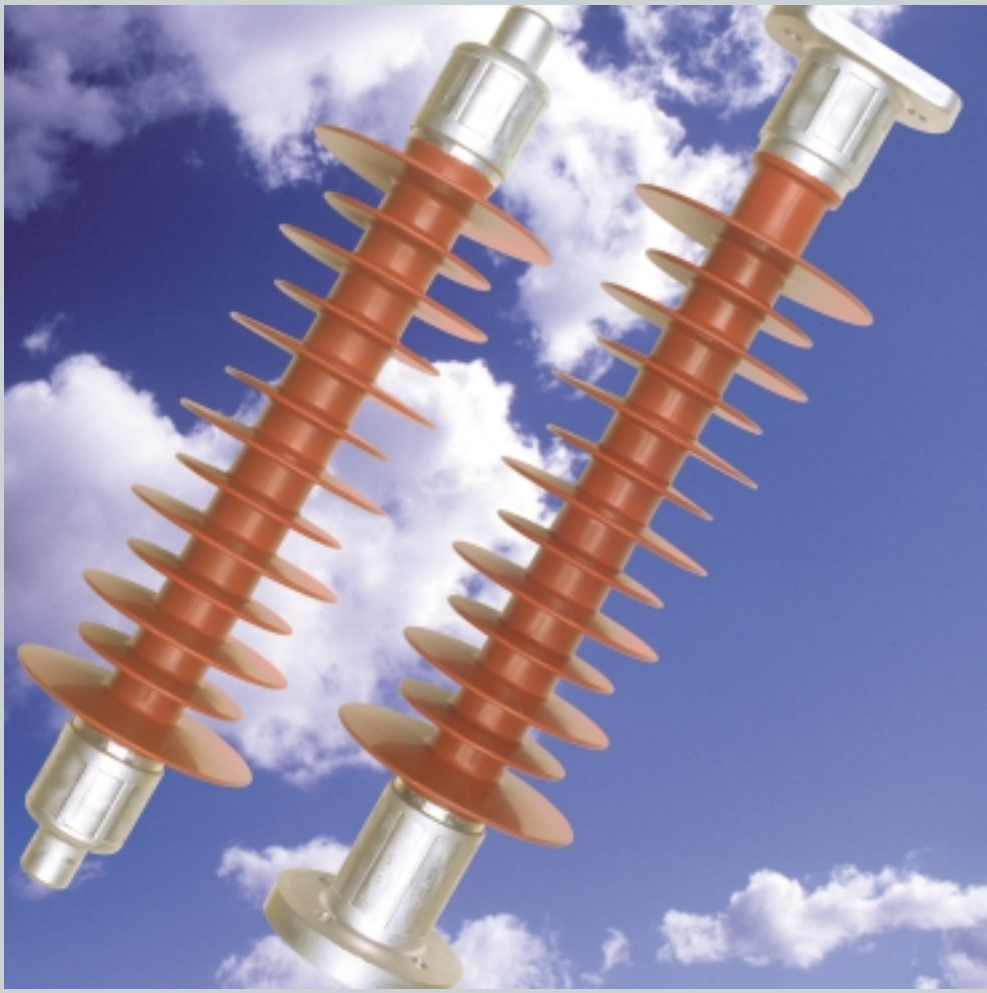
tyco Electronics

Energy Division
http://energy.tycoelectronics.com

RAP
Polymeric Station Post Insulator

The RAP polymeric station post insulator combines mechanical strength with excellent pollution performance. It consists of a pultruded fibre glass rod and a non-tracking polymer housing which is directly bonded to the metal end fitting. Long-term service experience and laboratory testing have shown the outstanding performance of the insulating material particularly under severe environmental conditions.

Corrosion resistant end fittings designed for high cantilever loads are crimped to both ends of the insulator. A patented crimp control technology prevents damage to the fibre glass rod while achieving maximum mechanical strength. The direct bonding of the polymer housing to the metal end fitting results in an ideal moisture barrier in the sensitive interface area.



Features	Benefits
Composite design	Lightweight – easy installation and reduced transport costs Vandal and break resistant
EVA housing	High tracking and erosion resistance Excellent performance under polluted conditions Reduced maintenance costs
Direct bonding to end fitting	Ideal moisture barrier – avoids moisture ingress to the fibre glass rod Tailor made design according to customer requirments is possible
Patented crimp technology	Maximum mechanical strength without damaging the fibre glass rod

