BASE LOAD POWER HUB (BLPH)

"SG-200D2" LV SWBD 800V

GENERAL ARRANGEMENTS DWG AND FOUNDATION LOAD CALCULATION INCLUDING COG

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
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+					
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0	09/02/2024	Rossi	Santinelli	Santinelli	Issue for review (IFR)

DWG n° : 231298/SD/8

Item n° : PF1002669/3

IMESA ELECTRICAL ENGINEERING

CROSSWIND

ROSETTI MARINO

TITLE : "SG-200D2"

GENERAL ARRANGEMENTS
Cover

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK

SCALE : NTS

A3

DRAWING NO. 1723002197-EL-DA-00008

SHEET 001

REV. 04

F.to UNI A3: 420mmx297mm

File Name : 1723002197-EL-DA-00008 Rev. 04

INDEX SHEETS

Sheet	Description	Revision 0	1	2	3	4	5	6	7	8	9
001	Cover / GENERAL ARRANGEMENTS	X	X	X	X	X					
002	Index / GENERAL ARRANGEMENTS	X	X	X	X	X					
003	Switchgear Characteristics / GENERAL ARRANGEMENTS	X	X	X	X	X					
004	Switchgear Characteristics / GENERAL ARRANGEMENTS	X	X	X	X	X					
005	Switchgear Name Plate / GENERAL ARRANGEMENTS	X	X	X	X	X					
006	Switchgear Lay-Out - Front View / GENERAL ARRANGEMENTS	X	X	X	X	X					
007	Switchgear Lay-Out - Laterals View / GENERAL ARRANGEMENTS	X	X	X	X	X					
008	Switchgear Lay-Out - Bottom View / GENERAL ARRANGEMENTS	X	X	X	X	X					
009	Base Frame Fixing System / GENERAL ARRANGEMENTS	X	X	X	X	X					
010	Center of Gravity Positioning / GENERAL ARRANGEMENTS	X	X	X	X	X					

Sheet	Description	Revision 0	1	2	3	4	5	6	7	8	9

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DWG n° : 231298/SD/8

Item n° : PF1002669/3

IMESA ELECTRICAL ENGINEERING

CROSSWIND

ROSETTI MARINO

TITLE : "SG-200D2"

GENERAL ARRANGEMENTS
Index

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK

SCALE : NTS

A3

DRAWING NO. 1723002197-EL-DA-00008

SHEET 002

REV. 04

F.to UNI A3: 420mmx297mm

File Name : 1723002197-EL-DA-00008 Rev. 04

A	ENVIRONMENTAL DATA	
1	AMBIENT	MARINE - OFFSHORE
2	INSTALLATION	INDOOR
3	AMBIENT AIR TEMPERATURE - DELAY AVERAGE MAXIMUM	35 °C
4	AMBIENT AIR MINIMUM/MAXIMUM TEMPERATURE	-8,4 ÷ +40 °C
5	RELATIVE HUMIDITY AVERAGE	95 %
6	RELATIVE HUMIDITY MAXIMUM	-
7	POLLUTION LEVEL DEGREE	VERY LIGHT

B	SWITCHGEAR ELECTRICAL FEATURES	
1	RATED VOLTAGE (Ue)	0,8 kV
2	NOMINAL VOLTAGE (Un)	0,8 kV
3	RATED INSULATION VOLTAGE (Ui)	1 kV
4	RATED FREQUENCY (Fn)	50 Hz
5	RATED IMPULSE WITHSTAND (Uimp)	4 kV
6	RATED NORMAL CURRENT (In)	630 A @45 °C
7	RATED SHORT TIME WITHSTAND CURRENT (Ik)	30 kA
8	RATED DURATION OF SHORT CIRCUIT (tk)	1 s
9	RATED PEAK WITHSTAND CURRENT (Ipk)	63 kA
10	INTERNAL ARC CLASSIFICATION IAC	Not Applicable
11	ARCING CLASS	Not Applicable
12	NUMBER OF PHASES	3
13	PHASES IDENTIFICATION	L1-L2-L3
14	EARTHING CIRCUITS MAIN BUSBAR SECTION	> 300mmq
15	REFERENCE STANDARDS	IEC 61439-2
16	EARTHING SYSTEM	TN-S
17	NEUTRAL BUSBARS SIZING	-

