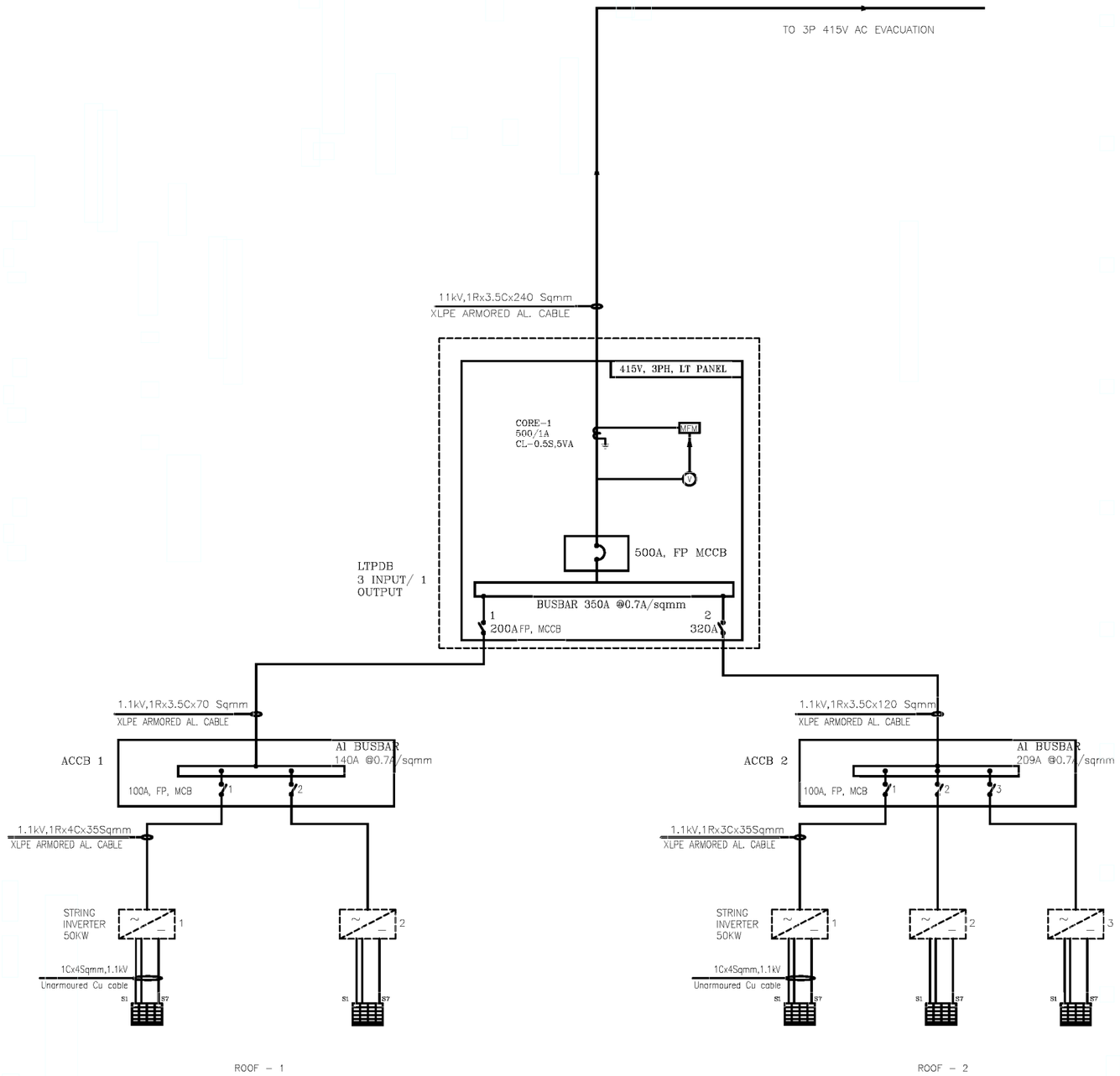
ADDENDUM (BKC0000008);

1. Bid has to be submitted as Two Part – Techno Commercial Bid (Part-1) & Price Bid (Part-II).
2. Bids shall be submitted through e-Procurement portal https://bheleps.buyjunction.in of M/s. Mjunction Services Limited ONLY.
3. NO OFFERS SHALL BE ACCEPTED IN HARD COPY FORM AS INDICATED IN RFQ.
4. ARRAY DRAWINGS, MMS DRAWINGS, PV MODULE DETAILS ADDED.
5. REVISED ANNEXURE-A1(TECHNICAL BID FORMAT) AND ANNEXURE-A2(PRICE BID FORMAT) ATTACHED. PREVIOUSLY UPLOADED ANNEXURE A1 AND A2 TO BE IGNORED.



LEGEND DETAILS

SL. NO.	SYMBOL	DESCRIPTION
1	MFM	MULTI FUNCTION METER
2	ε	CURRENT TRANSFORMER
3	~ / —	STRING INVERTER
4	ↄ	MCCB

PROJECT : 250KW ROOF TOP SOLAR POWER PLANT
CUSTOMER : SURAT MUNICIPAL CORPORATION

BHARAT HEAVY ELECTRICALS LIMITED.
ELECTRONICS DIVISION, BANGALORE

SINGLE LINE DIAGRAM
RANDER WATER WORKS (ROOF 3 & 4)

DWG NO. 3-SK-SLD-BHEL-SMC

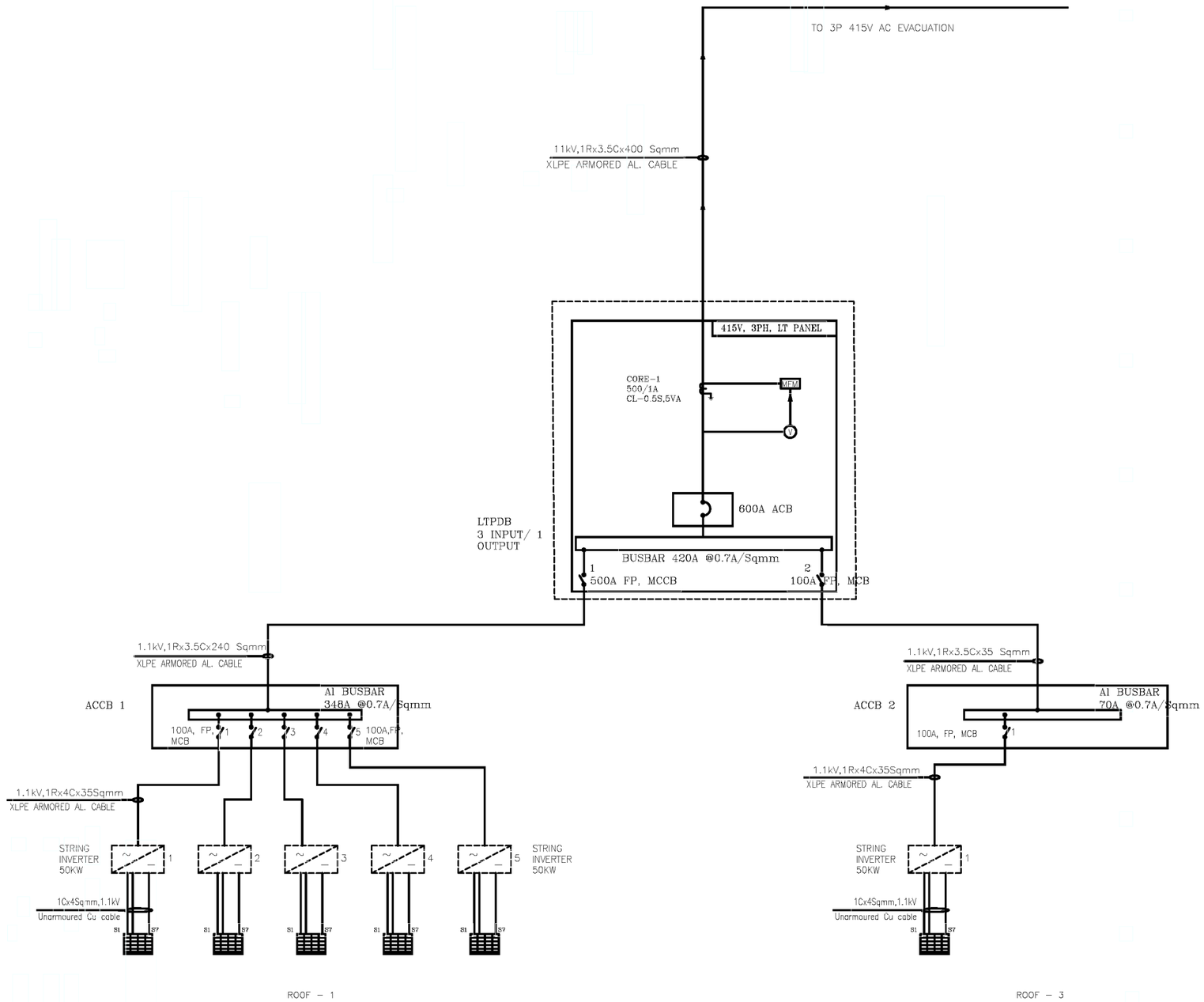
FIRST ISSUE

ALL DIMENSIONS ARE IN mm

FIRST ANGLE PROJECTION

DRAWING NO. 3-SK-SLD-BHEL-SMC

The information in this document is the property of Bharat Heavy Electricals Limited and should not be used, disclosed or reproduced, in whole or in part, without prior consent in writing from the Board of the Company.



LEGEND DETAILS

SL. NO.	SYMBOL	DESCRIPTION
1	MFM	MULTI FUNCTION METER
2	ε	CURRENT TRANSFORMER
3	~ / –	STRING INVERTER
4		MCCB

PROJECT : 300KW ROOF TOP SOLAR POWER PLANT
CUSTOMER : SURAT MUNICIPAL CORPORATION

BHARAT HEAVY ELECTRICALS LIMITED.
ELECTRONICS DIVISION, BANGALORE

SINGLE LINE DIAGRAM
SARTHANA WATER WORKS (ROOF 1 & 2)

DRAWING NO. 3-SK-SLD-BHEL-SMC

REV. 00

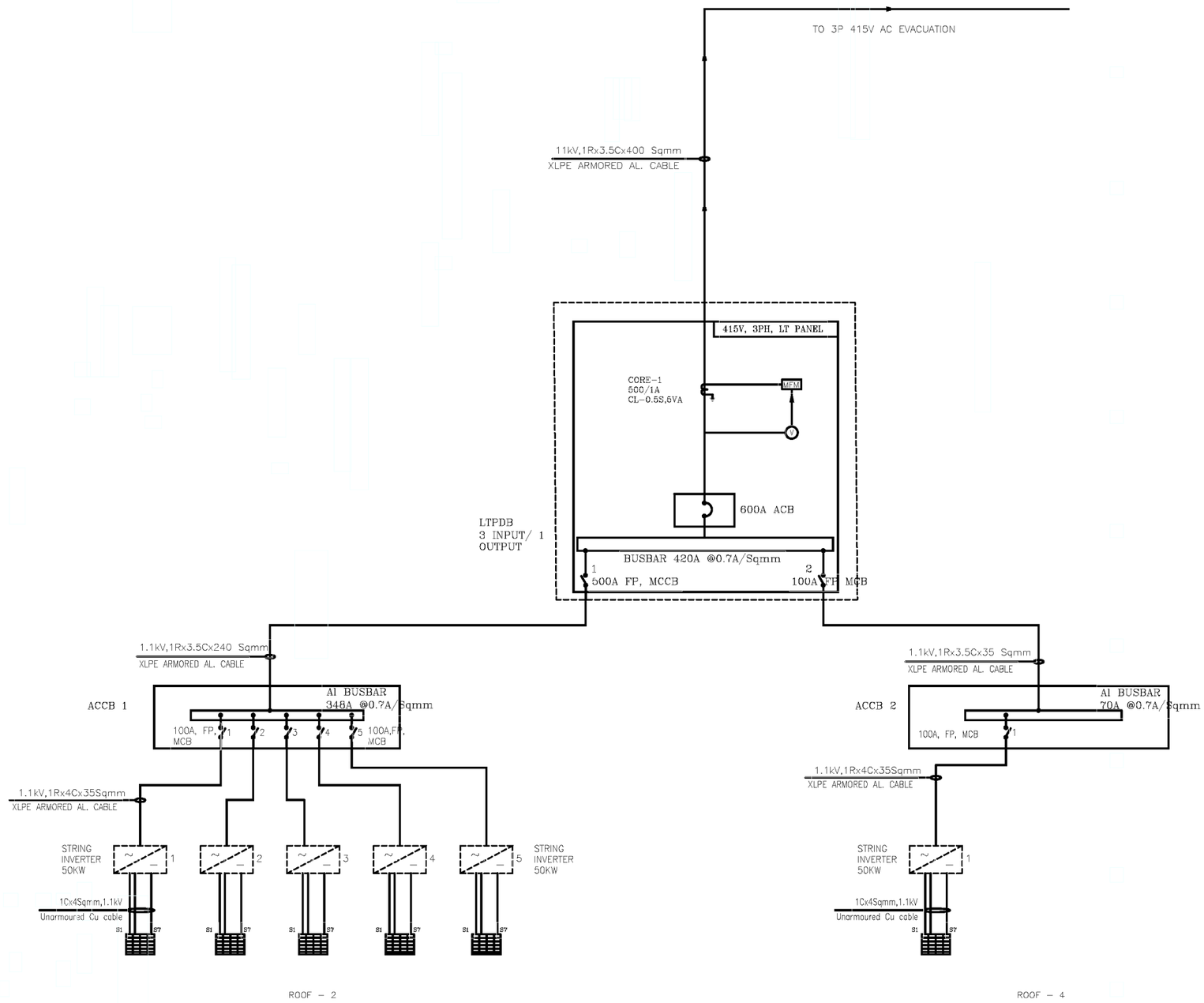
FIRST ISSUE

FIRST ANGLE PROJECTION

ALL DIMENSIONS ARE IN mm

A0 SIZE

This information as to the form, fit and function of the product is the property of Bharat Heavy Electricals Limited and is not to be disclosed or otherwise, in whole or in part, without the express consent of the Board of the Company.



LEGEND DETAILS

SL. NO.	SYMBOL	DESCRIPTION
1	MFM	MULTI FUNCTION METER
2	ε	CURRENT TRANSFORMER
3	~ / –	STRING INVERTER
4		MCCB

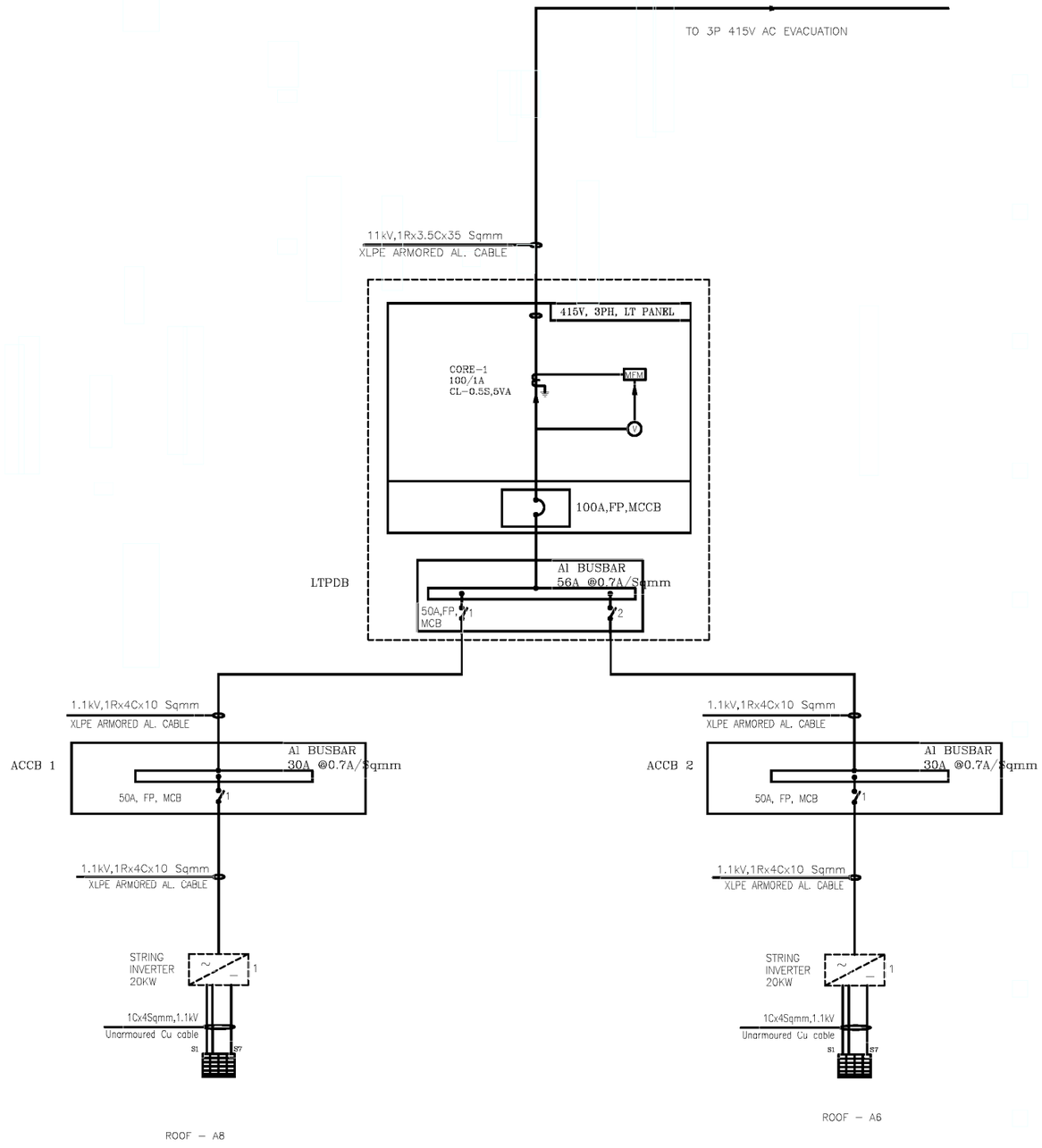
PROJECT : 300KW ROOF TOP SOLAR POWER PLANT
CUSTOMER : SURAT MUNICIPAL CORPORATION

