# BASE LOAD POWER HUB (BLPH)

# "DP-200N1" LV SWBD 400/230V

# ELECTRICAL
# SINGLE LINE DIAGRAM

ROSETTI MARINO

| | |
|---|---|
| 1 | NO COMMENTS - APPROVED - WORK MAY PROCEED |
| 2 | MINOR COMMENTS - REVISE AND RESUBMIT - WORK MAY PROCEED |
| 3 | MAJOR COMMENTS – REJECTED – DO NOT PROCEED |
| 4 | APPROVAL NOT REQUIRED |

*NOTE: Approval doesn't relieve the supplier from mandatory compliance with contractual documents and specifications. Comments made do not imply acceptance of any cost or delivery impact.*

| Sign | Date |
|---|---|
| Andrea Sgadoni | 12/03/2025 |

| REV. | DATE | DRN | CHKD | APPD | DESCRIPTION |
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IMESA ELECTRICAL ENGINEERING

DWG n° : 231298/SD/13

Item n° : PF1002888/101

CROSSWIND

ROSETTI MARINO

TITLE : "DP-200N1"

SINGLE LINE DIAGRAM

Cover

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

SCALE : NTS

A3

DRAWING NO. 1723002197-EL-DG-00013

SHEET 001

REV. 05

F.to UNI A3: 420mmx297mm

File Name : 1723002197-EL-DG-00013 Rev. 05

# INDEX SHEETS

| Sheet | Description | Revision 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 001 | Cover | X | X | X | X | X | X | | | | |
| 002 | Index | X | X | X | X | X | X | | | | |
| 003 | Graphical Symbols | X | X | X | X | X | X | | | | |
| 004 | Graphical Symbols | X | X | X | X | X | X | | | | |
| 005 | Single Line Drawing | X | X | X | X | X | X | | | | |
| 006 | Single Line Drawing | X | X | X | X | X | X | | | | |
| 007 | Single Line Drawing | X | X | X | X | X | X | | | | |
| 008 | Single Line Drawing | X | X | X | X | X | X | | | | |
| 009 | Single Line Drawing | X | X | X | X | X | X | | | | |
| 010 | Single Line Drawing | X | X | X | X | X | X | | | | |
| 011 | Single Line Drawing | X | X | X | X | X | X | | | | |
| 012 | Single Line Drawing | X | X | X | X | X | X | | | | |
| 013 | Single Line Drawing | X | X | X | X | X | X | | | | |
| 014 | Single Line Drawing | X | X | X | X | X | X | | | | |

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TITLE : "DP-200N1"

SINGLE LINE DIAGRAM

Index

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

SCALE : NTS

A3

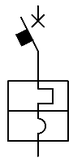
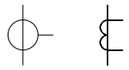
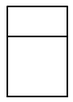
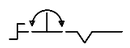
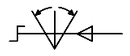
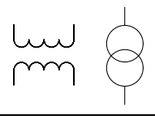
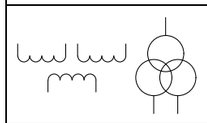
DRAWING NO. 1723002197-EL-DG-00013

SHEET 002

REV. 05

F.to UNI A3: 420mmx297mm

File Name : 1723002197-EL-DG-00013 Rev. 05

| GRAPHICAL SYMBOLS | DESCRIPTION | GRAPHICAL SYMBOLS | DESCRIPTION | GRAPHICAL SYMBOLS | DESCRIPTION | GRAPHICAL SYMBOLS | DESCRIPTION |
|---|---|---|---|---|---|---|---|
|  | **CIRCUIT BREAKER WITH AUTOMATIC RELEASE** |  | **CAPACITOR (GENERAL SYMBOL)** |  | **BISTABLE RELAY** |  | **CHANGE-OVER BREAK BEFORE MAKE CONTACT** |
|  | **CIRCUIT BREAKER WITH AUTOMATIC RELEASE AND BUILT-IN THERMOMAGNETIC RELEASE** |  | **CAPACITIVE VOLTAGE DIVIDER** |  | **COIL OF A MECHANICALLY LATCHED RELAY** |  | **DELAYED ACTION (IN THE DIRECTION OF MOVEMENT FROM THE ARC TOWARDS ITS CENTRE)** |
| | |  | **CURRENT TRANSFORMER** |  | **INDICATOR, ELECTROMECHANICAL ELEMENT** |  | POSITION SWITCH (LIMIT SWITCH), MAKE CONTACT |
|  | **SWITCH DISCONNECTOR** |  | RING CURRENT TRANSFORMER |  | **LAMP (GENERAL SYMBOL)** |  | **POSITION SWITCH (LIMIT SWITCH), MAKE CONTACT** |
|  | **CONTACTOR** |  | **INDICATING INSTRUMENT GENERAL SYMBOL** |  | **SEMICONDUCTOR DIODE** |  | POSITION SWITCH (LIMIT SWITCH), BREAK CONTACT |
|  | **LOCK WITH FREE KEY WHEN THE DEVICE IS IN OPEN POSITION** |  | **INTEGRATING INSTRUMENT (GENERAL SYMBOL)** |  | **LED** |  | **OPERATED BY TURNING** |
|  | **LOCK WITH FREE KEY WHEN THE DEVICE IS IN CLOSE POSITION** |  | **DISCONNECTING FUSE, NOT WITH LIVE CIRCUIT AND WITH MECHANICAL LINKAGE (STRIKER FUSE))** |   | **TRANSDUCER OF ALTERNATING CURRENT MEASURE INTO DIRECT CURRENT SIGNAL** |  | **THREE HELD POSITIONS TURNING SWITCH** |
|  | **PLUG AND SOCKET (MALE AND FEMALE)** |  | **OPERATING DEVICE (GENERAL SYMBOL)** |  | **EARTH, GROUND (GENERAL SYMBOL)** |  | **THREE POSITIONS TURNING SWITCH, WITH SPRING THROWBACK TO THE CENTRAL POSITION** |
|  | **VOLTAGE TRANSFORMER WITH TWO WINDINGS** |  | **COIL OF A TIME DELAYED OPERATING RELAY** |  | **MAKE CONTACT** |  | MECHANICAL INTERLOCK BETWEEN TWO DEVICES |
|  | **VOLTAGE TRANSFORMER WITH THREE WINDINGS** |  | **COIL OF A TIME DELAYED RELEASING RELAY** |  | **BREAK CONTACT** |  | RESISTOR (GENERAL SYMBOL) |

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CROSSWIND

ROSETTI MARINO

IMESA ELECTRICAL ENGINEERING

DWG n° : 231298/SD/13

Item n° : PF1002888/101

TITLE : "DP-200N1"

SINGLE LINE DIAGRAM

Graphical Symbols

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

SCALE : NTS

A3

DRAWING NO. 1723002197-EL-DG-00013

SHEET 003

REV. 05

F.to UNI A3: 420mmx297mm

File Name : 1723002197-EL-DG-00013 Rev. 05

| GRAPHICAL SYMBOLS | DESCRIPTION | GRAPHICAL SYMBOLS | DESCRIPTION | GRAPHICAL SYMBOLS | DESCRIPTION | GRAPHICAL SYMBOLS | DESCRIPTION |
|---|---|---|---|---|---|---|---|
|  | THERMISTOR (GENERAL SYMBOL) |  | 3 PHASE + NEUTRAL LINE | | | | |
|  | HEATING ELEMENT |  | SINGLE PHASE + NEUTRAL LINE | | | | |
|  | INTERCONNECTION TERMINAL | | | | | | |
|  | WITHDRAWABLE TERMINAL SHORT-CIRCUITABLE ON C.T. SECONDARY CIRCUITS | | | | | | |
|  | WITHDRAWABLE TERMINAL FOR V.T. SECONDARY CIRCUITS | | | | | | |
|  | SWITCHBOARD TERMINAL | | | | | | |
|  | ON - OFF SWITCH | | | | | | |
|  | SURGE ARRESTER | | | | | | |
|  | VOLTMETRIC TEST SOCKET | | | | | | |
|  | AMPEROMETRIC TEST SOCKET | | | | | | |

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SCALE : NTS

A3

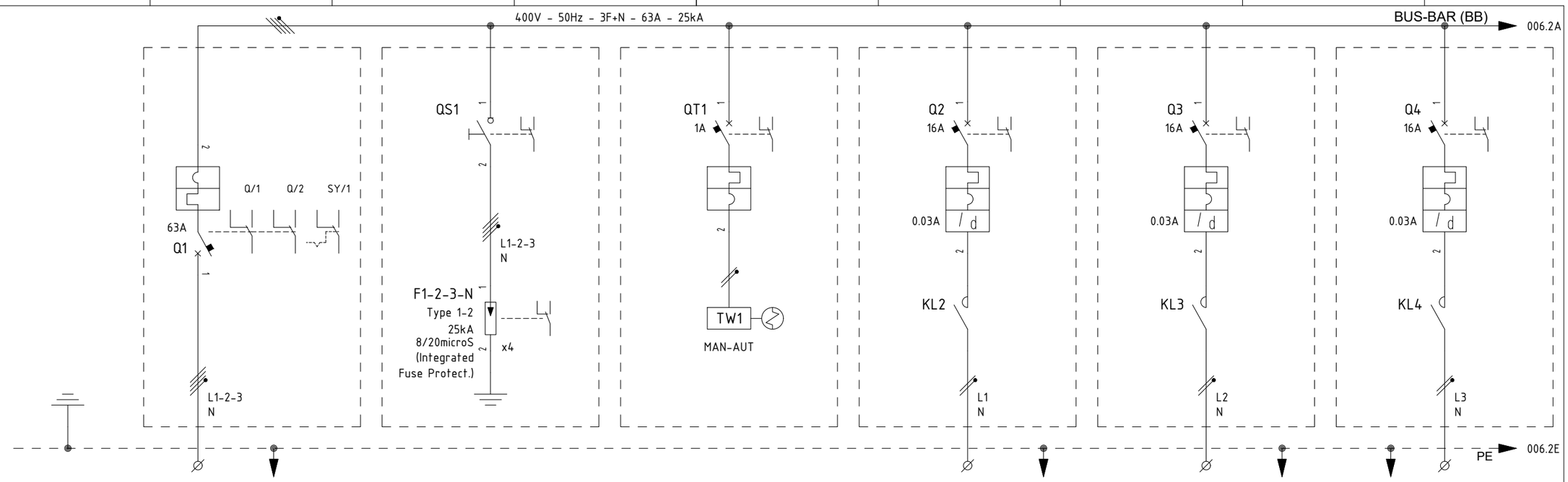
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SHEET 004

