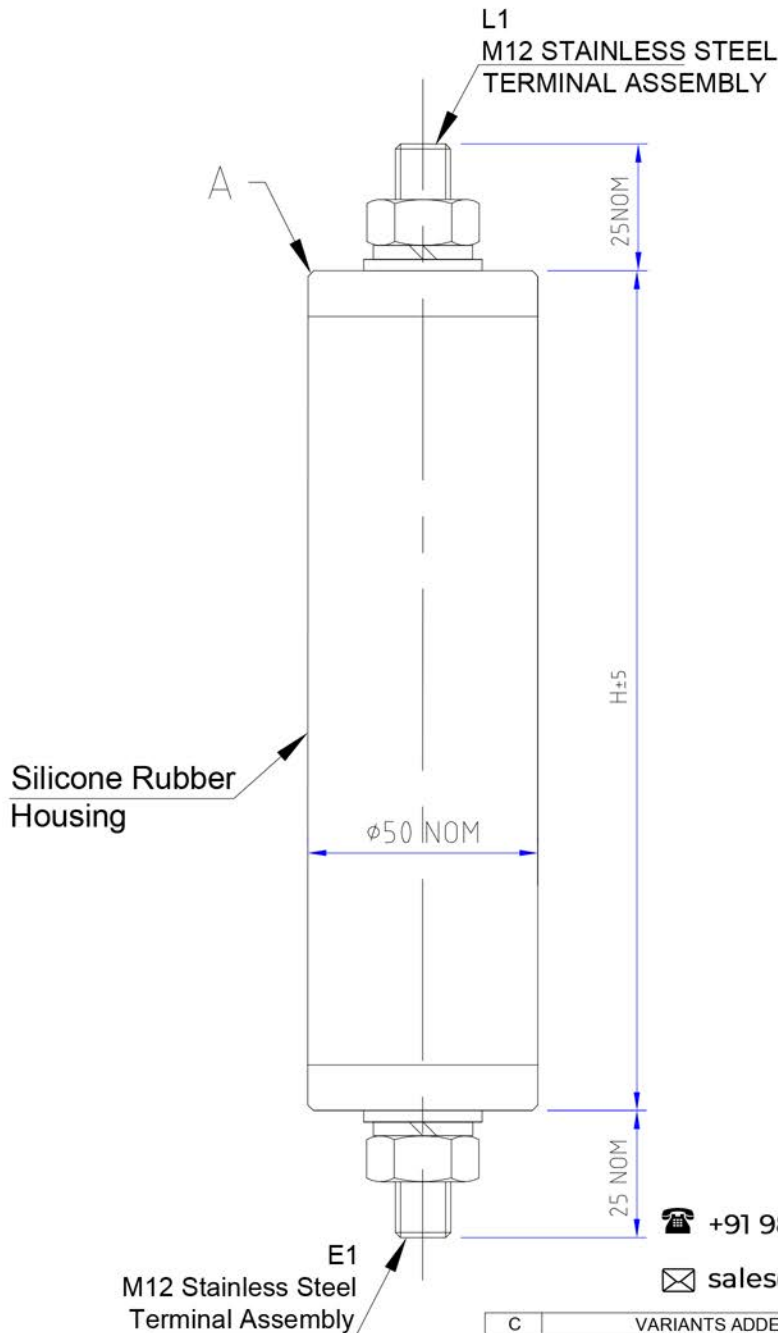
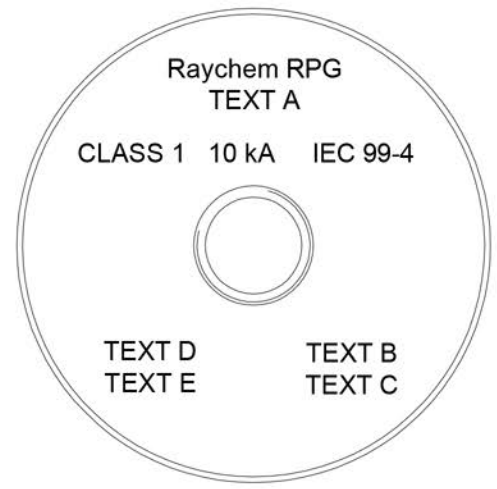


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PRODUCT	O/A HEIGHT 'H'
DA1-04A-IND	147
DA1-06A-IND	147
DA1-7.2A-IND	147
DA1-7.5A-IND	147
DA1-08A-IND	147
DA1-09A-IND	147
DA1-10A-IND	147
DA1-12A-IND	147
DA1-04B-IND	172
DA1-06B-IND	172
DA1-7.2B-IND	172
DA1-7.5B-IND	172
DA1-08B-IND	172
DA1-09B-IND	172
DA1-10B-IND	172
DA1-12B-IND	172
DA1-15B-IND	172

