

# DAKAP, DAKAP CR

Kapton® wrapped rectangular copper wire

## Product name

DAKAP, DAKAP CR

## Description

DAKAP, DAKAP CR is a bare rectangular copper wire wrapped with one or two layers polyimid film, Kapton® with Teflon®. The polyimidfilm can be with or without corona-resistans. The film is fixed through sintering of the teflon coat. This insulation has a very good thermal resistance and an excellent resistance to humidity.

## Field of applications

Examples of applications for DAKAP, DAKAP CR are in traction motors and electrical machines.

## Specifications

DAKAP, DAKAP CR is manufactured acc. to Dahréntråd standard or customer specification as IEC-specification is not available.

## Class 240

Temperature index  $\geq 240^{\circ}\text{C}$  acc. to experience.

Heat shock  $\geq 260^{\circ}\text{C}$ .

## Reels

DAKAP, DAKAP CR can be delivered on reel 500 and 630

## Tolerances, (without insulation)

On a separate data sheet you can read which dimensions can be offered. The normal tolerance and corner radius you can see in the tables below.

Width mm		Tolerance mm	Thickness mm		Tolerance mm	Thickness mm		Corner radius	
over	up to and including		over	up to and including		over	up to and including	mm	tolerance
2,00	3,15	+/-0,03	0,80	3,15	+/-0,03	0,80	1,00	halfround	
3,15	6,30	+/-0,05	3,15	6,30	+/-0,05	1,00	1,60	0,50	+/-25%
6,30	12,50	+/-0,07	6,30	7,00	+/-0,07	1,60	2,24	0,65	+/-25%
12,50	20,00	+/-0,10				2,24	3,35	0,80	+/-25%
						3,35		1,00	+/-25%

	Test method	Requirements
<b>Mechanical properties</b> Bending. W and T 2 - 8 mm 2 x W and T (8) - 16 mm 4 x W and T (16) - 20 mm 6 x W and T Stretching after cutting.	IEC 60851-3.5.1.5	The insulation must not open.
	IEC 60851-3.5.5.1	20% stretching, open max 1 mm
<b>Electrical properties</b> Resistance Breakdown voltage. Bended samples as above 7010 7011 7020 7021 7030 7031 7021CR 7031CR	IEC 60851-5.3 IEC 60851-5.4	0,01724Ωmm <sup>2</sup> /m  >3 kV >3 kV >5 kV >5 kV >5 kV >5 kV >5 kV >5 kV

### Material data for insulated rectangular wire of copper

Length in m/kg wire: Length = 112/ width x thickness (m/kg)

#### Insulation

1. DAKAP 7010, 1 layer with 50% overlap, Kapton 200FN919, increase 0,20 mm
2. DAKAP 7011, 1 layer with 50% overlap, Kapton 150FN019, increase 0,15 mm
3. DAKAP 7020, 2 layer with 50% overlap, Kapton 200FN919, increase 0,40 mm
4. DAKAP 7021, 2 layer with 50% overlap, Kapton 200FN919+150FN019, increase 0,35 mm
5. DAKAP 7030, 1 layer with 66,7% (2/3), Kapton 200FN919, increase 0,30 mm
6. DAKAP 7031, 1 layer with 66,7% (2/3), Kapton 150FN019, increase 0,23 mm
7. DAKAP 7021CR, 2 layer with 50% overlap, Kapton 200FN919+150FN019, increase 0,35 mm
8. DAKAP 7031CR, 1 layer with 66,7% (2/3), Kapton 150FN019, increase 0,23 mm