REV. 05

F.to UNI A3: 420mmx297mm

File Name : 1723002197-EL-DG-00013 Rev. 05




| ITEM | | | 1 | - | | | | EJB-200N1-02-L1-01 | | EJB-200N1-03-L2-01 | | EJB-200N1-04-L3-01 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UTILITY | | | 2 | GENERAL INCOMING | | SURGE ARRESTER | | TWILIGHT SWICTH AND AUXILIARY | | NORMAL LIGHTING UPPER DECK | | NORMAL LIGHTING LOWER DECK | | NORMAL LIGHTING STAIRS | |
| CUBICLE | | | 3 | +01 | | +01 | | +01 | | +01 | | +02 | | +02 | |
| RATED POWER | RATED CURRENT | | 4/5 | 34.8 KW | 63 A | / | / | / | / | 1.5 KW | 6.86 A | 1 KW | 4.58 A | 0.2 KW | 0.92 A |
| TYPICAL FUNCTIONAL | | | 6 | - | | - | | - | | - | | - | | - | |
| CIRCUIT BREAKER (ABB) | TYPE | | 7 | XT2N-160 4P | | E204/100R | | S302P-C1 | | S302P-C16 + DDA202 AC-25/0.03 | | S302P-C16 + DDA202 AC-25/0.03 | | S302P-C16 + DDA202 AC-25/0.03 | |
| | VERSION | | 8 | FIXED | | 4P / MINIATURE | | 2P / MINIATURE | | 2P / MINIATURE | | 2P / MINIATURE | | 2P / MINIAUTURE | |
| | TRIP UNITS | | 9 | Ekip Dip LSI = 63A | | In=100A | | In=1A - Curve C | | In=16A - Curve C / Id=0.03A Class AC | | In=16A - Curve C / Id=0.03A Class AC | | In=16A - Curve C / Id=0.03A Class AC | |
| | Icu | KA | 10 | 36KA | | - | | 25kA | | 25kA | | 25kA | | 25kA | |
| OVERLOAD | L | Range A | 11 | 0,4 ÷1 In | | - | | - | | - | | - | | - | |
| | | Range t | 12 | t=k/I^2 | | - | | - | | - | | - | | - | |
| SEL. SHORT-CIRCUIT | S | Range A | 13 | 1 ÷10 In | | - | | - | | - | | - | | - | |
| | | Range t | 14 | t=k / t=k/I^2 | | - | | - | | - | | - | | - | |
| INST. SHORT-CIRCUIT | I | Range A | 15 | 1 ÷10 In | | - | | - | | - | | - | | - | |
| | | Range t | 16 | instantaneous | | - | | - | | - | | - | | - | |
| EARTH FAULT PROTECTION | G | Range A | 17 | - | | - | | - | | - | | - | | - | |
| | | Range t | 18 | - | | - | | - | | - | | - | | - | |
| CONTACTOR (ABB) | | | 19 | - | | - | | - | | ESB40-20N-06; 2x22A AC3; Vaux=230Vdc/ac | | ESB40-20N-06; 2x22A AC3; Vaux=230Vdc/ac | | ESB40-20N-06; 2x22A AC3; Vaux=230Vdc/ac | |
| THERMAL OVERLOAD RELAY (ABB) | | | 20 | - | | - | | - | | - | | - | | - | |
| SURGE ARRESTERS (DHENN) | | | 21 | - | | DVCI 1 255 FM (961 205) | | - | | - | | - | | - | |
| TOROIDAL CURRENT TRANSFORMER (FRER) | | | 22 | - | | - | | - | | - | | - | | - | |
| FUSE HOLDER (ABB) | | | 23 | - | | - | | - | | - | | - | | - | |
| TWILIGHT SWITCH (FINDER) | | | 24 | - | | - | | 11.31.0.230.0000 (1-100 LUX); Vaux=110-230Vac/dc | | - | | - | | - | |
| VOLTMETER (FRER) | | | 25 | - | | - | | - | | - | | - | | - | |
| CURRENT TRANSFORMER FOR MEASURE (FRER) | TYPE | | 26 | - | | - | | - | | - | | - | | - | |
| | PERFORMANCE/CLASS | | 27 | - | | - | | - | | - | | - | | - | |
| VOLTAGE TRANSFORMER FOR MEASURE (FRER) | TYPE | | 28 | - | | - | | - | | - | | - | | - | |
| | PERFORMANCE/CLASS | | 29 | - | | - | | - | | - | | - | | - | |
| POWER TERM. BLOCK (CABUR) | | Type/mm² | 30 | SCREW / 16 | | - | | - | | SCREW / 4 | | SCREW / 4 | | SCREW / 4 | |
| POWER CONDUCTOR | | mm² | 31 | 5G16 | | - | | - | | 3G4 | | 3G4 | | 3G4 | |

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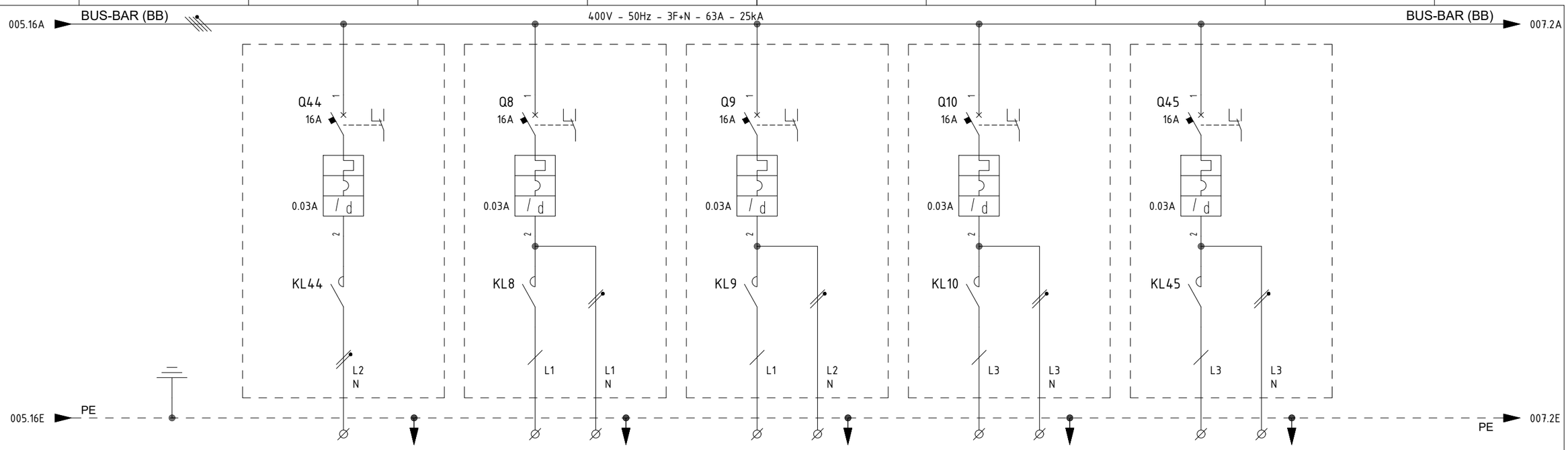
DRAWING NO. 1723002197-EL-DG-00013

SHEET 005

REV. 05

F.to UNI A3: 420mmx297mm

File Name : 1723002197-EL-DG-00013 Rev. 05




| ITEM | | | 1 | - | EJB-200N1-08-L1-01 | EJB-200N1-09-L2-01 | EJB-200N1-10-L3-01 | - | |
|---|---|---|---|---|---|---|---|---|---|
| UTILITY | | | 2 | NORMAL LIGHTING - SPARE | EMERGENCY LIGHTING UPPER DECK | EMERGENCY LIGHTING LOWER DECK | EMERGENCY LIGHTING STAIRS | EMERGENCY LIGHTING - SPARE | |
| CUBICLE | | | 3 | +02 | +02 | +02 | +02 | +02 | |
| RATED POWER \| RATED CURRENT | | | 4/5 | 1 KW \| 4.58 A | 1.5 KW \| 6.86 A | 1.5 KW \| 6.86 A | 0.30 KW \| 1.37 A | 1.5 KW \| 6.86 A | |
| TYPICAL FUNCTIONAL | | | 6 | - | - | - | - | - | |
| CIRCUIT BREAKER (ABB) | TYPE | | 7 | S302P-C16 + DDA202 AC-25/0.03 | S302P-D16 + DDA202 AC-25/0.03 | S302P-D16 + DDA202 AC-25/0.03 | S302P-D16 + DDA202 AC-25/0.03 | S302P-D16 + DDA202 AC-25/0.03 | |
| | VERSION | | 8 | 2P / MINIATURE | 2P / MINIATURE | 2P / MINIATURE | 2P / MINIATURE | 2P / MINIATURE | |
| | TRIP UNITS | | 9 | In=16A - Curve C / Id=0.03A Class AC | In=16A - Curve D / Id=0.03A Class AC | In=16A - Curve D / Id=0.03A Class AC | In=16A - Curve D / Id=0.03A Class AC | In=16A - Curve D / Id=0.03A Class AC | |
| | Icu | KA | 10 | 25KA | 25KA | 25KA | 25KA | 25KA | |
| OVERLOAD | L | Range A | 11 | - | - | - | - | - | |
| | | Range t | 12 | - | - | - | - | - | |
| SEL. SHORT-CIRCUIT | S | Range A | 13 | - | - | - | - | - | |
| | | Range t | 14 | - | - | - | - | - | |
| INST. SHORT-CIRCUIT | I | Range A | 15 | - | - | - | - | - | |
| | | Range t | 16 | - | - | - | - | - | |
| EARTH FAULT PROTECTION | G | Range A | 17 | - | - | - | - | - | |
| | | Range t | 18 | - | - | - | - | - | |
| CONTACTOR (ABB) | | | 19 | ESB40-20N-06; 2x22A AC3; Vaux=230Vdc/ac | ESB40-20N-06; 2x22A AC3; Vaux=230Vdc/ac | ESB40-20N-06; 2x22A AC3; Vaux=230Vdc/ac | ESB40-20N-06; 2x22A AC3; Vaux=230Vdc/ac | ESB40-20N-06; 2x22A AC3; Vaux=230Vdc/ac | |
| THERMAL OVERLOAD RELAY (ABB) | | | 20 | - | - | - | - | - | |
| SURGE ARRESTERS (DHENN) | | | 21 | - | - | - | - | - | |
| TOROIDAL CURRENT TRANSFORMER (FRER) | | | 22 | - | - | - | - | - | |
| FUSE HOLDER (ABB) | | | 23 | - | - | - | - | - | |
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| | PERFORMANCE/CLASS | | 29 | - | - | - | - | - | |
| POWER TERM. BLOCK (CABUR) | | Type/mm² | 30 | SCREW / 4 | SCREW / 4 | SCREW / 4 | SCREW / 4 | SCREW / 4 | |
| POWER CONDUCTOR | | mm² | 31 | - | 4G4_E | 4G4_E | 4G4_E | - | |