PRODUCT	TEXT A	TEXT B	TEXT C	TEXT D	TEXT E
DA1-04A-IND/ DA1-04B-IND	DA1-04A-IND/ DA1-04B-IND	Uc 3.2 kV	Ur 4 kV	YEAR	XXXX
DA1-06A-IND/ DA1-06B-IND	DA1-06A-IND/ DA1-06B-IND	Uc 4.8 kV	Ur 6 kV	YEAR	XXXX
DA1-7.2A-IND/ DA1-7.2B-IND	DA1-7.2A-IND/ DA1-7.2B-IND	Uc 5.76 kV	Ur 7.2 kV	YEAR	XXXX
DA1-7.5A-IND/ DA1-7.5B-IND	DA1-7.5A-IND/ DA1-7.5B-IND	Uc 6.0 kV	Ur 7.5 kV	YEAR	XXXX
DA1-08A-IND/ DA1-08B-IND	DA1-08A-IND/ DA1-08B-IND	Uc 6.4 kV	Ur 8 kV	YEAR	XXXX
DA1-09A-IND/ DA1-09B-IND	DA1-09A-IND/ DA1-09B-IND	Uc 7.2 kV	Ur 9 kV	YEAR	XXXX
DA1-10A-IND/ DA1-10B-IND	DA1-10A-IND/ DA1-10B-IND	Uc 8 kV	Ur 10 kV	YEAR	XXXX
DA1-12A-IND/ DA1-12B-IND	DA1-12A-IND/ DA1-12B-IND	Uc 9.6 kV	Ur 12 kV	YEAR	XXXX
DA1-15B-IND	DA1-15B-IND	Uc 12 kV	Ur 15 kV	YEAR	XXXX



DETAIL - A

NOTE:
ALL DIMENSIONS IN mm

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REV	REVISION RECORD	DATE	DWN	APVD
C	VARIANTS ADDED	09/08/2016	M.S	
B	VARIANTS ADDED	02/08/2016	M.S	
A	NEW DRAWING	24/12/2012	PM PAVAN	

		NAME/SIGN	DATE
		DSGN RRL	
TITLE : DA1 / XXX / IND / L1E1M0 INDOOR SURGE ARRESTER RANGE		DRWN <i>Staroof</i>	24.12.2012
		CHKD <i>Abhijit</i>	24.12.2012
DRAWING No. MV-SA-PD-10197-S PART No. -----		APPD <i>R-Anekar</i>	24.12.2012
		SHEET 01 OF 01	REV. C
		PROJECTION	

Technical Data Sheet

Indoor Surge Arrester: 10kV 10kA Class 1

General:

Model	DA1-10A-IND
Arrester housing	Polymeric
Application	Indoor
Applicable standard	IEC 60099-4/ IS 3070 Part 3
Nominal discharge current	10kA
Line discharge class	1
High current impulse 4/10 μ s	100kA
Energy capability	2.5 kJ/kV at Ur according to IEC 60099-4



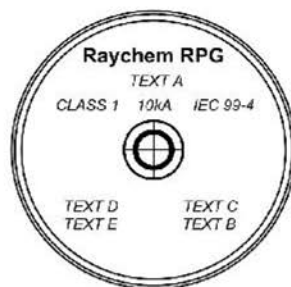
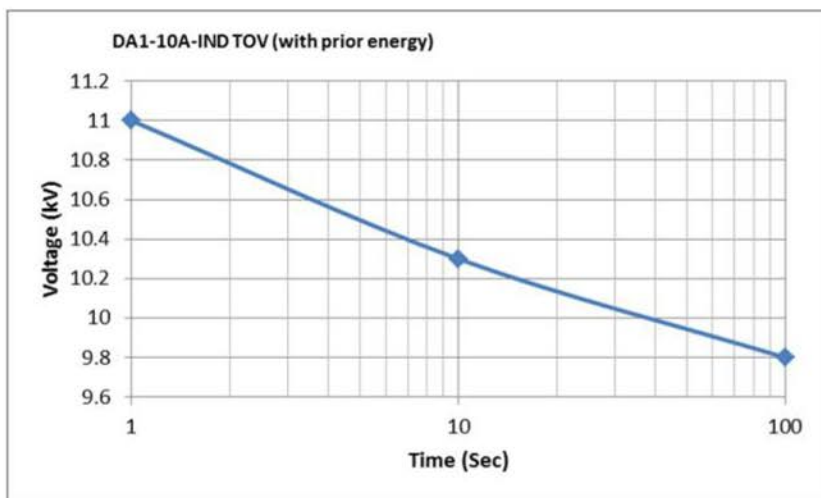
Surge arrester characteristics:

Rated voltage	Ur: 10	kV
Continuous operating voltage	Uc: 8.0	kV
TOV capability	11.0	kV for 1s
	10.3	kV for 10 s
	9.80	kV for 100 s
Max. app. cant. load	250	Nm
Impulse voltage 1.2/50 μ s	75	kV
Power frequency voltage-dry	30	kV
Creepage distance	130	mm
Height	147	mm

Maximum residual voltages

Lightning current impulse 8/20 μ s			Steep lightning current impulse 1/20 μ s	Switching current impulse 30/60 μ s	
5kA	10kA	20kA	10kA	125A	500A
24.9kV	26.5kV	29.1kV	27.9kV	19.9kV	21.1kV

