



PPC Insulators

Cap & Pin Replacement Insulators

Post Insulators designed to directly replace aging cap and pin stacks

Cap and Pin Replacement Insulators (CPR)

Direct replacements for aging cap and pin insulators

In the past, substations were built using cap-and-pin style insulators according to ANSI C29.8. These aging substations are now seeing failure of their cap and pin insulators. Because of these failures many utilities are being forced to replace these old-style insulators.

The main issue with replacing cap-and-pin insulators has been the height differences between them and modern ANSI C29.9 post insulators.

In order to overcome these differences, PPC has developed a full line of products to be direct replacements for the aging cap and pin style insulators. This means no bus modifications or switch adjustments, increasing the life of existing substation assets without compromising insulator performance.



Benefits of PPC's CPR Insulators

- Weight savings thanks to single piece design
- Cost savings with reduced assembly time
- Reduced risk of failure due to cement growth
- Direct height and bolt circle replacement of ANSI C29.8 insulators
- Superior mechanical strength

BIL	95 kV		110 kV		150 kV		200 kV		250 kV		350 kV		550 kV
Catalog Number	CPR 1	CPR 41	CPR 4	CPR 44	CPR 7	CPR 46	CPR 10	CPR 49	CPR 13	CPR 165	CPR 16	CPR 56	CPR 19
ANSI Technical Reference	1	41	4	44	7	46	10	49	13	165	16	56	19
Dimensions													
Creepage, in	7.5	8	12	14	20	18	28	28	36	36	72	72	99
Height, in	7.5	8	10	10	12	12	15	15	18	18	29	29	43.5
Bolt Circle Dia, in	3	5	3	5	3	5	3	5	3	3	3	5	5
Mechanical Ratings													
Cantilever strength, lb.	2000	4000	2000	4000	2000	4000	2000	4000	2000	3000	1500	3000	1700
Tensile strength, lb.	5000	10000	5000	10000	5000	10000	7000	14000	8000	12000	12000	20000	20000
Torsion strength, in-lb.	6000	12000	7000	14000	8000	16000	10000	20000	12000	30000	15000	40000	40000
Compression strength, lb.	10000	20000	10000	20000	10000	20000	15000	30000	15000	60000	25000	60000	60000
Electrical Ratings													
Impulse Flashover, positive, kV	105	105	125	125	170	170	225	225	280	280	390	390	610
Low Frequency Withstand 10 sec Wet, kV	30	30	45	40	60	60	80	80	100	100	145	145	230
Impulse Withstand, kV	95	95	110	110	150	150	200	200	250	250	350	350	550
RIV Data													
Test voltage Rms, kV	5	5	10	10	15	15	22	22	30	30	44	44	73
Max RIV, Microvolts at 1000 kHz	50	50	50	50	100	100	100	100	200	200	200	200	200

Product Data

* Models are available in both cap and pedestal bases.

* For designs not shown above, please contact your local PPC sales representative or reach us at customerservice.usa@ppcinsulators.com.

