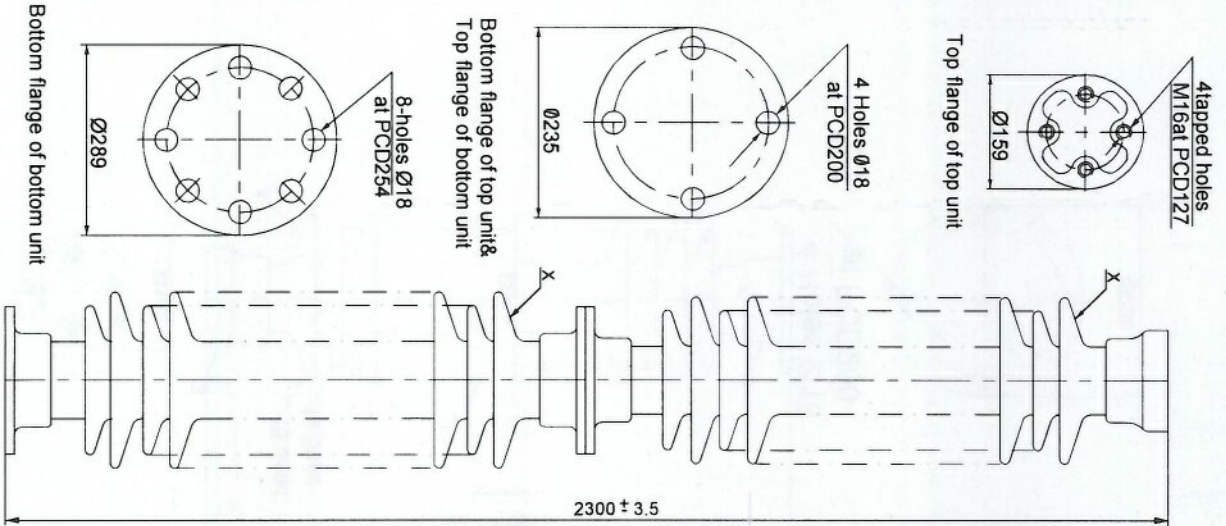
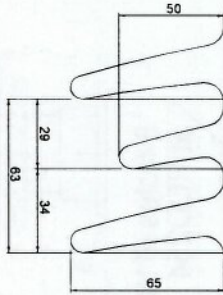




NOTES

Shed profile meets all the requirements of IEC:60815.
Name of Mfg., trade mark, month & year of Mfr. & Sr. no. to be marked at position "X"
All ferrous parts to be hot dip galvanized as per IS:2633, IS 4759
Colour of glaze: BROWN
Purity of zinc used for galvanizing- min 99.95% as per IS: 209
Galvanized Thickness shall be - Avg. 86 micron minimum
Flat washers shall have diameter 2.5 times short of the bolt diameter



Sr no	Parameters	Values	Sr	Parameters	Values
1	C = d1	19.2	5	P1-P2	≥ 15
2	Sr = d2	0.8	6	Inclination of shed top/bottom	≥ 5°
3	d1 d2	4.85 4.84	7	Profile factor ZP1-ZP2S	≥ 7
4	Average dia Dm	182.5	8	Creepage factor= 11/S1	1.127
					≤ 4
					3.8

Approved/Released for Fabrication/ construction
Approved/Released for Fabrication/ construction Subject to Incorporation of comments Modification as Noted.
Revised Drawing Required
To Be Resubmitted for Approval after Incorporating the Comments
IV. For information & Record
Not approved

(Signature)
(Designation)
(Date)

Power Grid Corporation of India Ltd
Engg. Deptt. (S/S Group) Gurgaon, Haryana

REV.	DATE	DESCRIPTION	APPD.