Power frequency voltage versus Time

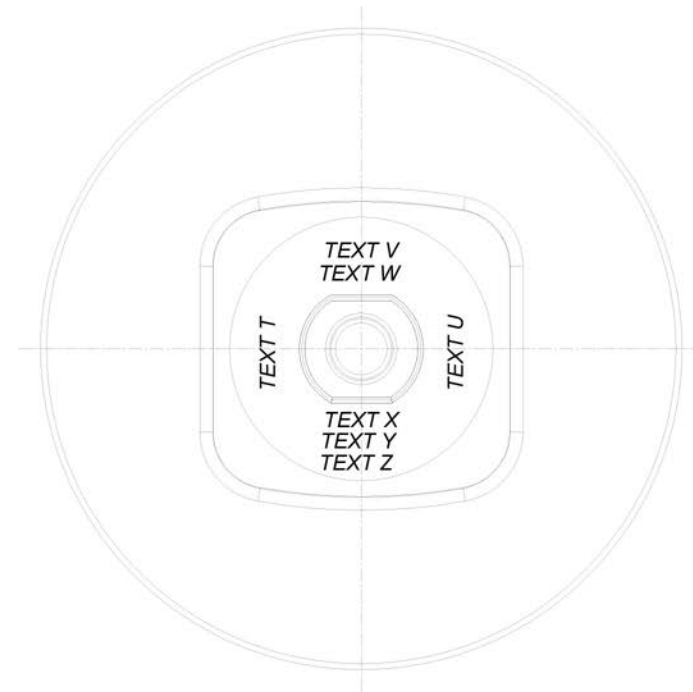
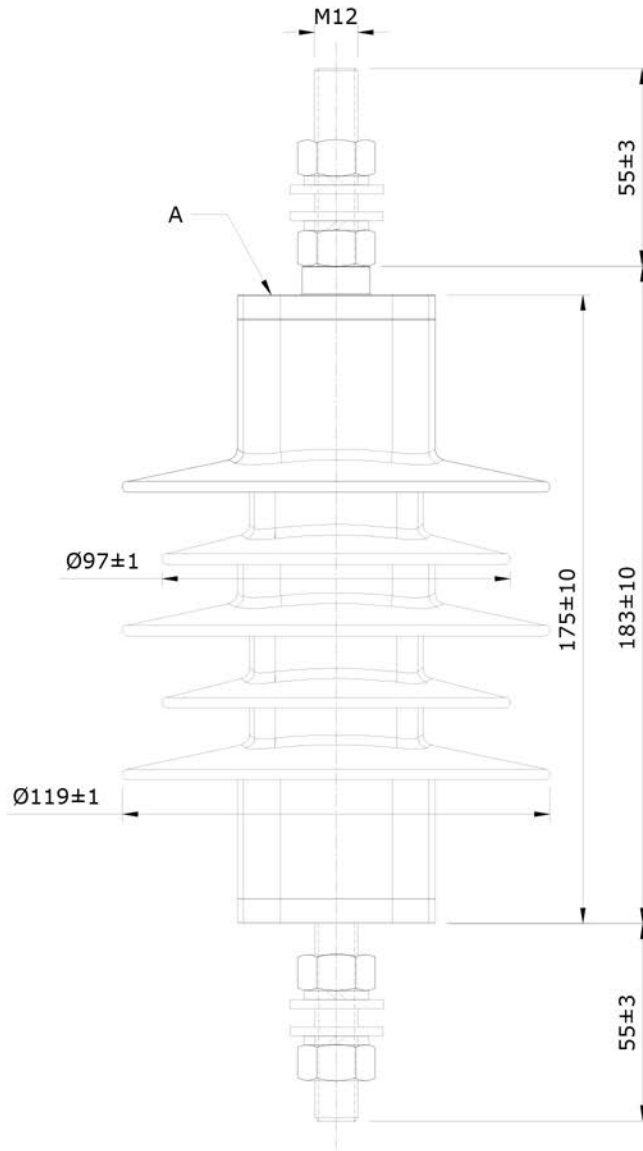


Text A: DA1-10A-IND
 Text B: Uc 8.0 kV
 Text C: Ur 10 kV
 Text D: Year
 Text E: Batch

GUARANTEED TECHNICAL PARTICULARS OF 10 KV, 10KA Class-2 SURGE ARRESTER

Sr.No	Particulars	
1	Name of the Manufacturer	Raychem RPG Pvt Ltd, Halol, Gujarat
2	Reference Standard	IEC 60099-4
3	Rating (kVrms)	10
4	Model Number & Designation	OCP2-08S
5	Installation	Outdoor
6	Class	Class-2
8	Type of construction	Polymeric single column
9	Connection	Between phase to earth
10	Maximum Continous Operation Voltage (kVrms)	8
11	Nominal Discharge Current, NDC (kA)	10
12	Reference Current (mA)	5
13	Reference Voltage at Reference Current (kVrms)	Greater than rated voltage of surge arrester
14	Maximum Lightning Impulse Residual Voltage (kVp) at NDC of 8/20 micro sec	
	5 kA	27.4
	10.0 kA	29.2
	20.0 kA	32.3
15	Maximum Steep Current Impulse Residual Voltage (kVp) at 10 kA, 1/20 micro sec	32.0
16	Maximum Switching Current Impulse Residual Voltage (kVp) at 500 A, 30/60 micro sec	23.2
17	High Current Withstand (kA)	100 kA
18	Long Duration Current Impulse Withstand	400 A, 2000 Micro sec
19	Lightning Impulse Voltage withstand of Arrester Housing (kVp)	145
20	Power Frequency Voltage withstand of Arrester Housing (kVrms) Dry / Wet	47
21	Partial Discharge at 1.05 x MCOV	Less than 10 pC
22	creepage distance of arrester housing (mm)	380
23	Temporarily Overvoltage Capability in kVrms for	
	1 Sec	11.5
	10 Sec	11.0
	100 Sec	10.5





