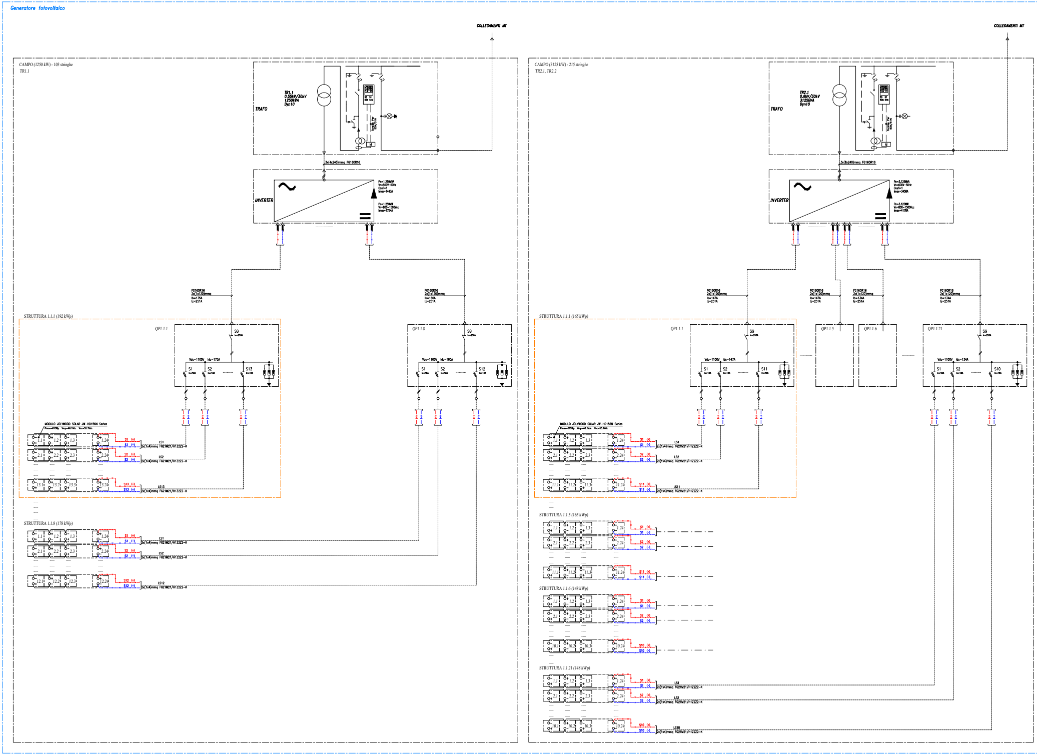
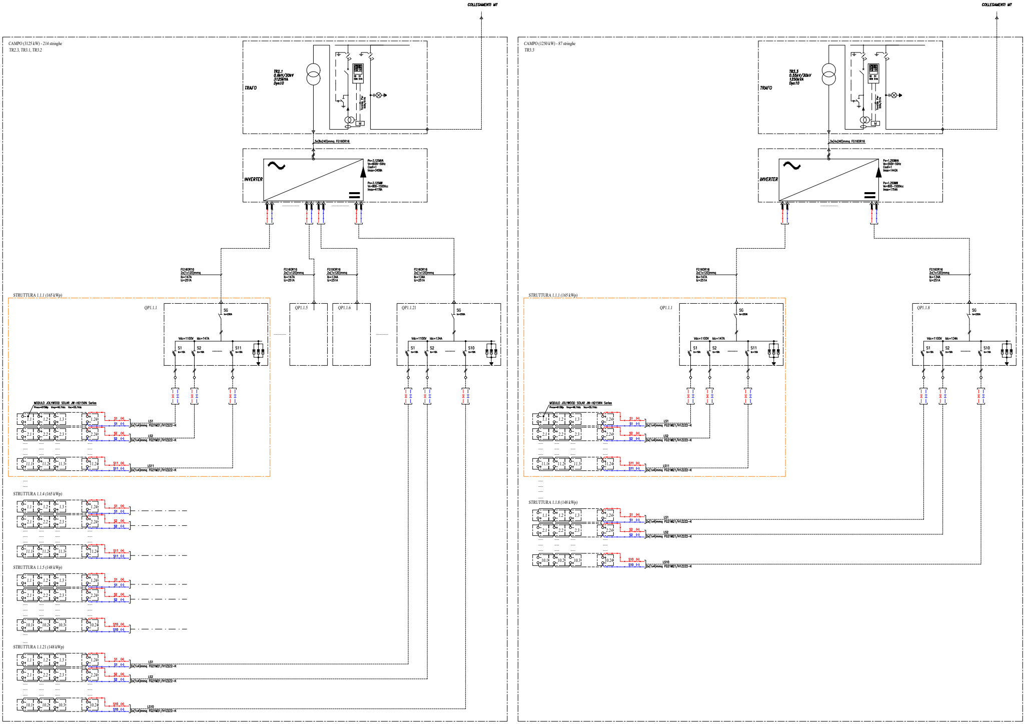
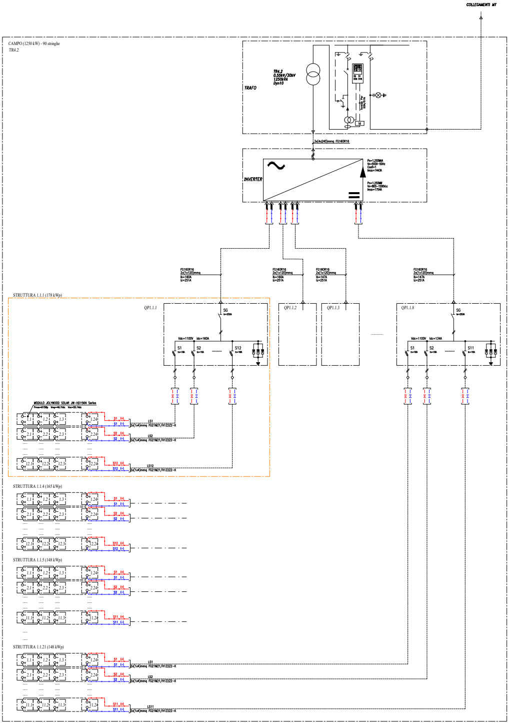