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SINGLE LINE DIAGRAM

Single Line Drawing

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

SCALE : NTS

A3

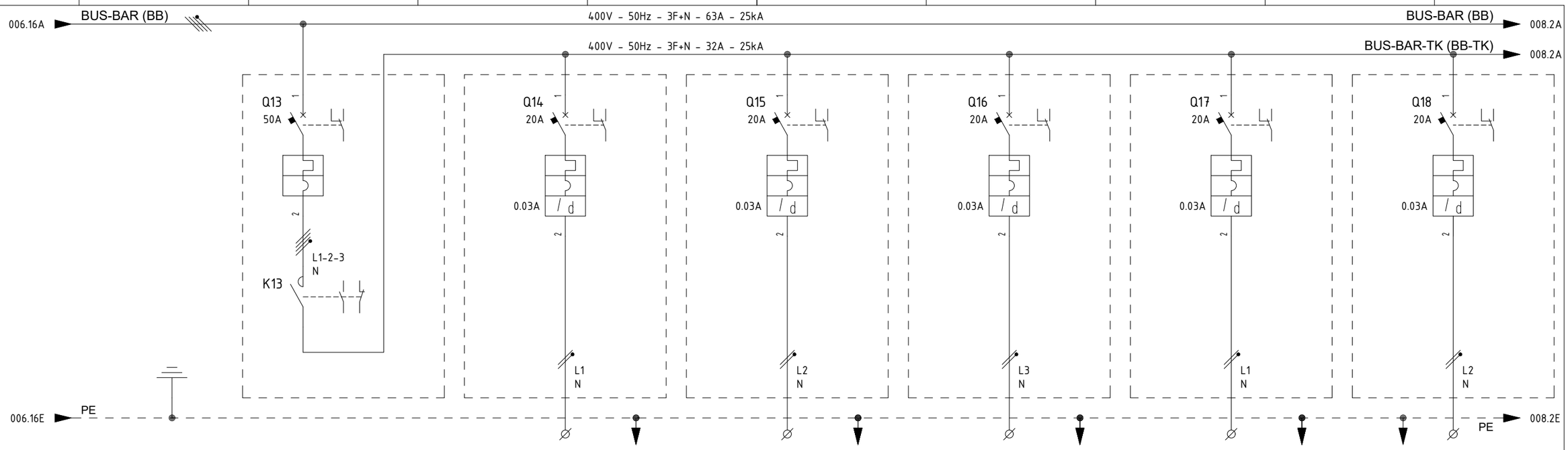
DRAWING NO. 1723002197-EL-DG-00013

SHEET 006

REV. 05

F.to UNI A3: 420mmx297mm

File Name : 1723002197-EL-DG-00013 Rev. 05




| ITEM | | | 1 | - | ETB-200N1-14-L1-01 | ETB-200N1-15-L2-01 | ETB-200N1-16-L3-01 | ETB-200N1-17-L1-01 | ETB-200N1-18-L2-01 |
|---|---|---|---|---|---|---|---|---|---|
| UTILITY | | | 2 | TRACE HEATING MAIN C.B. | TRACE HEATING - PROCESS LINES - FEEDER 1 (SWS LINES) | TRACE HEATING - PROCESS LINES - FEEDER 2 (CI LINES) | TRACE HEATING - PROCESS LINES - FEEDER 3 (DM LINE) | TRACE HEATING - PROCESS LINES - FEEDER 4 (WW LINES) | TRACE HEATING - PROCESS LINES - FEEDER 5 (VASSEL KO DRUM) |
| CUBICLE | | | 3 | +02 | +02 | +02 | +02 | +03 | +03 |
| RATED POWER \| RATED CURRENT | | | 4/5 | 34.6 KW \| 50 A | 3.5 KW \| 15.22 A | 3.5 KW \| 15.22 A | 3.5 KW \| 15.22 A | 3.5 KW \| 15.22 A | 3.5 KW \| 15.22 A |
| TYPICAL FUNCTIONAL | | | 6 | - | - | - | - | - | - |
| CIRCUIT BREAKER (ABB) | TYPE | | 7 | S804C-C50 | S302P-C20 + DDA202 AC-25/0.03 | S302P-C20 + DDA202 AC-25/0.03 | S302P-C20 + DDA202 AC-25/0.03 | S302P-C20 + DDA202 AC-25/0.03 | S302P-C20 + DDA202 AC-25/0.03 |
| | VERSION | | 8 | 4P / MINIATURE | 2P / MINIATURE | 2P / MINIATURE | 2P / MINIATURE | 2P / MINIATURE | 2P / MINIATURE |
| | TRIP UNITS | | 9 | In=50A - curve C | In=20A - Curve C / Id=0.03A Class AC | In=20A - Curve C / Id=0.03A Class AC | In=20A - Curve C / Id=0.03A Class AC | In=20A - Curve C / Id=0.03A Class AC | In=20A - Curve C / Id=0.03A Class AC |
| | Icu KA | | 10 | 25kA | 25kA | 25kA | 25kA | 25kA | 25kA |
| OVERLOAD | L | Range A | 11 | - | - | - | - | - | - |
| | | Range t | 12 | - | - | - | - | - | - |
| SEL. SHORT-CIRCUIT | S | Range A | 13 | - | - | - | - | - | - |
| | | Range t | 14 | - | - | - | - | - | - |
| INST. SHORT-CIRCUIT | I | Range A | 15 | - | - | - | - | - | - |
| | | Range t | 16 | - | - | - | - | - | - |
| EARTH FAULT PROTECTION | G | Range A | 17 | - | - | - | - | - | - |
| | | Range t | 18 | - | - | - | - | - | - |
| CONTACTOR (ABB) | | | 19 | ESB63-40N-06; 4x63A AC1; Vaux=230Vdc/ac | - | - | - | - | - |
| THERMAL OVERLOAD RELAY (ABB) | | | 20 | - | - | - | - | - | - |
| SURGE ARRESTERS (DHENN) | | | 21 | - | - | - | - | - | - |
| TOROIDAL CURRENT TRANSFORMER (FRER) | | | 22 | - | - | - | - | - | - |
| FUSE HOLDER (ABB) | | | 23 | - | - | - | - | - | - |
| TWILIGHT SWITCH (FINDER) | | | 24 | - | - | - | - | - | - |
| VOLTMETER (FRER) | | | 25 | - | - | - | - | - | - |
| CURRENT TRANSFORMER FOR MEASURE (FRER) | TYPE | | 26 | - | - | - | - | - | - |
| | PERFORMANCE/CLASS | | 27 | - | - | - | - | - | - |
| VOLTAGE TRANSFORMER FOR MEASURE (FRER) | TYPE | | 28 | - | - | - | - | - | - |
| | PERFORMANCE/CLASS | | 29 | - | - | - | - | - | - |
| POWER TERM. BLOCK (CABUR) | | Type/mm² | 30 | - | SCREW / 6 | SCREW / 6 | SCREW / 6 | SCREW / 6 | SCREW / 6 |
| POWER CONDUCTOR | | mm² | 31 | - | 3G6 | 3G6 | 3G6 | 3G6 | 3G6 |

| REV. | DATE | DRN | CHKD | APPD | DESCRIPTION |
|---|---|---|---|---|---|
| = | | | | | |
| + | | | | | |
| 5 | 12/03/2025 | Santinelli | Flamminio | Sigismondi | Replaced Twilight Switch TW1 |
| 4 | 18/09/2024 | Santinelli | Flamminio | Sigismondi | As Built (ASB) |
| 3 | 05/07/2024 | Santinelli | Flamminio | Sigismondi | Accepted for construction (AFC) |
| 2 | 24/04/2024 | Santinelli | Flamminio | Sigismondi | Issued for review (IFR) |
| 1 | 15/03/2024 | Santinelli | Flamminio | Sigismondi | Issued for review (IFR) |
| 0 | 08/02/2024 | Santinelli | Flamminio | Sigismondi | Issued for review (IFR) |

IMESA ELECTRICAL ENGINEERING

DWG n° : 231298/SD/13

Item n° : PF1002888/101

CROSSWIND

ROSETTI MARINO

TITLE : "DP-200N1"