DETAIL - A

TEXT V	TEXT W	TEXT X	TEXT Y	TEXT Z	TEXT T	TEXT U
OCP2 - 08S	In 10kA, Class 2	Uc 08kV	Ur 10 kV	Isc 40kA	BATCH NO.	YEAR

NO. OF SHEDS	CREEPAGE	DRY ARC DIST
05	380	176

NOTE:
ALL DIMENSIONS IN mm

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		NAME/SIGN	DATE
<small>Tyco Electronics</small> (A Tyco Electronics - RPG Enterprises JV)		DSGN RRL	04.03.14
TITLE : OCP2 / 08S / 10KA / CLASS 2 / SURGE ARRESTER RANGE		DRWN <i>Navof</i>	04.03.14
SCALE HTS		CHKD <i>Abhijit</i>	04.03.14
DRAWING No. RRPL / IP / MVSA / 017		APPD <i>As Anshkar</i>	04.03.14
PART No.		SHEET 01 OF 01	REV. 00
		PROJECTION	

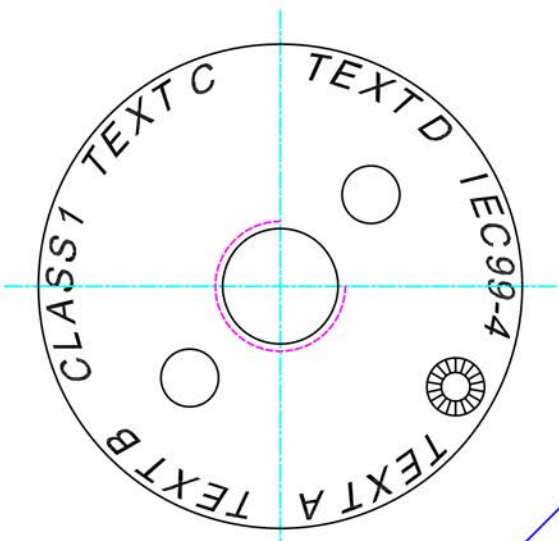
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GUARANTEED TECHNICAL PARTICULARS OF 18 KV, 10KA Class-1 SURGE ARRESTER

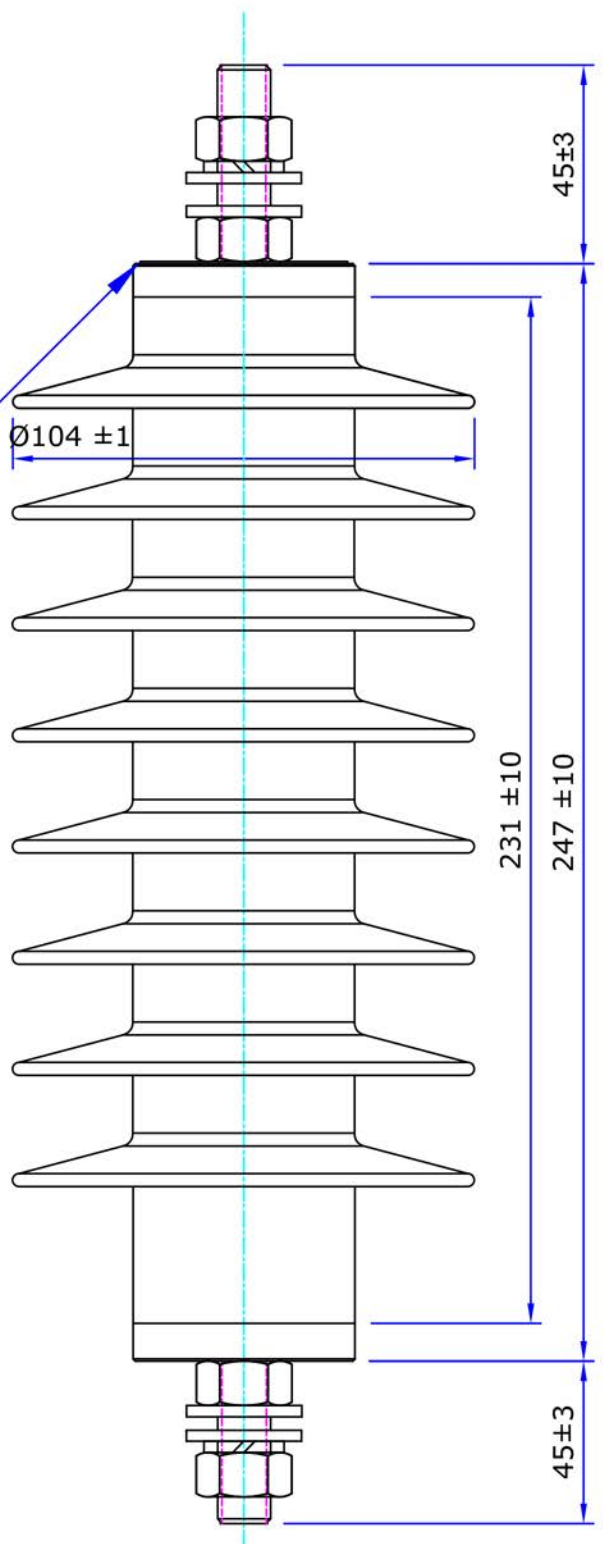
Sr.No	Particulars	
1	Name of the Manufacturer	Raychem RPG Pvt Ltd, Halol, Gujarat
2	Reference Standard	IEC 60099-4
3	Rating (kVrms)	18
4	Model Number & Designation	DA1-18D
5	Installation	Outdoor
6	Class	Class-1
8	Type of construction	Polymeric single column
9	Connection	Between phase to earth
10	Maximum Continous Operation Voltage (kVrms)	14.4
11	Nominal Discharge Current, NDC (kA)	10
12	Reference Current (mAp)	5
13	Reference Voltage at Reference Current (kVrms)	17.2 kV to 19.8kV
14	Maximum Lightning Impulse Residual Voltage (kVp) at NDC of 8/20 micro sec	5 kA 44.8
		10.0 kA 47.7
		20.0 kA 52.3
15	Maximum Steep Current Impulse Residual Voltage (kVp) at 10 kA, 1/20 micro sec	50.2
16	Maximum Switching Current Impulse Residual Voltage (kVp) at 500 A, 30/60 micro sec	38.0
17	High Current Withstand (kA)	100 kA
18	Long Duration Current Impulse Withstand	250 A, 2000 Micro sec
19	Lightning Impulse Voltage withstand of Arrester Housing (kVp)	205
20	Power Frequency Voltage withstand of Arrester Housing (kVrms) Dry / Wet	75
21	Partial Discharge at 1.05 x MCOV	Less than 10 pC
22	Min. creepage distance of arrester housing (mm)	627
23	Temporarily Overvoltage Capability in kVrms for	
	1 Sec	19.8
	10 Sec	18.6
	100 Sec	17.6