Raychem

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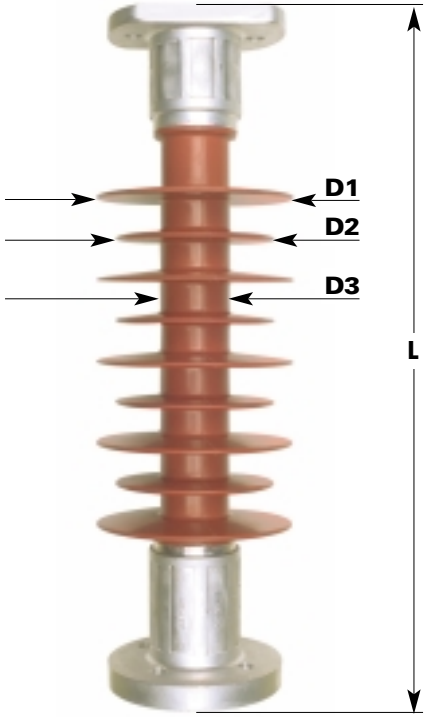
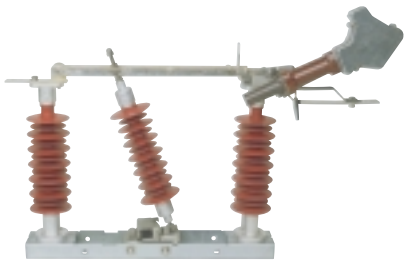


Technical Specification

Dimensions in mm (inches)	RAP-24R-A66-305	RAP-36R-A66-350	RAP-46R-A66-460	RAP-52R-A66-475
Length	305 *(12.0)*	350 *(13.78)*	460 *(18.11)*	475 *(18.7)*
Dry arc distance	211 *(8.31)*	255 *(10.0)*	360 *(14.17)*	388 *(15.28)*
Creepage distance	631 *(24.84)*	809 *(31.85)*	1190 *(46.85)*	1333 *(52.48)*
No. of sheds	7	9	13	15
Diameter D1	120 *(4.72)*	120 *(4.72)*	120 *(4.72)*	120 *(4.72)*
Diameter D2	100 *(3.94)*	100 *(3.94)*	100 *(3.94)*	100 *(3.94)*
Diameter D3	37 *(1.46)*	37 *(1.46)*	37 *(1.46)*	37 *(1.46)*
Electrical values in kV				
Dry AC withstand (flashover)	90 *(100)*	100 *(>100)*	115 *(150)*	115 *(150)*
Wet AC withstand (flashover)	50 *(60)*	75 *(85)*	110 *(125)*	110 *(125)*
Impulse withstand voltage	150	170	250	250
Mechanical values in kN				
Specified Cantilever Load	12	10	7	6
Specified Tensile Load	25	25	25	25

Ordering Information

Description	Std Pkg	Pkg Weight	Pkg Volume
RAP-24R-A66-305	45 pcs	106 Kg *(106 lbs)*	0.510 m³
RAP-36R-A66-350	45 pcs	115 Kg *(254 lbs)*	0.510 m³
RAP-46R-A66-460	45 pcs	134 Kg *(296 lbs)*	0.510 m³
RAP-52R-A66-475	45 pcs	139 Kg *(307 lbs)*	0.510 m³



End fittings
Standard top and base end fittings are with M10 threads on a 66 mm PCD. Various other end fittings as well as customer required designs, i.e. 76 mm (3") PCD , are available on request.

Applications
The insulators are suitable for high compressive and cantilever loads up to a system voltage of 52 kV (IEC 60071-1), e.g. isolators (disconnectors), bus-bar and fuse support.

Environmental
IEC 61109, Annex C: 5000 hours ageing test under operating voltage simulating weather conditions (various stresses in a cyclic manner)

Test Reports
PPR 1506
Summary test report for the PSI-36A-ZM12A-P, PSI-36A-Z2.6A-P, PSI-36ZM12A and PSI-36A-Z2.6A insulators

T97-456
5000h ageing test in accordance with IEC 1109 Annex C on one composite insulator type Post-F 5-4 25 kV

Example of Naming for OEM Products **RAP - 52R - AM12 - 441 - (*)**

Family of Products

kV rating based on creepage required for class III polution 25 mm/kV

Material & Colour
R = Red EVA
G = Grey EVA
R = Red Silicone

End Fitting Material
A = Aluminium
G = Galvanised

End Fitting Type within this family
M12 = M12 Stub connection
6 = Flange with PCD of 66 mm
73 = Flange with PCD of 73 mm
76 = Flange with PCD of 76 mm

Length: Section length in mm

Supplement Description:
Threaded Bar
End Fitting Information i.e. threads

Energy Division – a pioneer in the development of economical solutions for the electrical power industry. Our product range includes: cable accessories, connectors & fittings, electrical equipment, instruments, lighting controls, insulators & insulation enhancement and surge arresters.

For more information and your country contact person, please visit us at:
http://energy.tycoelectronics.com

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