SINGLE LINE DIAGRAM

Single Line Drawing

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

SCALE : NTS

A3

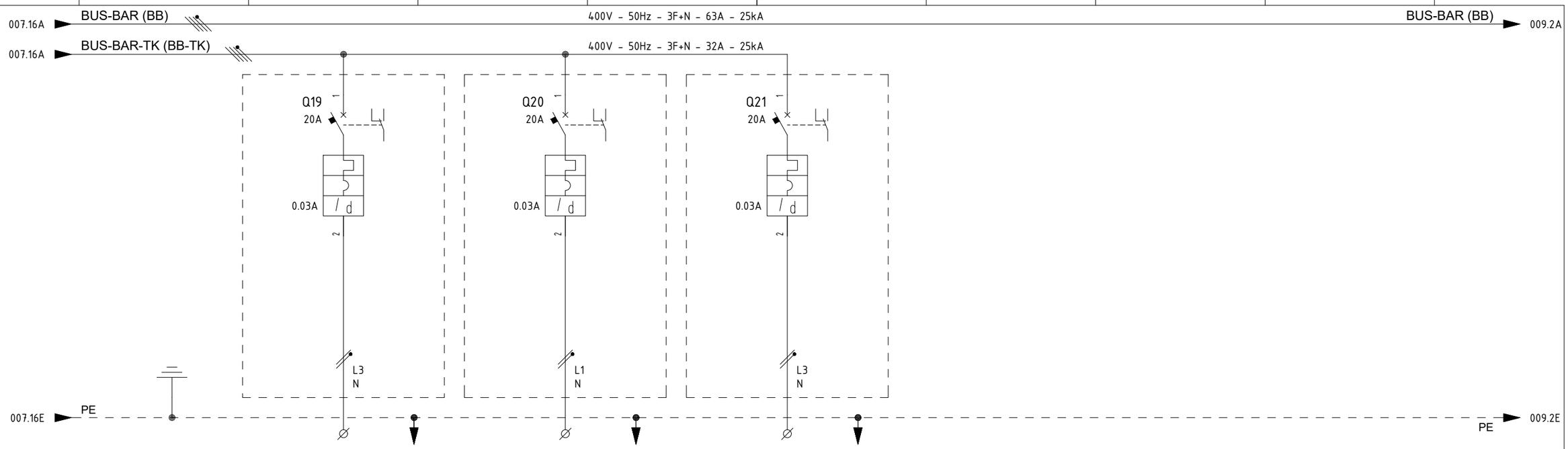
DRAWING NO. 1723002197-EL-DG-00013

SHEET 007

REV. 05

F.to UNI A3: 420mmx297mm

File Name : 1723002197-EL-DG-00013 Rev. 05




| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ITEM | | | 1 | ETB-200N1-19-L3-01 | | ETB-200N1-20-L1-01 | | - | | | | | | | | | | | |
| UTILITY | | | 2 | TRACE HEATING - PROCESS LINES - FEEDER 6 (H2 VENT) | | TRACE HEATING - PROCESS LINES - FEEDER 7 (SEA WATER PUMPS) | | TRACE HEATING - SPARE | | | | | | | | | | | |
| CUBICLE | | | 3 | +03 | | +03 | | +03 | | | | | | | | | | | |
| RATED POWER \| RATED CURRENT | | | 4/5 | 2.5 KW | 10.87 A | 2.5 KW | 10.87 A | 3.5 KW | 15.22 A | | | | | | | | | | |
| TYPICAL FUNCTIONAL | | | 6 | - | | - | | - | | | | | | | | | | | |
| CIRCUIT BREAKER (ABB) | TYPE | | 7 | S302P-C20 + DDA202 AC-25/0.03 | | S302P-C20 + DDA202 AC-25/0.03 | | S302P-C20 + DDA202 AC-25/0.03 | | | | | | | | | | | |
| | VERSION | | 8 | 2P / MINIATURE | | 2P / MINIATURE | | 2P / MINIATURE | | | | | | | | | | | |
| | TRIP UNITS | | 9 | In=20A - Curve C / Id=0.03A Class AC | | In=20A - Curve C / Id=0.03A Class AC | | In=20A - Curve C / Id=0.03A Class AC | | | | | | | | | | | |
| | Icu | KA | 10 | 25kA | | 25kA | | 25kA | | | | | | | | | | | |
| OVERLOAD | L | Range A | 11 | - | | - | | - | | | | | | | | | | | |
| | | Range t | 12 | - | | - | | - | | | | | | | | | | | |
| SEL. SHORT-CIRCUIT | S | Range A | 13 | - | | - | | - | | | | | | | | | | | |
| | | Range t | 14 | - | | - | | - | | | | | | | | | | | |
| INST. SHORT-CIRCUIT | I | Range A | 15 | - | | - | | - | | | | | | | | | | | |
| | | Range t | 16 | - | | - | | - | | | | | | | | | | | |
| EARTH FAULT PROTECTION | G | Range A | 17 | - | | - | | - | | | | | | | | | | | |
| | | Range t | 18 | - | | - | | - | | | | | | | | | | | |
| CONTACTOR (ABB) | | | 19 | - | | - | | - | | | | | | | | | | | |
| THERMAL OVERLOAD RELAY (ABB) | | | 20 | - | | - | | - | | | | | | | | | | | |
| SURGE ARRESTERS (DHENN) | | | 21 | - | | - | | - | | | | | | | | | | | |
| TOROIDAL CURRENT TRANSFORMER (FRER) | | | 22 | - | | - | | - | | | | | | | | | | | |
| FUSE HOLDER (ABB) | | | 23 | - | | - | | - | | | | | | | | | | | |
| TWILIGHT SWITCH (FINDER) | | | 24 | - | | - | | - | | | | | | | | | | | |
| VOLTMETER (FRER) | | | 25 | - | | - | | - | | | | | | | | | | | |
| CURRENT TRANSFORMER FOR MEASURE (FRER) | TYPE | | 26 | - | | - | | - | | | | | | | | | | | |
| | PERFORMANCE/CLASS | | 27 | - | | - | | - | | | | | | | | | | | |
| VOLTAGE TRANSFORMER FOR MEASURE (FRER) | TYPE | | 28 | - | | - | | - | | | | | | | | | | | |
| | PERFORMANCE/CLASS | | 29 | - | | - | | - | | | | | | | | | | | |
| POWER TERM. BLOCK (CABUR) | | Type/mm² | 30 | SCREW / 6 | | SCREW / 6 | | SCREW / 6 | | | | | | | | | | | |
| POWER CONDUCTOR | | mm² | 31 | 3G6 | | 3G6 | | - | | | | | | | | | | | |

| REV. | DATE | DRN | CHKD | APPD | DESCRIPTION |
|---|---|---|---|---|---|
| = | | | | | |
| + | | | | | |
| 5 | 12/03/2025 | Santinelli | Flamminio | Sigismondi | Replaced Twilight Switch TW1 |
| 4 | 18/09/2024 | Santinelli | Flamminio | Sigismondi | As Built (ASB) |
| 3 | 05/07/2024 | Santinelli | Flamminio | Sigismondi | Accepted for construction (AFC) |
| 2 | 24/04/2024 | Santinelli | Flamminio | Sigismondi | Issued for review (IFR) |
| 1 | 15/03/2024 | Santinelli | Flamminio | Sigismondi | Issued for review (IFR) |
| 0 | 08/02/2024 | Santinelli | Flamminio | Sigismondi | Issued for review (IFR) |

IMESA ELECTRICAL ENGINEERING

DWG n° : 231298/SD/13

Item n° : PF1002888/101

CROSSWIND

ROSETTI MARINO

TITLE : "DP-200N1"