PRODUCT	TEXT A	TEXT B	TEXT C	TEXT D
DA1 - 15D	DA1 - 15D	LOT No	Uc 12.0 kV	Ur 15 kV
DA1 - 18D	DA1 - 18D	LOT No	Uc 14.4 kV	Ur 18 kV
DA1 - 21D	DA1 - 21D	LOT No	Uc 16.8 kV	Ur 21 kV
DA1 - 22D	DA1 - 22D	LOT No	Uc 17.6 kV	Ur 22 kV



Rating Details Engraving (N.T.S)



NOTE:
ALL DIMENSIONS IN mm

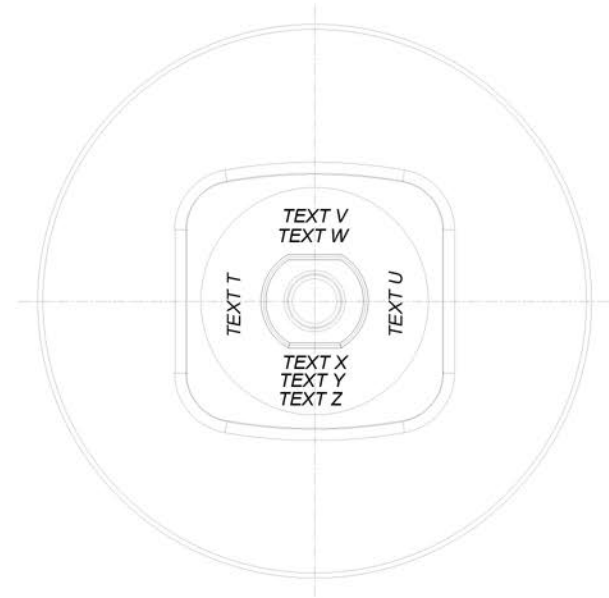
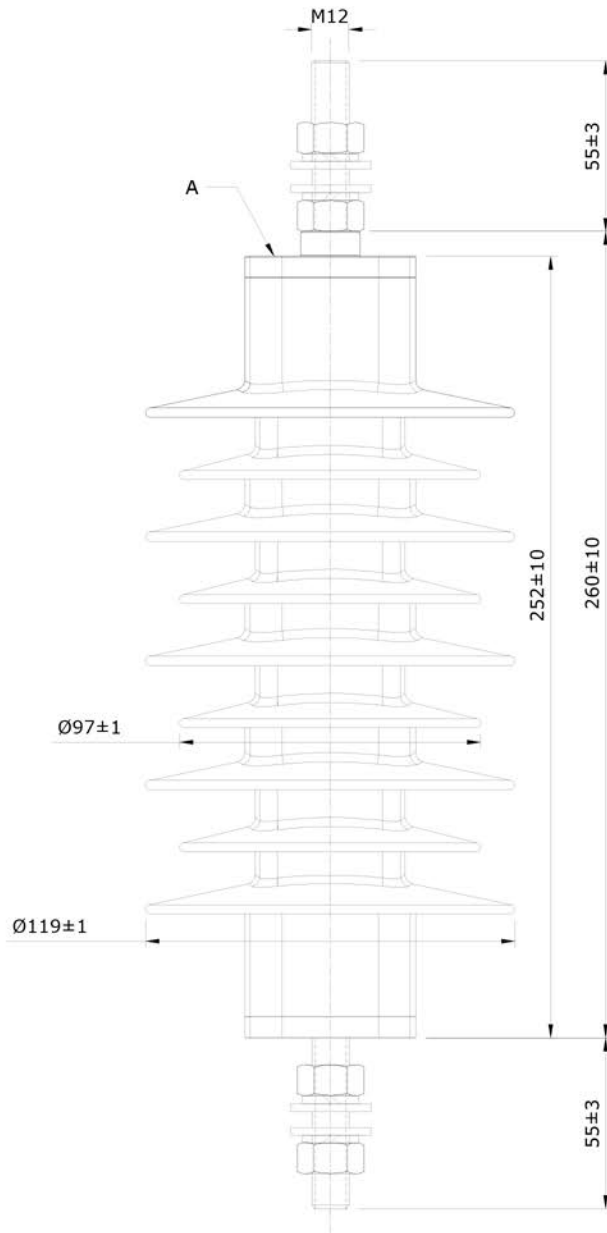
01	Marking Details added	09.07.15
REV	Details	DATE