BHARAT HEAVY ELECTRICALS LIMITED.
ELECTRONICS DIVISION, BANGALORE

SINGLE LINE DIAGRAM
SARTHANA WATER WORKS (ROOF 3 & 4)

DWG NO. 3-SK-SLD-BHEL-SMC

REV. 00



LEGEND DETAILS

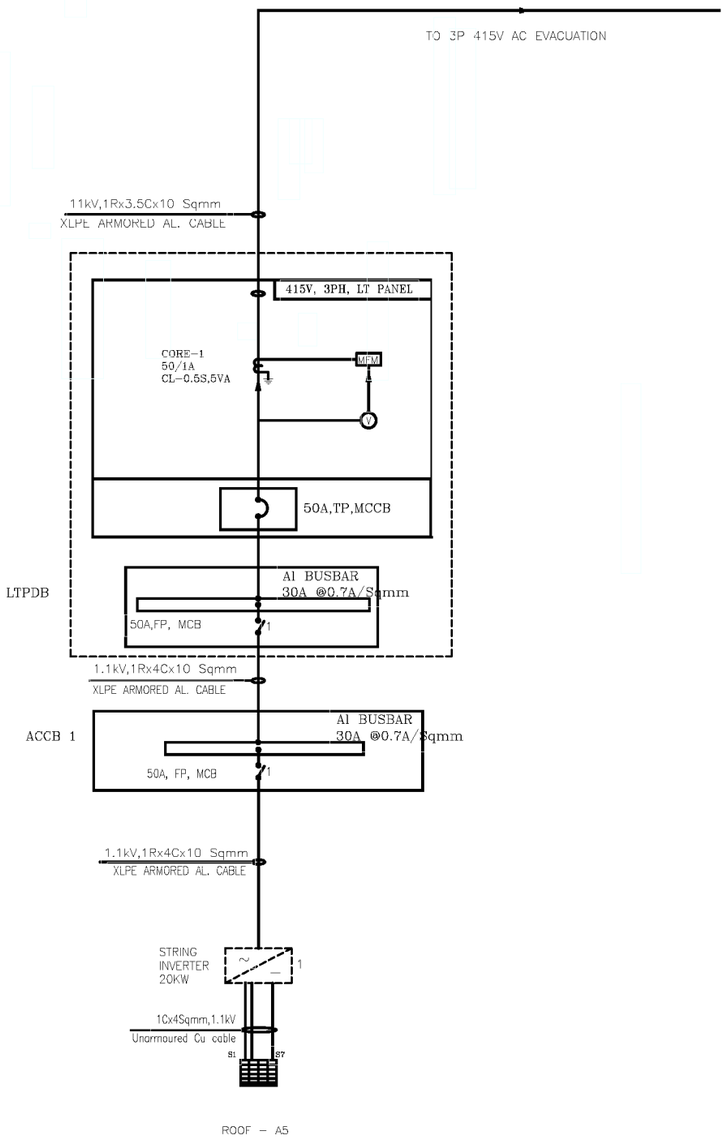
SL. NO.	SYMBOL	DESCRIPTION
1	MFM	MULTI FUNCTION METER
2	ε	CURRENT TRANSFORMER
3	~	STRING INVERTER

PROJECT : 40KW ROOF TOP SOLAR POWER PLANT
CUSTOMER : SURAT MUNICIPAL CORPORATION

BHARAT HEAVY ELECTRICALS LIMITED.
ELECTRONICS DIVISION, BANGALORE

SINGLE LINE DIAGRAM
SARTHANA WATER WORKS (ROOF A6 & A8)

3-SK-SLD-BHEL SMC



LEGEND DETAILS

SL. NO.	SYMBOL	DESCRIPTION
1	MFM	MULTI FUNCTION METER
2	ε	CURRENT TRANSFORMER
3	~	STRING INVERTER

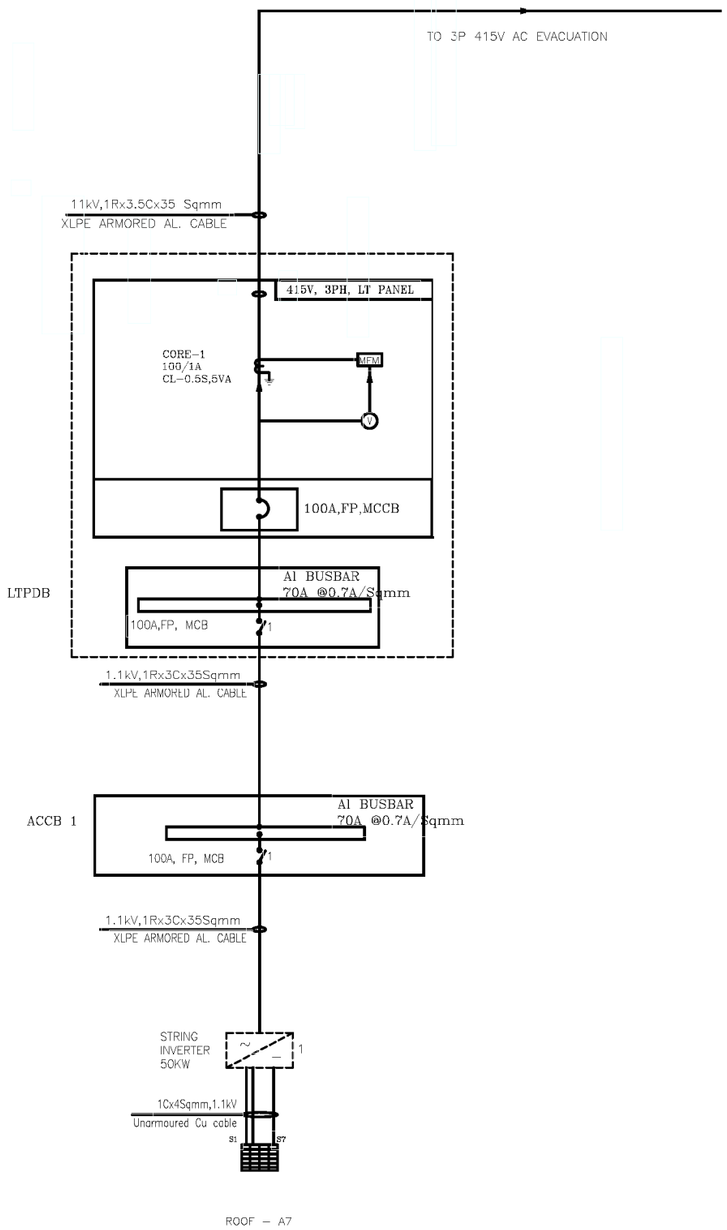
PROJECT : 20KW ROOF TOP SOLAR POWER PLANT
CUSTOMER : SURAT MUNICIPAL CORPORATION

BHARAT HEAVY ELECTRICALS LIMITED.
ELECTRONICS DIVISION, BANGALORE

SINGLE LINE DIAGRAM
SARTHANA WATER WORKS (ROOF A5)

3-SK-SLD-BHEL SMC

01



LEGEND DETAILS

SL. NO.	SYMBOL	DESCRIPTION
1	MFM	MULTI FUNCTION METER
2	ε	CURRENT TRANSFORMER
3	~	STRING INVERTER

PROJECT : 50KW ROOF TOP SOLAR POWER PLANT
CUSTOMER : SURAT MUNICIPAL CORPORATION

BHARAT HEAVY ELECTRICALS LIMITED.
ELECTRONICS DIVISION, BANGALORE

SINGLE LINE DIAGRAM
SARTHANA WATER WORKS (ROOF A7)

3-SK-SLD-BHEL SMC

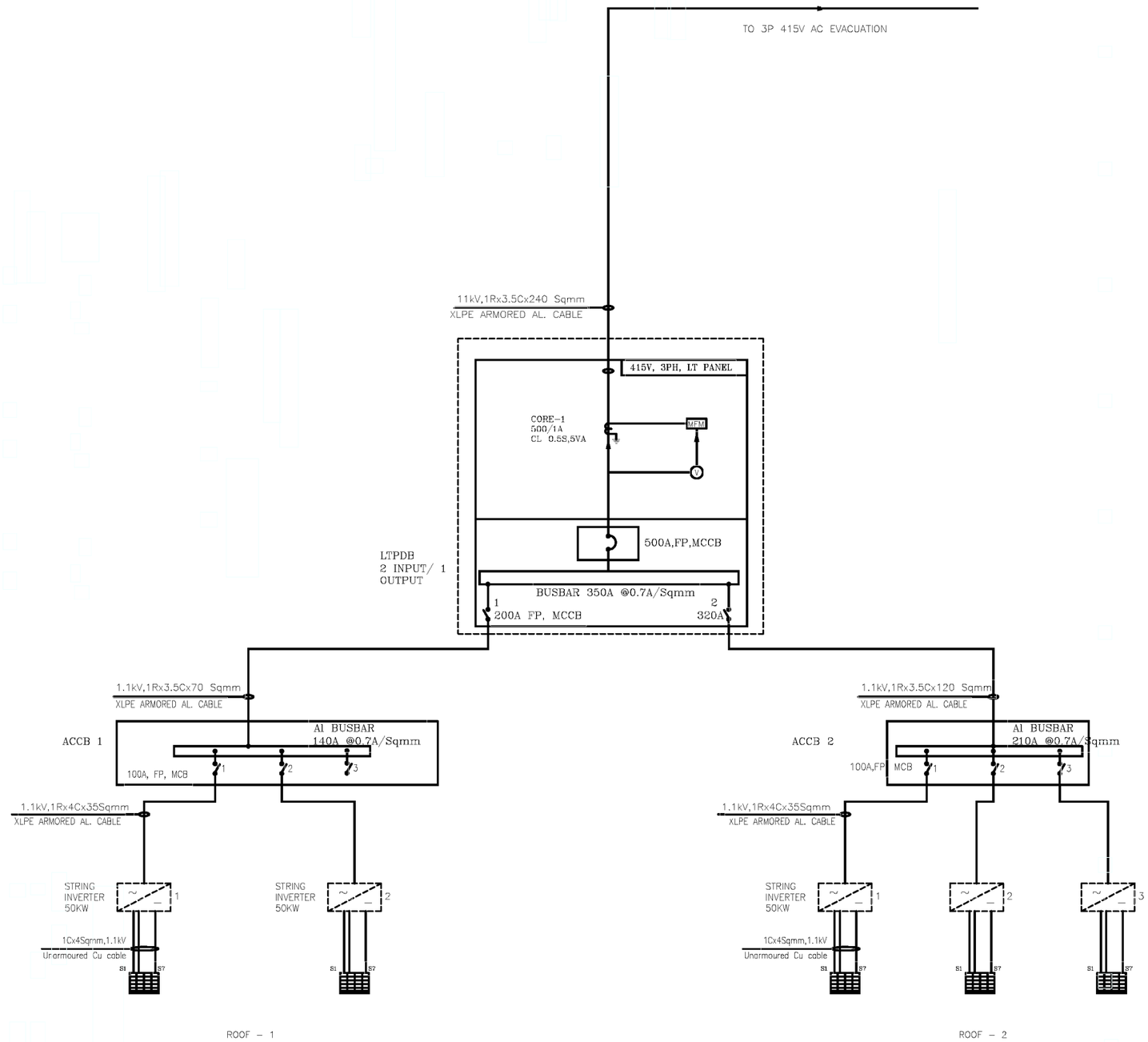
01
01
01
01

FIRST ANGLE PROJECTION

ALL DIMENSIONS ARE IN mm

DRAWING NO. 3-SK-SLD-BHEL-SMC

A0 SIZE



LEGEND DETAILS

SL. NO.	SYMBOL	DESCRIPTION
1	MFM	MULTI FUNCTION METER
2	ε	CURRENT TRANSFORMER
3	~ / –	STRING INVERTER
4	ↄ	MCCB

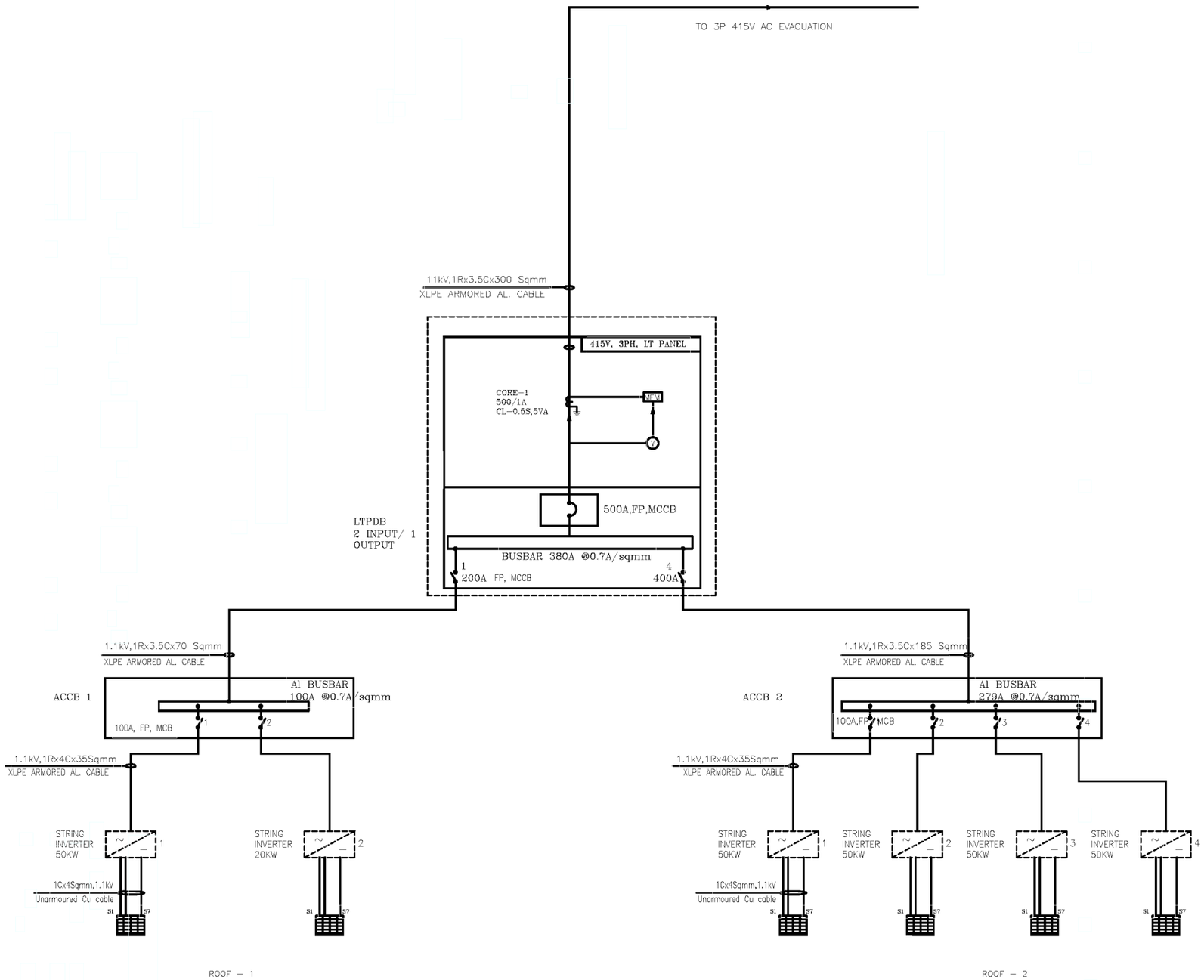
PROJECT : 250KW ROOF TOP SOLAR POWER PLANT
CUSTOMER : SURAT MUNICIPAL CORPORATION