SINGLE LINE DIAGRAM

Single Line Drawing

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

SCALE : NTS

A3

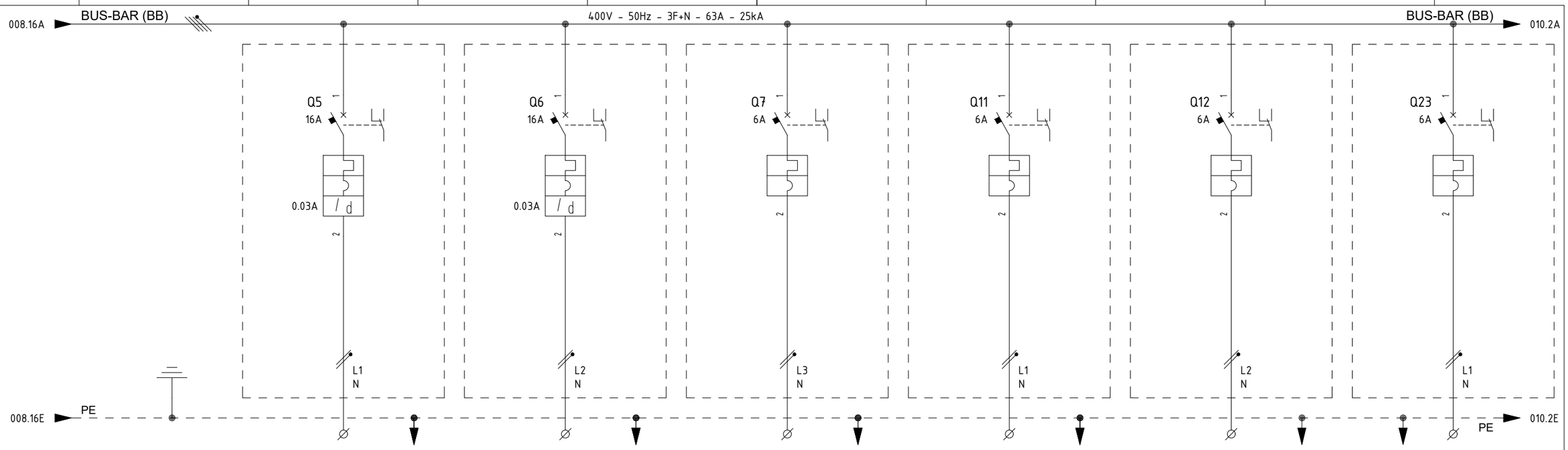
DRAWING NO. 1723002197-EL-DG-00013

SHEET 008

REV. 05

F.to UNI A3: 420mmx297mm

File Name : 1723002197-EL-DG-00013 Rev. 05




| ITEM | | | 1 | ESO-200N1-05-L1-01 | ESO-200N1-06-L2-01 | - | ESH-200N1-11-L1-01 | ESH-200N1-12-L2-01 | B400-SIS-001 |
|---|---|---|---|---|---|---|---|---|---|
| UTILITY | | | 2 | SMALL POWER SOCKET (UPPER DECK) | SMALL POWER SOCKET (LOWER DECK) | SPARE | SPACE HEATERS JB - WIND FARM SUBSEA CABLE | SPACE HEATERS JB - SOLAR SUBSEA CABLE | SIS-CONTROLLER AND I/O CABINET - AUXILIARY |
| CUBICLE | | | 3 | +03 | +03 | +03 | +03 | +03 | +03 |
| RATED POWER \| RATED CURRENT | | | 4/5 | 3 KW \| 14.49 A | 3 KW \| 14.49 A | 0.726 KW \| 3.95 A | 0.25 KW \| 1.14 A | 0.25 KW \| 1.14 A | 0.5 KW \| 2.72 A |
| TYPICAL FUNCTIONAL | | | 6 | - | - | - | - | - | - |
| CIRCUIT BREAKER (ABB) | TYPE | | 7 | S302P-C16 + DDA202 AC-25/0.03 | S302P-C16 + DDA202 AC-25/0.03 | S302P-C6 | S302P-C6 | S302P-C6 | S302P-C6 |
| | VERSION | | 8 | 2P / MINIATURE | 2P / MINIATURE | 2P / MINIATURE | 2P / MINIATURE | 2P / MINIATURE | 2P / MINIATURE |
| | TRIP UNITS | | 9 | In=16A - Curve C / Id=0.03A Class AC | In=16A - Curve C / Id=0.03A Class AC | In=6A - Curve C | In=6A - Curve C | In=6A - Curve C | In=6A - Curve C |
| | Icu | KA | 10 | 25kA | 25kA | 25kA | 25kA | 25kA | 25kA |
| OVERLOAD | L | Range A | 11 | - | - | - | - | - | - |
| | | Range t | 12 | - | - | - | - | - | - |
| SEL. SHORT-CIRCUIT | S | Range A | 13 | - | - | - | - | - | - |
| | | Range t | 14 | - | - | - | - | - | - |
| INST. SHORT-CIRCUIT | I | Range A | 15 | - | - | - | - | - | - |
| | | Range t | 16 | - | - | - | - | - | - |
| EARTH FAULT PROTECTION | G | Range A | 17 | - | - | - | - | - | - |
| | | Range t | 18 | - | - | - | - | - | - |
| CONTACTOR (ABB) | | | 19 | - | - | - | - | - | - |
| THERMAL OVERLOAD RELAY (ABB) | | | 20 | - | - | - | - | - | - |
| SURGE ARRESTERS (DHENN) | | | 21 | - | - | - | - | - | - |
| TOROIDAL CURRENT TRANSFORMER (FRER) | | | 22 | - | - | - | - | - | - |
| FUSE HOLDER (ABB) | | | 23 | - | - | - | - | - | - |
| TWILIGHT SWITCH (FINDER) | | | 24 | - | - | - | - | - | - |
| VOLTMETER (FRER) | | | 25 | - | - | - | - | - | - |
| CURRENT TRANSFORMER FOR MEASURE (FRER) | TYPE | | 26 | - | - | - | - | - | - |
| | PERFORMANCE/CLASS | | 27 | - | - | - | - | - | - |
| VOLTAGE TRANSFORMER FOR MEASURE (FRER) | TYPE | | 28 | - | - | - | - | - | - |
| | PERFORMANCE/CLASS | | 29 | - | - | - | - | - | - |
| POWER TERM. BLOCK (CABUR) | | Type/mm² | 30 | SCREW / 10 | SCREW / 10 | SCREW / 4 | SCREW / 4 | SCREW / 4 | SCREW / 4 |
| POWER CONDUCTOR | | mm² | 31 | 3G10 | 3G10 | 3G2.5 | 3G2.5 | 3G2.5 | 3G2.5 |

| REV. | DATE | DRN | CHKD | APPD | DESCRIPTION |
|---|---|---|---|---|---|
| = | | | | | |
| + | | | | | |
| 5 | 12/03/2025 | Santinelli | Flamminio | Sigismondi | Replaced Twilight Switch TW1 |
| 4 | 18/09/2024 | Santinelli | Flamminio | Sigismondi | As Built (ASB) |
| 3 | 05/07/2024 | Santinelli | Flamminio | Sigismondi | Accepted for construction (AFC) |
| 2 | 24/04/2024 | Santinelli | Flamminio | Sigismondi | Issued for review (IFR) |
| 1 | 15/03/2024 | Santinelli | Flamminio | Sigismondi | Issued for review (IFR) |
| 0 | 08/02/2024 | Santinelli | Flamminio | Sigismondi | Issued for review (IFR) |

IMESA ELECTRICAL ENGINEERING

DWG n° : 231298/SD/13

Item n° : PF1002888/101

CROSSWIND

ROSETTI MARINO

TITLE : "DP-200N1"

SINGLE LINE DIAGRAM

Single Line Drawing

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

SCALE : NTS

A3

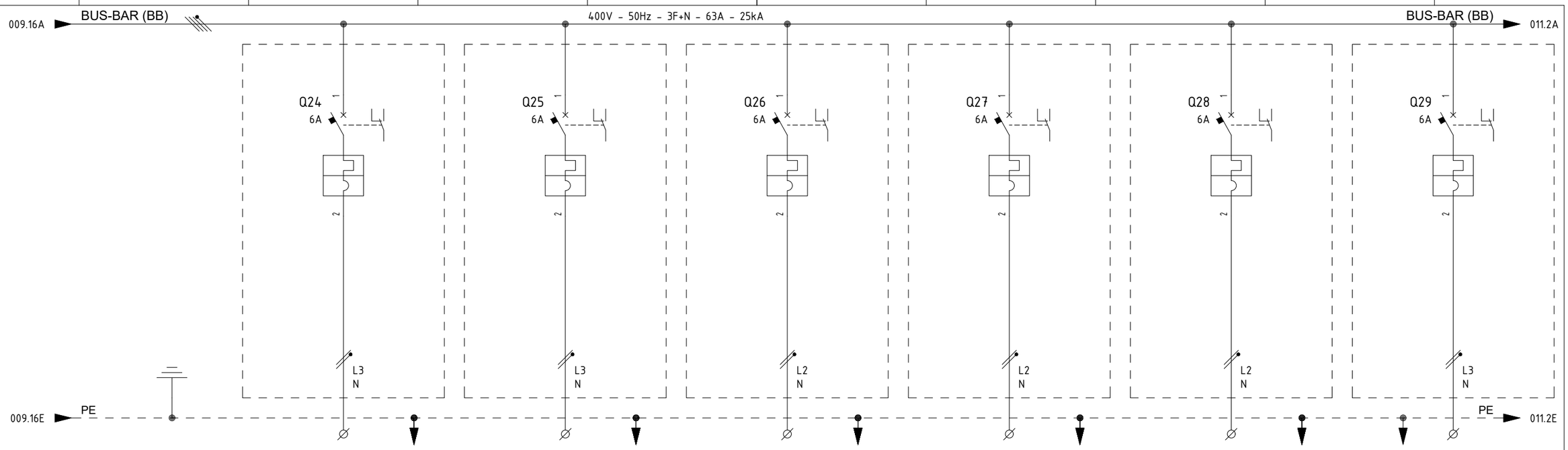
DRAWING NO. 1723002197-EL-DG-00013

SHEET 009

REV. 05

F.to UNI A3: 420mmx297mm

File Name : 1723002197-EL-DG-00013 Rev. 05




| ITEM | | | 1 | B400-PCS-001 | B400-EMCS-001 | B400-FGS-001 | B400-NET-001 | B400-SRV-001 | CP-630E1 |
|---|---|---|---|---|---|---|---|---|---|
| UTILITY | | | 2 | PCS-CONTROLLER AND I/O CABINET - AUXILIARY | EMCS-CONTROLLER AND I/O CABINET - AUXILIARY | FGS FIRE & GAS PANEL - AUXILIARY | SYSTEM SERVER / NETWORK CABINET - AUXILIARY | SERVER CABINET ITER - AUXILIARY | UCP - INSTRUMENT AIR PACKAGE -A-63000 - AUXILIARY |
| CUBICLE | | | 3 | +03 | +03 | +03 | +03 | +03 | +03 |
| RATED POWER \| RATED CURRENT | | | 4/5 | 0.5 KW \| 2.72 A | 0.5 KW \| 2.72 A | 0.8 KW \| 4.35 A | 0.5 KW \| 2.72 A | 0.5 KW \| 2.72 A | 0.5 KW \| 2.72 A |
| TYPICAL FUNCTIONAL | | | 6 | - | - | - | - | - | - |
| CIRCUIT BREAKER (ABB) | TYPE | | 7 | S302P-C6 | S302P-C6 | S302P-C6 | S302P-C6 | S302P-C6 | S302P-C6 |
| | VERSION | | 8 | 2P / MINIATURE | 2P / MINIATURE | 2P / MINIATURE | 2P / MINIATURE | 2P / MINIATURE | 2P / MINIATURE |
| | TRIP UNITS | | 9 | In=6A - Curve C | In=6A - Curve C | In=6A - Curve C | In=6A - Curve C | In=6A - Curve C | In=6A - Curve C |
| | Icu | KA | 10 | 25kA | 25kA | 25kA | 25kA | 25kA | 25kA |
| OVERLOAD | L | Range A | 11 | - | - | - | - | - | - |
| | | Range t | 12 | - | - | - | - | - | - |
| SEL. SHORT-CIRCUIT | S | Range A | 13 | - | - | - | - | - | - |
| | | Range t | 14 | - | - | - | - | - | - |
| INST. SHORT-CIRCUIT | I | Range A | 15 | - | - | - | - | - | - |
| | | Range t | 16 | - | - | - | - | - | - |
| EARTH FAULT PROTECTION | G | Range A | 17 | - | - | - | - | - | - |
| | | Range t | 18 | - | - | - | - | - | - |
| CONTACTOR (ABB) | | | 19 | - | - | - | - | - | - |
| THERMAL OVERLOAD RELAY (ABB) | | | 20 | - | - | - | - | - | - |
| SURGE ARRESTERS (DHENN) | | | 21 | - | - | - | - | - | - |
| TOROIDAL CURRENT TRANSFORMER (FRER) | | | 22 | - | - | - | - | - | - |
| FUSE HOLDER (ABB) | | | 23 | - | - | - | - | - | - |
| TWILIGHT SWITCH (FINDER) | | | 24 | - | - | - | - | - | - |
| VOLTMETER (FRER) | | | 25 | - | - | - | - | - | - |
| CURRENT TRANSFORMER FOR MEASURE (FRER) | TYPE | | 26 | - | - | - | - | - | - |
| | PERFORMANCE/CLASS | | 27 | - | - | - | - | - | - |
| VOLTAGE TRANSFORMER FOR MEASURE (FRER) | TYPE | | 28 | - | - | - | - | - | - |
| | PERFORMANCE/CLASS | | 29 | - | - | - | - | - | - |
| POWER TERM. BLOCK (CABUR) | | Type/mm² | 30 | SCREW / 4 | SCREW / 4 | SCREW / 4 | SCREW / 4 | SCREW / 4 | SCREW / 4 |
| POWER CONDUCTOR | | mm² | 31 | 3G2.5 | 3G2.5 | 3G2.5 | 3G2.5 | 3G2.5 | 3G2.5 |

