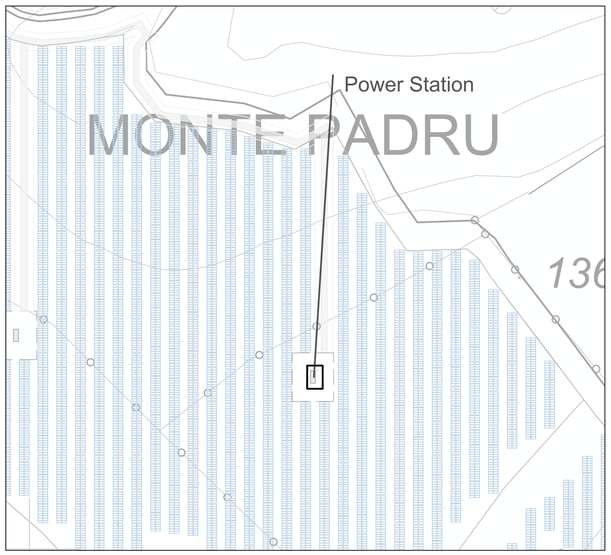
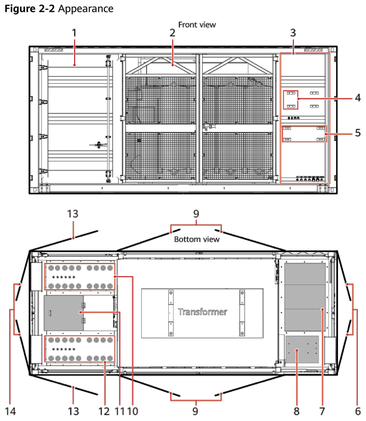


INQUADRAMENTO IN PIANTA - POWER STATION

2.2 Appearance

Figure 2-2 Appearance



(1) Low-voltage room (LV)	(2) Transformer room (TR)	(3) Medium-voltage room (MV)
(4) Position for the distributed power system (uninterruptible power supply, UPS)	(5) Position for the smart array controller (SACU)	(6) Double-swing door of the MV room
(7) Ring main unit	(8) Auxiliary transformer	(9) Double-swing screen door for the transformer room
(10) AC input cable hole (LV PANEL B)	(11) Manhole entrance	(12) AC input cable hole (LV PANEL A)
(13) Single-swing door for the LV room	(14) Double-swing door for the LV room	

NOTE

The STS-3000K-H1 does not have LV PANEL B configurations.

Figure 2-3 Container dimensions

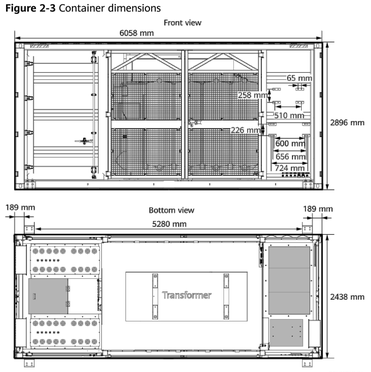
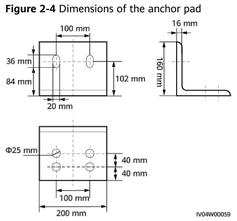
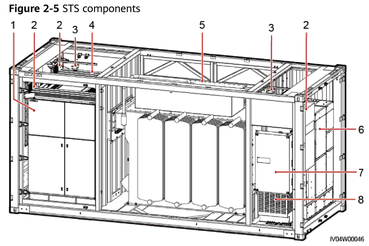


Figure 2-4 Dimensions of the anchor pad



2.4.1 STS

Figure 2-5 STS components



(1) LV PANEL A	(2) Heat exchanger	(3) Smoke sensor
(4) LV PANEL B	(5) Transformer	(6) Ring main unit
(7) Power distribution box (PDB)	(8) Auxiliary transformer	

2.4.2 LV Room

This section shows only the components. The actual product appearance prevails.

2.4.2.1 STS-3000K-H1 Single-sided Cabinet

The LV room is a single-side cabinet structure. To perform any operation, you only need to open the door of the LV cabinet without entering the STS.

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COMUNE DI VALLERMOSA

OGGETTO
REALIZZAZIONE DI IMPIANTO FOTOVOLTAICO A TERRA 12,84 MW - TIPO A INSEGUIMENTO MONOASSIALE "VALLERMOSA 2"

COMMITTENTE
ENERGYVALLERMOSA2 S.R.L.
Via Simplicio Spano 10 - 07026 Olbia (SS)

PROGETTO DEFINITIVO

ELABORATO
DETTAGLI COSTRUTTIVI - POWER STATION

NUMERO ELABORATO
AU 10
SCALA: 1:1000
DATA: LUGLIO 2023

REV.	DATA	DESCRIZIONE	REDATTO	CONTROLLATO	APPROVATO
3		Terza emissione			
2		Seconda emissione			
1		Prima emissione	Arch. Marco Cocco Norfo	Arch. Chiara Martis	Ing. Stefano Floris