BHARAT HEAVY ELECTRICALS LIMITED.
ELECTRONICS DIVISION, BANGALORE

SINGLE LINE DIAGRAM
VARACHHA WATER WORKS

3-SK-SLD-BHEL SMC

FIRST ISSUE



LEGEND DETAILS

SL. NO.	SYMBOL	DESCRIPTION
1	MFM	MULTI FUNCTION METER
2	ε	CURRENT TRANSFORMER
3	~ / –	STRING INVERTER
4	ↄ	MCCB

PROJECT : 270KW ROOF TOP SOLAR POWER PLANT
CUSTOMER : SURAT MUNICIPAL CORPORATION

BHARAT HEAVY ELECTRICALS LIMITED.
ELECTRONICS DIVISION, BANGALORE

SINGLE LINE DIAGRAM
ALTHAN WATER DISTRIBUTION SYSTEM

DWG NO. 3-SK-SLD-BHEL SMC

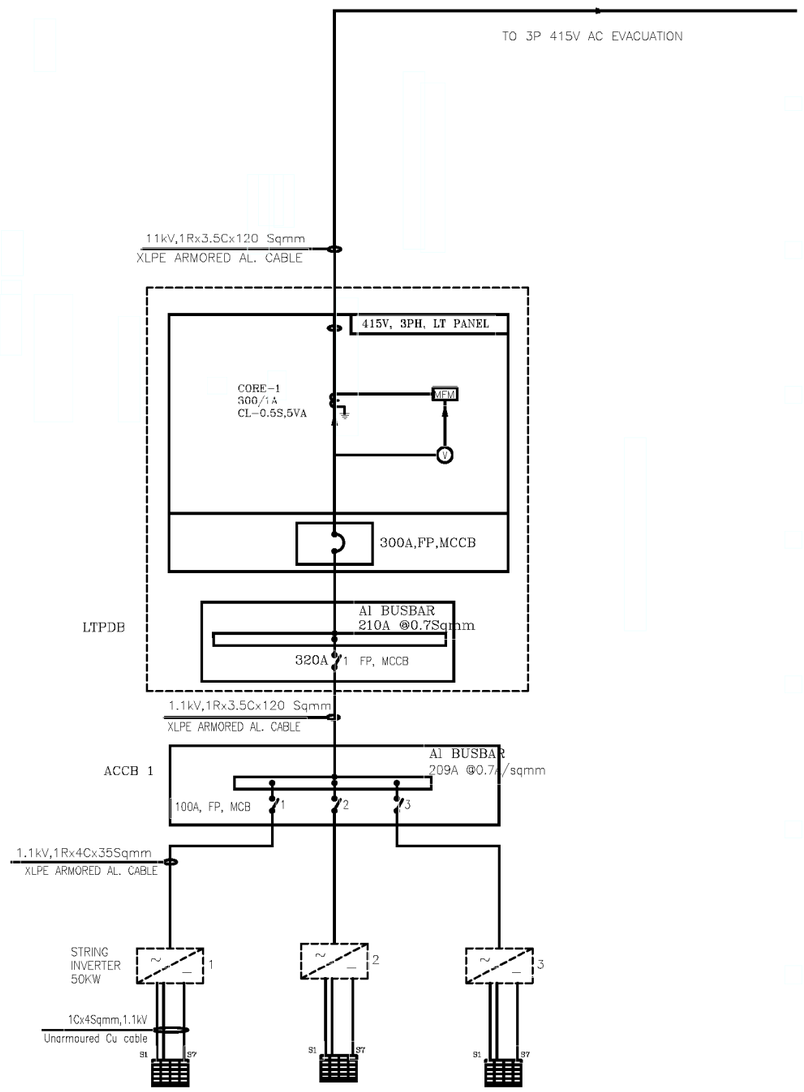
REV. 01
DATE 01
SHEET 01
REV 00

FIRST ANGLE PROJECTION

ALL DIMENSIONS ARE IN mm

DRAWING NO. 3-SK-SLD-BHEL-SMC

A0 SIZE



ROOF – 1

LEGEND DETAILS

SL. NO.	SYMBOL	DESCRIPTION
1	MFM	MULTI FUNCTION METER
2	ε	CURRENT TRANSFORMER
3		STRING INVERTER

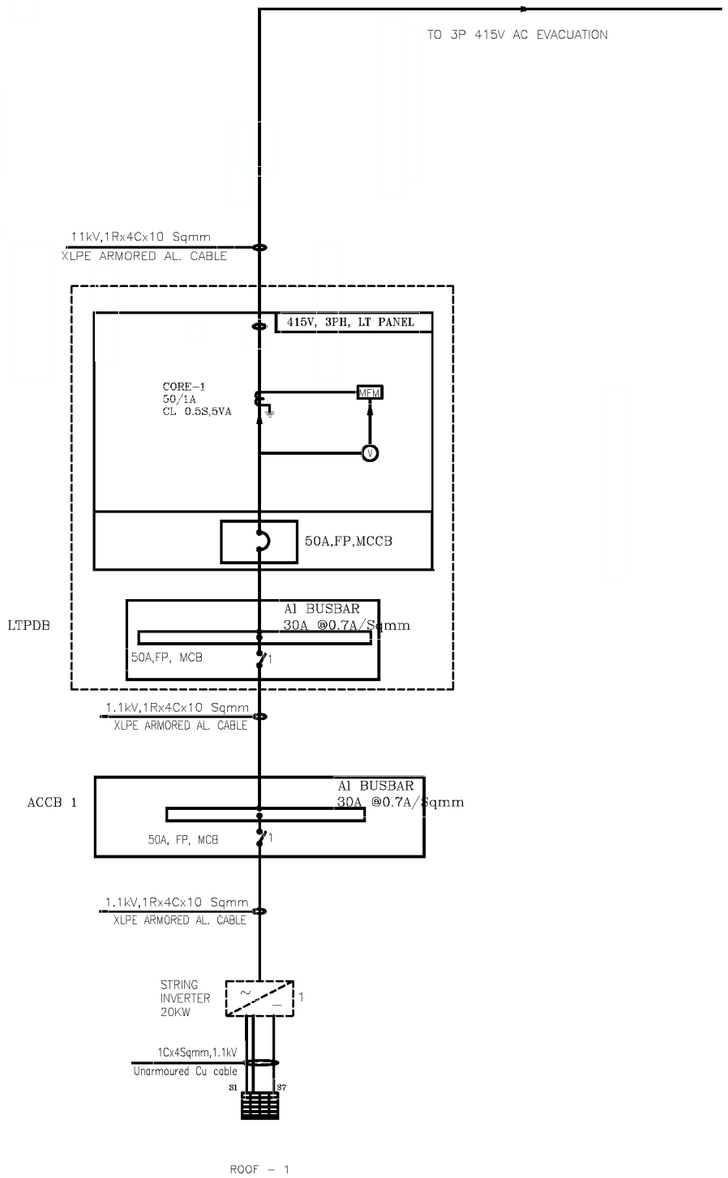
PROJECT : 150KW ROOF TOP SOLAR POWER PLANT
CUSTOMER : SURAT MUNICIPAL CORPORATION

BHARAT HEAVY ELECTRICALS LIMITED.
ELECTRONICS DIVISION, BANGALORE

SINGLE LINE DIAGRAM
NUSAD WEBS

3-SK-SLD-BHEL SMC

01
01
00



LEGEND DETAILS

SL. NO.	SYMBOL	DESCRIPTION
1	MFM	MULTI FUNCTION METER
2	ε	CURRENT TRANSFORMER
3		STRING INVERTER

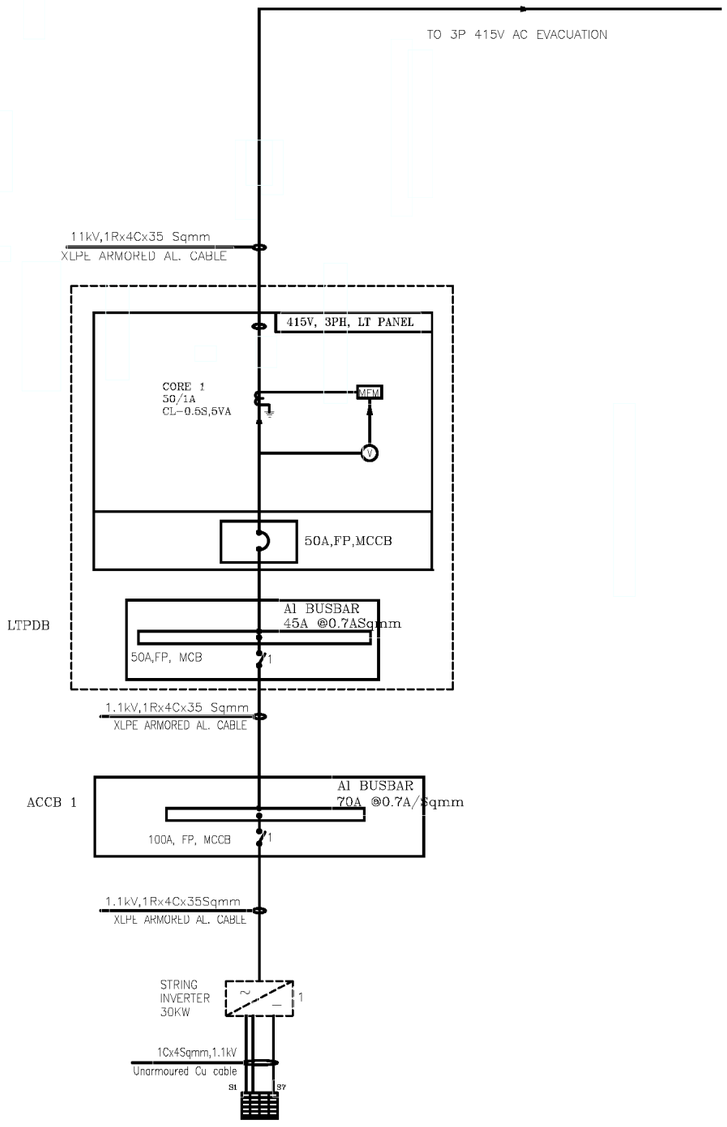
PROJECT : 15KW ROOF TOP SOLAR POWER PLANT
CUSTOMER : SURAT MUNICIPAL CORPORATION

BHARAT HEAVY ELECTRICALS LIMITED.
ELECTRONICS DIVISION, BANGALORE

SINGLE LINE DIAGRAM
UDHANA ZONE OFFICE

3-SK-SLD-BHEL SMC

01
01
00



LEGEND DETAILS

SL. NO.	SYMBOL	DESCRIPTION
1	MFM	MULTI FUNCTION METER
2	ε	CURRENT TRANSFORMER
3	~	STRING INVERTER

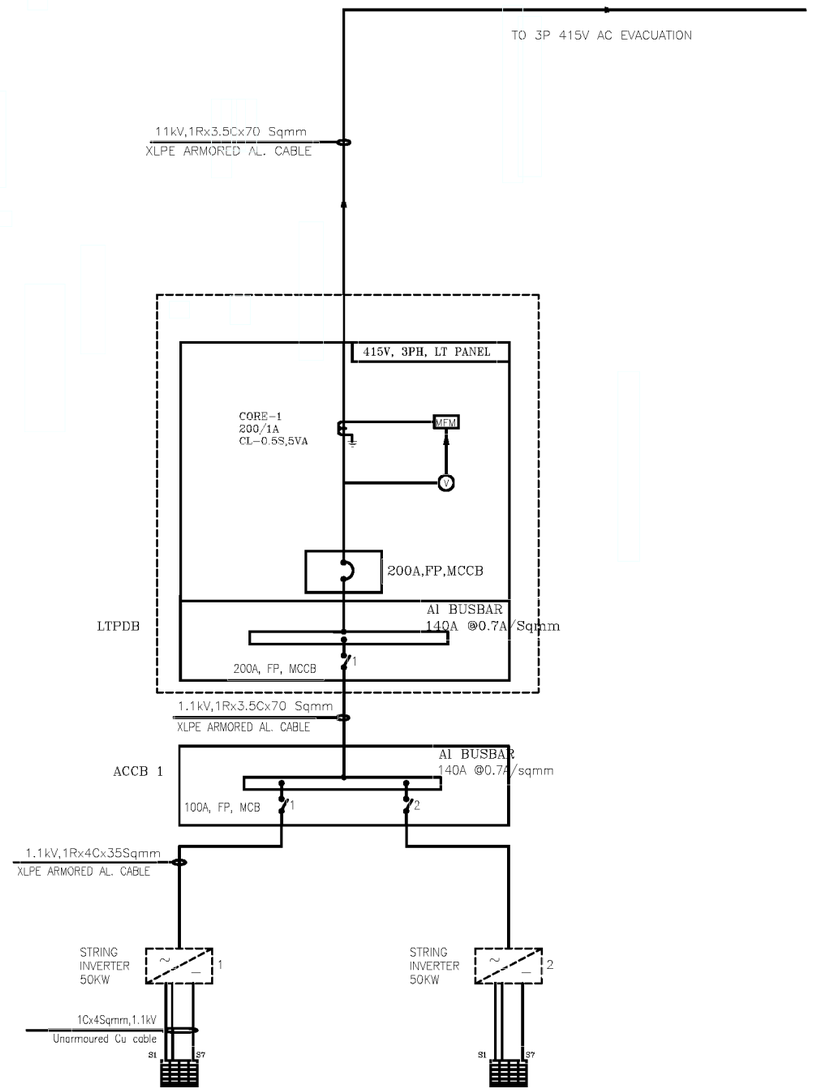
PROJECT : 30KW ROOF TOP SOLAR POWER PLANT
CUSTOMER : SURAT MUNICIPAL CORPORATION

BHARAT HEAVY ELECTRICALS LIMITED.
ELECTRONICS DIVISION, BANGALORE

SINGLE LINE DIAGRAM
RANDER ZONE OFFICE

3-SK-SLD-BHEL SMC

FIRST ISSUE



LEGEND DETAILS

SL. NO.	SYMBOL	DESCRIPTION
1	MFM	MULTI FUNCTION METER
2	ε	CURRENT TRANSFORMER
3	~	STRING INVERTER

ROOF – 1

PROJECT : 100KW ROOF TOP SOLAR POWER PLANT
CUSTOMER : SURAT MUNICIPAL CORPORATION

BHARAT HEAVY ELECTRICALS LIMITED.
ELECTRONICS DIVISION, BANGALORE

SINGLE LINE DIAGRAM
MOTA VARACHHA WDS

DWG NO. 3-SK-SLD-BHEL-SMC

FIRST ANGLE PROJECTION

ALL DIMENSIONS ARE IN mm

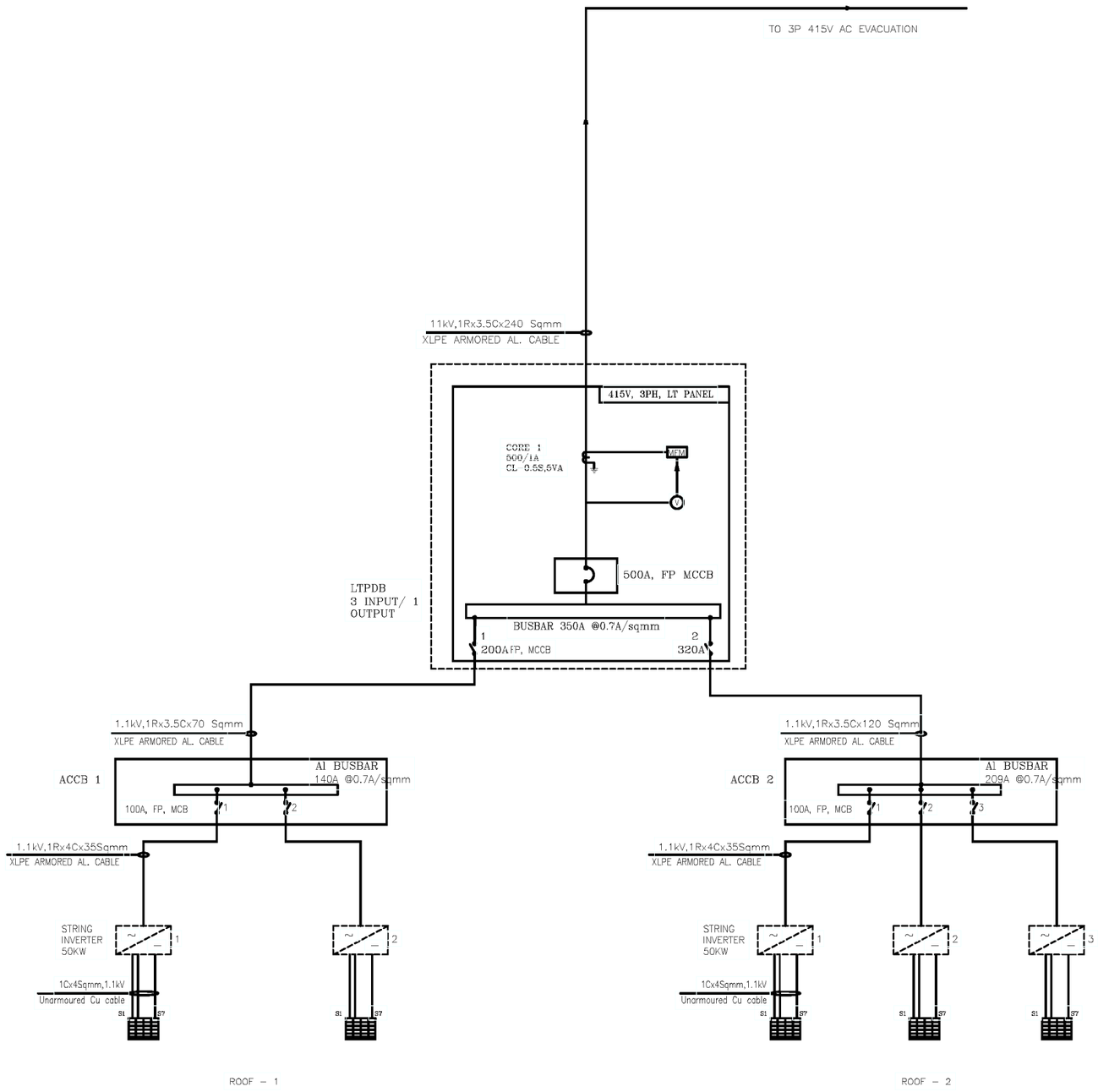
DRAWING NO. 3-SK-SLD-BHEL-SMC

The information as to the design and dimensions of this drawing is the property of Bharat Heavy Electricals Limited and must not be used directly or indirectly, in any other manner to the detriment of the Company.