| REV. | DATE | DRN | CHKD | APPD | DESCRIPTION |
|---|---|---|---|---|---|
| = | | | | | |
| + | | | | | |
| 5 | 12/03/2025 | Santinelli | Flamminio | Sigismondi | Replaced Twilight Switch TW1 |
| 4 | 18/09/2024 | Santinelli | Flamminio | Sigismondi | As Built (ASB) |
| 3 | 05/07/2024 | Santinelli | Flamminio | Sigismondi | Accepted for construction (AFC) |
| 2 | 24/04/2024 | Santinelli | Flamminio | Sigismondi | Issued for review (IFR) |
| 1 | 15/03/2024 | Santinelli | Flamminio | Sigismondi | Issued for review (IFR) |
| 0 | 08/02/2024 | Santinelli | Flamminio | Sigismondi | Issued for review (IFR) |

IMESA ELECTRICAL ENGINEERING

DWG n° : 231298/SD/13

Item n° : PF1002888/101

CROSSWIND

ROSETTI MARINO

TITLE : "DP-200N1"

SINGLE LINE DIAGRAM

Single Line Drawing

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

SCALE : NTS

A3

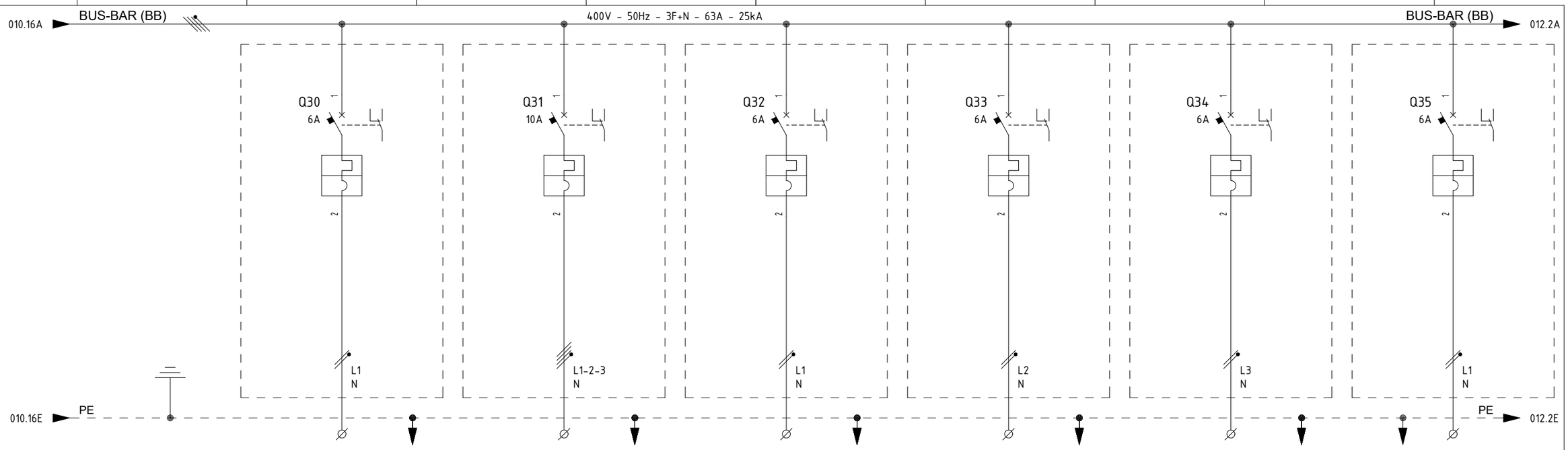
DRAWING NO. 1723002197-EL-DG-00013

SHEET 010

REV. 05

F.to UNI A3: 420mmx297mm

File Name : 1723002197-EL-DG-00013 Rev. 05




| ITEM | | | 1 | CP-640F1 | CP-100E2 | CP-100E3 | CP-100E4 | RR-100D1 | CP-200E1 |
|---|---|---|---|---|---|---|---|---|---|
| UTILITY | | | 2 | UCP - N2 PACKAGE - AUXILIARY | AUXILIARY TRAFO OLTC | AUXILIARY TRAFO AVR | AUXILIARY TRAFO 7MVA | AUXILIARY NER | AUXILIARY TRAFO 1.6MVA |
| CUBICLE | | | 3 | +03 | +03 | +03 | +03 | +03 | +03 |
| RATED POWER \| RATED CURRENT | | | 4/5 | 0.5 KW \| 2.72 A | 1 KW \| 1.81 A | 0.3 KW \| 1.63 A | 0.5 KW \| 2.72 A | 0.3 KW \| 1.63 A | 0.5 KW \| 2.72 A |
| TYPICAL FUNCTIONAL | | | 6 | - | - | - | - | - | - |
| CIRCUIT BREAKER (ABB) | TYPE | | 7 | S302P-C6 | S304P-C10 | S302P-C6 | S302P-C6 | S302P-C6 | S302P-C6 |
| | VERSION | | 8 | 2P / MINIATURE | 4P / MINIATURE | 2P / MINIATURE | 2P / MINIATURE | 2P / MINIATURE | 2P / MINIATURE |
| | TRIP UNITS | | 9 | In=6A - Curve C | In=10A - Curve C | In=6A - Curve C | In=6A - Curve C | In=6A - Curve C | In=6A - Curve C |
| | Icu | KA | 10 | 25kA | 25kA | 25kA | 25kA | 25kA | 25kA |
| OVERLOAD | L | Range A | 11 | - | - | - | - | - | - |
| | | Range t | 12 | - | - | - | - | - | - |
| SEL. SHORT-CIRCUIT | S | Range A | 13 | - | - | - | - | - | - |
| | | Range t | 14 | - | - | - | - | - | - |
| INST. SHORT-CIRCUIT | I | Range A | 15 | - | - | - | - | - | - |
| | | Range t | 16 | - | - | - | - | - | - |
| EARTH FAULT PROTECTION | G | Range A | 17 | - | - | - | - | - | - |
| | | Range t | 18 | - | - | - | - | - | - |
| CONTACTOR (ABB) | | | 19 | - | - | - | - | - | - |
| THERMAL OVERLOAD RELAY (ABB) | | | 20 | - | - | - | - | - | - |
| SURGE ARRESTERS (DHENN) | | | 21 | - | - | - | - | - | - |
| TOROIDAL CURRENT TRANSFORMER (FRER) | | | 22 | - | - | - | - | - | - |
| FUSE HOLDER (ABB) | | | 23 | - | - | - | - | - | - |
| TWILIGHT SWITCH (FINDER) | | | 24 | - | - | - | - | - | - |
| VOLTMETER (FRER) | | | 25 | - | - | - | - | - | - |
| CURRENT TRANSFORMER FOR MEASURE (FRER) | TYPE | | 26 | - | - | - | - | - | - |
| | PERFORMANCE/CLASS | | 27 | - | - | - | - | - | - |
| VOLTAGE TRANSFORMER FOR MEASURE (FRER) | TYPE | | 28 | - | - | - | - | - | - |
| | PERFORMANCE/CLASS | | 29 | - | - | - | - | - | - |
| POWER TERM. BLOCK (CABUR) | | Type/mm² | 30 | SCREW / 4 | SCREW / 4 | SCREW / 4 | SCREW / 4 | SCREW / 4 | SCREW / 4 |
| POWER CONDUCTOR | | mm² | 31 | 3G2.5 | 5G4 | 3G2.5 | 3G2.5 | 3G2.5 | 3G2.5 |

| REV. | DATE | DRN | CHKD | APPD | DESCRIPTION |
|---|---|---|---|---|---|
| = | | | | | |
| + | | | | | |
| 5 | 12/03/2025 | Santinelli | Flamminio | Sigismondi | Replaced Twilight Switch TW1 |
| 4 | 18/09/2024 | Santinelli | Flamminio | Sigismondi | As Built (ASB) |
| 3 | 05/07/2024 | Santinelli | Flamminio | Sigismondi | Accepted for construction (AFC) |
| 2 | 24/04/2024 | Santinelli | Flamminio | Sigismondi | Issued for review (IFR) |
| 1 | 15/03/2024 | Santinelli | Flamminio | Sigismondi | Issued for review (IFR) |
| 0 | 08/02/2024 | Santinelli | Flamminio | Sigismondi | Issued for review (IFR) |

IMESA ELECTRICAL ENGINEERING

DWG n° : 231298/SD/13

Item n° : PF1002888/101

CROSSWIND

ROSETTI MARINO

TITLE : "DP-200N1"

