



Tapered flat wires

MicaR H/C

Rectangular enameled copper wire covered by mica tapes for coil consolidation

General description

MicaR H/C is a family products specifically indicated for coil consolidation where high voltage resistance needed. An enameled conductor covered using one or more tapes in order to meet customer requirement, tapes specificity is to be realized by muscovite mica paper impregnated where is applied on one, or both, side a thermosetting special adhesive for successive consolidation. Coils consolidation obtained using a hot press, after gluing coils or bar can be processed in a VPI or RR process.

Applications

Conductors from MicaR family are suitable for low, medium and high voltage machines, particularly when using conditions are under hard inverter duties.

Available range

Thickness of bare conductors from 1 to 5 mm
Width of bare conductor from 4 to 15 mm

Typical technical values

Feature	2 layers	3 layers
	(1 tape 50% overlapped or 2 tapes butlapped and displaced 50%)	(3 tapes butlapped and displaced 33%)
Increase due to insulation in mm (enamel mm 0.12 plus tape)	0.42 - 0.48	0.60 - 0.69
Elongation %	≥ 32	≥ 32
Spingback angle	≤ 5°	≤ 5°
Breakdown voltage		
• Flatwise bent on 4 times thickness	> 6 kV	> 7 kV
• Edgewise bent on 6 times width	> 6 kV	> 7 kV

Notes

- Increase in diameter is intended using 0.09 tape thickness, other thickness can be used under specific inquiry
- Standards references, where applicable, IEC60317 (in its parts for dimensions and mechanical properties for enameled wires), IEC60851 for test methods