NOT TO SCALE

REV. DATE AS TRIMED

FIRST ISSUE



LEGEND DETAILS

SL. NO.	SYMBOL	DESCRIPTION
1	MFM	MULTI FUNCTION METER
2	ε	CURRENT TRANSFORMER
3	~ / –	STRING INVERTER
4		MCCB

PROJECT : 250KW ROOF TOP SOLAR POWER PLANT
CUSTOMER : SURAT MUNICIPAL CORPORATION

BHARAT HEAVY ELECTRICALS LIMITED.
ELECTRONICS DIVISION, BANGALORE

SINGLE LINE DIAGRAM
RANDER RIVER WORKS (ROOF 1 & 2)

3-SK-SLD-BHEL SMC

Rander Varigruh
A1 a
A1
A2
A3
A3 a
A4

A10
A5
A9
A8
A6
A7
A2
A4
A1
A3

e Maps
A1
A2 a
A2
A3
Varachha Rd
Surat - Kamrej Hwy
Varachha Rd
Surat - Kamrej Hwy
Varachha Rd
Radheshyam
Hardware & Cement

Bhimad-Alhan Rd
A1 a
A1
A2
Google

SMC Water Treatment
And Distribution Center
A1

A2 a
A2
A1
SMC South Zone
(Udhna) office
Shree International
S Zone Rd

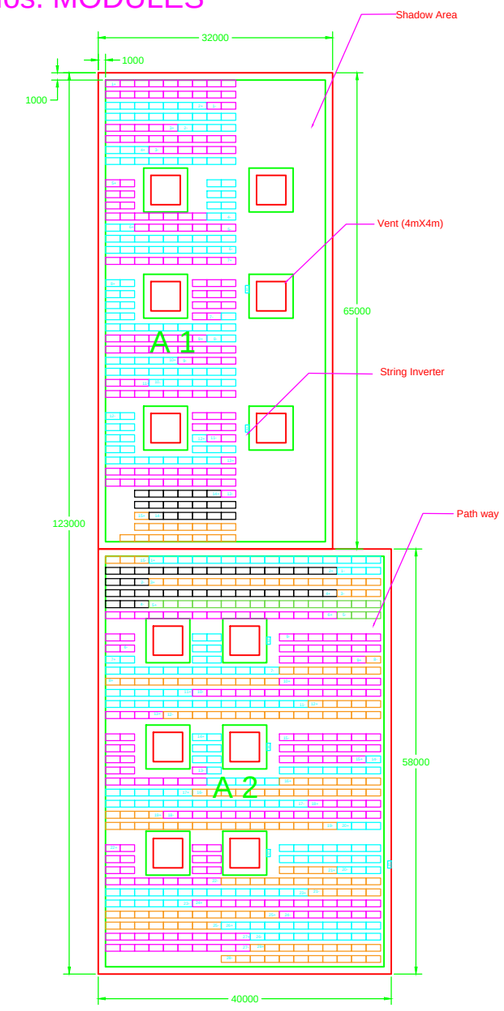
A1

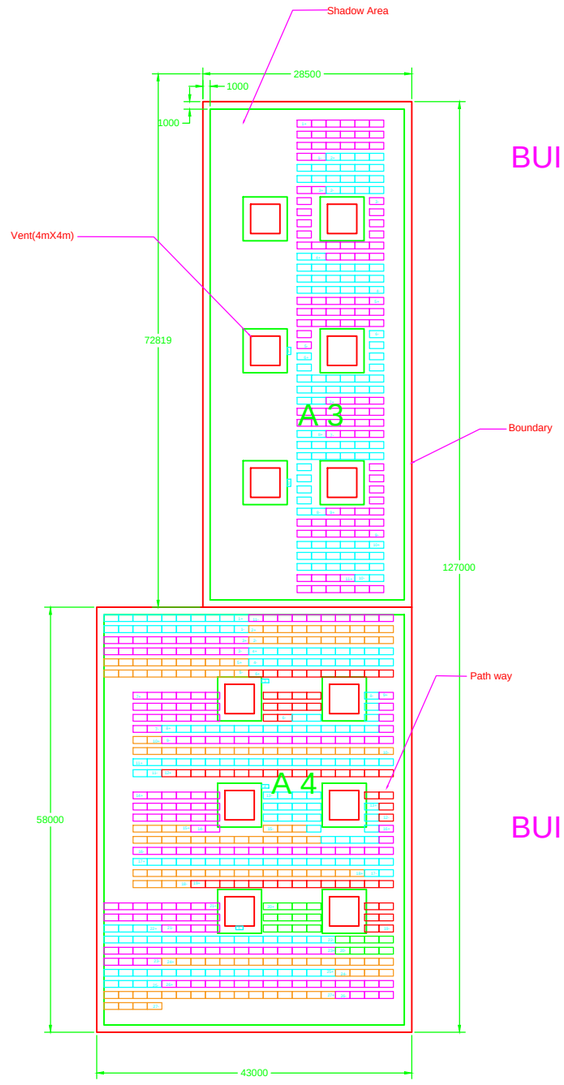
A1
A2

COPYRIGHT AND CONFIDENTIAL
THE INFORMATION ON THIS DOCUMENT IS THE PROPERTY OF BHARAT HEAVY ELECTRICALS LTD. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO THE INTEREST OF THE COMPANY.

DRG. No. 3 679 05 00872

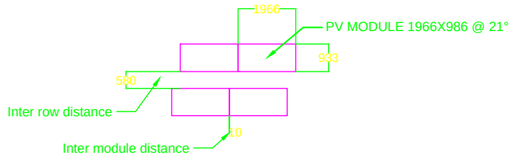
BUILDING A1= 295 Nos. MODULES





BUILDING A3= 210 Nos. MODULES

BUILDING A4= 550 Nos. MODULES



Typical module arrangement

BUILDING A2= 558 Nos. MODULES

Rander WDS_500 KWp

PROJECT : 3.6 MW SOLAR POWER PLANT.
CUSTOMER : SMC SURAT,GUJARAT.

REV.	DATE	ALTERED / CHECKED / APPROVED	REV.	DATE	ALTERED / CHECKED / APPROVED

	NAME	SIGN	DATE
DRAWN	SHU		1/02/17
CHECKED	PM		1/02/17
APPROVED	MS		1/02/17

DISTRIBUTION OF PRINTS

DEPT.	CODE
SC&PV	439

BHARAT HEAVY ELECTRICALS LIMITED.
ELECTRONICS DIVISION, BANGALORE

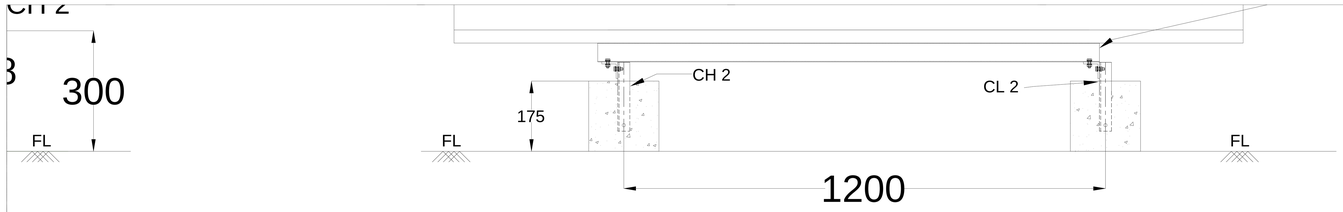
TITLE: Rander WW 500 KWp TENTATIVE ARRAY LAYOUT.

No. OF SHEETS	10
SHEET No.	03
REV	00

SMC DRG NO.

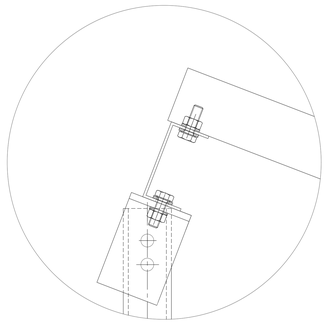
BHEL DRG. No. 3-679-05-00872

REF. DRG. No.
SIGN. & DATE
INVENTORY No.

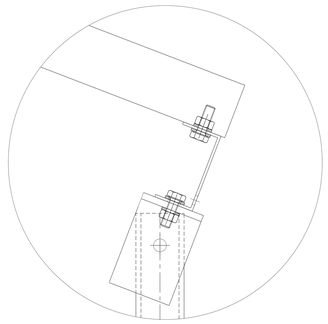


FRONT VIEW

PEDESTAL



DETAIL A



DETAIL B

PEDESTAL

8 SLOTS Ø8X12

PROJECT : 3.6 MWp ROOF TOP.
CUSTOMER : SURAT MUNICIPAL CORPORATION.

AME	SIGN	DATE
Y		8/02/17
M		8/02/17
S		8/02/17
F PRINTS		
4		

DEPT.	CODE
SC&PV	439

BHARAT HEAVY ELECTRICALS LIMITED.
ELECTRONICS DIVISION, BANGALORE

TITLE: GA OF 1 MODULE STRUCTURE

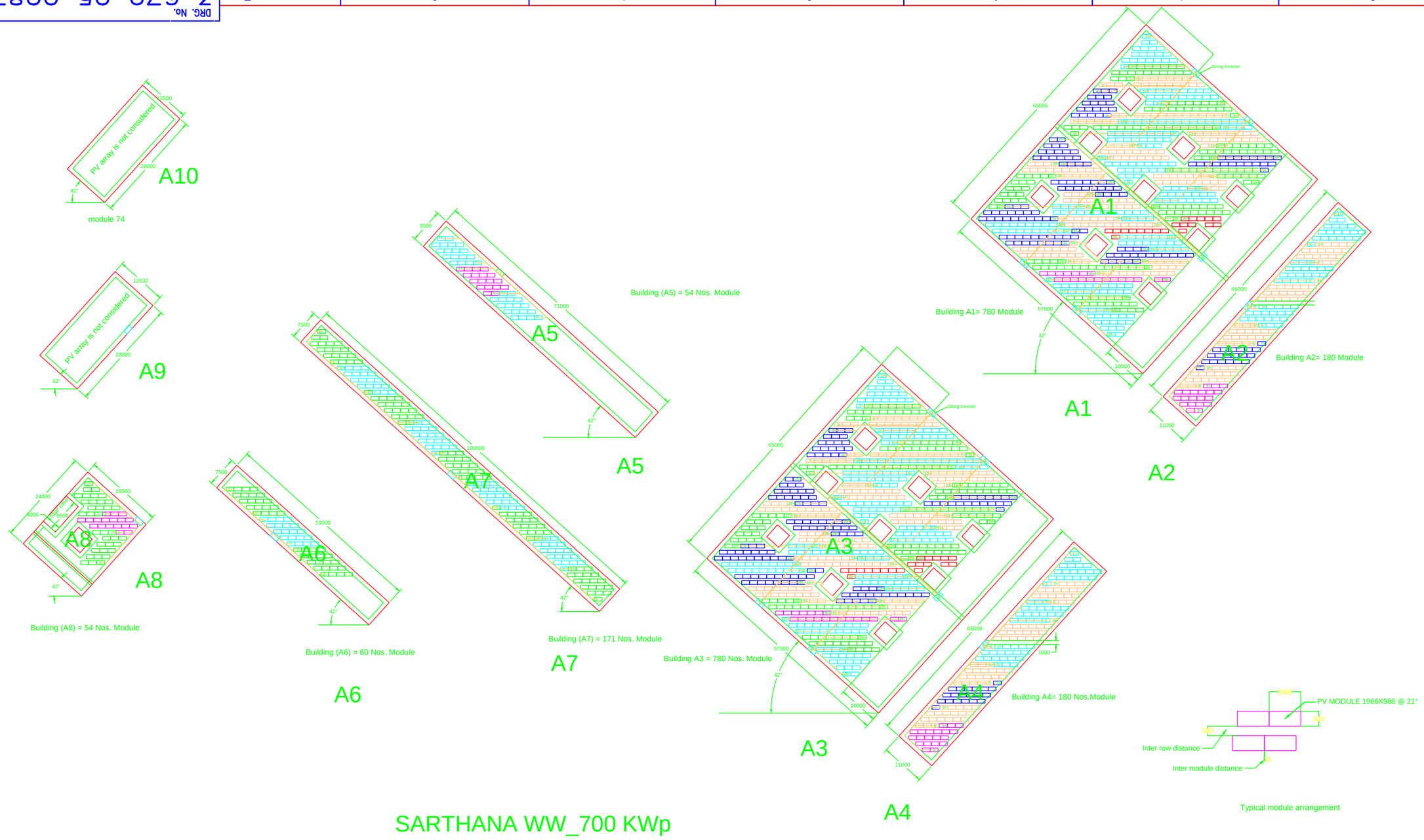
No. OF SHEETS	01
SHEET No.	01
REV	00

SMC DRG NO. BHEL-SMC-DD-MMS-010

BHEL DRG. No. 3 679 05 00871

COPYRIGHT AND CONFIDENTIAL
THE INFORMATION ON THIS DOCUMENT IS THE PROPERTY OF BHARAT HEAVY ELECTRICALS LTD. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO THE INTEREST OF THE COMPANY.

DRG. No. 3 679 05 00872



SARTHANA WW_700 KWp

PROJECT : 3.6 MW SOLAR POWER PLANT.
CUSTOMER : SMC SURAT,GUJARAT.

REV.	DATE	ALTERED / CHECKED / APPROVED	REV.	DATE	ALTERED / CHECKED / APPROVED

	NAME	SIGN	DATE
DRAWN	SHU		1/02/17
CHECKED	PM		1/02/17
APPROVED	MS		1/02/17

DISTRIBUTION OF PRINTS

DEPT.	CODE
SC&PV	439

BHARAT HEAVY ELECTRICALS LIMITED.
ELECTRONICS DIVISION, BANGALORE

TITLE: SARTHANA WW 700 KWp TENTATIVE ARRAY LAYOUT.

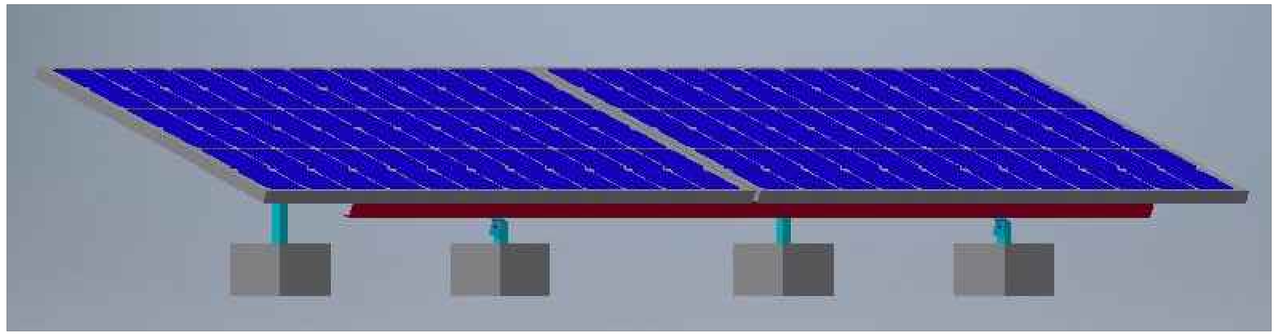
No. OF SHEETS	10
SHEET No.	04
REV	00

SMC DRG NO.

BHEL DRG. No. 3–679–05–00872

REF. DRG. No.
SIGN. & DATE
INVENTORY No.

FRONT VIEW



ISOMETRIC VIEW

PROJECT : 3.6 MWp ROOF TOP.
CUSTOMER : SURAT MUNICIPAL CORPORATION.

