



Taped flat wires

PIR

Rectangular bare or enameled annealed copper wire covered by polyimide tapes

General description

PIR family products is specifically realized for conductors that need the highest temperature class, polyimide materials guarantee 240°C temperature class. According to customer needs is possible to wrap the conductor with one or two tape, would it crossed or not. Two independent heads let us have the possibility to wrap with different overlapping specification on each layer.

Induction oven and 5 m UV static oven thermally cure the layer of polyimide film in order to obtain the best adhesion of the insulation. A pyrometer at the end of each oven permit to maintain the right polymerization range.

Additional fiberglass protection available.

Applications

Conductors from PIR family are suitable for traction motors (with standard polyimide or Corona Resistant films) or static coils where working temperature is the most severe parameter.

Available range

Thickness of bare conductors from 1 to 5 mm

Width of bare conductor from 4 to 15 mm

Polyimide film standard, Corona Resistant, Water Resistant

Typical technical values

Main feature	Single tape	Double tape
Increase due to insulation in mm	From A1 to A5 Acc. to IEC 60317-44	From B1 to B5 Acc. to IEC 60317-44
Elongation %	≥ 33	≥ 33
Spingback angle	≤ 5.5°	≤ 5.5°
Breakdown voltage	Depending on insulation thickness acc. to IEC 60317-44	Depending on insulation thickness acc. to IEC 60317-44
Heat shock (at 260°C)	No break after 15% stretching	No break after 10% stretching

Notes

- Standards references IEC60317- 44, IEC60851 for test methods
- Other wrapping configurations and reference values must be agreed and discussed