania
COMUNI DI
MILITELLO IN VAL DI CATANIA ,VIZZINI E MINEO

PROGETTO

PARCO FOTOVOLTAICO DI MILITELLO

PROGETTO DEFINITIVO

COMMITTENTE

ERG Solar Holding — ERG EVOLVING ENERGIES

SOCIETA' DI PROGETTAZIONE

SERING ITALIA

Ordine degli Ingegneri della Provincia di Catania — Dott. Ing. Antonino Roberto Psaila N. 844
Ing. Antonino Psaila
Progettazione Opere Elettriche

Ordine degli Architetti P.P.C. della Provincia di Catania — Dott. Arch. Cintolo Roberto N. 1041
Ing. Roberto Cintolo
Progettazione Opere Civili

OGGETTO DELL'ELABORATO

COROGRAFIA GENERALE CON PERCORSO DEI CAVI E CABINE

REV.	DATA	ATTIVITA'	REDATTO	VERIFICATO	APROVATO

CODICE PROGETTISTA	DATA	SCALA	FORMATO	FOGLIO	DOCUMENTO
	14/02/2023	--	A0	1	8975-7570-DP-039