Raychem RPG Pvt. Ltd. Tyco Electronics (A Tyco Electronics - RPG Enterprises JV) +91 98405 20899 sales@vingeo.in enquiry@vingeo.in		DSGN	NAME/SIGN	DATE
		DRWN	<i>Maroof</i>	01.10.13
TITLE : DA1/XXD/10KA/CLASS 1/SURGE ARRESTER RANGE		CHKD	<i>Abhijit</i>	01.10.13
		APPD	<i>R. Anekar</i>	01.10.13
DRAWING No.	RRPL / IP / MVSA / 011	SHEET 01 OF 01		REV. 01
PART No.	-----	PROJECTION		

GUARANTEED TECHNICAL PARTICULARS OF 18.75 KV, 10KA Class-2 SURGE ARRESTER

Sr.No	Particulars	
1	Name of the Manufacturer	Raychem RPG Pvt Ltd, Halol, Gujarat
2	Reference Standard	IEC 60099-4
3	Rating (kVrms)	18.75
4	Model Number & Designation	OCP2-15L
5	Installation	Outdoor
6	Class	Class-2
8	Type of construction	Polymeric single column
9	Connection	Between phase to earth
10	Maximum Continous Operation Voltage (kVrms)	15
11	Nominal Discharge Current, NDC (kA)	10
12	Reference Current (mA)	5
13	Reference Voltage at Reference Current (kVrms)	Greater than rated voltage of surge arrester
14	Maximum Lightning Impulse Residual Voltage (kVp) at NDC of 8/20 micro sec	
	5 kA	49.8
	10.0 kA	53.0
	20.0 kA	58.7
15	Maximum Steep Current Impulse Residual Voltage (kVp) at 10 kA, 1/20 micro sec	58.0
16	Maximum Switching Current Impulse Residual Voltage (kVp) at 500 A, 30/60 micro sec	42.2
17	High Current Withstand (kA)	100 kA
18	Long Duration Current Impulse Withstand	400 A, 2000 Micro sec
19	Lightning Impulse Voltage withstand of Arrester Housing (kVp)	230
20	Power Frequency Voltage withstand of Arrester Housing (kVrms) Dry / Wet	95
21	Partial Discharge at 1.05 x MCOV	Less than 10 pC
22	Min. creepage distance of arrester housing (mm)	758
23	Temporarily Overvoltage Capability in kVrms for	
	1 Sec	21.6
	10 Sec	20.6
	100 Sec	19.7





DETAIL - A

TEXT V	TEXT W	TEXT X	TEXT Y	TEXT Z	TEXT T	TEXT U
OCP2 - 15L	In 10kA, Class 2	Uc 15kV	Ur 18.75 kV	Isc 40kA	BATCH NO.	YEAR

NO. OF SHEDS	CREEPAGE	DRY ARC DIST
09	632	254

NOTE:
ALL DIMENSIONS IN mm

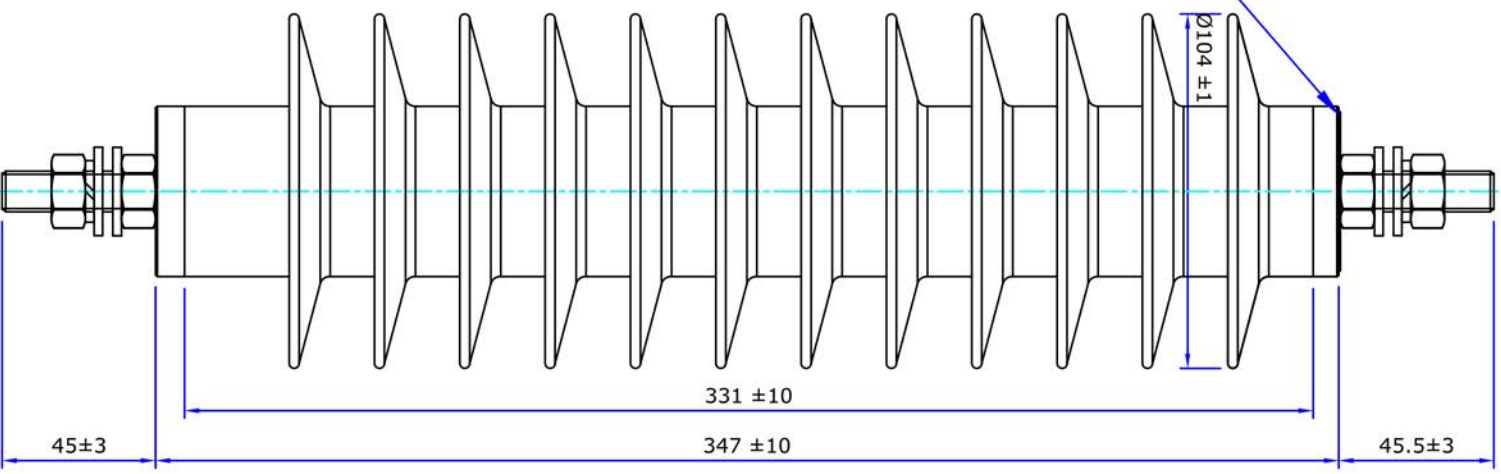
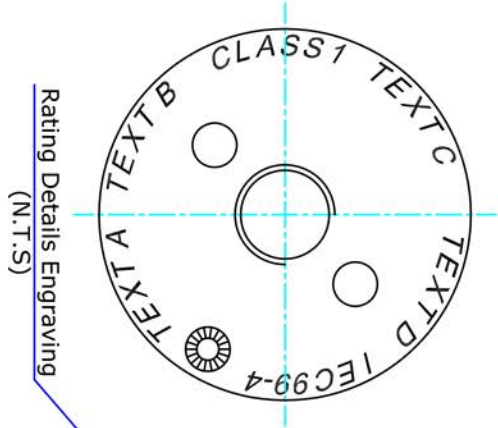
		NAME/SIGN	DATE
<small>Tyco Electronics (A Tyco Electronics - RPG Enterprises JV)</small>		DSGN RRL	
TITLE : OCP2 / 15L / 10KA / CLASS 2 / SURGE ARRESTER RANGE		DRWN <i>Navof</i>	04.03.14
DRAWING No. RRPL / IP / MVSA / 023		CHKD <i>Abhijit</i>	04.03.14
PART No. -----		APPD <i>R. Anchar</i>	04.03.14
SCALE NTS		SHEET 01 OF 01	REV. 00
		PROJECTION	