SINGLE LINE DIAGRAM

Single Line Drawing

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

SCALE : NTS

A3

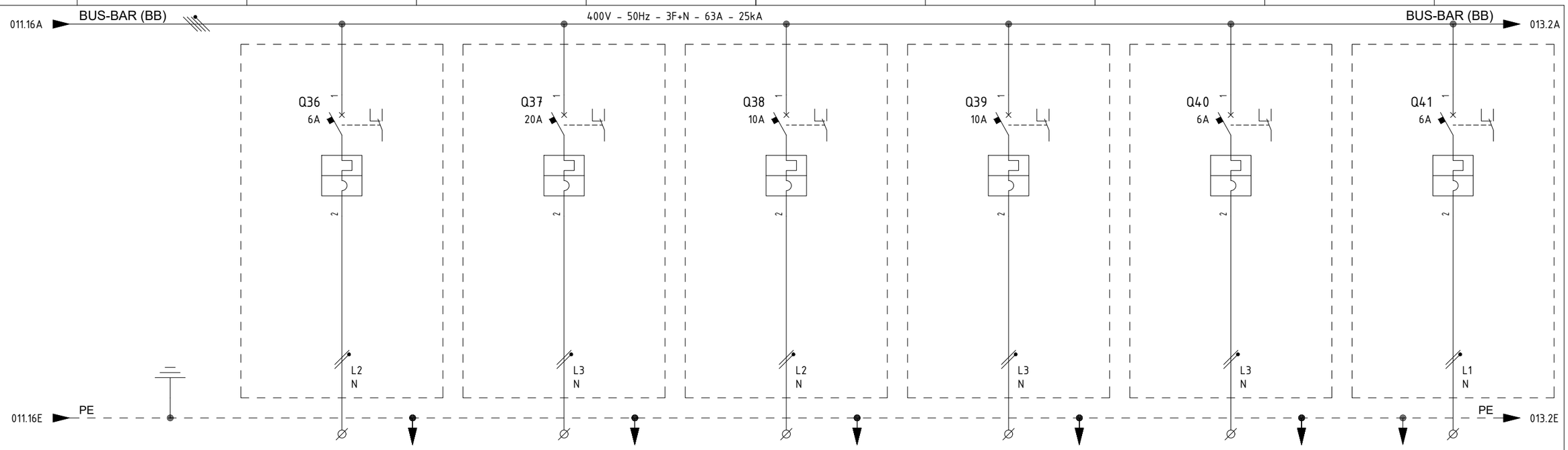
DRAWING NO. 1723002197-EL-DG-00013

SHEET 011

REV. 05

F.to UNI A3: 420mmx297mm

File Name : 1723002197-EL-DG-00013 Rev. 05




| ITEM | | | 1 | CP-200E2 | CP-100E1 | SG-100D1 | SG-200N1 | SG-200D2 | UP-200F3 |
|---|---|---|---|---|---|---|---|---|---|
| UTILITY | | | 2 | AUXILIARY TRAFO SOLARE 0.5MVA | AUXILIARY GIS | AUXILIARY 6.6KV SWITCHBOARD | AUXILIARY LV SWITCHBOARD | AUXILIARY LV SWITCHBOARD 800/460V | AC UPS PAS AUXILIARY |
| CUBICLE | | | 3 | +03 | +03 | +03 | +03 | +03 | +03 |
| RATED POWER \| RATED CURRENT | | | 4/5 | 0.5 KW \| 2.72 A | 3 KW \| 16.3 A | 1 KW \| 5.43 A | 1 KW \| 5.43 A | 0.5 KW \| 2.72 A | 0.2 KW \| 0.82 A |
| TYPICAL FUNCTIONAL | | | 6 | - | - | - | - | - | - |
| CIRCUIT BREAKER (ABB) | TYPE | | 7 | S302P-C6 | S302P-C20 | S302P-C10 | S302P-C10 | S302P-C6 | S302P-C6 |
| | VERSION | | 8 | 2P / MINIATURE | 2P / MINIATURE | 2P / MINIATURE | 2P / MINIATURE | 2P / MINIATURE | 2P / MINIATURE |
| | TRIP UNITS | | 9 | In=6A - Curve C | In=20A - Curve C | In=10A - Curve C | In=10A - Curve C | In=6A - Curve C | In=6A - Curve C |
| | Icu | KA | 10 | 25kA | 25kA | 25kA | 25kA | 25kA | 25kA |
| OVERLOAD | L | Range A | 11 | - | - | - | - | - | - |
| | | Range t | 12 | - | - | - | - | - | - |
| SEL. SHORT-CIRCUIT | S | Range A | 13 | - | - | - | - | - | - |
| | | Range t | 14 | - | - | - | - | - | - |
| INST. SHORT-CIRCUIT | I | Range A | 15 | - | - | - | - | - | - |
| | | Range t | 16 | - | - | - | - | - | - |
| EARTH FAULT PROTECTION | G | Range A | 17 | - | - | - | - | - | - |
| | | Range t | 18 | - | - | - | - | - | - |
| CONTACTOR (ABB) | | | 19 | - | - | - | - | - | - |
| THERMAL OVERLOAD RELAY (ABB) | | | 20 | - | - | - | - | - | - |
| SURGE ARRESTERS (DHENN) | | | 21 | - | - | - | - | - | - |
| TOROIDAL CURRENT TRANSFORMER (FRER) | | | 22 | - | - | - | - | - | - |
| FUSE HOLDER (ABB) | | | 23 | - | - | - | - | - | - |
| TWILIGHT SWITCH (FINDER) | | | 24 | - | - | - | - | - | - |
| VOLTMETER (FRER) | | | 25 | - | - | - | - | - | - |
| CURRENT TRANSFORMER FOR MEASURE (FRER) | TYPE | | 26 | - | - | - | - | - | - |
| | PERFORMANCE/CLASS | | 27 | - | - | - | - | - | - |
| VOLTAGE TRANSFORMER FOR MEASURE (FRER) | TYPE | | 28 | - | - | - | - | - | - |
| | PERFORMANCE/CLASS | | 29 | - | - | - | - | - | - |
| POWER TERM. BLOCK (CABUR) | | Type/mm² | 30 | SCREW / 4 | SCREW / 6 | SCREW / 4 | SCREW / 4 | SCREW / 4 | SCREW / 4 |
| POWER CONDUCTOR | | mm² | 31 | 3G2.5 | 3G6 | 3G2.5 | 3G2.5 | 3G2.5 | 3G2.5 |

| REV. | DATE | DRN | CHKD | APPD | DESCRIPTION |
|---|---|---|---|---|---|
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| + | | | | | |
| 5 | 12/03/2025 | Santinelli | Flamminio | Sigismondi | Replaced Twilight Switch TW1 |
| 4 | 18/09/2024 | Santinelli | Flamminio | Sigismondi | As Built (ASB) |
| 3 | 05/07/2024 | Santinelli | Flamminio | Sigismondi | Accepted for construction (AFC) |
| 2 | 24/04/2024 | Santinelli | Flamminio | Sigismondi | Issued for review (IFR) |
| 1 | 15/03/2024 | Santinelli | Flamminio | Sigismondi | Issued for review (IFR) |
| 0 | 08/02/2024 | Santinelli | Flamminio | Sigismondi | Issued for review (IFR) |

CROSSWIND

ROSETTI MARINO

IMESA ELECTRICAL ENGINEERING

DWG n° : 231298/SD/13

Item n° : PF1002888/101

TITLE : "DP-200N1"