AME	SIGN	DATE
Y		17/02/17
M		17/02/17
S		17/02/17
F PRINTS		
4		

DEPT.	CODE
SC&PV	439

BHARAT HEAVY ELECTRICALS LIMITED.
ELECTRONICS DIVISION, BANGALORE

TITLE: GA OF 2 MODULE STRUCTURE

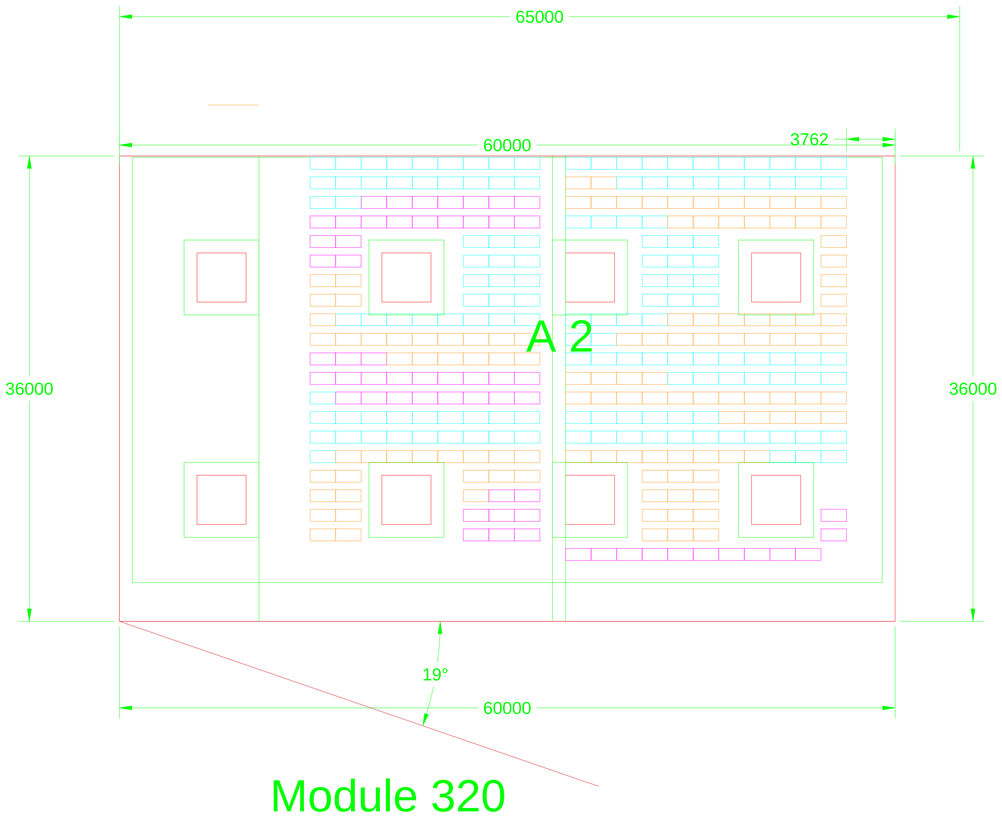
No. OF SHEETS	01
SHEET No.	01
REV	00

SMC DRG NO. BHEL-SMC-DD-MMS-010

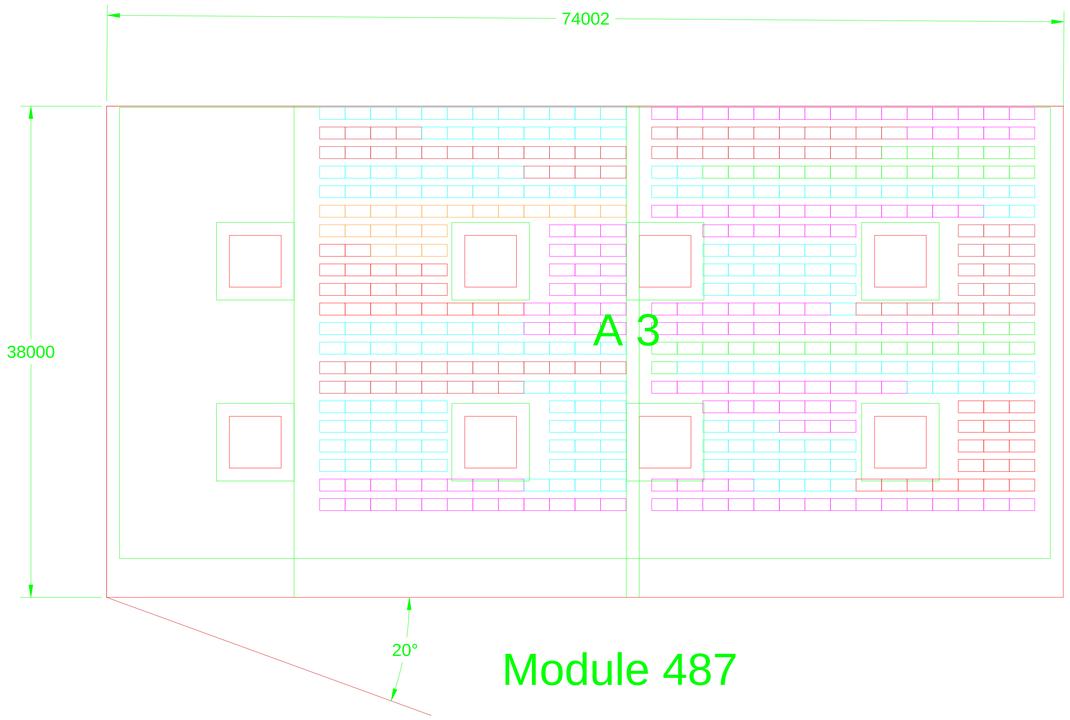
BHEL DRG. No. 3 679 05 00871

COPYRIGHT AND CONFIDENTIAL
THE INFORMATION ON THIS DOCUMENT IS THE PROPERTY OF BHARAT HEAVY ELECTRICALS LTD. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO THE INTEREST OF THE COMPANY.

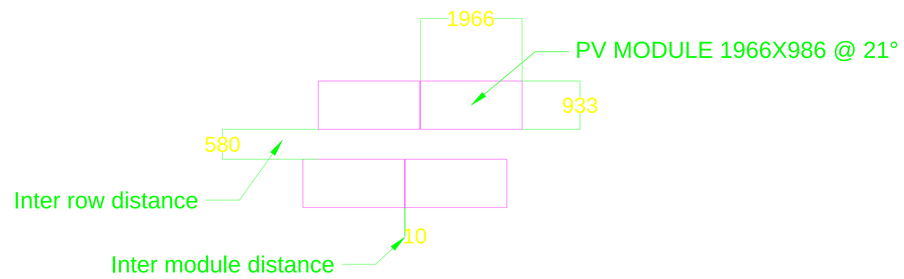
DRG. No. 3 679 05 00872



Module 320



Module 487



Typical module arrangement

VARACHCHA WW 250 KWp

PROJECT : 3.6 MW SOLAR POWER PLANT.
CUSTOMER : SMC SURAT,GUJARAT.

REV.	DATE	ALTERED / CHECKED / APPROVED	REV.	DATE	ALTERED / CHECKED / APPROVED

	NAME	SIGN	DATE
DRAWN	SHU		1/02/17
CHECKED	PM		1/02/17
APPROVED	MS		1/02/17

DISTRIBUTION OF PRINTS

DEPT.	CODE
SC&PV	439

BHARAT HEAVY ELECTRICALS LIMITED.
ELECTRONICS DIVISION, BANGALORE

TITLE: VARACHCHA WW 250 KWp TENTATIVE ARRAY LAYOUT

No. OF SHEETS	10
SHEET No.	05
REV	00

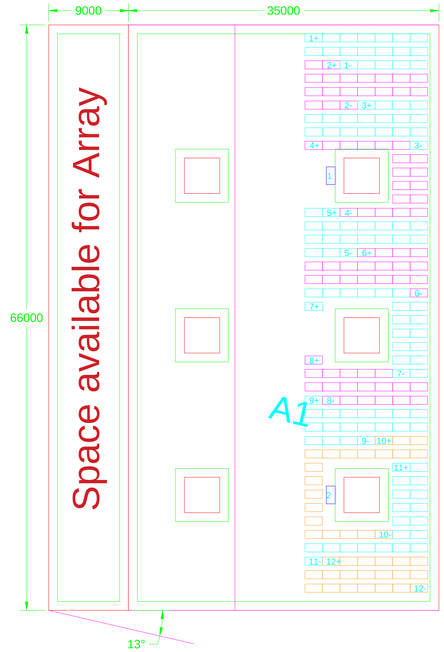
SMC DRG NO.

BHEL DRG. No. 3-679-05-00872

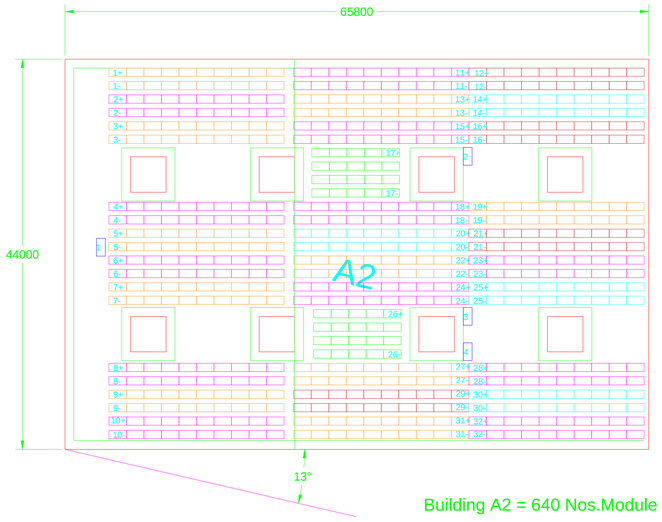
REF. DRG. No.
SIGN. & DATE
INVENTORY No.

COPYRIGHT AND CONFIDENTIAL
THE INFORMATION ON THIS DOCUMENT IS THE PROPERTY OF BHARAT HEAVY ELECTRICALS LTD. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO THE INTEREST OF THE COMPANY.

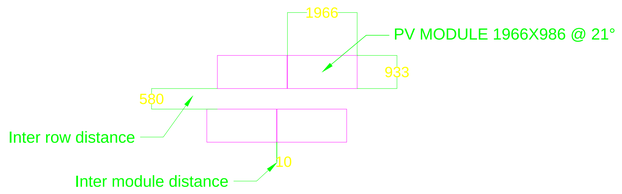
DRG. No. 3 679 05 00872



Building A1 = 231 Nos.Module



Building A2 = 640 Nos.Module



Typical module arrangement

ALTHAN WDS 270 KWp

PROJECT : 3.6 MW SOLAR POWER PLANT.
CUSTOMER : SMC SURAT,GUJARAT.

REV.	DATE	ALTERED / CHECKED / APPROVED	REV.	DATE	ALTERED / CHECKED / APPROVED

	NAME	SIGN	DATE
DRAWN	SHU		1/02/17
CHECKED	PM		1/02/17
APPROVED	MS		1/02/17

DISTRIBUTION OF PRINTS

DEPT.	CODE
SC&PV	439

BHARAT HEAVY ELECTRICALS LIMITED.
ELECTRONICS DIVISION, BANGALORE

TITLE: ALTHAN WDS 270 KWp TENTATIVE ARRAY LAYOUT.

No. OF SHEETS	10
SHEET No.	06
REV	00

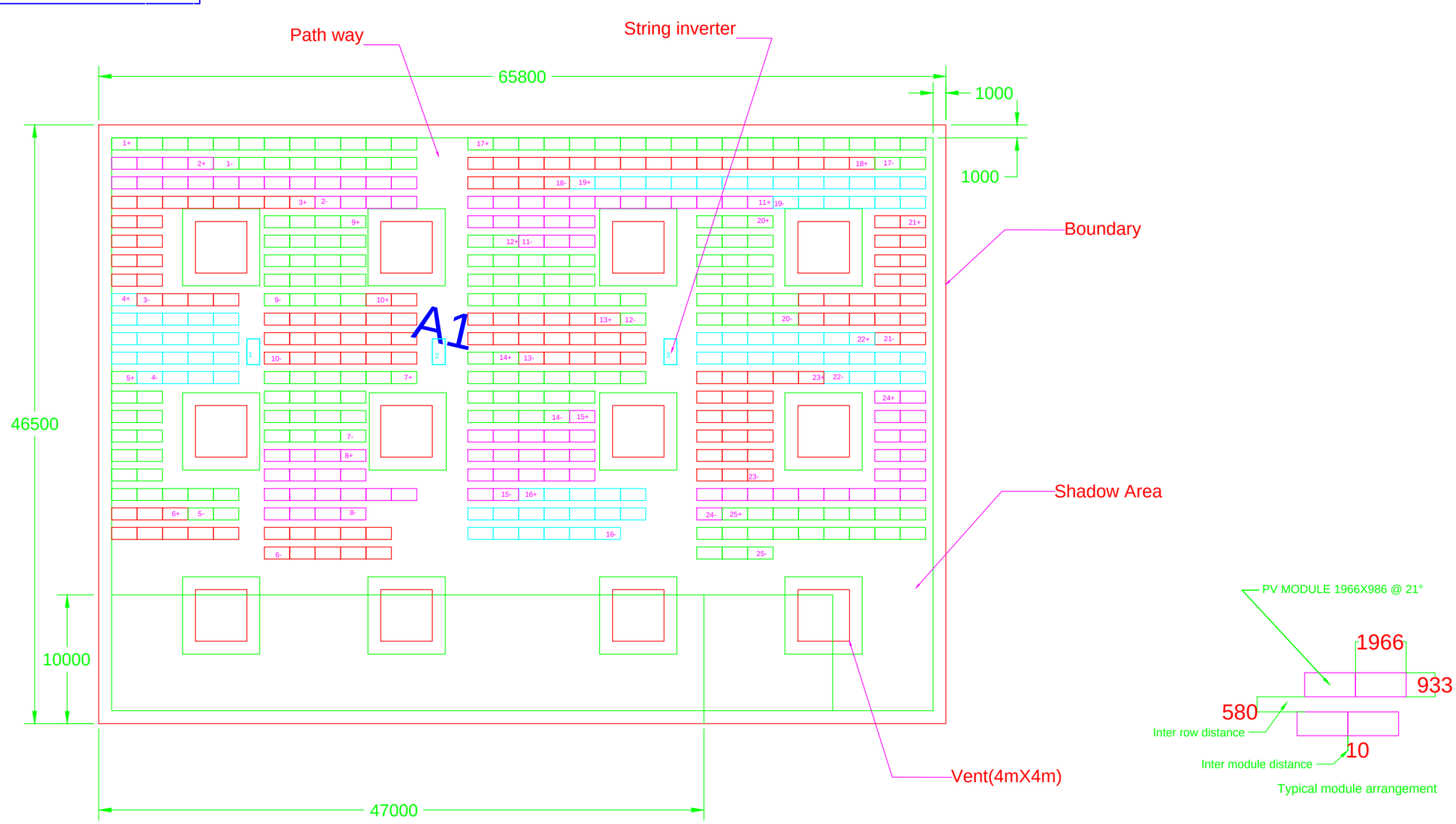
SMC DRG NO.

BHEL DRG. No. 3-679-05-00872

REF. DRG. No.
SIGN. & DATE
INVENTORY No.

COPYRIGHT AND CONFIDENTIAL
THE INFORMATION ON THIS DOCUMENT IS THE PROPERTY OF BHARAT HEAVY ELECTRICALS LTD. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO THE INTEREST OF THE COMPANY.

DRG. No. 3 679 05 00872



KOSAD WDS 150 KWp

PROJECT : 3.6 MW SOLAR POWER PLANT.
CUSTOMER : SMC SURAT,GUJARAT.

REV.	DATE	ALTERED / CHECKED / APPROVED	REV.	DATE	ALTERED / CHECKED / APPROVED

	NAME	SIGN	DATE
DRAWN	SHU		1/02/17
CHECKED	PM		1/02/17
APPROVED	MS		1/02/17

DISTRIBUTION OF PRINTS

DEPT.	CODE
SC&PV	439

BHARAT HEAVY ELECTRICALS LIMITED.
ELECTRONICS DIVISION, BANGALORE

TITLE: KOSAD WDS 150 KWp TENTATIVE ARRAY LAYOUT.

No. OF SHEETS	10
SHEET No.	07
REV	00

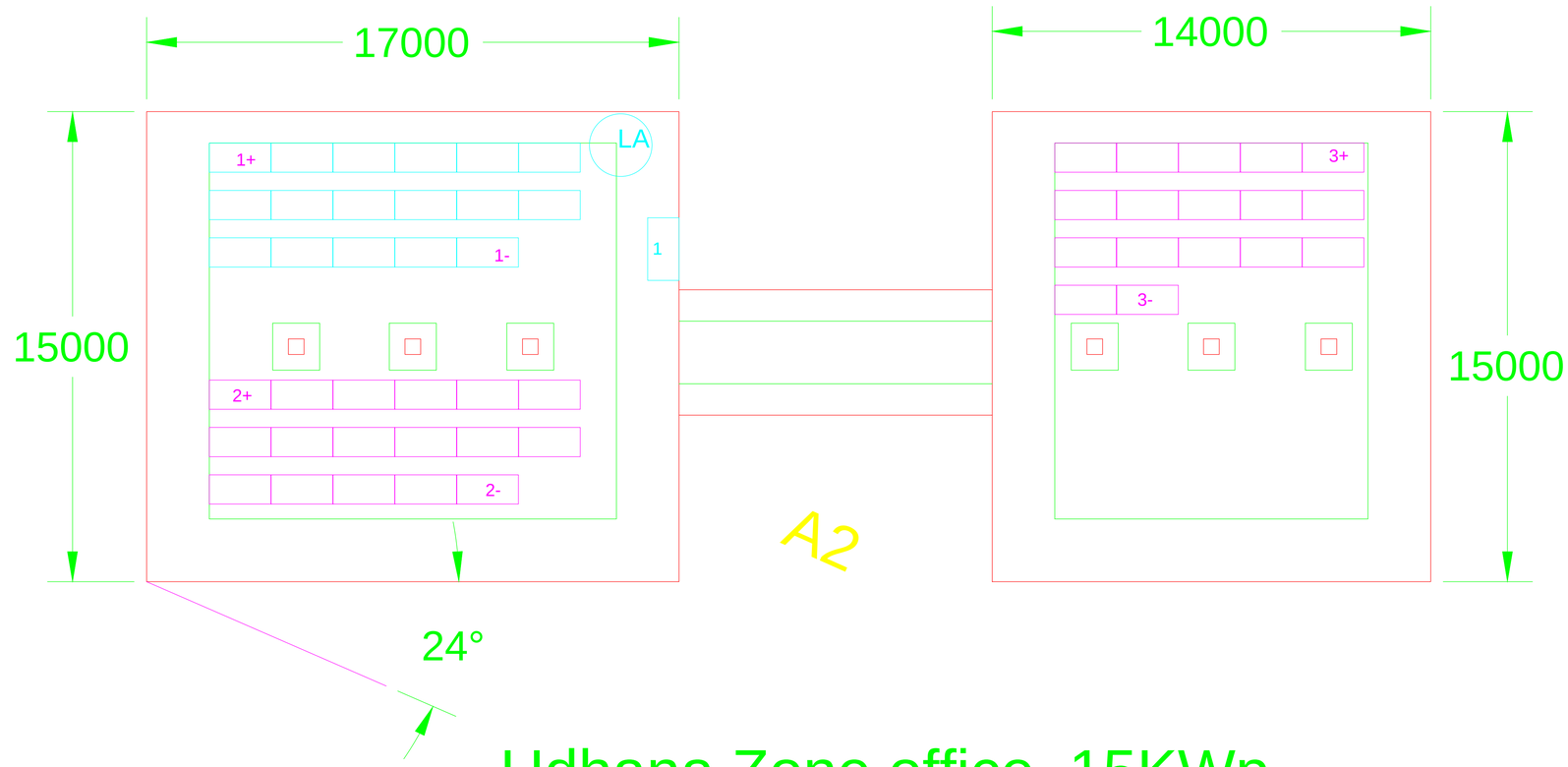
SMC DRG NO.