C	SWITCHGEAR MECHANICAL FEATURES	
1	EXTERNAL DEGREE OF PROTECTION	IP30
2	INTERNAL DEGREE OF PROTECTION	IP20
3	EXTERNAL MECHANICAL IMPACT PROTECTION	IK10
4	ACCESSIBILITY	FRONT
5	TYPE DESIGNATION	FORM : 3B (INCOMING) FORM : 3B (OUTGOING)
6	POWER CABLES (INCOMING)	FROM THE TOP (by MCT)
7	POWER CABLES (OUTGOING)	FROM THE TOP (by MCT)
8	AUXILIARY CABLES	FROM THE TOP (by MCT)
9	BASE FRAMES	PROVIDED
10	MIMIC DIAGRAM (BLACK)	Not Applicable
11	BOTTOM CLOSING	Not Applicable
12	PAINTING COLOUR	RAL 7035
13	PAINTING SPECIFICATION CYCLE	C3-MEDIUM, >60µ (IMESA CYCLE "A")
14	SURFACE NOT PAINTED	ZINC PLATED OR TROPICALIZED
15	FRONT DOORS (AUXILIARY COMPARTMENT)	HINGED WITH KEY LOCK
16	FRONT DOORS (CIRCUIT BREAKER)	HINGED WITH KEY LOCK
17	REAR/LATERAL PANELS	BOLTED
18	MINIMUM CLEARANCE	TO THE FRONT 1200 mm
19		TO THE REAR 50 mm
20		TO THE TOP 800 mm
21		TO THE SIDE 1200 mm
22	WEIGHTS	450 kg ± 10%
23	EXPANDABILITY	Not Applicable

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CROSSWIND

IMESA ELECTRICAL ENGINEERING

ROSETTI MARINO

DWG n° : 231298/SD/8

Item n° : PF1002669/3

TITLE : "SG-200D2"

GENERAL ARRANGEMENTS
Switchgear Characteristics

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK

SCALE : NTS

A3

DRAWING NO. 1723002197-EL-DA-00008

SHEET 003

REV. 04

F.to UNI A3: 420mmx297mm

File Name : 1723002197-EL-DA-00008 Rev. 04

D	BUSBAR SYSTEM	
1	MATERIALS	ELECTROLYTIC COPPER
2	BUSBAR SURFACE TREATMENT	not applicable
3	INSULATION BUSBARS (if Applicale)	SHEATHED
4	JOINT AND CONNECTIONS TREATMENT	Not Applicable
5	INSULATION JOINTS (if Applicable)	REMOVABLE SOLID DIELECTRIC PROTECTIONS
6	BULKHEADS FOR POWER BARS (if Applicable)	YES
7	PHASES IDENTIFICATION	L1 (BROWN)
8		L2 (BLACK)
9		L3 (GREY)
10		PE
12	MARKING OF PHASES	ADHESIVE LABELS PLACED ON BARS

E	POWER / AUXILIARY CIRCUITS CABLES		
1	LOW VOLTAGE CABLE TYPE		Not Applicable
2	INSULATION		Not Applicable
	SIZE / COLOUR CODE		
3	MEASURE & CONTROL & SIGNAL CIRCUITS	AC/DC CIRCUIT (Internal Heating / Motor Spring Charger / Internal Distribution)	≥ 2,5 mmq / BLACK
4		VT SECONDARY CIRCUIT	1,5 mmq / BLACK
5		CT SECONDARY CIRCUIT	2,5 mmq / BLACK
6		AC CIRCUIT	≥ 1,5 mmq / BLACK
7		DC CIRCUIT	≥ 1,5 mmq / RED(+) WHITE(-)
8		GROUND CIRCUIT	YELLOW / GREEN
9		PHASES IDENTIFICATION FOR AC POWER CIRCUIT TERMINATION WITH SHRINKABLE SHEATH	Not Applicable
10			Not Applicable
11			Not Applicable

F	TERMINAL BLOCKS	
1	TERMINAL BLOCK TYPE	SPRING CLAMP (CABUR HMM grey)
2	DISCONNECT/TEST TERMINAL BLOCK TYPE	SPRING CLAMP (CABUR HMM grey)
3	MATERIAL	POLYAMIDE
4	SIZE	≥ 4mmq

G	AUXILIARY CIRCUIT VOLTAGE	
1	AUXILIARY COMMAND CIRCUITS	230 Vac (Internal Supply)
2	AUXILIARY SIGNALLING CIRCUITS	230 Vac (Internal Supply)
3	AUXILIARY CIRCUITS	24 Vdc (Internal Supply)
4	SPRING CHARGING MOTOR C.B.	230 Vac (Internal Supply)
5	INTERNAL LIGHTINGS	230 Vac (Internal Supply)
6	ANTICONDENSATION HEATER	230 Vac (Internal Supply)

H	LABELS	
1	MATERIAL	TRAFFOLYTE
2	BACKGROUND	WHITE
3	LETTERS	BLACK
4	LANGUAGE	ENGLISH
5	WARNING LABEL LANGUAGE	ENGLISH
6	FIXING	SCREWED
7	MARKING DEVICES / WIRES	INDIPENDENT
8	AC CIRCUIT	SEQUENTIAL
9	DC CIRCUIT	SEQUENTIAL

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DWG n° : 231298/SD/8
Item n° : PF1002669/3

