

Standoff Insulators

Hi-Pot Tested to Assure Electrical Reliability

Standoff insulators are molded of UL®-recognized flame resistant fiberglass-reinforced thermoset polyester molding compound. Insulators 1603, 2015, 1461, 1872, 4610 and 4640 are UL -recognized according to UL Standard for Safety 891.

They feature shatter resistance and closer height tolerances than commonly available in porcelain insulators. Moisture and heat-resistance properties of these insulators are higher than those of conventional plastic insulators.

Voltage Rating

This is only meant to be a guide for indoor service. Insulators mounted within a suitable electrical cabinet are considered indoors even though the cabinet itself is outdoors. An insulator will withstand its rated voltage continuously, but industry standards or other specifications may require a different spacing from conductor to ground for a particular voltage. Wet or dirty conditions may require derating an insulator.

Outdoor Use

Insulators are primarily intended to be used indoors or inside a suitable enclosure. Insulators 1642 and 2450 should not be used upside down if there is a possibility of the center hole filling with water.



UL Recognition

All insulators are molded from UL-recognized molding materials (UL File E23525). When submitting your equipment to UL, you may need to furnish the molding material grade number used for a particular insulator. This information is available from Röchling Glastic Composites. All of the molding materials used in our insulators have a generic relative Thermal Index of 130° C Electrical/130° C Mechanical. 1603, 2165, 2015, 1461, 1872, 4610 and 4640 insulators are UL-recognized according to UL standard for Safety 891 (UL File E81713).

Physical and Electrical Properties

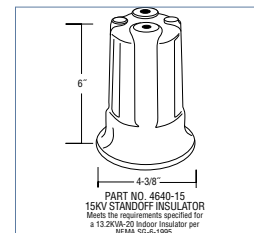
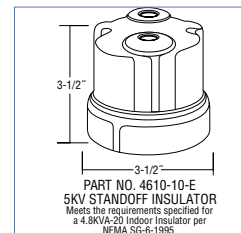
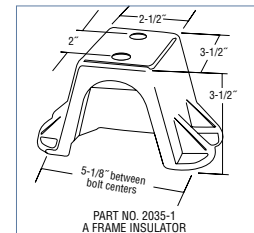
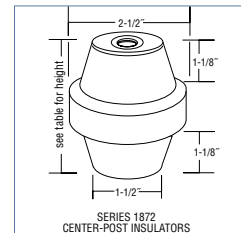
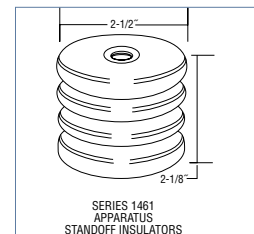
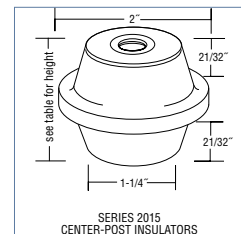
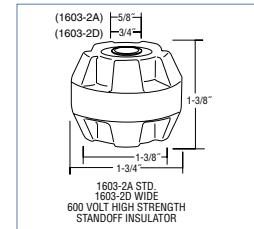
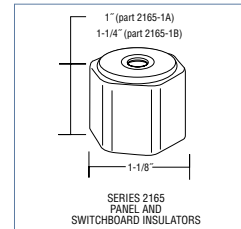
VALUES	2165	1603-2A	1603-2D	2015	1461	1872	2035-1	4610-15	4640-15
Tensile Strength (lbs.)	1000	2,000	2500	2,000	3,000	2,500	2,500	3,000	5,000
Cantilever Strength (inch lbs.)	400	1,500	1,800	1,750	3,500	3,000	3,600	6,000	10,000
Compression Strength (lbs.)	8000	20,000	20,000	20,000	60,000	25,000	25,000	20,000	20,000
Torque Strength (ft. lbs.)	12	25	30	35	35	35	–	200	285
Arc Resistance (sec.)	180	180	180	180	180	180	180	180	180
UL Subject 94 Flame Resistance	94 V-0	94 V-0	94 V-0	94 V-0	94 V-0	94 V-0	94 V-0	94 V-0	94 V-0
Height Tolerance (in.)	± .015	± .015	± .015	± .015	± .015	± .015	± .015	± .010	± .015
Creep Distance (in.)	Insulator Height	1½	1½	¼ + Insulator Height	¾	⅝ + Insulator Height	¾	3⅛	7
Dry Hi-Pot (volts) NEMA Specs.	–	–	–	–	–	–	–	19,000	36,000
Dew Hi-Pot (volts) NEMA Specs.	–	–	–	–	–	–	–	15,000	26,000
Impulse (volts, 1.5 x 40 wave)	–	–	–	–	–	–	–	60,000	95,000
Track Resistance (minutes)	600	600	600	600	600	600	600	600	600