GUARANTEED TECHNICAL PARTICULARS OF 30 KV, 10KA Class-1 SURGE ARRESTER

Sr.No	Particulars	
1	Name of the Manufacturer	Raychem RPG Pvt Ltd, Halol, Gujarat
2	Reference Standard	IEC 60099-4
3	Rating (kVrms)	30
4	Model Number & Designation	DA1-30G
5	Installation	Outdoor
6	Class	Class-1
8	Type of construction	Polymeric single column
9	Connection	Between phase to earth
10	Maximum Continous Operation Voltage (kVrms)	24
11	Nominal Discharge Current, NDC (kA)	10
12	Reference Current (mAp)	5
13	Reference Voltage at Reference Current (kVrms)	28.7 kV to 33.1kV
14	Maximum Lightning Impulse Residual Voltage (kVp) at NDC of 8/20 micro sec	5 kA 74.7
		10.0 kA 79.5
		20.0 kA 87.2
15	Maximum Steep Current Impulse Residual Voltage (kVp) at 10 kA, 1/20 micro sec	83.6
16	Maximum Switching Current Impulse Residual Voltage (kVp) at 500 A, 30/60 micro sec	63.3
17	High Current Withstand (kA)	100 kA
18	Long Duration Current Impulse Withstand	250 A, 2000 Micro sec
19	Lightning Impulse Voltage withstand of Arrester Housing (kVp)	273
20	Power Frequency Voltage withstand of Arrester Housing (kVrms) Dry / Wet	122
21	Partial Discharge at 1.05 x MCOV	Less than 10 pC
22	Min. creepage distance of arrester housing (mm)	925
23	Temporarily Overvoltage Capability in kVrms for	
	1 Sec	33.0
	10 Sec	30.9
	100 Sec	29.4




PRODUCT	TEXT A	TEXT B	TEXT C	TEXT D	TEXT E
DA1 - 24G	DA1 - 24G	Uc 19.2 kV	Uf 24 kV	YEAR	XXXX
DA1 - 27G	DA1 - 27G	Uc 21.6 kV	Uf 27 kV	YEAR	XXXX
DA1 - 30G	DA1 - 30G	Uc 24 kV	Uf 30 kV	YEAR	XXXX
DA1 - 33G	DA1 - 33G	Uc 26.4 kV	Uf 33 kV	YEAR	XXXX
DA1 - 36G	DA1 - 36G	Uc 28.8 kV	Uf 36 kV	YEAR	XXXX
DA1 - 39G	DA1 - 39G	Uc 31.2 kV	Uf 39 kV	YEAR	XXXX



NOTE:
ALL DIMENSIONS IN mm

REV	Details	DATE
02	DA1 39G added in Table	02.05.16
01	Marking Details added	09.07.15