CROSSWIND

IMESA ELECTRICAL ENGINEERING

ROSETTI MARINO

TITLE : "SG-200D2"

GENERAL ARRANGEMENTS
Switchgear Characteristics

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK

SCALE : NTS

A3

DRAWING NO. 1723002197-EL-DA-00008

SHEET 004

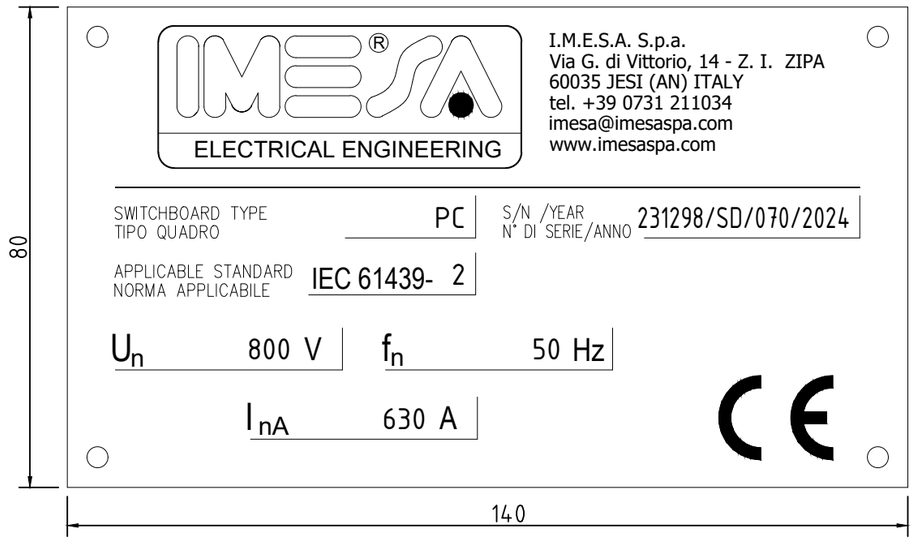
REV. 04

F.to UNI A3: 420mmx297mm

File Name : 1723002197-EL-DA-00008 Rev. 04

NAMEPLATE DATES

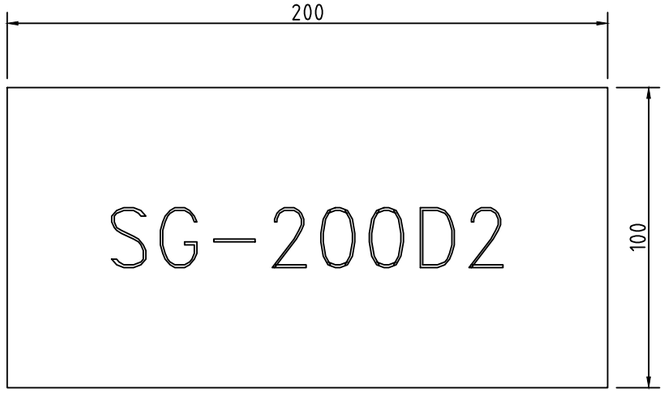
1



Material: Alloy

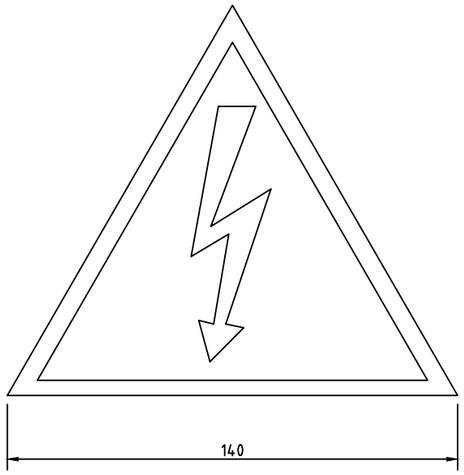
SWITCHGEAR TAG PLATE

2



Material: Traffolyte

WARNING LABEL



Material: Adhesive film

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DWG n° : 231298/SD/8
Item n° : PF1002669/3

CROSSWIND

ROSETTI MARINO

TITLE : "SG-200D2"