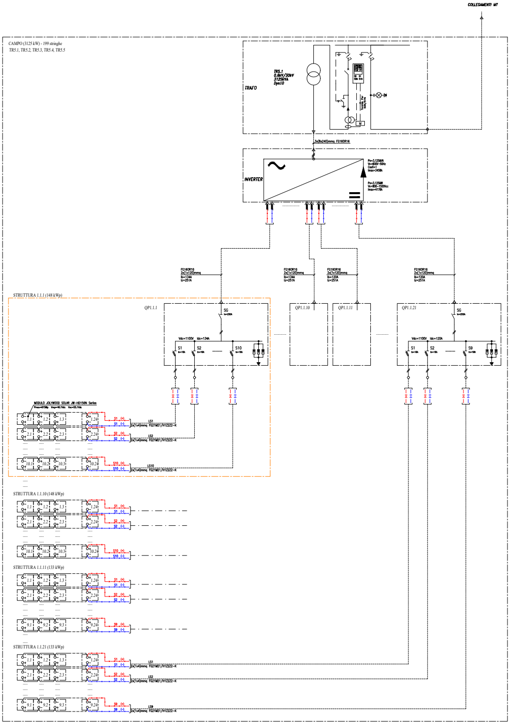
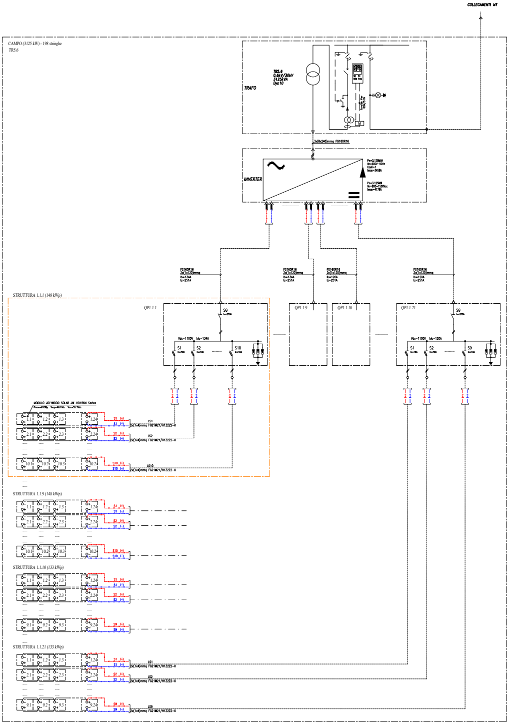
SCHEMI ELETTRICI DI CAMPO