TECHNICAL PARTICULARS	
Applicable Standards	IS 2544, IEC 60168, IEC 60273, IEC 60815
Min. Creepage Distance	7595 mm
Protected Creepage Distance	3060 mm
Dry Arcing Distance	1960 mm
Heavy Polluted	Level IV (Heavy Polluted)
MECHANICAL VALUES	
Canilever Strength	kgf. 800
Torsional Strength	kgfm 500
Tension Strength	kgf 6000
Compression Strength	kgf 27000
ELECTRICAL VALUES	
Nominal System Voltage	kV 220
Highest System Voltage	kV 245
P. F. Withstand Voltage	kV 460
P. F. Flashover Voltage	kV 575
Impulse Withstand Voltage	kV 525
Impulse Flashover Voltage	kV 1050
Corona Extension Voltage	kV 1150
Switching Impulse Withstand Voltage	kV 1350
RIV TEST	
Test Voltage to Ground	kV 156
Max. RIV at 1000kHz	μV 500
PACKING DETAILS	
Net Weight (approx)	kg 180

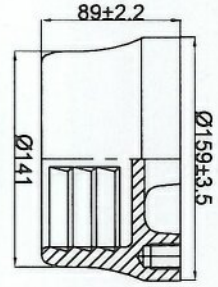
SR NO	DESCRIPTION	DRG. No.	WEIGHT	MATERIAL	QTY.	REMARKS
9	Spring washer M16			MS HDG	4	
8	Flat washer M16			MS HDG	4	
7	Hex. bolt & nut. M16 x80			MS HDG	4	
6	Bottom flange			MC/SGI	1	
5	Intermediate flange			MC/SGI	1	
4	Intermediate flange			MC/SGI	1	
3	Top flange			MC/SGI	1	
2	Porcelain shell bottom			C130	1	
1	Porcelain shell top			C130	1	

TITLE		DRG. No.	WEIGHT	MATERIAL	QTY.	REMARKS
Solid Core Insulator						
For BPI / WaveTrap						
REF: ABIP/GCIL/BPI/245-HC/STD						
POWER GRID CORPORATION OF INDIA LIMITED.						
ALL DIMENSIONS ARE IN mm						
Drg. No.						
Rev No.						

Grey : 2
Brown : 1
Finish Code
Product code

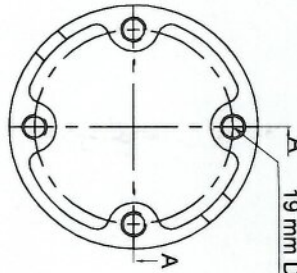
ADITYA BIRLA INSULATORS
HALOL - INDIA

987070	0
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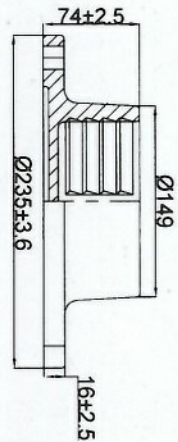