GENERAL ARRANGEMENTS
Switchgear Name Plate

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK

SCALE : NTS

A3

DRAWING NO. 1723002197-EL-DA-00008

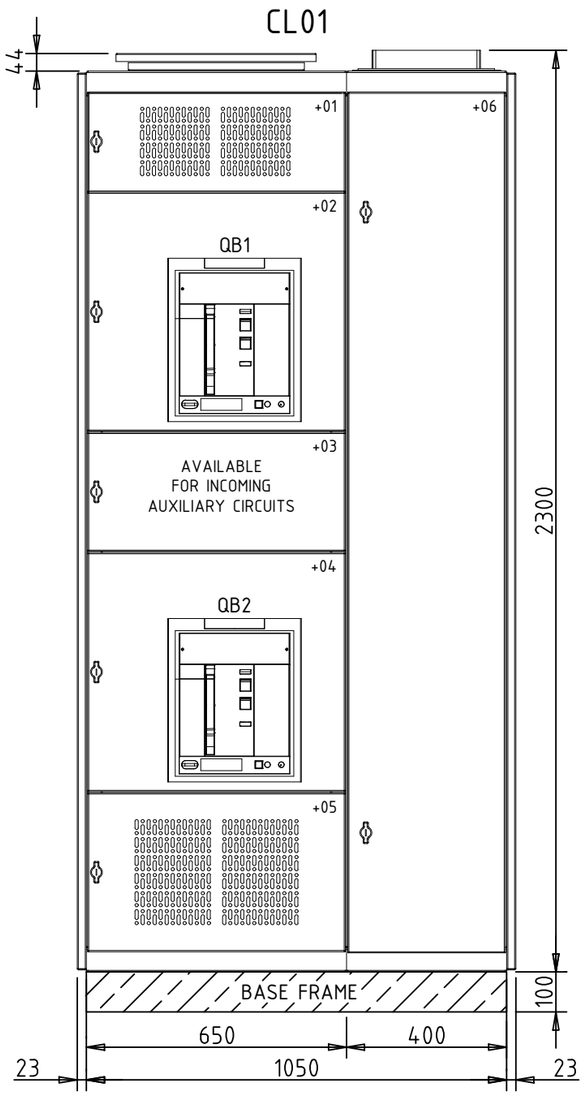
SHEET 005

REV. 04

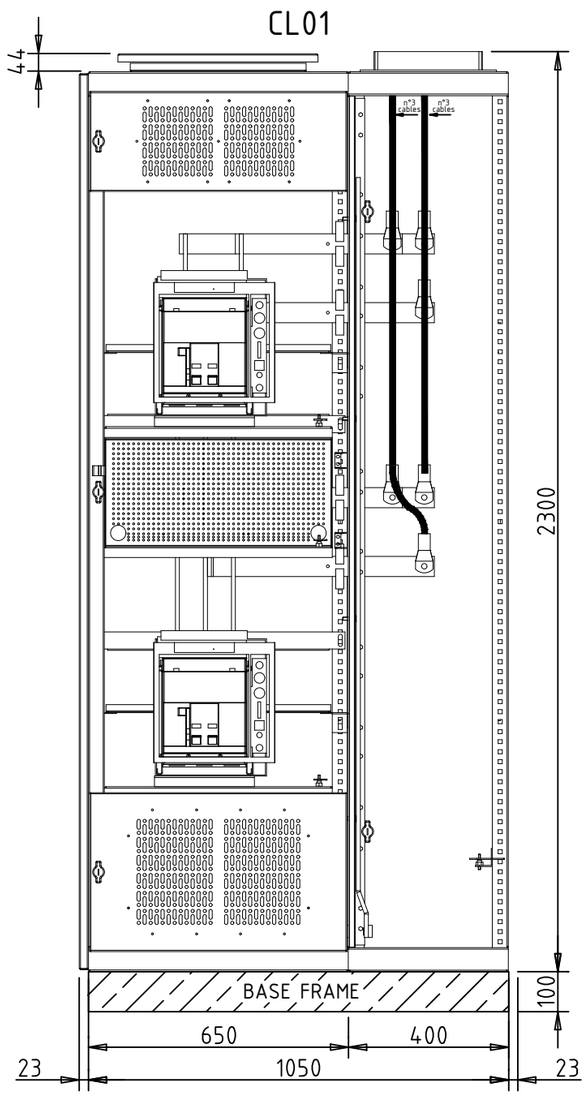
F.to UNI A3: 420mmx297mm

File Name : 1723002197-EL-DA-00008 Rev. 04

FRONT VIEW



FRONT VIEW
(INTERNAL)



NOTE :
1. Measurement Tollerance + 0,25%
2. Weight Tollerance ± 10%

scale 1/15

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CROSSWIND

IMESA ELECTRICAL ENGINEERING

ROSETTI MARINO

DWG n° : 231298/SD/8

Item n° : PF1002669/3

TITLE : "SG-200D2"