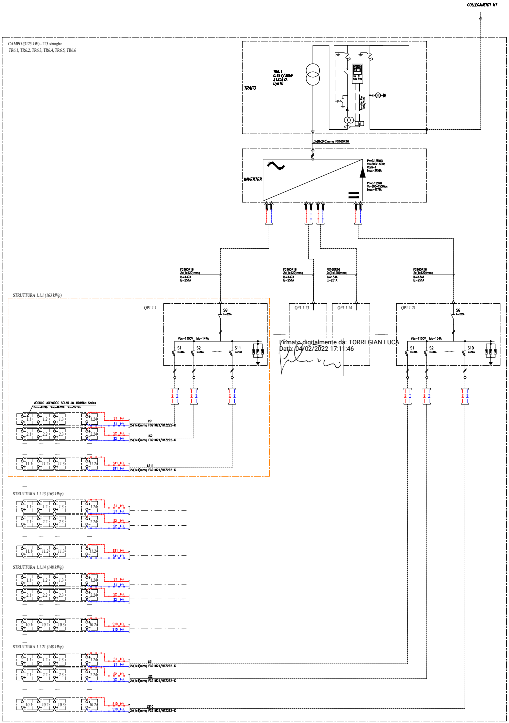

Generatore fotovoltaico
COLLEGAMENTI MT
CAMPO (1250 kW) - 103 stringhe
TR1.1
TRAFO
TR1.1
0.55kV/30kV
1250kVA
Dyn10
50 51
50N 51N
Toroide Per 50N/51N
Id
3x(4x240)mmq FG16OR16
INVERTER
Pn=1.250MVA
Vn=550V-50Hz
Cosfi=1
Imax=1443A
Pn=1.250MW
Vn=800-1500Vcc
Imax=1754A
FG16OR16
2x(1x120)mmq
Ib=175A
Iz=251A
FG16OR16
2x(1x120)mmq
Ib=160A
Iz=251A
STRUTTURA 1.1.1 (192 kWp)
QP1.1.1
SG
In=250A
Vdc=1100V Idc=175A
S1
In=16A
S2
In=16A
S13
In=16A
QP1.1.8
SG
In=250A
Vdc=1100V Idc=160A
S1
S2
S12
MODULO JOLYWOOD SOLAR JW-HD156N Series
Pmax=615Wp Vmp=46.1Vdc Voc=55.7Vdc
1.1
1.2
1.3
1.24
2.1
2.2
2.3
2.24
13.1
13.2
13.3
13.24
S1 (+)
S1 (-)
S2 (+)
S2 (-)
S13 (+)
S13 (-)
LS1
LS2
LS13
2x(1x4)mmq FG21M21/H1Z2Z2-K
STRUTTURA 1.1.8 (178 kWp)
12.1
12.2
12.3
12.24
S12 (+)
S12 (-)
LS12
COLLEGAMENTI MT
CAMPO (3125 kW) - 215 stringhe
TR2.1, TR2.2
TRAFO
TR2.1
0.6kV/30kV
3125kVA
Dyn10
3x(8x240)mmq FG16OR16
INVERTER
Pn=3.125MVA
Vn=600V-50Hz
Cosfi=1
Imax=3458A
Pn=3.125MW
Vn=800-1500Vcc
Imax=4178A
FG16OR16
2x(1x120)mmq
Ib=147A
Iz=251A
FG16OR16
2x(1x120)mmq
Ib=147A
Iz=251A
FG16OR16
2x(1x120)mmq
Ib=134A
Iz=251A
FG16OR16
2x(1x120)mmq
Ib=134A
Iz=251A
STRUTTURA 1.1.1 (165 kWp)
QP1.1.1
SG
In=250A
Vdc=1100V Idc=147A
S1
S2
S11
QP1.1.5
QP1.1.6
QP1.1.21
SG
In=250A
Vdc=1100V Idc=134A
S1
S2
S10
MODULO JOLYWOOD SOLAR JW-HD156N Series
11.1
11.2
11.3
11.24
S11 (+)
S11 (-)
LS11
STRUTTURA 1.1.5 (165 kWp)
STRUTTURA 1.1.6 (148 kWp)
10.1
10.2
10.3
10.24
S10 (+)
S10 (-)
STRUTTURA 1.1.21 (148 kWp)
LS10