BHEL DRG. No. 3–679–05–00872

REF. DRG. No.
SIGN. & DATE
INVENTORY No.

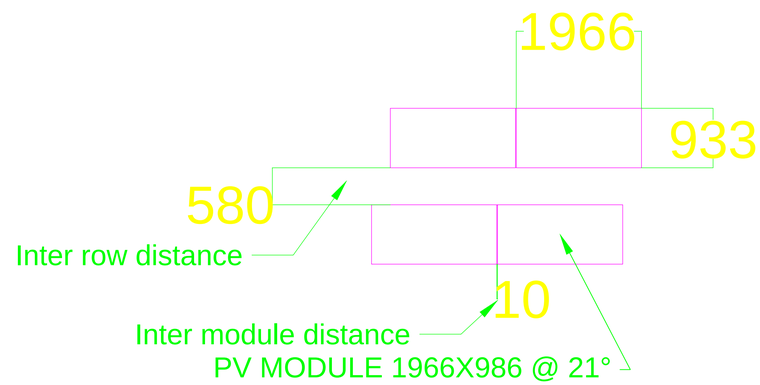
COPYRIGHT AND CONFIDENTIAL
THE INFORMATION ON THIS DOCUMENT IS THE PROPERTY OF BHARAT HEAVY ELECTRICALS LTD. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO THE INTEREST OF THE COMPANY.

DRG. No. 3 679 05 00872



Udhana Zone office_15KWp

Building A2= 51 Nos. of Module



Typical module arrangement

PROJECT : 3.6 MW SOLAR POWER PLANT.
CUSTOMER : SMC SURAT,GUJARAT.

REV.	DATE	ALTERED / CHECKED / APPROVED	REV.	DATE	ALTERED / CHECKED / APPROVED

	NAME	SIGN	DATE
DRAWN	SHU		1/02/17
CHECKED	PM		1/02/17
APPROVED	MS		1/02/17

DISTRIBUTION OF PRINTS

DEPT.	CODE
SC&PV	439

BHARAT HEAVY ELECTRICALS LIMITED.
ELECTRONICS DIVISION, BANGALORE

TITLE: Udhana Zone office_15KWp TENTATIVE ARRAY LAYOUT

No. OF SHEETS	10
SHEET No.	08
REV	00

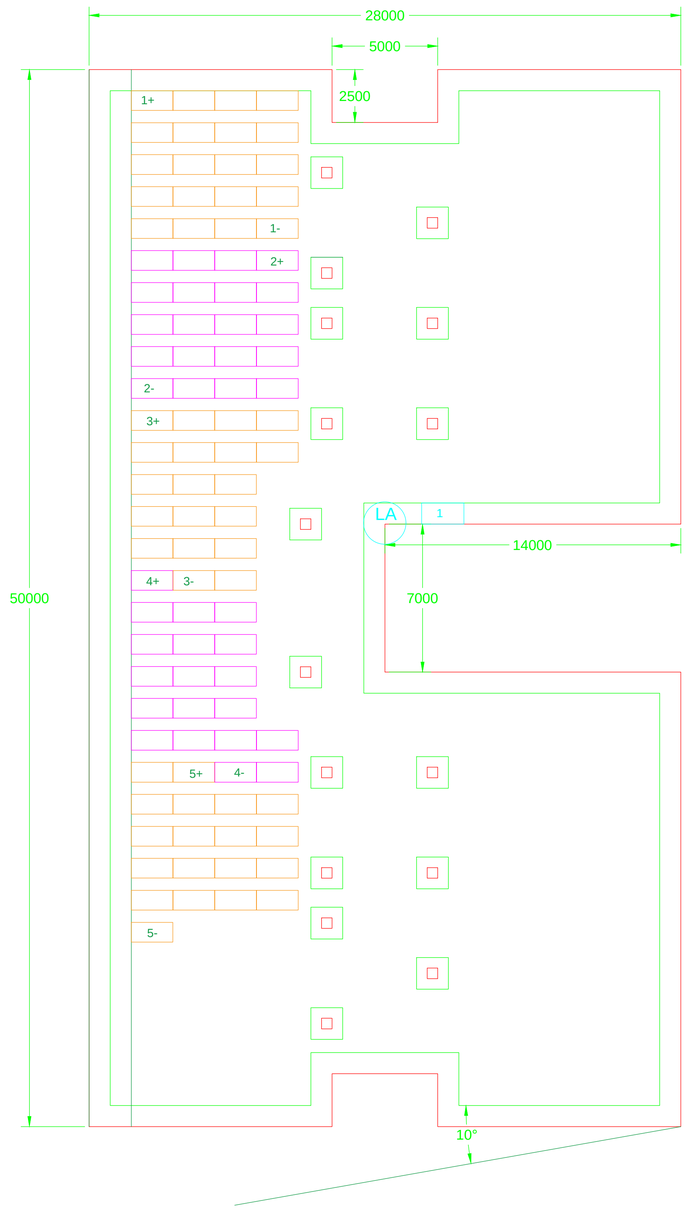
SMC DRG NO.

BHEL DRG. No. 3-679-05-00872

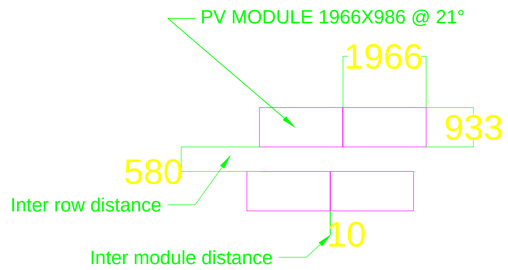
REF. DRG. No.
SIGN. & DATE
INVENTORY No.

COPYRIGHT AND CONFIDENTIAL
THE INFORMATION ON THIS DOCUMENT IS THE PROPERTY OF BHARAT HEAVY ELECTRICALS LTD. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO THE INTEREST OF THE COMPANY.

DRG. No. 3 679 05 00872



Building A1=97 No. of module



Typical module arrangement

RANDER ZONE OFFICE (30 KWp)

PROJECT : 3.6 MW SOLAR POWER PLANT.
CUSTOMER : SMC SURAT,GUJARAT.

REV.	DATE	ALTERED / CHECKED / APPROVED	REV.	DATE	ALTERED / CHECKED / APPROVED

	NAME	SIGN	DATE
DRAWN	SHU		1/02/17
CHECKED	PM		1/02/17
APPROVED	MS		1/02/17

DISTRIBUTION OF PRINTS

DEPT.	CODE
SC&PV	439

BHARAT HEAVY ELECTRICALS LIMITED.
ELECTRONICS DIVISION, BANGALORE

TITLE: RANDER ZONE OFFICE (30 KWp) TYPICAL ARRAY LAYOUT

No. OF SHEETS	10
SHEET No.	09
REV	00

SMC DRG NO.

BHEL DRG. No. 3-679-05-00872

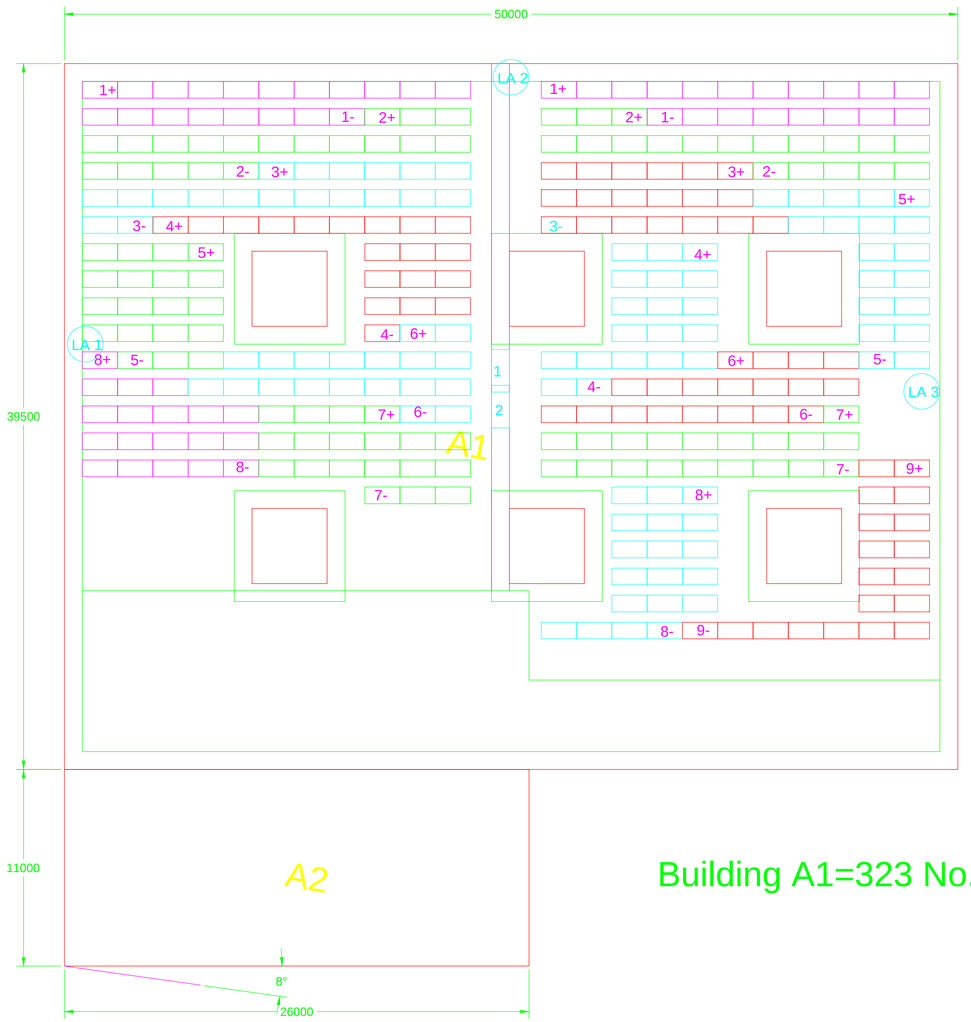
REF. DRG. No.

SIGN. & DATE

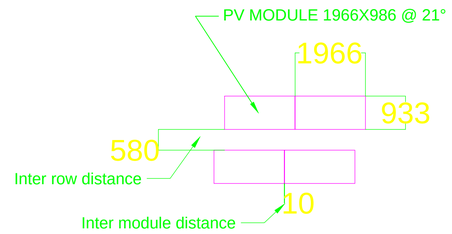
INVENTORY No.

COPYRIGHT AND CONFIDENTIAL
THE INFORMATION ON THIS DOCUMENT IS THE PROPERTY OF BHARAT HEAVY ELECTRICALS LTD. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO THE INTEREST OF THE COMPANY.

DRG. No. 3 679 05 00872



Building A1=323 No. of module



Typical module arrangement

MOTA VARACHCHA 100 kW

PROJECT : 3.6 MW SOLAR POWER PLANT.
CUSTOMER : SMC SURAT,GUJARAT.

REV.	DATE	ALTERED / CHECKED / APPROVED	REV.	DATE	ALTERED / CHECKED / APPROVED

	NAME	SIGN	DATE
DRAWN	SHU		1/02/17
CHECKED	PM		1/02/17
APPROVED	MS		1/02/17

DISTRIBUTION OF PRINTS

DEPT.	CODE
SC&PV	439

BHARAT HEAVY ELECTRICALS LIMITED.
ELECTRONICS DIVISION, BANGALORE

TITLE: MOTA VARACHCHA 100 KWp TYPICAL ARRAY LAYOUT

No. OF SHEETS	10
SHEET No.	10
REV	00

SMC DRG NO.

BHEL DRG. No. 3-679-05-00872

REF. DRG. No.
SIGN. & DATE
INVENTORY No.

COPY RIGHT AND CONFIDENTIAL
The information on this document is the property of Bharat Heavy Electrical Limited.
ust not be used diretly or indirectly in anyway detrimental to the interest of the company.

TECHNICAL SPECIFICATION FOR PV MODULE L24270P (24 V, 300 WATTS)

1. PV MODULE TYPE NO. : L24270P

2. CONFIGURATION :SINGLE GLASS LAMINATED TYPE WITH WITH 72 NOS. OF 156-mm MULTI CRYSTALLINE SILICON SOLAR CELLS (12*6) IN SERIES CONFIGURATION.

3. OVERALL SIZE : 1966 (±3) * 986 (±2) * 35 (±1) mm

4. WEIGHT : 25 Kg. (Typ.)

5. PV MODULE FRAME MATERIAL : ANODISED ALUMINIUM

6. JUNCTION BOX : IP65 GRADE JUNCTION BOX WITH CABLES AND CONNECTORS

7. RFID Tag : As per JNNSM Guidelines

8. TYPICAL ELECTRICAL CHARACTERISTICS :

8.1 OPEN CIRCUIT VOLTAGE (Voc) : 45.0 V
8.2 SHORT CIRCUIT CURRENT (Isc) : 8.7 A
8.3 VOLTAGE AT PEAK POWER POINT (Vmp) : 36 V
8.4 CURRENT AT PEAK POWER POINT (Imp) : 8.34 A
8.5 PEAK POWER OUTPUT (Pmax.) : 300 W (±5%)
8.6 CELL EFFICIENCY : 17.1 %
8.7 MODULE EFFICIENCY : 15.5 %
8.8 FILL FACTOR : ≥ 0.70

NOTE :

1. Electrical specifications mentioned above are at Standard Test Conditions of 100 mW/sq. cm solar insolation (AM 1.5) and at 25 deg C temperature.
2. Measurement repeatability of peak power output: ± 3 %