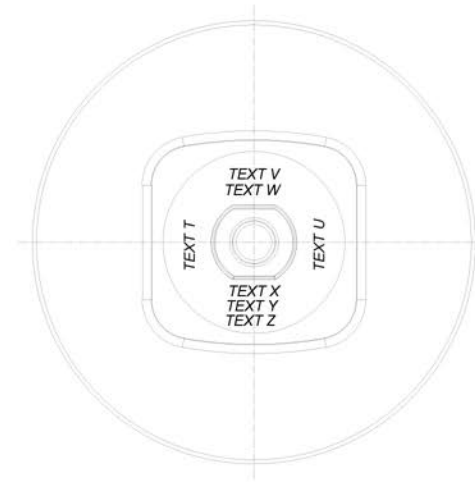
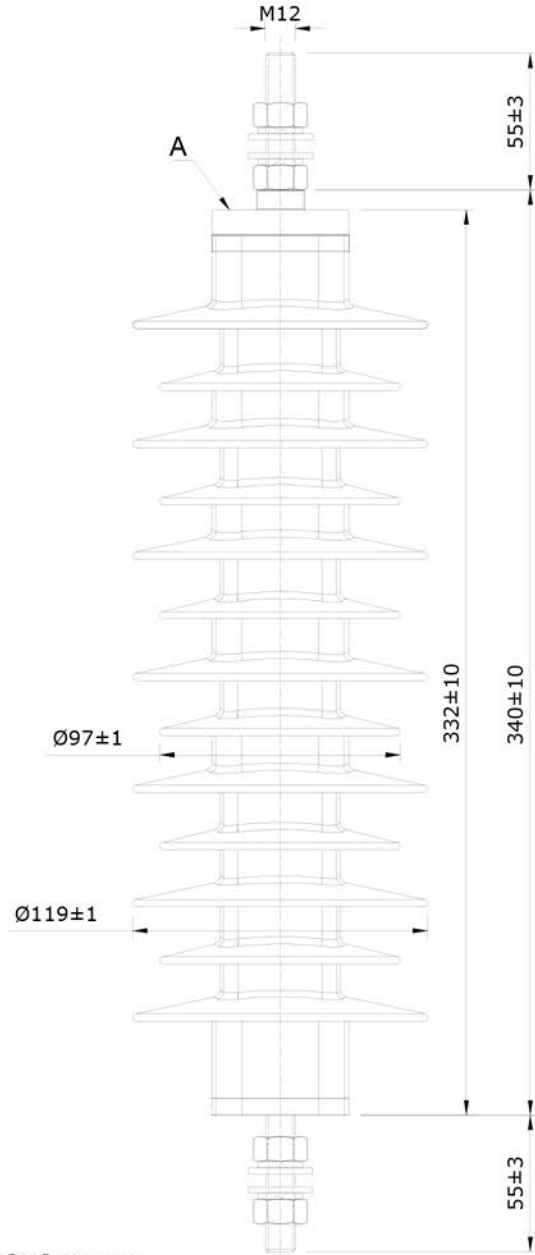
 Tyco Electronics
 +91 98405 20899
 Tyco Electronics - RPG Enterprises JV
 sales@vintage.in | enquiry@vintage.in
 RPG
 www.vintage.in

TITLE :		DA1/XXG/10KA / CLASS 1/ SURGE ARRESTER RANGE		SCALE NTS	
DRAWING No.	RRPL / IP / MSA / 014	DSGN	RRL	NAME/SIGN	DATE
PART No.	-----	DRWN	Munoo	CHKD	Siddhant
		APPD	Prasanna	APPD	01.10.13
		SHEET	01 OF 01	REV.	02
			PROJECTION 		

GUARANTEED TECHNICAL PARTICULARS OF 30 KV, 10KA Class-SL SURGE ARRESTER

Sr.No	Particulars		
1	Name of the Manufacturer	Raychem RPG Pvt Ltd, Halol, Gujarat	
2	Reference Standard	IEC 60099-4	
3	Rating (kVrms)	30	
4	Model Number & Designation	OCP2-24L	
5	Installation	Outdoor/indoor	
6	Class	Class-SL	
8	Type of construction	Polymeric single column	
9	Connection	Between phase to earth	
10	Maximum Continuous Operation Voltage (kVrms)	24	
11	Nominal Discharge Current, NDC (kA)	10	
12	Reference Current (mAp)	5	
13	Reference Voltage at Reference Current (kVrms)	Greater than rated voltage of surge arrester	
14	Maximum Lightning Impulse Residual Voltage (kVp) at NDC of 8/20 micro sec	5 kA	80.0
		10.0 kA	85.1
		20.0 kA	94.2
15	Maximum Steep Current Impulse Residual Voltage (kVp) at 10 kA, 1/20 micro sec	93.2	
16	Maximum Switching Current Impulse Residual Voltage (kVp) at 500 A, 30/60 micro sec	67.7	
17	High Current Withstand (kA)	100 kA	
18	Long Duration Current Impulse Withstand	400 A, 2000 Micro sec	
19	Lightning Impulse Voltage withstand of Arrester Housing (kVp)	230	
20	Power Frequency Voltage withstand of Arrester Housing (kVrms) Dry / Wet	95	
21	Partial Discharge at 1.05 x MCOV	Less than 10 pC	
22	Min. creepage distance of arrester housing (mm)	900	
23	Temporarily Overvoltage Capability in kVrms for		
		1 Sec	34.5
		10 Sec	33.0
		100 Sec	31.5





DETAIL - A

TEXT V	TEXT W	TEXT X	TEXT Y	TEXT Z	TEXT T	TEXT U
OCP2 - 24L	In 10kA, Class 2	Uc 24kV	Ur 30 kV	Isc 40kA	BATCH NO.	YEAR

NO. OF SHEDS	CREEPAGE	DRY ARC DIST
13	900	334

NOTE:
ALL DIMENSIONS IN mm

		NAME/SIGN	DATE
(A Tyco Electronics - RPG Enterprises JV)		DSGN	RRL
TITLE : OCP2 / 24L / 10KA / CLASS 2 / SURGE ARRESTER RANGE		DRWN	<i>Narvef</i> 04.03.14
DRAWING No. RRPL / IP / MVSA / 026		CHKD	<i>Abhijit</i> 04.03.14
PART No. -----		APPD	<i>R. Anchar</i> 04.03.14
SCALE NTS		SHEET	01 OF 01
PROJECTION		REV.	00

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