COLLEGAMENTI MT
CAMPO (3125 kW) - 214 stringhe
TR2.3, TR3.1, TR3.2
TRAFO
TR2.1
0.6kV/30kV
3125kVA
Dyn10
50 51
50N 51N
Toroide Per 50N/51N
Id
3x(8x240)mmq FG16OR16
INVERTER
Pn=3.125MVA
Vn=600V-50Hz
Cosfi=1
Imax=3458A
Pn=3.125MW
Vn=800-1500Vcc
Imax=4178A
FG16OR16
2x(1x120)mmq
Ib=147A
Iz=251A
FG16OR16
2x(1x120)mmq
Ib=147A
Iz=251A
FG16OR16
2x(1x120)mmq
Ib=134A
Iz=251A
FG16OR16
2x(1x120)mmq
Ib=134A
Iz=251A
STRUTTURA 1.1.1 (165 kWp)
QP1.1.1
SG
In=250A
Vdc=1100V
Idc=147A
S1
In=16A
S2
In=16A
S11
In=16A
QP1.1.5
QP1.1.6
QP1.1.21
SG
In=250A
Vdc=1100V
Idc=134A
S1
S2
S10
MODULO JOLYWOOD SOLAR JW-HD156N Series
Pmax=615Wp Vmp=46.1Vdc Voc=55.1Vdc
1.1
1.2
1.3
1.24
S1 (+)
S1 (-)
LS1
2x(1x4)mmq FG21M21/H1Z2Z2-K
2.1
2.2
2.3
2.24
S2 (+)
S2 (-)
LS2
2x(1x4)mmq FG21M21/H1Z2Z2-K
11.1
11.2
11.3
11.24
S11 (+)
S11 (-)
LS11
2x(1x4)mmq FG21M21/H1Z2Z2-K
STRUTTURA 1.1.4 (165 kWp)
STRUTTURA 1.1.5 (148 kWp)
10.1
10.2
10.3
10.24
S10 (+)
S10 (-)
STRUTTURA 1.1.21 (148 kWp)
LS10
CAMPO (1250 kW) - 87 stringhe
TR3.3
TR3.3
0.55kV/30kV
1250kVA
Dyn10
3x(4x240)mmq FG16OR16
Pn=1.250MVA
Vn=550V-50Hz
Cosfi=1
Imax=1443A
Pn=1.250MW
Vn=800-1500Vcc
Imax=1754A
QP1.1.8
STRUTTURA 1.1.8 (148 kWp)