SECTION -AA

4 x M16 Tapped Holes
19 mm Deep on PCD 127

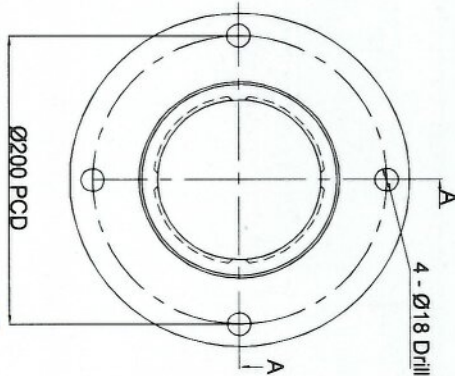


SR. NO-1

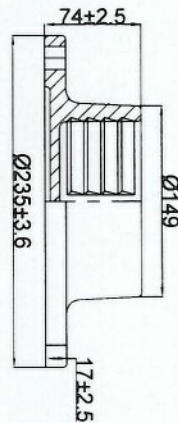


SECTION -AA

4 - Ø18 Drilled holes

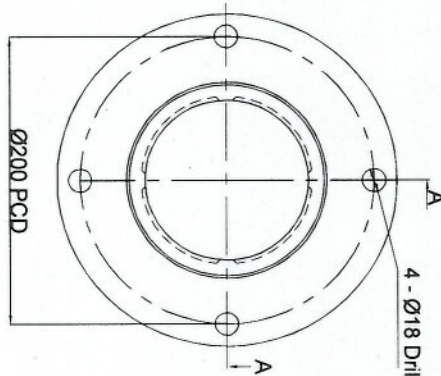


SR. NO-2

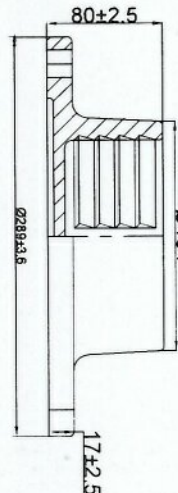


SECTION -AA

4 - Ø18 Drilled holes

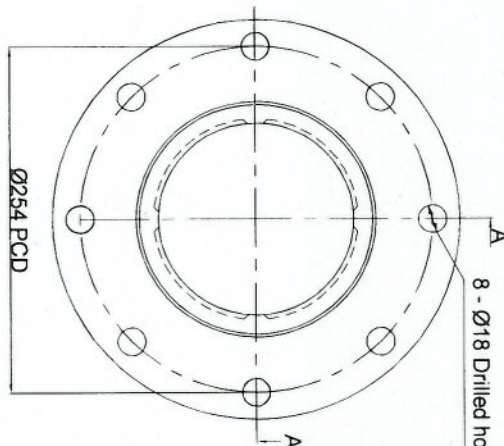


SR. NO-3



SECTION -AA

8 - Ø18 Drilled holes



SR. NO-4

 (Signature) 19/8/10 (Date)	I. Approved/Released for Fabrication/ construction
	II. Approved/Released for Fabrication/ construction Subject to incorporation of comments Modification as Noted.
	III. To Be Resubmitted for Approval after Incorporating the Comments
	IV. For information & Record Not approved

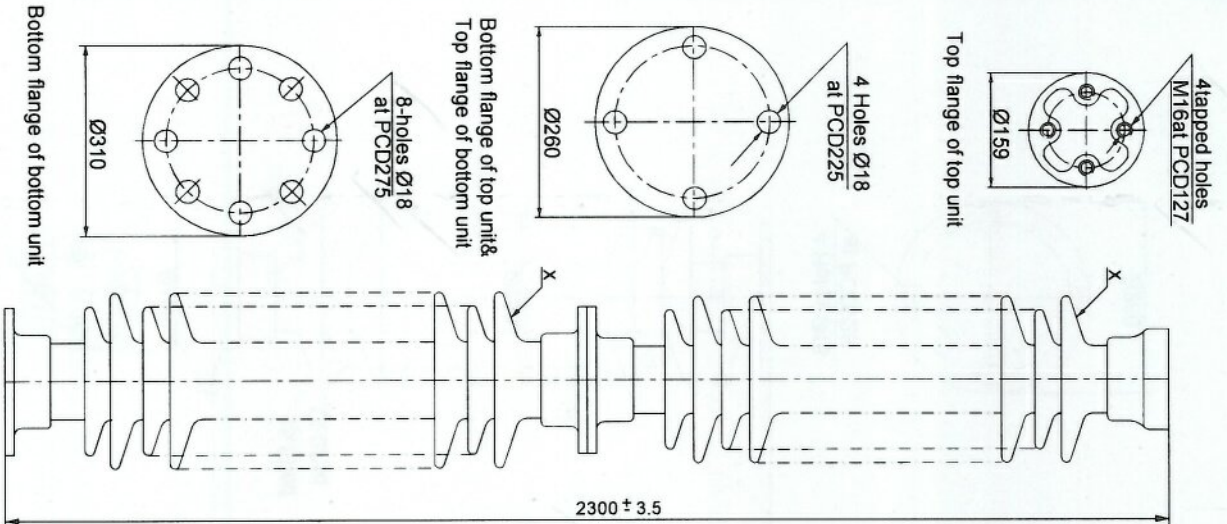
Power Grid Corporation of India Ltd
Engg Deptt (SSS Group) Gurgaon, Haryana

Grey : 2
Brown : 1 987070
Finish Code
Product code

SR NO	DESCRIPTION	DRG. No.	WEIGHT	MATERIAL	QTY.	REMARKS
4	Bottom Flange of Bottom Unit			MC/SG/HDG	1	
3	Top Flange of Bottom Unit			MC/SG/HDG	1	
2	Bottom Flange of Top Unit			MC/SG/HDG	1	
1	Top flange-Top Unit			MC/SG/HDG	1	

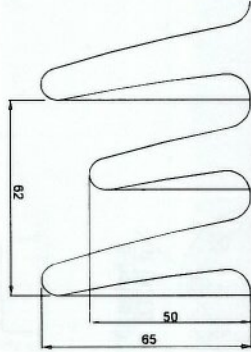
TITLE	DRG. No.	SCALE	Rev. No.
METAL PARTS DETAILS			
245kv.			
REF:- AB/PGCU/BP/245-HC/STD			
POWER GRID CORPORATION OF INDIA LIMITED.			
ADITYA BIRLA INSULATORS			
HALOL - INDIA			
987070			
0			

REV.	DATE	DESCRIPTION	APPD.