GENERAL ARRANGEMENTS
Switchgear Lay-Out - Front View

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK

SCALE : NTS

A3

DRAWING NO. 1723002197-EL-DA-00008

SHEET 006

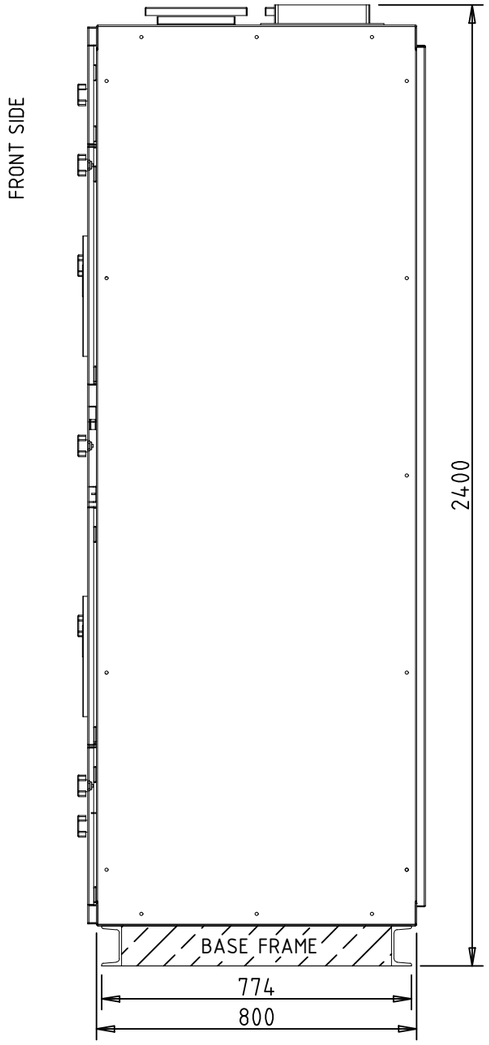
REV. 04

F.to UNI A3: 420mmx297mm

File Name : 1723002197-EL-DA-00008 Rev. 04

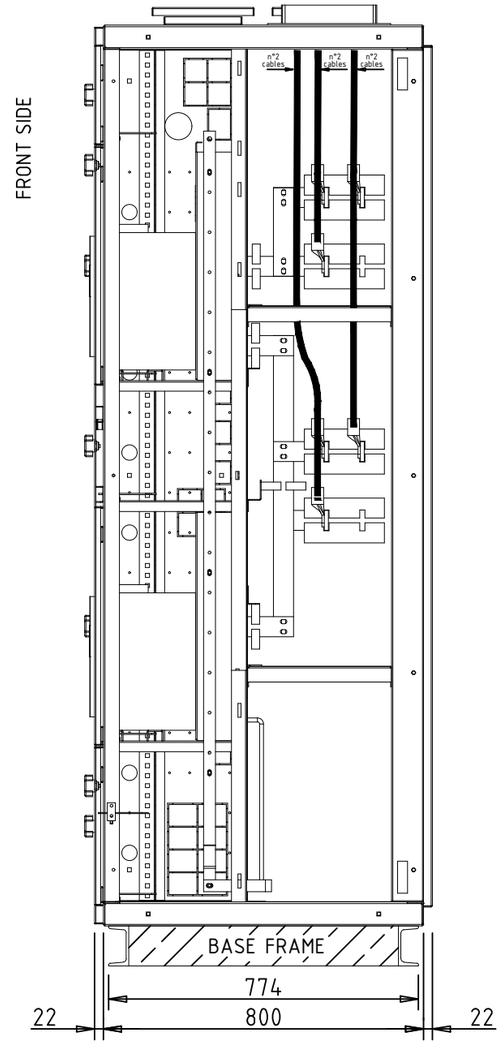
LATERAL VIEW

CL01



LATERAL VIEW
(W/O EXTERNAL PANEL)

CL01



NOTE :
1. Measurement Tollerance + 0,25%
2. Weight Tollerance ± 10%

scale 1/15

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CROSSWIND

IMESA ELECTRICAL ENGINEERING

ROSETTI MARINO

DWG n° : 231298/SD/8

Item n° : PF1002669/3

TITLE : "SG-200D2"