REFER MODULE DRAWING NO. : 3-679-02-00395

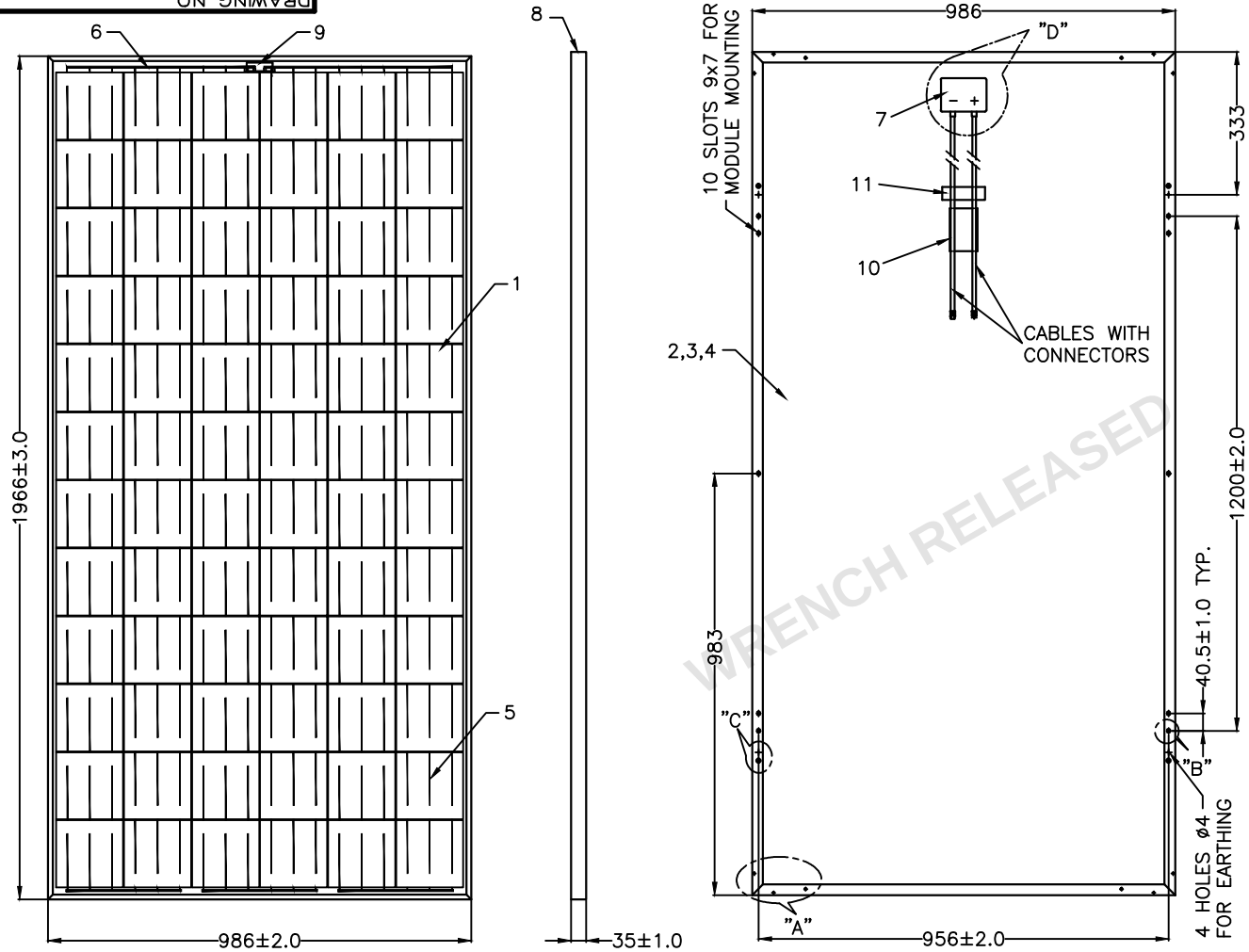
FIRST ANGLE PROJECTION

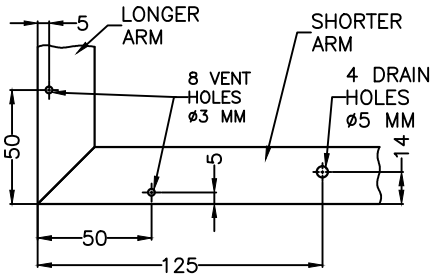
ALL DIMENSIONS ARE IN mm

DRAWING NO. 3 679 02 00395

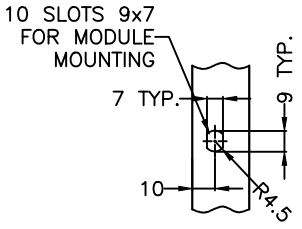
COPYRIGHT AND CONFIDENTIAL

The information on this document is the property of Bharat Heavy Electricals Limited.
It must not be used directly or indirectly in anyway detrimental to the interest of the Company

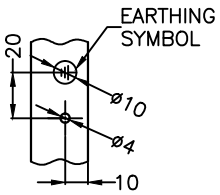




DETAL – "A"

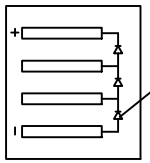


DETAIL – "B"



DETAIL – "C"

PART	DESCRIPTION
11	RFID TAG
10	MODULE RATING STICKER
9	PV MODULE SL. NO. STICKER
8	ANODISED ALUMINIUM EDGE FRAME
7	JUNCTION BOX WITH CABLES & CONNECTORS
6	BUS BAR
5	INTERCONNECTS
4	BACK SHEET
3	EVA SHEET
2	HIGH TRANSMISSION TEMPERED GLASS
1	72 Nos. OF 156 mm MULTI CRYSTALLINE SILICON SOLAR CELLS CONNECTED IN SERIES



DETAIL "D"

WRENCH RELEASED

TYPE OF PRODUCT OR NAME OF CUSTOMER/PROJECT

BHARAT HEAVY ELECTRICALS LIMITED.
ELECTRONICS DIVISION, BANGALORE

	NAME	SIGN.	DATE	No. OF VAR
DRN	SAN		130315	
CKD	SM		130315	
APPD	SR	Sd/–	130315	

REV.	DATE	ALTERED / CHECKED / APPROVED

REV.	DATE	ALTERED / CHECKED / APPROVED

REV.	DATE	ALTERED / CHECKED / APPROVED
00		FIRST ISSUE

DEPT.	FOR UNSPECIFIED TOLERANCES REFER ED 0230499	SCALE	WEIGHT(Kg)	REF. TO ASSY. DRG.	ITEM NO.	No. OF ITEM
SC&PV		1 : 10				
CODE 439						

TITLE
PHOTOVOLTAIC MODULE–L24270P
156mm Multi Solar Cell (Corner Block Type)

DRAWING NO. 3 679 02 00395 REV. 00

SHEET NO. 01 NO. OF SHEETS 01

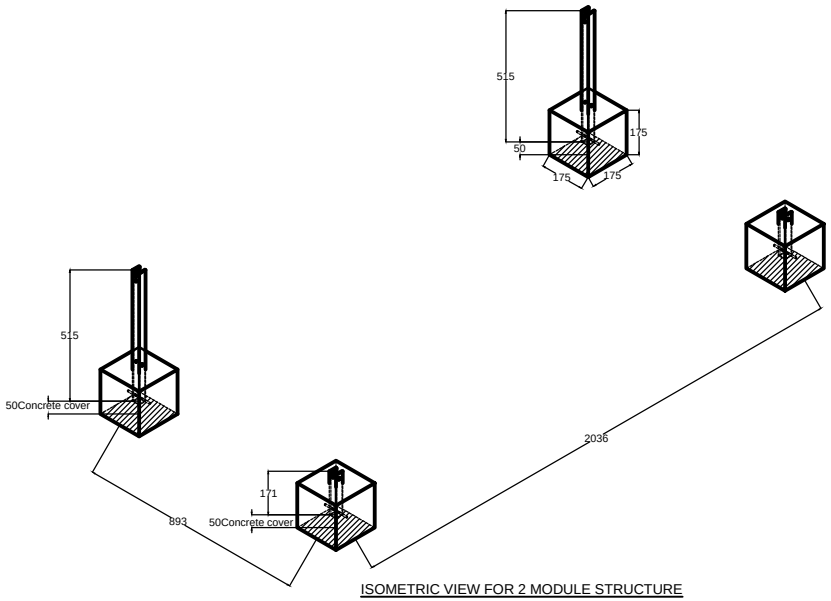
REF. DRG.NO. | SIGN & DATE | INVENTORY NO.

FORM No. A3–02

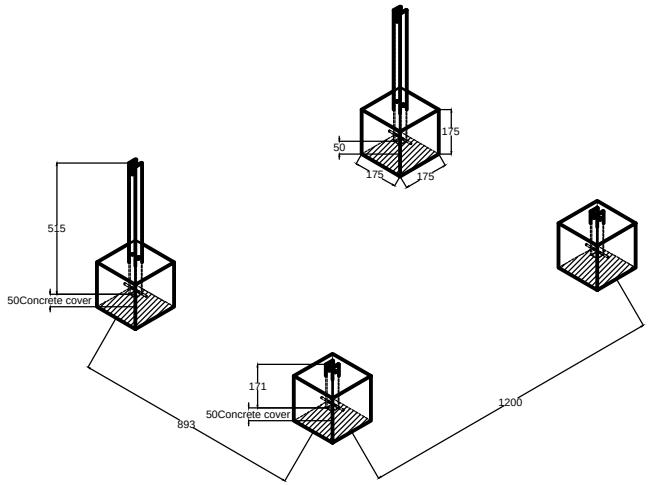
A3 SIZE

COPYRIGHT AND CONFIDENTIAL
THE INFORMATION ON THIS DOCUMENT IS THE PROPERTY OF BHARAT HEAVY ELECTRICALS LTD. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO THE INTEREST OF THE COMPANY.

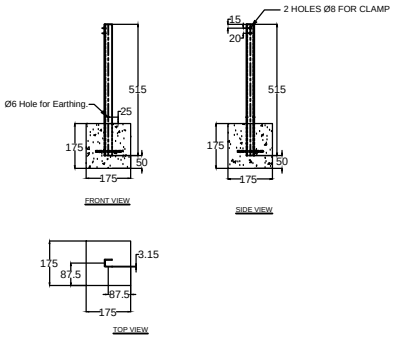
DRG. No. 3 679 05 00871



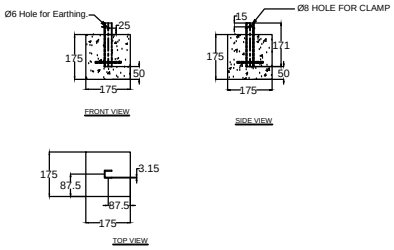
ISOMETRIC VIEW FOR 2 MODULE STRUCTURE



ISOMETRIC VIEW FOR 1 MODULE STRUCTURE



PEDESTAL FOR BIGGER CHANNEL



PEDESTAL FOR SMALLER CHANNEL

Nito bond to be applied as shown in hatched area

Note:

1. Provision is given for earthing holes on columns at a distance of 25 mm from the top of pedestal.These holes can be used for holding columns for making the template for pedestal.
2. All dimensions are in mm.
3. Do not scale the drawing only written dimensions to be read.

PROJECT : ROOF TOP SURAT
CUSTOMER : SURAT MUNICIPAL CORPORATION

REV.	DATE	ALTERED / CHECKED / APPROVED	REV.	DATE	ALTERED / CHECKED / APPROVED

	NAME	SIGN	DATE
DRAWN	NY		17/02/17
CHECKED	PM		17/02/17
APPROVED	MS		17/02/17

DISTRIBUTION OF PRINTS

DEPT.	CODE
SC&PV	439

BHARAT HEAVY ELECTRICALS LIMITED.
ELECTRONICS DIVISION, BANGALORE

TITLE: ISOMETRIC VIEW OF PEDESTAL

No. OF SHEETS	01
SHEET No.	01
REV	00

SMC DRG NO. BHEL-SMC-DD-MMS-010

BHEL DRG. No. 3 679 05 00871

REF. DRG. No.
SIGN. & DATE
INVENTORY No.

Typical Procedure for In-Situ Casting of Pedestals.

1. Marking of Pedestals as per the Array layout footing.
2. The area marked for the base of the pedestal has to be roughed and then cleaned properly with a brush.
3. Nito bond has to be prepared as per data sheet.
4. Nito bond to be applied on the base of pedestal and then the template for pedestal to be placed on the base and the Channel to be placed as shown in the MMS drawing.
5. The template has to prepared by the vendor in sufficient nos and template to ensure proper position of channel in it.
6. PCC foundation blocks are to be made with 1:2:4 cement concrete.
7. After the template is in position and nito bond applied, 1:2:4 concrete to be poured in it and allowed to dry as per IS 456.
8. Physical inspection of mixing of concrete.
9. The concrete can be made with hand mixing or machine mixing, to be done at site itself.
   The above procedure has to be applied.

   Vendor to submit the following documents for Approval to BHEL:
   1. Revised procedure for In-situ Casting of pedestals.
   2. Template drawing to be used for In –situ Casting.

   Annexures:
   1. Nito bond data sheet.
   2. Array layout.
   3. GA Drawing of Pedestals.

   Note:
   Standard procedures along with relevant IS Codes to be followed for the above procedure.

TECHNICAL BID ENCLOSURE FOR COMPLIANCE OF QUOTE : UNPRICED BID (Indigenous vendors)

RFQ No. BKC0000008 Dtd.21.02.2017 Due Date (Tech Bid): 01.03.2017

Sl No.	Material Code	DESCRIPTION	ADDITIONAL DESCRIPTION	QTY	UNIT	TAXES				REMARKS
						ED %	CST %	VAT %	S. TAX%	
1	PS0679069321	Concrete pedestal 175X175X175mm @1:2:4 ratio	As per spec:PS-439-1122	8745	Nos	NA			NA	TAXES INCLUDED
2	PS0679069330	NITO Bond Epoxy Bonding agent	As per spec:PS-439-1122	154	Ltr	NA			NA	TAXES INCLUDED
3	PS0679069348	4 sq.mm Cu, XLPO, FRLS, unarmoured DC Cable	As per spec:PS-439-1122	11100	Mtrs	NA			NA	TAXES INCLUDED
4	PS0679069712	4C X 10sqmm Al, XLPE, armoured cable	As per spec:PS-439-1122	175	Mtrs	NA			NA	TAXES INCLUDED
5	PS0679069720	4C X 35sqmm Al, XLPE, armoured cable	As per spec:PS-439-1122	1100	Mtrs	NA			NA	TAXES INCLUDED
6	PS0679069739	1.1kV, 3.5CX70 sq.mm Al, XLPE armoured cable	As per spec:PS-439-1122	250	Mtrs	NA			NA	TAXES INCLUDED
7	PS0679069747	1.1kV, 3.5CX120 sq.mm Al, XLPE armoured cable	As per spec:PS-439-1122	150	Mtrs	NA			NA	TAXES INCLUDED
8	PS0679069763	1.1kV, 3.5CX240 sq.mm Al, XLPE armoured cable	As per spec:PS-439-1122	70	Mtrs	NA			NA	TAXES INCLUDED
9	PS0679069780	1.1kV, 3.5CX400 sq.mm Al, XLPE armoured cable	As per spec:PS-439-1122	25	Mtrs	NA			NA	TAXES INCLUDED
10	PS0679069798	ACCB 1 In 1 Out	As per spec:PS-439-1122	6	Nos	NA			NA	TAXES INCLUDED
11	PS0679069801	ACCB 2 In 1 Out	As per spec:PS-439-1122	1	Nos	NA				
12	PS0679069810	ACCB 3 In 1 Out	As per spec:PS-439-1122	3	Nos	NA			NA	TAXES INCLUDED
13	PS0679069429	ACCB 5 In 1 Out	As per spec:PS-439-1122	2	Nos	NA			NA	TAXES INCLUDED
14	PS0679069828	LTPDB 1IN 1Out with MFM	As per spec:PS-439-1122	4	Nos	NA			NA	TAXES INCLUDED
15	PS0679069836	LTPDB 2IN 1Out with MFM	As per spec:PS-439-1122	4	Nos	NA			NA	TAXES INCLUDED
16	PS0679069488	Weather proof Male & Female Snap-on (MC4 type) Connectors for 4 sq.mm	As per spec:PS-439-1122	500	Set	NA			NA	TAXES INCLUDED
17	PS0679069496	Cable tray 100mm(W)X50mm(H)X2mm(T)	As per spec:PS-439-1122	2050	Mtrs	NA			NA	TAXES INCLUDED
18	PS0679069500	Copper globe type LA	As per spec:PS-439-1122	24	Nos	NA			NA	TAXES INCLUDED
19	PS0679069844	Chemical earthing Material for Part A	As per spec:PS-439-1122	1	set	NA			NA	TAXES INCLUDED
20	PS0679069534	25X3 mm GI strip for structure earthing	As per spec:PS-439-1122	2900	Mtrs	NA			NA	TAXES INCLUDED
21	PS0679069542	25 X 6 mm GI strip for Equip earthing	As per spec:PS-439-1122	2300	Mtrs	NA			NA	TAXES INCLUDED
22	PS0679069852	Tools & Equipments for Part A	As per spec:PS-439-1122	1	Set	NA			NA	TAXES INCLUDED
23	PS0679069860	RS-485 compatible 2Px0.5Sqmm copper armoured cable	As per spec:PS-439-1122	1650	Mtrs	NA			NA	TAXES INCLUDED
24	PS0679069879	Fire Fighting and Safety Equipment for Part A	As per spec:PS-439-1122	1	Set	NA			NA	TAXES INCLUDED
25	PS0679069887	Module Cleaning System for Part A	As per spec:PS-439-1122	1	Set	NA			NA	TAXES INCLUDED
26	PS0679070036	Miscellaneous Supply items for Part A	As per spec:PS-439-1122	1	Set	NA			NA	TAXES INCLUDED
27	PS0679070044	Spares for Part A	As per spec:PS-439-1122	1	Set	NA			NA	TAXES INCLUDED
28	PS0679069321	Concrete pedestal 175X175X175mm	As per spec:PS-439-1122	5910	Nos	NA			NA	TAXES INCLUDED
29	PS0679069330	NITO Bond Epoxy Bonding agent	As per spec:PS-439-1122	125	Ltr	NA			NA	TAXES INCLUDED
30	PS0679069348	4 sq.mm Cu, XLPO, FRLS,	As per spec:PS-439-1122	7600	Mtrs	NA			NA	TAXES INCLUDED
31	PS0679069712	4C X 10sqmm Al, XLPE, armoured cable	As per spec:PS-439-1122	150	Mtrs	NA			NA	TAXES INCLUDED
32	PS0679069720	4C X 35sqmm Al, XLPE, armoured cable	As per spec:PS-439-1122	800	Mtrs	NA			NA	TAXES INCLUDED
33	PS0679069739	1.1kV, 3.5CX70 sq.mm Al, XLPE armoured cable	As per spec:PS-439-1122	150	Mtrs	NA			NA	TAXES INCLUDED
34	PS0679069747	1.1kV, 3.5CX120 sq.mm Al, XLPE armoured cable	As per spec:PS-439-1122	210	Mtrs	NA			NA	TAXES INCLUDED
35	PS0679069763	1.1kV, 3.5CX240 sq.mm Al, XLPE armoured cable	As per spec:PS-439-1122	150	Mtrs	NA			NA	TAXES INCLUDED
36	PS0679069771	1.1kV, 3.5CX300 sq.mm Al, XLPE armoured cable	As per spec:PS-439-1122	25	Mtrs	NA			NA	TAXES INCLUDED
37	PS0679069798	ACCB 1 In 1 Out	As per spec:PS-439-1122	2	Nos	NA				
38	PS0679069801	ACCB 2 In 1 Out	As per spec:PS-439-1122	3	Nos	NA			NA	TAXES INCLUDED
39	PS0679069810	ACCB 3 In 1 Out	As per spec:PS-439-1122	2	Nos	NA			NA	TAXES INCLUDED
40	PS0679069690	ACCB 4 In 1 Out	As per spec:PS-439-1122	1	Nos	NA			NA	TAXES INCLUDED
41	PS0679069828	LTPDB 1IN 1Out with MFM	As per spec:PS-439-1122	2	Nos	NA			NA	TAXES INCLUDED
42	PS0679069836	LTPDB 2IN 1Out with MFM	As per spec:PS-439-1122	3	Nos	NA			NA	TAXES INCLUDED
43	PS0679069488	Weather proof Male & Female Snap-on (MC4 type) Connectors for 4 sq.mm	As per spec:PS-439-1122	350	Set	NA			NA	TAXES INCLUDED
44	PS0679069496	Cable tray 100mm(W)X50mm(H)X2mm(T)	As per spec:PS-439-1122	1500	Mtrs	NA			NA	TAXES INCLUDED
45	PS0679069500	Copper globe type LA	As per spec:PS-439-1122	24	Nos	NA			NA	TAXES INCLUDED
46	PS0679069895	Chemical earthing Material for Part B	As per spec:PS-439-1122	1	set	NA			NA	TAXES INCLUDED
47	PS0679069534	25X3 mm GI strip for structure earthing	As per spec:PS-439-1122	2000	Mtrs	NA			NA	TAXES INCLUDED
48	PS0679069542	25 X 6 mm GI strip for Equip earthing	As per spec:PS-439-1122	1400	Mtrs	NA			NA	TAXES INCLUDED
49	PS0679069909	Tools & Equipments for Part B	As per spec:PS-439-1122	1	Set	NA			NA	TAXES INCLUDED
50	PS0679069860	RS-485 compatible 2Px0.5Sqmm copper armoured cable	As per spec:PS-439-1122	550	Mtrs	NA			NA	TAXES INCLUDED
51	PS0679069917	Fire Fighting and Safety Equipment for Part B	As per spec:PS-439-1122	1	Set	NA			NA	TAXES INCLUDED
52	PS0679069925	Module Cleaning System for Part B	As per spec:PS-439-1122	1	Set	NA			NA	TAXES INCLUDED
53	PS0679070052	Miscellaneous Supply items for Part B	As per spec:PS-439-1122	1	Set	NA			NA	TAXES INCLUDED
54	PS0679070060	Spares for Part B	As per spec:PS-439-1122	1	Set	NA			NA	TAXES INCLUDED
55	PS0679069933	Unloading, storing, shifting, I&C of 700KW SPV power plant	As per spec:PS-439-1122	1	AU	NA	NA	NA		TAXES INCLUDED
56	PS0679069941	Unloading, storing, shifting, I&C	As per spec:PS-439-1122	1	AU	NA	NA	NA		TAXES INCLUDED
57	PS0679069950	Unloading, storing, shifting, I&C	As per spec:PS-439-1122	1	AU	NA	NA	NA		TAXES INCLUDED
58	PS0679069968	Unloading, storing, shifting, I&C	As per spec:PS-439-1122	1	AU	NA	NA	NA		TAXES INCLUDED
59	PS0679069976	AMC for 10 Years of 700KW, 250KW, 150KW & 100KW SPV Power Plants	As per spec:PS-439-1122	120	AU	NA	NA	NA		TAXES INCLUDED
60	PS0679069984	Unloading, storing, shifting, I&C of 500KW SPV power plant	As per spec:PS-439-1122	1	AU	NA	NA	NA		TAXES INCLUDED
61	PS0679069992	Unloading, storing, shifting, I&C of 270KW SPV power plant	As per spec:PS-439-1122	1	AU	NA	NA	NA		TAXES INCLUDED
62	PS0679070001	Unloading, storing, shifting, I&C of 15KW SPV power plant	As per spec:PS-439-1122	1	AU	NA	NA	NA		TAXES INCLUDED
63	PS0679070010	Unloading, storing, shifting, I&C of 30KW SPV power plant	As per spec:PS-439-1122	1	AU	NA	NA	NA		TAXES INCLUDED
64	PS0679070028	AMC for 10 Years of 500KW, 270KW, 15KW & 30KW SPV Power Plants	As per spec:PS-439-1122	120	AU	NA	NA	NA		TAXES INCLUDED
	Freight Charge including Service Tax on Freight: Included in Quoted rates									