NOTES

Shed profile meets all the requirements of IEC:60815.
Name of Mfg. trade mark, month & year of Mfr. & Sr. no. to be marked at position "X".
All ferrous parts to be hot dip galvanized as per IS:2633, IS:4759
Colour of glaze: BROWN
Purity of zinc used for galvanizing- min 99.95% as per IS: 209
Galvanized Thickness shall be - Avg. 86 micron minimum
Flat washers shall have diameter 2.5 times short of the bolt diameter



Sr no	Parameters	Values as per IEC	Sr no	Parameters	Values as per IEC
1	C = d1	19.2	5	P1-P2	≥ 15
2	S/P = d2	0.8	6	Inclination of shed top/bottom	≥ 5°
3	k1	4.85	7	Profile factor	≥ 2
4	Average dia Dm	192.5	8	Creepage factor	1.12

REV.	DATE	DESCRIPTION	APPD.

TECHNICAL PARTICULARS	
Applicable Standards	IS 2544, IEC 60168, IEC 60273, IEC 60815
Min. Creepage Distance	7595 mm
Protected Creepage Distance	3100 mm
Dry Arcing Distance	1950 mm
Heavy Polluted	Level IV (Heavy Polluted)
MECHANICAL VALUES	
Canilever Strength	kgf 1000
Torsional Strength	kgfm 500
Tension Strength	kgf 8000
Compression Strength	kgf 27000
ELECTRICAL VALUES	
Nominal System Voltage	kV 220
Highest System Voltage	kV 245
P. F. Withstand Voltage	kV 460
P. F. Flashover Voltage	kV 460
Impulse Withstand Voltage	kV 575
Impulse Flashover Voltage	kV 525
Corona Extension Voltage	kV 1050
Switching Impulse Withstand Voltage	kV 1150
RIV TEST	kV 1350
Test Voltage to Ground	kV 156
Max RIV at 1000kHz	kV 156
PACKING DETAILS	μV 500
Net Weight (approx)	kg 180

Approved/Released for Fabrication/ construction
Approved/Released for Fabrication/ construction Subject to Incorporation/ Revised Drawing Required
To Be Resubmitted for Approval after incorporating the Comments.
IV For information & Record
V Not approved

(Signature)
(Designation)
(Date)

Power Grid Corporation of India Ltd.
Engg Dept (S/S Group) Gurugram, Haryana

Grey : 2	980484
Brown : 1	987706
Finish	Code
Product code	

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HALOL - INDIA

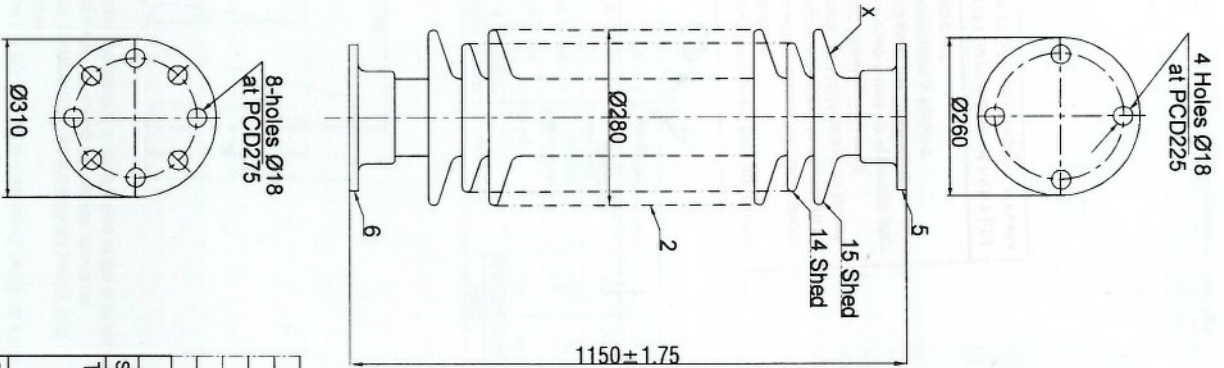
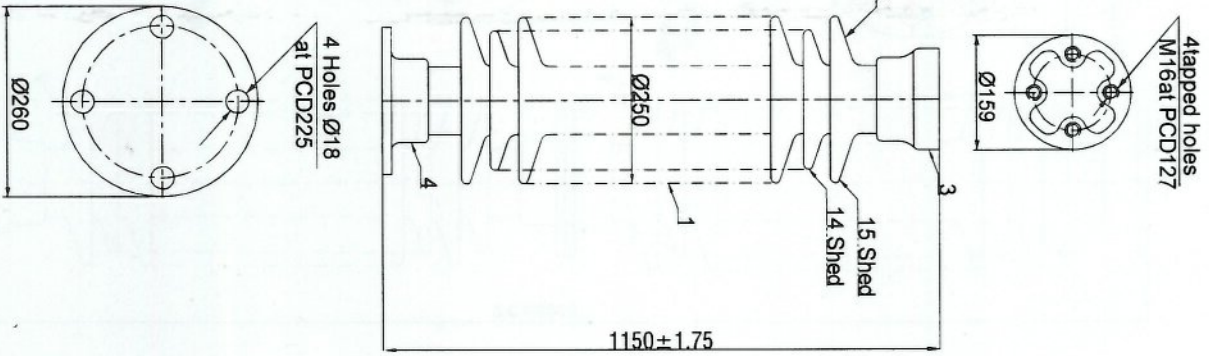
REF: AB/PGCIL/BP/245-HC/STD
POWER GRID CORPORATION
OF INDIA LIMITED.