SINGLE LINE DIAGRAM

Single Line Drawing

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

SCALE : NTS

A3

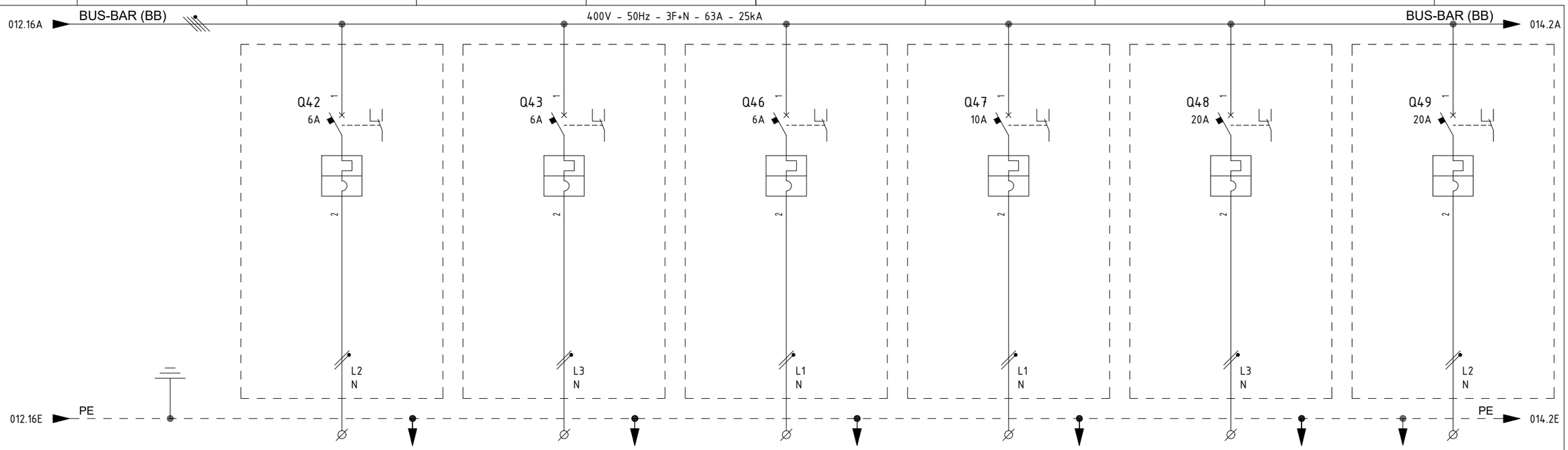
DRAWING NO. 1723002197-EL-DG-00013

SHEET 012

REV. 05

F.to UNI A3: 420mmx297mm

File Name : 1723002197-EL-DG-00013 Rev. 05




| ITEM | | | 1 | UP-200F4 | UP-200F1 | - | - | - | - |
|---|---|---|---|---|---|---|---|---|---|
| UTILITY | | | 2 | AC UPS F&G AUXILIARY | DC BATTERY SYSTEM AUXILIARY | INS CABINET - SPARE AUXILIARY | SPARE | SPARE | SPARE |
| CUBICLE | | | 3 | +03 | +03 | +03 | +03 | +03 | +03 |
| RATED POWER \| RATED CURRENT | | | 4/5 | 0.2 KW \| 0.82 A | 0.2 KW \| 0.82 A | 0.5 KW \| 2.72 A | 1 KW \| 5.43 A | 3 KW \| 16.3 A | 3 KW \| 16.3 A |
| TYPICAL FUNCTIONAL | | | 6 | - | - | - | - | - | - |
| CIRCUIT BREAKER (ABB) | TYPE | | 7 | S302P-C6 | S302P-C6 | S302P-C6 | S302P-C10 | S302P-C20 | S302P-C20 |
| | VERSION | | 8 | 2P / MINIATURE | 2P / MINIATURE | 2P / MINIATURE | 2P / MINIATURE | 2P / MINIATURE | 2P / MINIATURE |
| | TRIP UNITS | | 9 | In=6A - Curve C | In=6A - Curve C | In=6A - Curve C | In=10A - Curve C | In=20A - Curve C | In=20A - Curve C |
| | Icu | KA | 10 | 25kA | 25kA | 25kA | 25kA | 25kA | 25kA |
| OVERLOAD | L | Range A | 11 | - | - | - | - | - | - |
| | | Range t | 12 | - | - | - | - | - | - |
| SEL. SHORT-CIRCUIT | S | Range A | 13 | - | - | - | - | - | - |
| | | Range t | 14 | - | - | - | - | - | - |
| INST. SHORT-CIRCUIT | I | Range A | 15 | - | - | - | - | - | - |
| | | Range t | 16 | - | - | - | - | - | - |
| EARTH FAULT PROTECTION | G | Range A | 17 | - | - | - | - | - | - |
| | | Range t | 18 | - | - | - | - | - | - |
| CONTACTOR (ABB) | | | 19 | - | - | - | - | - | - |
| THERMAL OVERLOAD RELAY (ABB) | | | 20 | - | - | - | - | - | - |
| SURGE ARRESTERS (DHENN) | | | 21 | - | - | - | - | - | - |
| TOROIDAL CURRENT TRANSFORMER (FRER) | | | 22 | - | - | - | - | - | - |
| FUSE HOLDER (ABB) | | | 23 | - | - | - | - | - | - |
| TWILIGHT SWITCH (FINDER) | | | 24 | - | - | - | - | - | - |
| VOLTMETER (FRER) | | | 25 | - | - | - | - | - | - |
| CURRENT TRANSFORMER FOR MEASURE (FRER) | TYPE | | 26 | - | - | - | - | - | - |
| | PERFORMANCE/CLASS | | 27 | - | - | - | - | - | - |
| VOLTAGE TRANSFORMER FOR MEASURE (FRER) | TYPE | | 28 | - | - | - | - | - | - |
| | PERFORMANCE/CLASS | | 29 | - | - | - | - | - | - |
| POWER TERM. BLOCK (CABUR) | | Type/mm² | 30 | SCREW / 4 | SCREW / 4 | SCREW / 4 | SCREW / 4 | SCREW / 6 | SCREW / 6 |
| POWER CONDUCTOR | | mm² | 31 | 3G2.5 | 3G2.5 | 3G2.5 | - | - | - |

| REV. | DATE | DRN | CHKD | APPD | DESCRIPTION |
|---|---|---|---|---|---|
| = | | | | | |
| + | | | | | |
| 5 | 12/03/2025 | Santinelli | Flamminio | Sigismondi | Replaced Twilight Switch TW1 |
| 4 | 18/09/2024 | Santinelli | Flamminio | Sigismondi | As Built (ASB) |
| 3 | 05/07/2024 | Santinelli | Flamminio | Sigismondi | Accepted for construction (AFC) |
| 2 | 24/04/2024 | Santinelli | Flamminio | Sigismondi | Issued for review (IFR) |
| 1 | 15/03/2024 | Santinelli | Flamminio | Sigismondi | Issued for review (IFR) |
| 0 | 08/02/2024 | Santinelli | Flamminio | Sigismondi | Issued for review (IFR) |

IMESA ELECTRICAL ENGINEERING

DWG n° : 231298/SD/13

Item n° : PF1002888/101

CROSSWIND

ROSETTI MARINO

TITLE : "DP-200N1"

SINGLE LINE DIAGRAM

Single Line Drawing

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

SCALE : NTS

A3

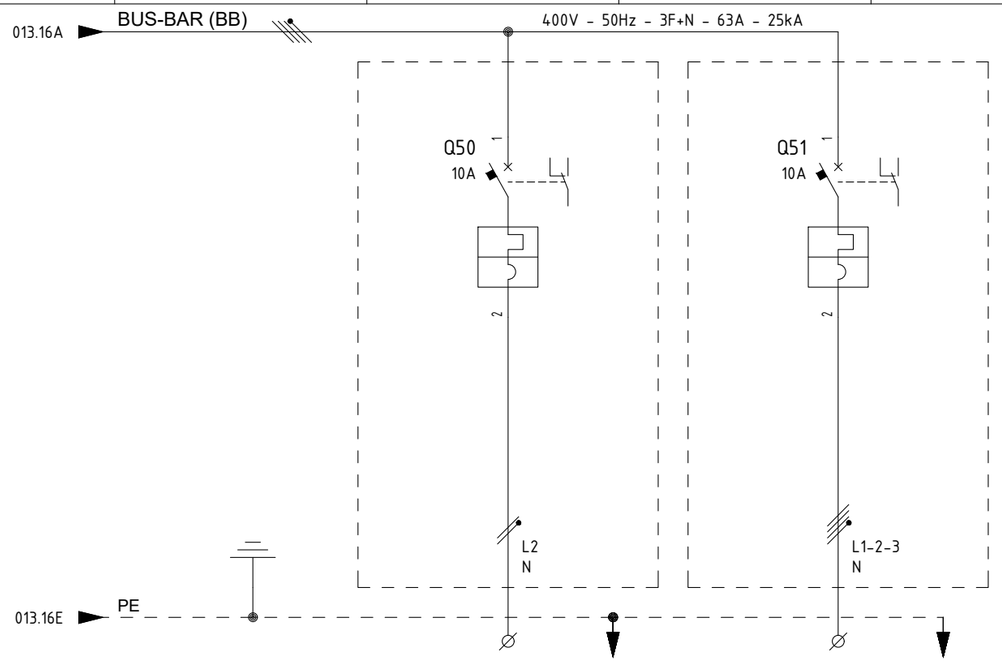
DRAWING NO. 1723002197-EL-DG-00013

SHEET 013

REV. 05

F.to UNI A3: 420mmx297mm

File Name : 1723002197-EL-DG-00013 Rev. 05




| ITEM | | | 1 | - | - | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UTILITY | | | 2 | SPARE | SPARE | | | | | | | | |
| CUBICLE | | | 3 | +03 | +03 | | | | | | | | |
| RATED POWER | RATED CURRENT | | 4/5 | 1 KW / 5.43 A | 3 KW / 5.42 A | | | | | | | | |
| TYPICAL FUNCTIONAL | | | 6 | - | - | | | | | | | | |
| CIRCUIT BREAKER (ABB) | TYPE | | 7 | S302P-C10 | S304P-C10 | | | | | | | | |
| | VERSION | | 8 | 2P / MINIATURE | 4P / MINIATURE | | | | | | | | |
| | TRIP UNITS | | 9 | In=10A - Curve C | In=10A - Curve C | | | | | | | | |
| | Icu | KA | 10 | 25kA | 25kA | | | | | | | | |
| OVERLOAD | L | Range A | 11 | - | - | | | | | | | | |
| | | Range t | 12 | - | - | | | | | | | | |
| SEL. SHORT-CIRCUIT | S | Range A | 13 | - | - | | | | | | | | |
| | | Range t | 14 | - | - | | | | | | | | |
| INST. SHORT-CIRCUIT | I | Range A | 15 | - | - | | | | | | | | |
| | | Range t | 16 | - | - | | | | | | | | |
| EARTH FAULT PROTECTION | G | Range A | 17 | - | - | | | | | | | | |
| | | Range t | 18 | - | - | | | | | | | | |
| CONTACTOR (ABB) | | | 19 | - | - | | | | | | | | |
| THERMAL OVERLOAD RELAY (ABB) | | | 20 | - | - | | | | | | | | |
| SURGE ARRESTERS (DHENN) | | | 21 | - | - | | | | | | | | |
| TOROIDAL CURRENT TRANSFORMER (FRER) | | | 22 | - | - | | | | | | | | |
| FUSE HOLDER (ABB) | | | 23 | - | - | | | | | | | | |
| TWILIGHT SWITCH (FINDER) | | | 24 | - | - | | | | | | | | |
| VOLTMETER (FRER) | | | 25 | - | - | | | | | | | | |
| CURRENT TRANSFORMER FOR MEASURE (FRER) | TYPE | | 26 | - | - | | | | | | | | |
| | PERFORMANCE/CLASS | | 27 | - | - | | | | | | | | |
| VOLTAGE TRANSFORMER FOR MEASURE (FRER) | TYPE | | 28 | - | - | | | | | | | | |
| | PERFORMANCE/CLASS | | 29 | - | - | | | | | | | | |
| POWER TERM. BLOCK (CABUR) | | Type/mm² | 30 | SCREW / 4 | SCREW / 4 | | | | | | | | |
| POWER CONDUCTOR | | mm² | 31 | - | - | | | | | | | | |

| REV. | DATE | DRN | CHKD | APPD | DESCRIPTION |
|---|---|---|---|---|---|
| = | | | | | |
| + | | | | | |
| 5 | 12/03/2025 | Santinelli | Flamminio | Sigismondi | Replaced Twilight Switch TW1 |
| 4 | 18/09/2024 | Santinelli | Flamminio | Sigismondi | As Built (ASB) |
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IMESA ELECTRICAL ENGINEERING

DWG n° : 231298/SD/13

Item n° : PF1002888/101

CROSSWIND

ROSETTI MARINO

TITLE : "DP-200N1"

SINGLE LINE DIAGRAM

Single Line Drawing

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

SCALE : NTS

A3

DRAWING NO. 1723002197-EL-DG-00013

SHEET 014

REV. 05

F.to UNI A3: 420mmx297mm

File Name : 1723002197-EL-DG-00013 Rev. 05