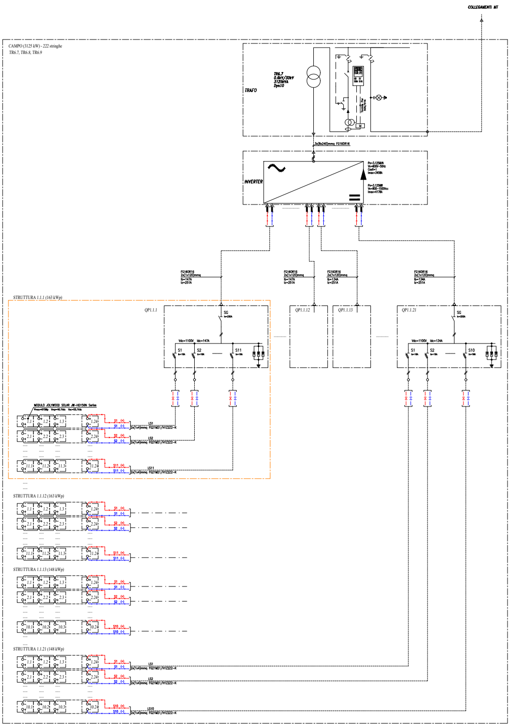

COLLEGAMENTI MT
CAMPO (1250 kW) - 90 stringhe
TR4.2
TRAFO
TR4.2
0.55kV/30kV
1250kVA
Dyn10
50 51
50N 51N
Tensione Per
50N/51N
Id
3x(4x240)mmq FG16OR16
INVERTER
Pn=1.250MVA
Vn=550V-50Hz
Cosfi=1
Imax=1443A
Pn=1.250MW
Vn=800-1500Vcc
Imax=1754A
FG16OR16
2x(1x120)mmq
Ib=160A
Iz=251A
FG16OR16
2x(1x120)mmq
Ib=160A
Iz=251A
FG16OR16
2x(1x120)mmq
Ib=147A
Iz=251A
FG16OR16
2x(1x120)mmq
Ib=147A
Iz=251A
STRUTTURA 1.1.1 (178 kWp)
QP1.1.1
SG
In=250A
Vdc=1100V Idc=160A
S1
In=16A
S2
In=16A
S12
In=16A
QP1.1.2
QP1.1.3
QP1.1.8
SG
In=250A
Vdc=1100V Idc=134A
S1
In=16A
S2
In=16A
S11
In=16A
MODULO JOLYWOOD SOLAR JW-HD156N Series
Pmax=615Wp Vmp=46.1Vdc Voc=55.1Vdc
1.1 1.2 1.3 1.24
S1 (+)
S1 (-)
LS1
2x(1x4)mmq FG21M21/H1Z2Z2-K
2.1 2.2 2.3 2.24
S2 (+)
S2 (-)
LS2
2x(1x4)mmq FG21M21/H1Z2Z2-K
12.1 12.2 12.3 12.24
S12 (+)
S12 (-)
LS12
2x(1x4)mmq FG21M21/H1Z2Z2-K
STRUTTURA 1.1.4 (165 kWp)
1.1 1.2 1.3 1.24
S1 (+)
S1 (-)
2.1 2.2 2.3 2.24
S2 (+)
S2 (-)
12.1 12.2 12.3 12.24
S12 (+)
S12 (-)
STRUTTURA 1.1.5 (148 kWp)
1.1 1.2 1.3 1.24
S1 (+)
S1 (-)
2.1 2.2 2.3 2.24
S2 (+)
S2 (-)
11.1 11.2 11.3 11.24
S11 (+)
S11 (-)
STRUTTURA 1.1.21 (148 kWp)
1.1 1.2 1.3 1.24
S1 (+)
S1 (-)
LS1
2x(1x4)mmq FG21M21/H1Z2Z2-K
2.1 2.2 2.3 2.24
S2 (+)
S2 (-)
LS2
2x(1x4)mmq FG21M21/H1Z2Z2-K
11.1 11.2 11.3 11.24
S11 (+)
S11 (-)
LS11
2x(1x4)mmq FG21M21/H1Z2Z2-K


COLLEGAMENTI MT
CAMPO (3125 kW) - 199 stringhe
TR5.1, TR5.2, TR5.3, TR5.4, TR5.5
TRAFO
TR5.1
0.6kV/30kV
3125kVA
Dyn10
50 51
50N 51N
Tensione Per
50N/51N
Id
3x(8x240)mmq FG16OR16
INVERTER
Pn=3.125MVA
Vn=600V-50Hz
Cosfi=1
Imax=3458A
Pn=3.125MW
Vn=800-1500Vcc
Imax=4178A
FG16OR16
2x(1x120)mmq
Ib=134A
Iz=251A
FG16OR16
2x(1x120)mmq
Ib=134A
Iz=251A
FG16OR16
2x(1x120)mmq
Ib=120A
Iz=251A
FG16OR16
2x(1x120)mmq
Ib=120A
Iz=251A
STRUTTURA 1.1.1 (148 kWp)
QP1.1.1
SG
In=250A
Vdc=1100V Idc=134A
S1
In=16A
S2
In=16A
S10
In=16A
QP1.1.10
QP1.1.11
QP1.1.21
SG
In=250A
Vdc=1100V Idc=120A
S1
In=16A
S2
In=16A
S9
In=16A
MODULO JOLYWOOD SOLAR JW-HD156N Series
Pmax=615Wp Vmp=46.1Vdc Voc=55.1Vdc
1.1 1.2 1.3 1.24
S1 (+)
S1 (-)
LS1
2x(1x4)mmq FG21M21/H1Z2Z2-K
2.1 2.2 2.3 2.24
S2 (+)
S2 (-)
LS2
2x(1x4)mmq FG21M21/H1Z2Z2-K
10.1 10.2 10.3 10.24
S10 (+)
S10 (-)
LS10
2x(1x4)mmq FG21M21/H1Z2Z2-K
STRUTTURA 1.1.10 (148 kWp)
1.1 1.2 1.3 1.24
S1 (+)
S1 (-)
2.1 2.2 2.3 2.24
S2 (+)
S2 (-)
10.1 10.2 10.3 10.24
S10 (+)
S10 (-)
STRUTTURA 1.1.11 (133 kWp)
1.1 1.2 1.3 1.24
S1 (+)
S1 (-)
2.1 2.2 2.3 2.24
S2 (+)
S2 (-)
9.1 9.2 9.3 9.24
S9 (+)
S9 (-)
STRUTTURA 1.1.21 (133 kWp)
1.1 1.2 1.3 1.24
S1 (+)
S1 (-)
LS1
2x(1x4)mmq FG21M21/H1Z2Z2-K
2.1 2.2 2.3 2.24
S2 (+)
S2 (-)
LS2
2x(1x4)mmq FG21M21/H1Z2Z2-K
9.1 9.2 9.3 9.24
S9 (+)
S9 (-)
LS9
2x(1x4)mmq FG21M21/H1Z2Z2-K