Dr. No. 987706
Rev. No. 0
Page 1 of 3

Sr NO.	DESCRIPTION	DRG. No.	WEIGHT	MATERIAL	QTY.	REMARKS
9	Spring washer M16		MS		4	
8	Flat washer M16		MS		8	
7	Hex. bolt & nut- M16 x80		MS		4	
6	Bottom flange		MC/SG-HDG		1	
5	Intermediate flange		MC/SG-HDG		1	
4	Intermediate flange		MC/SG-HDG		1	
3	Top flange		MC/SG-HDG		1	
2	Porcelain shell bottom		Porcelain		1	
1	Porcelain shell top		Porcelain		1	

TITLE
Solid Core Insulator
245KV.
For Isolators

DRN G. Pandhal 23/7/2013
CKD DBC 23/7/2013
APD DBC 23/7/2013
SCALE: NTS
PROJECTION



REV.	DATE	DESCRIPTION	APPD.

1. Approved/Released for Fabrication/ construction
 II. Approved/Released for Fabrication/ construction Subject to Incorporation/ of comments Modification as Noted Revised Drawing Required
 III. To Be Resubmitted for Approval after incorporating the Comments
 IV. For information & Record
 V. Not approved

(Signature)
 (Designation)
 (Date)

Power Grid Corporation of India Ltd
 Engg Deptt (S/S Group) Gurgaon, Haryana

Grey : 2
Brown : 1 987706
Finish Code
Product code

SR NO.	DESCRIPTION	DRG. No.	WEIGHT	MATERIAL	QTY.	REMARKS
6	Bottom flange of Bottom Unit			MC/SG-HDG	1	
5	Top Flange of Bottom Unit			MC/SG-HDG	1	
4	Bottom Flange of Top Unit			MC/SG-HDG	1	
3	Top flange Top Unit			MC/SG-HDG	1	
2	Bottom Unit			C130	1	
1	Top Unit			C130	1	

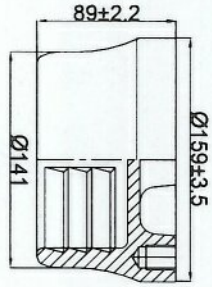
TITLE	245kv. 10 KN BPI UNITS
REF.	ABI/PGCL/BPI/245-HC/STD POWER GRID CORPORATION OF INDIA LIMITED.
DRN	G.Panchal 23/7/2013
CKD	DBC 23/7/2013
APD	DBC 23/7/2013

ALL DIMENSIONS ARE IN mm.	SCALE	NTS
Drig. No.	Rev No.	0

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 HALOL - INDIA

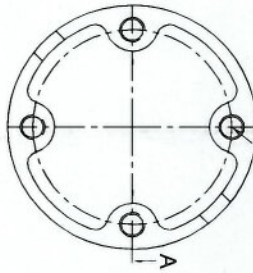
987706

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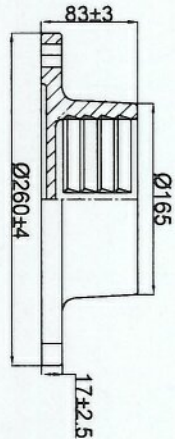