GENERAL ARRANGEMENTS
Switchgear Lay-Out - Laterals View

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK

SCALE : NTS

A3

DRAWING NO. 1723002197-EL-DA-00008

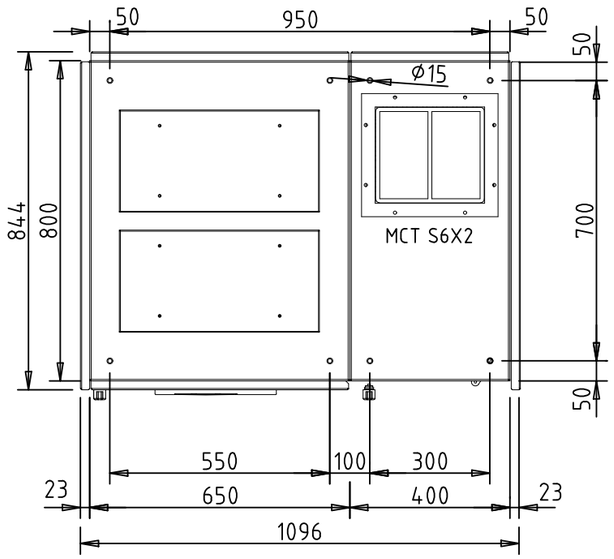
SHEET 007

REV. 04

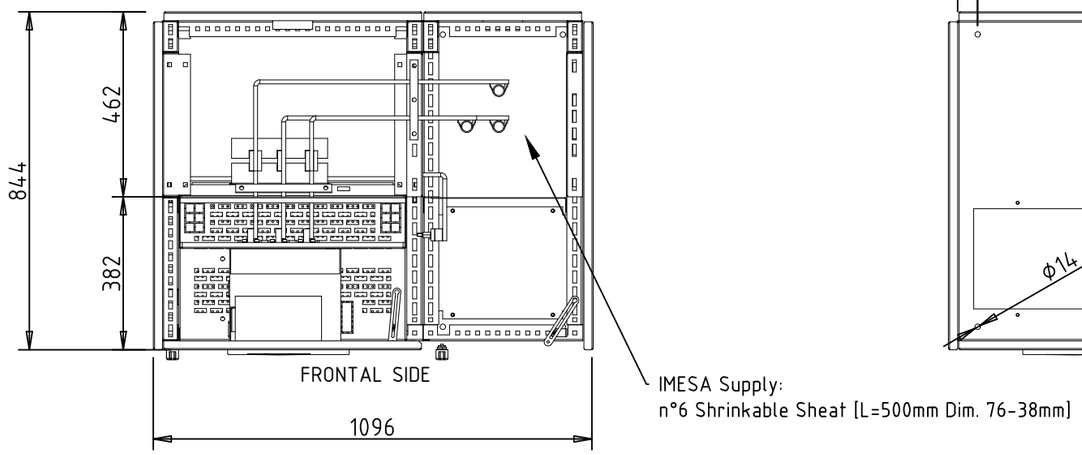
F.to UNI A3: 420mmx297mm

File Name : 1723002197-EL-DA-00008 Rev. 04

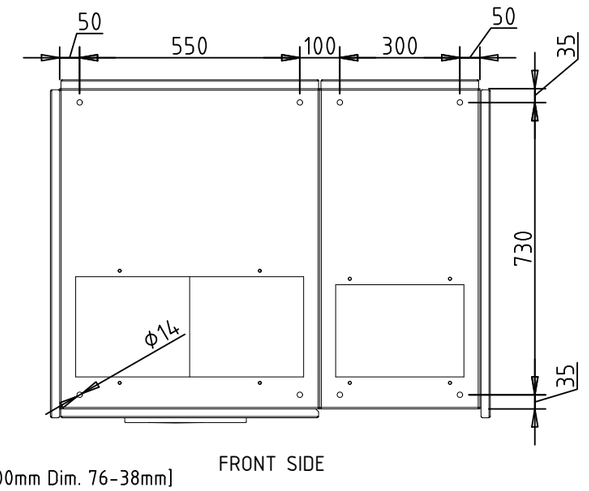
TOP VIEW



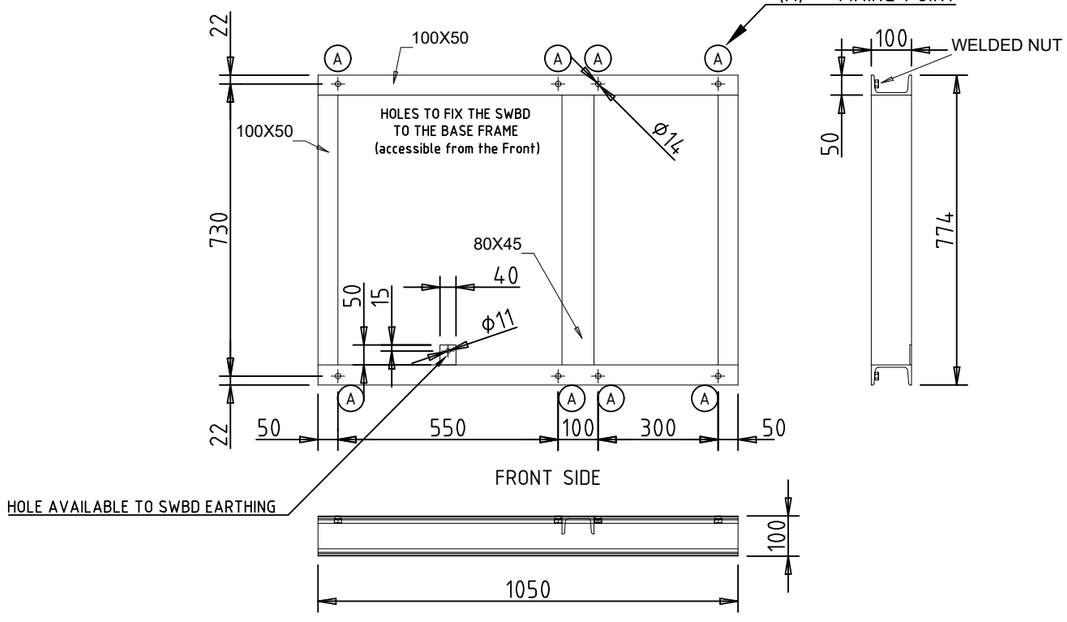
TOP VIEW
(W/O EXTERNAL PANEL)