Note:1. The quoted prices shall be on "FOR" basis to project site: SURAT,GUJARAT.

2. The quoted prices shall be inclusive of all Taxes & Duties, Packing & Forwarding charges and Freight.

3. However, the percentage of taxes considered against each item shall be indicated in the column for Taxes for the purpose of availing Tax Credit.

4. **ED shall not be considered as the project is under MNRE approval. Hence all inclusive rate for Supply is to be quoted without ED for Supply. However, the prevailing rate of ED shall be indicated in SCC (Annexure B). In case any item is rejected by MNRE, ED shall be reimbursed for that item at actuals.

5. The above format only shall be used for compliance. (reproducing on your letter head is acceptable).

6. Insurance will be in BHEL scope.

AUTHORISED SIGNATORY WITH SEAL

ANNEXURE A2(REVISED)

PRICED BID (Indigenous Vendors)

RFQ No. BKC0000008 Dtd.21.02.2017 Due Date (Tech Bid): 01.03.2017

Sl No.	Material Code	DESCRIPTION	QTY	UNIT	Unit Rate (Rs.)	Total Value (Rs.) (Rate X Qty)	TAXES ED %	CST%	VAT %	S TAX%	Remarks
1	PS0679069321	Concrete pedestal 175X175X175mm @1:2:4 ratio	8745	Nos			NA			NA	TAXES INCLUDED
	Unit rate in words:										
2	PS0679069330	NITO Bond Epoxy Bonding agent	154	Ltr			NA			NA	TAXES INCLUDED
	Unit rate in words:										
3	PS0679069348	4 sq.mm Cu, XLPO, FRLS, unarmoured DC Cable	11100	Mtrs			NA			NA	TAXES INCLUDED
	Unit rate in words:										
4	PS0679069712	4C X 10sqmm Al, XLPE, armoured cable	175	Mtrs			NA			NA	TAXES INCLUDED
	Unit rate in words:										
5	PS0679069720	4C X 35sqmm Al, XLPE, armoured cable	1100	Mtrs			NA			NA	TAXES INCLUDED
	Unit rate in words:										
6	PS0679069739	1.1kV, 3.5CX70 sq.mm Al, XLPE armoured cable	250	Mtrs			NA			NA	TAXES INCLUDED
	Unit rate in words:										
7	PS0679069747	1.1kV, 3.5CX120 sq.mm Al, XLPE armoured cable	150	Mtrs			NA			NA	TAXES INCLUDED
	Unit rate in words:										
8	PS0679069763	1.1kV, 3.5CX240 sq.mm Al, XLPE armoured cable	70	Mtrs			NA			NA	TAXES INCLUDED
	Unit rate in words:										
9	PS0679069790	1.1kV, 3.5CX400 sq.mm Al, XLPE armoured cable	25	Mtrs			NA			NA	TAXES INCLUDED
	Unit rate in words:										
10	PS0679069798	ACCB 1 in 1 Out	6	Nos			NA			NA	TAXES INCLUDED
	Unit rate in words:										
11	PS0679069810	ACCB 3 in 1 Out	3	Nos			NA			NA	TAXES INCLUDED
	Unit rate in words:										
12	PS0679069429	ACCB 5 in 1 Out	2	Nos			NA			NA	TAXES INCLUDED
	Unit rate in words:										
13	PS0679069828	LTPDB 1IM 1Out with MFM	4	Nos			NA			NA	TAXES INCLUDED
	Unit rate in words:										
14	PS0679069836	LTPDB 2IM 1Out with MFM	4	Nos			NA			NA	TAXES INCLUDED
	Unit rate in words:										
15	PS0679069801	ACCB 2 in 1 Out	1	NOS							
	Unit rate in words:										
16	PS0679069488	Weather proof Male & Female Snap-on (MC4 type) Connectors for 4 sq.mm	500	Set			NA			NA	TAXES INCLUDED
	Unit rate in words:										
17	PS0679069496	Cable tray 100mm(W)X50mm(H)X2mm(T) Perforated type GI with coupler plate, H/W and cover of 2 mm Thk	2050	Mtrs			NA			NA	TAXES INCLUDED
	Unit rate in words:										
18	PS0679069500	Copper globe type LA	24	Nos			NA			NA	TAXES INCLUDED
	Unit rate in words:										
19	PS0679069844	Chemical earthing Material for Part A Electrodes, backfill compound etc.	1	set			NA			NA	TAXES INCLUDED
	Unit rate in words:										
20	PS0679069534	25X3 mm GI strip for structure earthing	2900	Mtrs			NA			NA	TAXES INCLUDED
	Unit rate in words:										
21	PS0679069542	25 X 6 mm GI strip for Equip earthing	2300	Mtrs			NA			NA	TAXES INCLUDED
	Unit rate in words:										
22	PS0679069852	Tools & Equipments for Part A	1	Set			NA			NA	TAXES INCLUDED
	Unit rate in words:										
23	PS0679069860	RS-485 compatible 2Px0.5Sqmm copper armoured cable	1650	Mtrs			NA			NA	TAXES INCLUDED
	Unit rate in words:										
24	PS0679069879	Fire Fighting and Safety Equipment for Part A	1	Set			NA			NA	TAXES INCLUDED
	Unit rate in words:										
25	PS0679069887	Module Cleaning System for Part A	1	Set			NA			NA	TAXES INCLUDED
	Unit rate in words:										
26	PS0679070036	Miscellaneous Supply Items for Part A	1	Set			NA			NA	TAXES INCLUDED
	Unit rate in words:										
27	PS0679070044	Spares for Part A	1	Set			NA			NA	TAXES INCLUDED
	Unit rate in words:										
28	PS0679069321	Concrete pedestal 175X175X175mm @1:2:4 ratio	5910	Nos			NA			NA	TAXES INCLUDED
	Unit rate in words:										
29	PS0679069330	NITO Bond Epoxy Bonding agent	125	Ltr			NA			NA	TAXES INCLUDED
	Unit rate in words:										
30	PS0679069348	4 sq.mm Cu, XLPO, FRLS, unarmoured DC Cable	7600	Mtrs			NA			NA	TAXES INCLUDED
	Unit rate in words:										
31	PS0679069712	4C X 10sqmm Al, XLPE, armoured cable	150	Mtrs			NA			NA	TAXES INCLUDED
	Unit rate in words:										
32	PS0679069720	4C X 35sqmm Al, XLPE, armoured cable	800	Mtrs			NA			NA	TAXES INCLUDED
	Unit rate in words:										
33	PS0679069739	1.1kV, 3.5CX70 sq.mm Al, XLPE armoured cable	150	Mtrs			NA		NA	NA	TAXES INCLUDED
	Unit rate in words:										
34	PS0679069747	1.1kV, 3.5CX120 sq.mm Al, XLPE armoured cable	210	Mtrs			NA		NA	NA	TAXES INCLUDED
	Unit rate in words:										
35	PS0679069798	ACCB 1 in 1 Out	2	NOS			NA		NA	NA	TAXES INCLUDED
	Unit rate in words:										
36	PS0679069763	1.1kV, 3.5CX240 sq.mm Al, XLPE armoured cable	150	Mtrs			NA			NA	TAXES INCLUDED
	Unit rate in words:										
37	PS0679069771	1.1kV, 3.5CX300 sq.mm Al, XLPE armoured cable	25	Mtrs			NA			NA	TAXES INCLUDED
	Unit rate in words:										
38	PS0679069801	ACCB 2 in 1 Out	3	Nos			NA			NA	TAXES INCLUDED
	Unit rate in words:										
39	PS0679069810	ACCB 3 in 1 Out	2	Nos			NA			NA	TAXES INCLUDED
	Unit rate in words:										
40	PS0679069690	ACCB 4 in 1 Out	1	Nos			NA			NA	TAXES INCLUDED
	Unit rate in words:										
41	PS0679069828	LTPDB 1IM 1Out with MFM	2	Nos			NA			NA	TAXES INCLUDED
	Unit rate in words:										
42	PS0679069836	LTPDB 2IM 1Out with MFM	3	Nos			NA			NA	TAXES INCLUDED
	Unit rate in words:										
43	PS0679069488	Weather proof Male & Female Snap-on (MC4 type) Connectors for 4 sq.mm	350	Set			NA			NA	TAXES INCLUDED
	Unit rate in words:										
44	PS0679069496	Cable tray 100mm(W)X50mm(H)X2mm(T) Perforated type GI with coupler plate, H/W and cover of 2 mm Thk	1500	Mtrs			NA			NA	TAXES INCLUDED
	Unit rate in words:										
45	PS0679069500	Copper globe type LA	24	Nos			NA			NA	TAXES INCLUDED
	Unit rate in words:										
46	PS0679069895	Chemical earthing Material for Part B Electrodes. backfill compound etc.	1	set			NA			NA	TAXES INCLUDED
	Unit rate in words:										
47	PS0679069534	25X3 mm GI strip for structure earthing	2000	Mtrs			NA			NA	TAXES INCLUDED
	Unit rate in words:										
48	PS0679069542	25 X 6 mm GI strip for Equip earthing	1400	Mtrs			NA			NA	TAXES INCLUDED
	Unit rate in words:										
49	PS0679069909	Tools & Equipments for Part B	1	Set			NA			NA	TAXES INCLUDED
	Unit rate in words:										
50	PS0679069860	RS-485 compatible 2Px0.5Sqmm copper armoured cable	550	Mtrs			NA			NA	TAXES INCLUDED
	Unit rate in words:										
51	PS0679069917	Fire Fighting and Safety Equipment for Part B	1	Set			NA			NA	TAXES INCLUDED
	Unit rate in words:										
52	PS0679069925	Module Cleaning System for Part B	1	Set			NA			NA	TAXES INCLUDED
	Unit rate in words:										
53	PS0679070052	Miscellaneous Supply Items for Part B	1	Set			NA			NA	TAXES INCLUDED
	Unit rate in words:										
54	PS0679070060	Spares for Part B	1	Set			NA			NA	TAXES INCLUDED
	Unit rate in words:										
55	PS0679069933	Unloading, storing, shifting, I&C of 700KW SPV power plant	1	AU			NA	NA	NA		TAXES INCLUDED
	Unit rate in words:										
56	PS0679069941	Unloading, storing, shifting, I&C of 250KW SPV power plant	1	AU			NA	NA	NA		TAXES INCLUDED
	Unit rate in words:										
57	PS0679069950	Unloading, storing, shifting, I&C of 150KW SPV power plant	1	AU			NA	NA	NA		TAXES INCLUDED
	Unit rate in words:										
58	PS0679069968	Unloading, storing, shifting, I&C of 100KW SPV power plant	1	AU			NA	NA	NA		TAXES INCLUDED
	Unit rate in words:										
59	PS0679069976	AMC for 10 Years of 700KW, 250KW, 150KW & 100KW SPV Power Plants	120	AU			NA	NA	NA		TAXES INCLUDED
	Unit rate in words:										
60	PS0679069984	Unloading, storing, shifting, I&C of 500KW SPV power plant	1	AU			NA	NA	NA		TAXES INCLUDED
	Unit rate in words:										
61	PS0679069992	Unloading, storing, shifting, I&C of 270KW SPV power plant	1	AU			NA	NA	NA		TAXES INCLUDED
	Unit rate in words:										
62	PS0679070001	Unloading, storing, shifting, I&C of 15KW SPV power plant	1	AU			NA	NA	NA		TAXES INCLUDED
	Unit rate in words:										
63	PS0679070010	Unloading, storing, shifting, I&C of 30KW SPV power plant	1	AU			NA	NA	NA		TAXES INCLUDED
	Unit rate in words:										
64	PS0679070028	AMC for 10 Years of 500KW, 270KW, 15KW & 30KW SPV Power Plants	120	AU			NA	NA	NA		TAXES INCLUDED
	Unit rate in words:										
65		Freight Charge including Service Tax on Freight	Lumpsum								

Note:1. The quoted prices shall be on "FOR" basis to project site: SURAT,GUJARAT.
2. The quoted prices shall be inclusive of all Taxes & Duties, Packing & Forwarding charges and Freight.
3. However, the percentage of taxes considered against each item shall be indicated in the column for Taxes for the purpose of availing Tax Credit.
4. **ED shall not be considered as the project is under MNRE approval. Hence all inclusive rate for Supply is to be quoted without ED for Supply. However, the prevailing rate of ED shall be indicated in SCC (Annexure B). In case any item is rejected by MNRE, ED shall be reimbursed for that item at actuals.
5. The above format only shall be used for compliance. (reproducing on your letter head is acceptable).
6. Insurance will be in BHEL scope.

AUTHORISED SIGNATORY WITH SEAL