CODICE COMMESSA	NOME FILE	FASE PROGETTUALE	CATEGORIA	REV.
		PRE	IMPIANTI	00

STUDIO ALCHEMIST:
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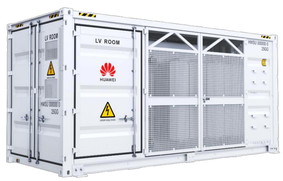
Arch. Luigi Mereu
Arch. Federico Serventi
Arch. Marco Cocco Norfo
Geol. Mario Strinna

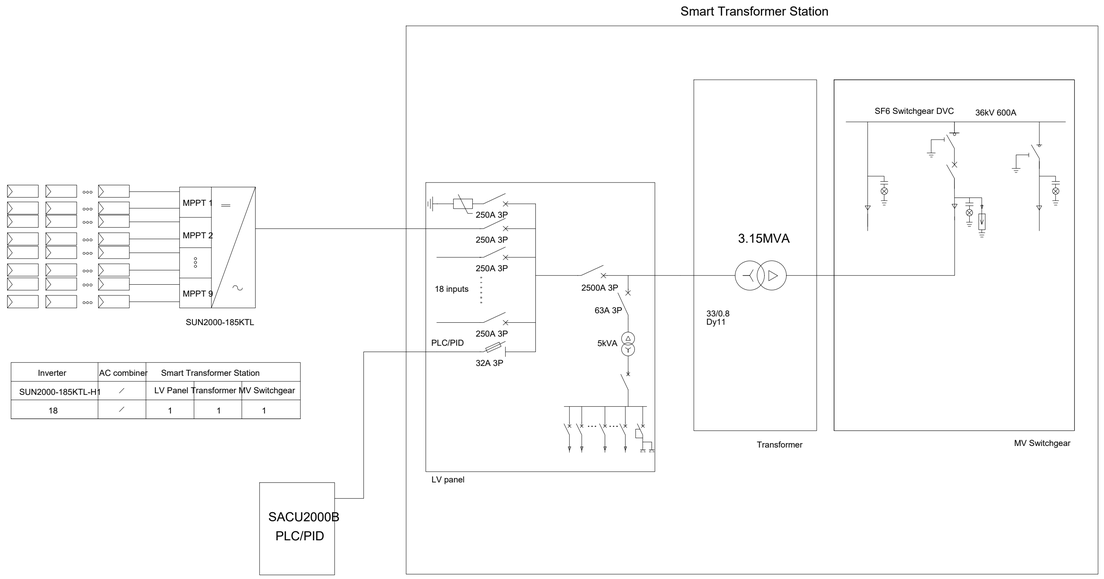
PROGETTISTA - TIMBRO E FIRMA

ORDINE INGEGNERI PROVINCIA DI CAGLIARI
N. 5777 Dott. Ing. STEFANO FLORIS

PROGETTISTA - TIMBRO E FIRMA



Input	
Available Inverters	SUN2000-200KTL / SUN2000-215KTL
AC Power	3,250 kVA @40°C / 2,960 kVA @50°C [1]
Max. Inverters Quantity	16
Rated Input Voltage	800 V
Max. Input Current at Nominal Voltage	2482.7 A
LV Main Switches	ACB (2900 A / 800 V / 3P, 1*1 pcs), MCCB (250 A / 800 V / 3P, 1*16 pcs)
Output	
Rated Output Voltage	33 kV
Frequency	50 Hz
Transformer Type	Oil-immersed, Conservator Type
Tappings	± 2 x 2.5%
Transformer Oil Type	Mineral Oil (PCB Free)
Transformer Vector Group	Dy11
Minimum Peak Efficiency Index	99.465%, in accordance with EN 50588-1
Transformer Load Losses	30.1 kW
Transformer No-load Losses	2.51 kW
Impedance	7% (0 ~ +10%) @3,250 kVA
MV Switchgear Type	SF6 Gas Insulated, 3 Units
Auxiliary Transformer	5 kVA, Dyn11, 0.8/0.4 kV
Protection	
Transformer Monitoring & Protection	Oil level, oil temperature, oil pressure and buchholz
Protection Degree of MV & LV Room	IP 54
Internal Arcing Fault MV Switchgear	IAC A 20 kA 1s
MV Surge Arrester for MV Circuit Breaker	Equipped
LV Overvoltage Protection	Type I+II
General	
Dimensions (W x H x D)	6,058 x 2,896 x 2,438 mm (20' HC Container)
Weight	< 15 t (33,069 lb.)
Operating Temperature Range	-25℃ ~ 60℃[2] (-13°F ~ 140°F)
Relative Humidity	0% ~ 95%



Inverter	AC combiner	Smart Transformer Station		
SUN2000-185KTL-H1	/	LV Panel	Transformer	MV Switchgear
18	/	1	1	1

X		HUAWEI TECHNOLOGIES Co.LTD	TITLE: STS-3000K-H1 Standard Solution SLD	
XX				
XXX	ANG	DRAW Fangxi DATE 20190830	UNIT'S	DWG NO.
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		APPD DATE	SCALE	
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