SECTION -AA

4 x M16 Tapped Holes
19 mm Deep on PCD 127

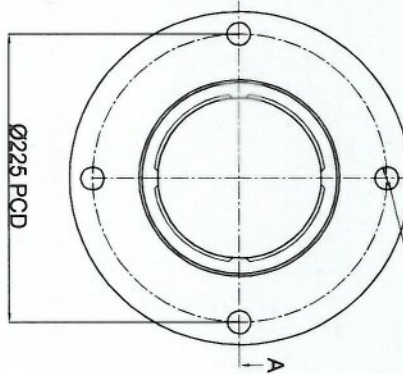


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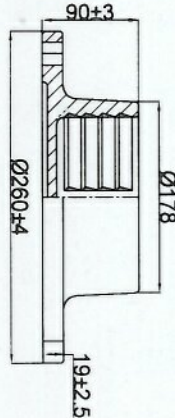


SECTION -AA

4 - Ø18 Drilled holes

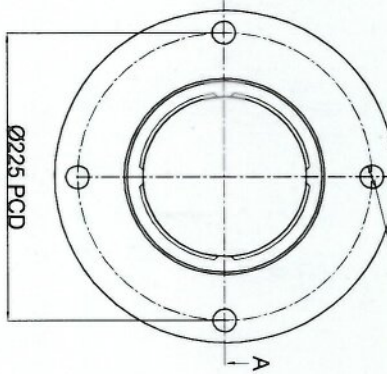


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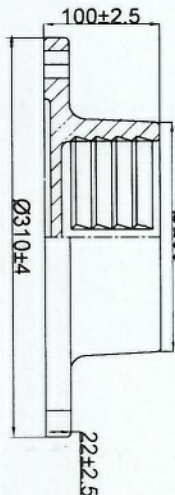


SECTION -AA

4 - Ø18 Drilled holes

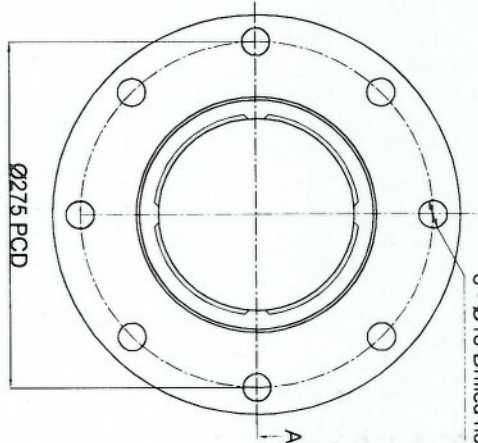


SR. NO-3



SECTION -AA

8 - Ø18 Drilled holes



SR. NO-4

	I. Approved/Released for Fabrication/ construction
(Signature)	II. Approved/Released for Fabrication/ construction Subject to Incorporation of comments Modification as Noted
(Date)	III. Revised Drawing Required
	IV. To Be Resubmitted for Approval after incorporating the Comments
	V. For information & Record
	VI. Not approved

Power Grid Corporation of India Ltd.
Engg Dept (S/S Group) Gurgaon, Haryana

SR NO.	DESCRIPTION	DRG. No.	WEIGHT	MATERIAL	QTY.	REMARKS
4	Bottom Flange of Bottom Unit			MC/SGH-HDG	1	
3	Top Flange of Bottom Unit			MC/SGH-HDG	1	
2	Bottom Flange of Top Unit			MC/SGH-HDG	1	
1	Top Flange-Top Unit			MC/SGH-HDG	1	

TITLE		DRN	G.Panchal	23/7/2013	PROJECTION
245kv.-10 KN		CKD	DBC	23/7/2013	
METAL PARTS DETAILS		APD	DBC	23/7/2013	

REF:- AB/PGCIL/BI/245-HC/STD
POWER GRID CORPORATION
OF INDIA LIMITED.

Grey :2
Brown:1 987706
Finish Code
Product code

ADITYA BIRLA INSULATORS
HALOL - INDIA

987706	Rev No.	0
Page 3 of 3		