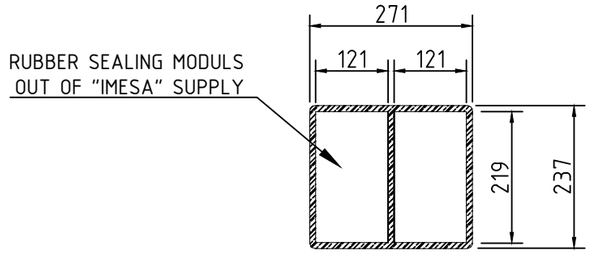
BOTTOM VIEW



BASE FRAME



"S6X2" MCT DETAILS



NOTE :
1. Measurement Tollerance + 0,25%
2. Weight Tollerance ± 10%

scale 1/15

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IMESA ELECTRICAL ENGINEERING
DWG n° : 231298/SD/8
Item n° : PF1002669/3

CROSSWIND

ROSETTI MARINO

TITLE : "SG-200D2"

GENERAL ARRANGEMENTS
Switchgear Lay-Out - Bottom View

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK

SCALE : NTS

A3

DRAWING NO. 1723002197-EL-DA-00008

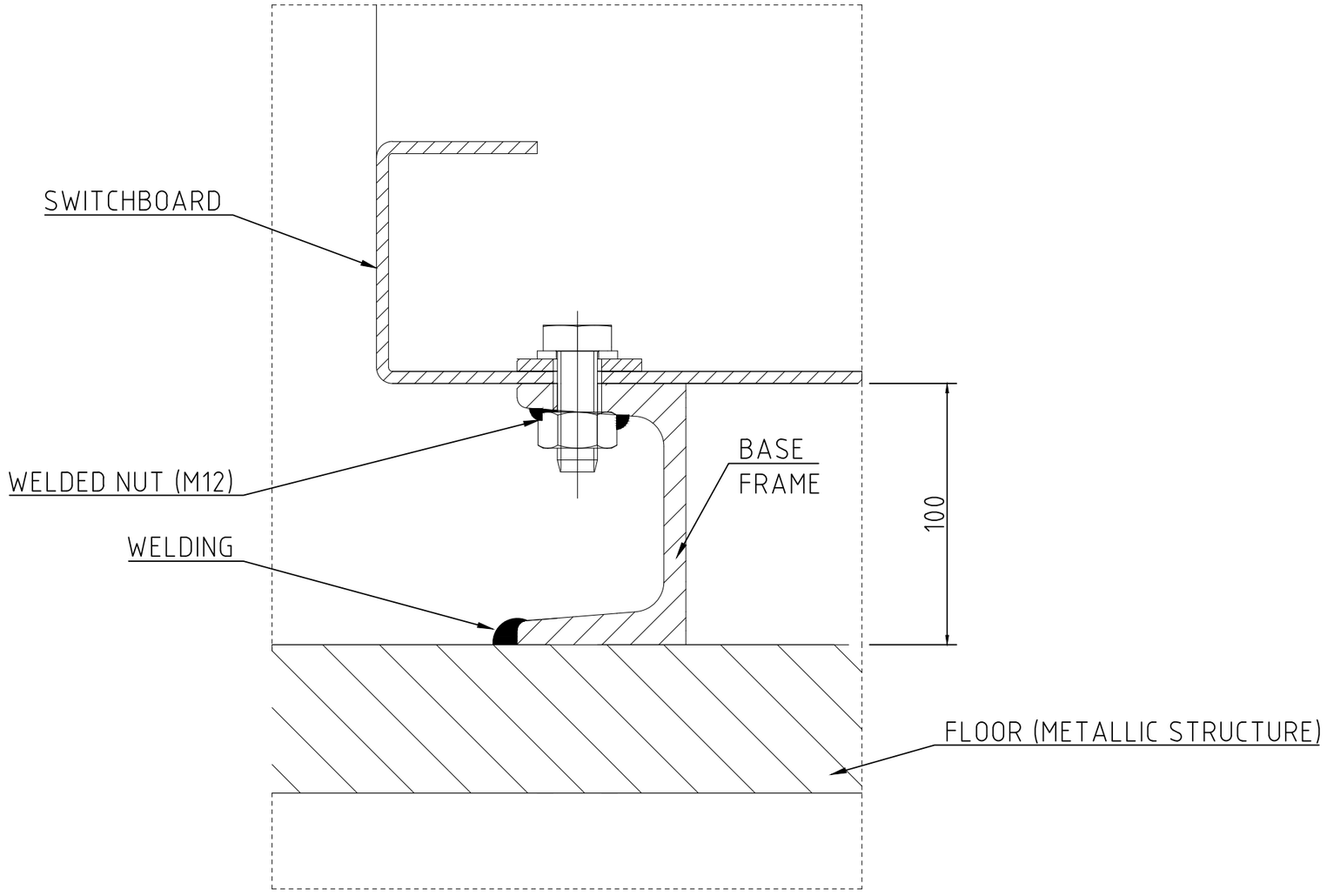
SHEET 008

REV. 04

F.to UNI A3: 420mmx297mm

File Name : 1723002197-EL-DA-00008 Rev. 04

BASE FRAME FIXING SYSTEM



NOTE :
1. Measurement Tollerance + 0,25%
2. Weight Tollerance ± 10%

scale 1/2

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CROSSWIND

IMESA ELECTRICAL ENGINEERING