COLLEGAMENTI MT
CAMPO (3125 kW) - 198 stringhe
TR5.6
TRAFO
TR5.6
0.6kV/30kV
3125kVA
Dyn10
Id
3x(8x240)mmq FG16OR16
INVERTER
Pn=3.125MVA
Vn=600V-50Hz
Cosfi=1
Imax=3458A
Pn=3.125MW
Vn=800-1500Vcc
Imax=4178A
FG16OR16
2x(1x120)mmq
Ib=134A
Iz=251A
FG16OR16
2x(1x120)mmq
Ib=134A
Iz=251A
FG16OR16
2x(1x120)mmq
Ib=120A
Iz=251A
FG16OR16
2x(1x120)mmq
Ib=120A
Iz=251A
STRUTTURA 1.1.1 (148 kWp)
QP1.1.1
SG
In=250A
Vdc=1100V
Idc=134A
S1
S2
S10
In=16A
QP1.1.9
QP1.1.10
QP1.1.21
SG
In=250A
Vdc=1100V
Idc=120A
S1
S2
S9
In=16A
MODULO JOLYWOOD SOLAR JW-HD156N Series
Pmax=615Wp Vmp=46.1Vdc Voc=55.1Vdc
1.1
1.2
1.3
1.24
2.1
2.2
2.3
2.24
10.1
10.2
10.3
10.24
S1 (+)
S1 (-)
S2 (+)
S2 (-)
S10 (+)
S10 (-)
LS1
LS2
LS10
2x(1x4)mmq FG21M21/H1Z2Z2-K
STRUTTURA 1.1.9 (148 kWp)
STRUTTURA 1.1.10 (133 kWp)
9.1
9.2
9.3
9.24
S9 (+)
S9 (-)
STRUTTURA 1.1.21 (133 kWp)
LS9


COLLEGAMENTI MT
CAMPO (3125 kW) - 223 stringhe
TR6.1, TR6.2, TR6.3, TR6.4, TR6.5, TR6.6
TRAFO
TR6.1
0.6kV/30kV
3125kVA
Dyn10
Id
3x(8x240)mmq FG16OR16
INVERTER
Pn=3.125MVA
Vn=600V-50Hz
Cosfi=1
Imax=3458A
Pn=3.125MW
Vn=800-1500Vcc
Imax=4178A
FG16OR16
2x(1x120)mmq
Ib=147A
Iz=251A
FG16OR16
2x(1x120)mmq
Ib=147A
Iz=251A
FG16OR16
2x(1x120)mmq
Ib=134A
Iz=251A
FG16OR16
2x(1x120)mmq
Ib=134A
Iz=251A
STRUTTURA 1.1.1 (163 kWp)
QP1.1.1
SG
In=250A
Vdc=1100V
Idc=147A
S1
S2
S11
In=16A
QP1.1.13
QP1.1.14
QP1.1.21
SG
In=250A
Vdc=1100V
Idc=134A
S1
S2
S10
In=16A
MODULO JOLYWOOD SOLAR JW-HD156N Series
Pmax=615Wp Vmp=46.1Vdc Voc=55.1Vdc
1.1
1.2
1.3
1.24
2.1
2.2
2.3
2.24
11.1
11.2
11.3
11.24
S1 (+)
S1 (-)
S2 (+)
S2 (-)
S11 (+)
S11 (-)
LS1
LS2
LS11
2x(1x4)mmq FG21M21/H1Z2Z2-K
STRUTTURA 1.1.13 (163 kWp)
STRUTTURA 1.1.14 (148 kWp)
10.1
10.2
10.3
10.24
S10 (+)
S10 (-)
STRUTTURA 1.1.21 (148 kWp)
LS10