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Part No.	Height (In.)	Thread Size (In.)	DIMENSIONS		
			Suggested Indoor Voltage Rating	Short Time Electrical Strength Kv	Weight (Lb.)
2165-1A	1	1/4 x 20 x 5/16 deep	600	18.6	0.06
2165-1B	1 1/4	1/4 x 20 x 5/16 deep	600	—	0.06
1603-2A	1 3/8	3/8 x 16 x 3/8 deep	600	10.0	0.19
1603-2D	1 3/8	3/8 x 16 x 3/8 deep	600	10.0	0.19
2015-1A	1 1/2	1/4 x 20 x 1/2 deep	1500	33.4	0.20
2015-2A	1 1/2	5/16 x 18 x 7/16 deep	1500	33.4	0.19
2015-3A	1 1/2	3/8 x 16 x 3/8 deep	1500	33.4	0.20
2015-2B	1 3/4	5/16 x 18 x 7/16 deep	2000	—	0.25
2015-3B	1 3/4	3/8 x 16 x 3/8 deep	2000	—	0.25
2015-2C	2	5/16 x 18 x 7/16 deep	2300	43.1	0.30
2015-3C	2	3/8 x 16 x 9/16 deep	2300	43.1	0.31
2015-4C	2	1/2 x 13 x 5/8 deep	2300	43.1	0.30
2015-3D	2 1/4	3/8 x 16 x 9/16 deep	2700	—	0.36
2015-4D	2 1/4	1/2 x 13 x 5/8 deep	2700	—	0.36
1461-1A	2 1/8	3/8 x 16 x 9/16 deep	2500	49.3	0.61
1461-1B	2 1/8	1/2 x 13 x 5/8 deep	2500	27.9	0.61
1461-1C	2 1/8	5/8 x 11 x 5/8 deep	2500	21.0	0.61
1872-1A	2 1/2	3/8 x 16 x 9/16 deep	3200	51.4	0.44
1872-2A	2 1/2	1/2 x 13 x 5/8 deep	3200	51.4	0.45
1872-3F	2 5/8	5/8 x 11 x 11/16 deep	3400	—	0.60
1872-1B	2 3/4	3/8 x 16 x 9/16 deep	3600	—	0.53
1872-2B	2 3/4	1/2 x 13 x 5/8 deep	3600	—	0.51
1872-1C	3	3/8 x 16 x 9/16 deep	4100	—	0.59
1872-2C	3	1/2 x 13 x 5/8 deep	4100	—	0.60
1872-1D	3 1/4	3/8 x 16 x 9/16 deep	4500	—	0.67
1872-2D	3 1/4	1/2 x 13 x 5/8 deep	4500	—	0.67
1872-1E	3 1/2	3/8 x 16 x 9/16 deep	5000	55.2	0.76
1872-2E	3 1/2	1/2 x 13 x 5/8 deep	5000	55.2	0.58
1872-3E	3 1/2	5/8 x 11 x 11/16 deep	5000	55.2	0.74
2035-1	3 1/2	2" bolt circle	5000	—	1.20
4610-10E	3 1/2	3/8 x 16 x 9/16 deep — 2" bolt circle	5000	—	1.78
4640-15	6	3/8 x 16 x 9/16 deep — 2" bolt circle	15,000	—	3.49



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