DWG n° : 231298/SD/8

Item n° : PF1002669/3

ROSETTI MARINO

TITLE : "SG-200D2"

GENERAL ARRANGEMENTS
Base Frame Fixing System

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK

SCALE : NTS

A3

DRAWING NO. 1723002197-EL-DA-00008

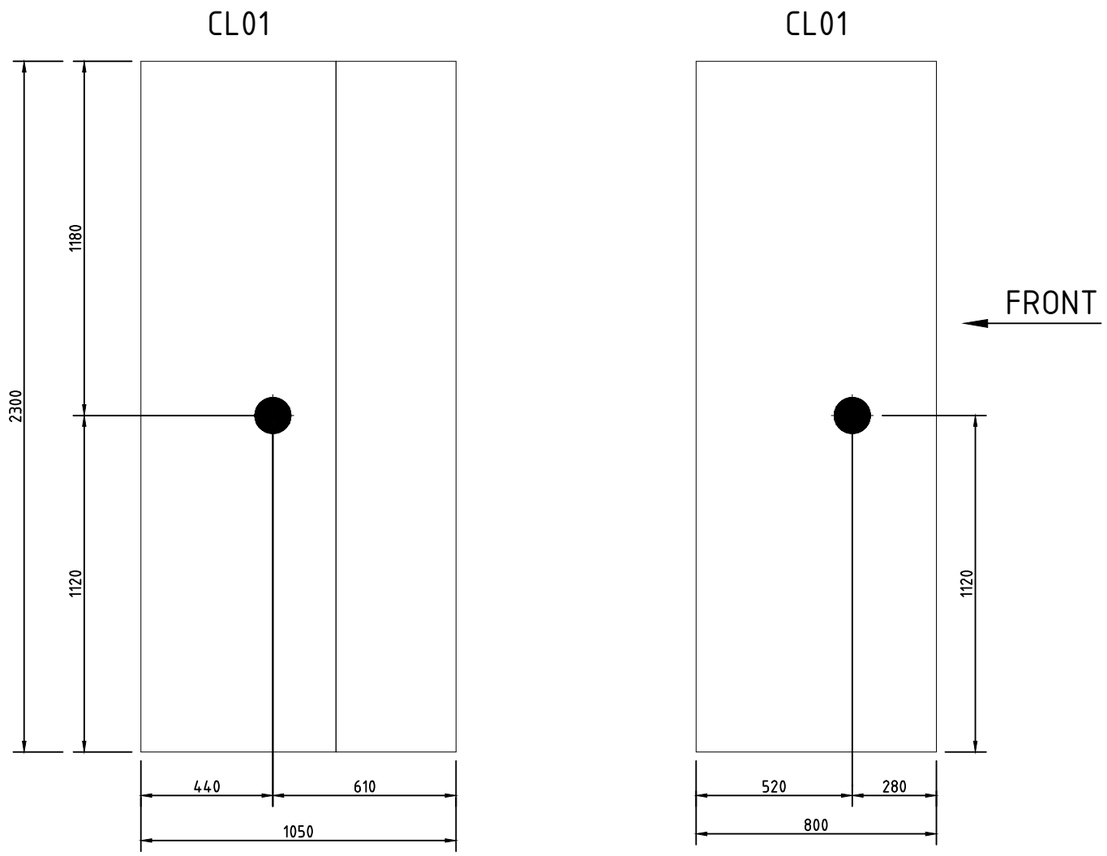
SHEET 009

REV. 04

F.to UNI A3: 420mmx297mm

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CENTER OF GRAVITY POSITIONING



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CROSSWIND

IMESA ELECTRICAL ENGINEERING

ROSETTI MARINO

DWG n° : 231298/SD/8

Item n° : PF1002669/3

TITLE : "SG-200D2"

GENERAL ARRANGEMENTS
Center of Gravity Positioning

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK

SCALE : NTS

A3

DRAWING NO. 1723002197-EL-DA-00008

SHEET 010

REV. 04

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