Firmato digitalmente da: TORRI GIAN LUCA
Data: 04/02/2022 17:11:46


COLLEGAMENTI MT
CAMPO (3125 kW) - 222 stringhe
TR6.7, TR6.8, TR6.9
TRAFO
TR6.7
0.6kV/30kV
3125kVA
Dyn10
50 51
50N 51N
Toroide Per 50N/51N
Id
3x(8x240)mmq FG16OR16
INVERTER
Pn=3.125MVA
Vn=600V-50Hz
Cosfi=1
Imax=3458A
Pn=3.125MW
Vn=800-1500Vcc
Imax=4178A
FG16OR16
2x(1x120)mmq
Ib=147A
Iz=251A
FG16OR16
2x(1x120)mmq
Ib=147A
Iz=251A
FG16OR16
2x(1x120)mmq
Ib=134A
Iz=251A
FG16OR16
2x(1x120)mmq
Ib=134A
Iz=251A
STRUTTURA 1.1.1 (163 kWp)
QP1.1.1
SG
In=250A
Vdc=1100V Idc=147A
S1 In=16A
S2 In=16A
S11 In=16A
QP1.1.12
QP1.1.13
QP1.1.21
SG
In=250A
Vdc=1100V Idc=134A
S1 In=16A
S2 In=16A
S10 In=16A
MODULO JOLYWOOD SOLAR JW-HD156N Series
Pmax=615Wp Vmp=46.1Vdc Voc=55.1Vdc
1.1 1.2 1.3 1.24
2.1 2.2 2.3 2.24
11.1 11.2 11.3 11.24
S1 (+) S1 (-)
S2 (+) S2 (-)
S11 (+) S11 (-)
LS1
2x(1x4)mmq FG21M21/H1Z2Z2-K
LS2
2x(1x4)mmq FG21M21/H1Z2Z2-K
LS11
2x(1x4)mmq FG21M21/H1Z2Z2-K
STRUTTURA 1.1.12 (163 kWp)
STRUTTURA 1.1.13 (148 kWp)
10.1 10.2 10.3 10.24
S10 (+) S10 (-)
STRUTTURA 1.1.21 (148 kWp)
LS10
2x(1x4)mmq FG21M21/H1Z2Z2-K

CITTA' DI BRINDISI

REGIONE PUGLIA

IMPIANTO FOTOVOLTAICO "CONTESSA"

della potenza di 100,00 MW in immissione e 109,46 MW in DC

PROGETTO DEFINITIVO

COMMITTENTE:

3Più Energia S.r.l.
Via Aldo Moro 28
25043 Breno (BS)
P.IVA 04230070981

PROGETTAZIONE:

TÈKNE srl
Via Vincenzo Gioberti, 11 - 76123 ANDRIA
Tel +39 0883 553714 - 552841 - Fax +39 0883 552915
www.gruppotekne.it e-mail: contatti@gruppotekne.it

PROGETTISTA:
Ing. Renato Pertuso
(Direttore Tecnico)

LEGALE RAPPRESENTANTE:
dott. Renato Mansi

INGEGNERE RENATO PERTUSO Sez. A - 463

TÈKNE srl
SOCIETÀ DI INGEGNERIA
IL PRESIDENTE
Dott. RENATO MANSI

PD
PROGETTO DEFINITIVO

SCHEMA UNIFILARE DI CAMPO

Tavola: IE03.A

Filename: TKA690-PD-IE03-Schema unifilare di campo-R0.dwg

Data 1°emissione:	Redatto:	Verificato:	Approvato:	Scala:	Protocollo Tekne:
Luglio 2021	G.ALICINO	G.PERTOSO	R.PERTUSO	-	TKA690

n° revisione				
1				
2				
3				
4				