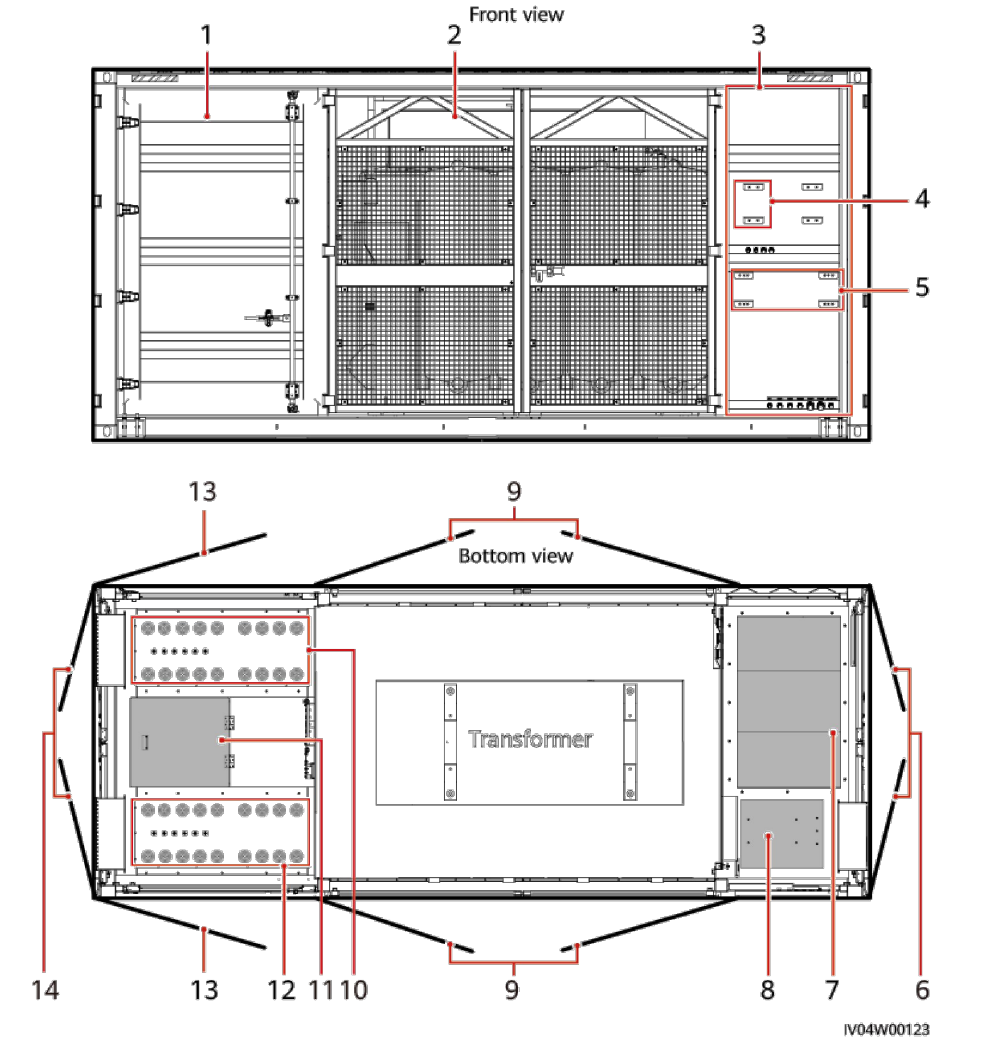




INQUADRAMENTO IN PIANTA - POWER STATION

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

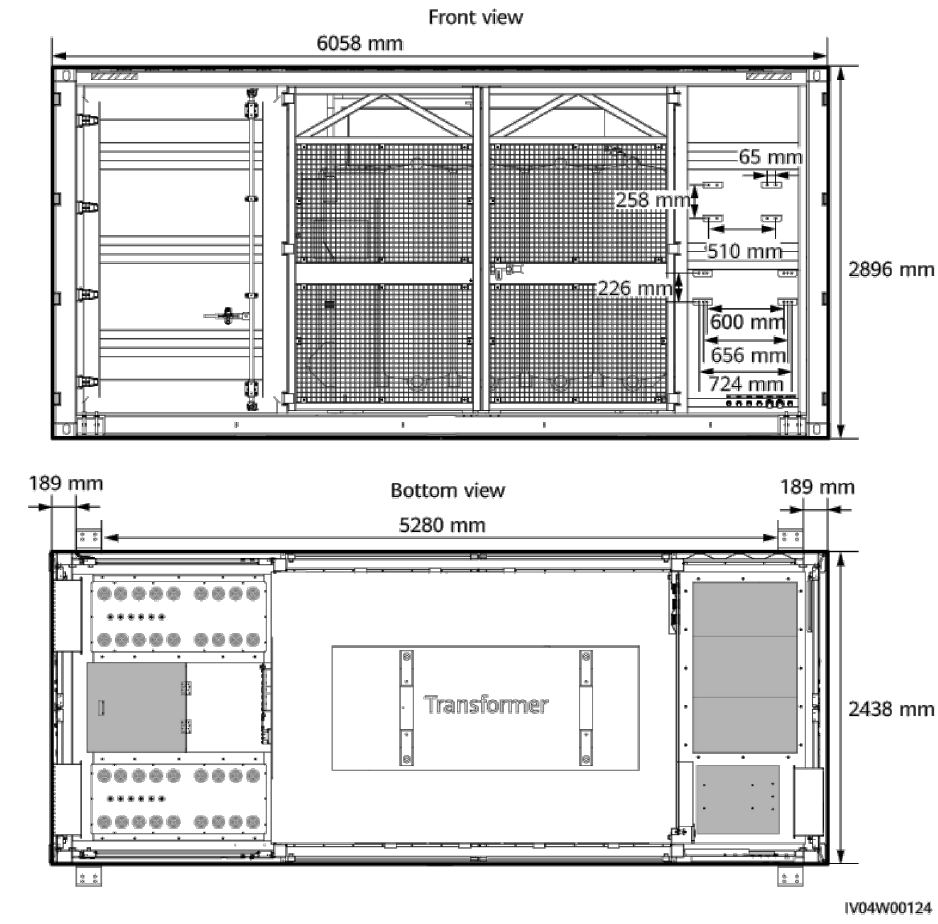
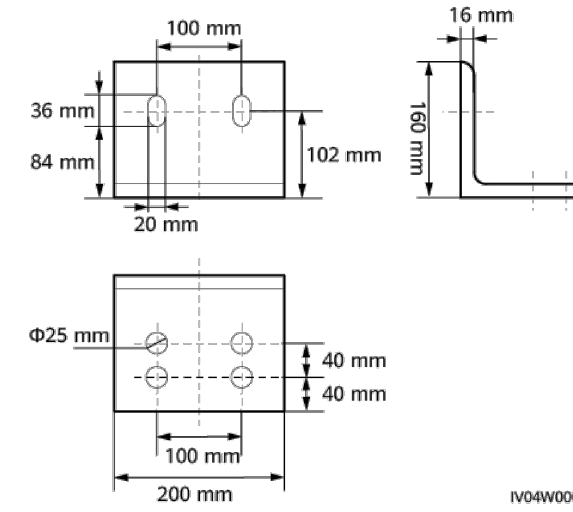
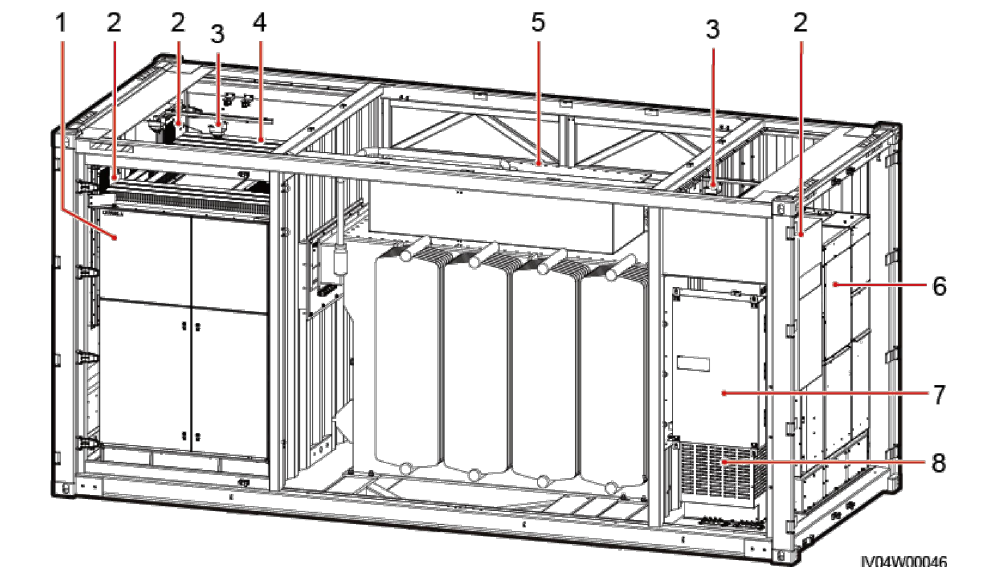


Figure 2-4 Dimensions of the anchor pad



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 SERRI

OGGETTO
REALIZZAZIONE IMPIANTO AGRIVOLTAICO DA 39,99 MW - TIPO TRACKER AD INSEGUIMENTO MONOASSIALE E IMPIANTO DI ACCUMULO (BESS) DA 15MW, DENOMINATO SERRI

COMMITTENTE
ENERGYSERRI1 SRL
Via Semplice Spano 10 - 07026 Olbia (SS)

PROGETTO DEFINITIVO

ELABORATO

NUMERO ELABORATO
AU 10

SCALA: 1:1000
DATA: LUGLIO 2023

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

PRE IMPIANTI 00

CODICE COMMESSA NOME FILE FASE PROGETTUALE CATEGORIA REV.

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PROGETTISTA - TIMBRO E FIRMA

ORDINE INGEGNERI
PROVINCIA DI CAGLIARI
N. 5777 **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°C ~ 60°C ⁽²⁾ (-13°F ~ 140°F)
Relative Humidity	0% ~ 95%

Smart Transformer Station

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

SACU2000B PLC/PID

X	ANG	DRAW	DATE	UNITS	TITLE
XXX	ANG	Drawn: Fungui	DATE: 20190820	UNITS	STS-3000K-H1 Standard Solution SLD
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