



Tapered flat wires

MicaR

Rectangular bare annealed copper wire covered by mica tapes

General description

MicaR family products are indicated in the construction of medium and high voltage electric motor and generators. In low voltage electric motors construction, MicaR products are suitable when high voltage spikes generated by inverter driving are present.

Conductor insulation is obtained using muscovite Mica tapes backed on PET support, MicaR production can use till three tapes in one passage realizing up to six layers of insulation per side. MicaR products are suitable for VPI impregnation 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	0.30 - 0.36	0.48 - 0.56
Elongation %	≥ 32	≥ 32
Spingback angle	≤ 5°	≤ 5°
Breakdown voltage		
• Flatwise bent on 4 times thickness	> 2 kV > 2 kV	> 3 kV > 3 kV
• Edgewise bent on 6 times width		

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