





# Application:

- Charging cable for electrical vehicles, for conductive a.c. charging modes 1 (control core not used), 2 and 3 in accordance with IEC 61851-1
- Suitable for outdoor use
- Especially suitable for heavy-duty applications, where cables have to endure rubbing and dragging across rough and/or sharp surfaces

# Properties in case of fire:

Flame retardant (acc. EN-IEC 60332-1) Halogen free (acc. EN 50267-2-2)

# General properties:

- Excellent resistance to heavy mechanical stress
- Highly abrasion resistant
- Very good cold resistant
- Excellent resistance to the effects of oil and greases
- Excellent resistance to chemicals
- Very good resistance to weather influences (UV, including ozone)

# Construction:

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Nominal cross section conductor	6 mm <sup>2</sup>
Conductor category Class 5	= flexible
Number of cores	3
Core insulation:	
Rubber (EPR) in accordance with K175	EVI-2
Core identification	Colour
Protective conductor	Yes
Screen	No
Material outer sheath PUR (Polyu	rethane)
Colour outer sheath	Green
Model	Round
Nom diam. over conductor 6mm2	3,02 mm
Nom diam. over core 6 mm2	4,78 mm
Nom diam. over conductor 0,75 mm2	1,08 mm
Nom diam. over core 0,75 mm2	2,30 mm
Outer diameter approx.	13,30 mm
Tolerance of outer diameter 13,1-	13,8 mm

Conductor material	Cu, tinned
Stranding	Multi-core
Nominal cable weight	304 kg/km
Minimum bending radius (fixed wiring)	54 mm
Minimum bending radius (flex.wiring)	67 mm
Max. pulling force (pulling by fleeter)	282 N

#### **Electrical properties:**

Nominal voltage U0		450 V
Nominal voltage U		750 V
Working reactance at 50 Hz	approx.	0,10 Ω/km
Conductor resistance at 20°C,dc	(0,75mm2)	26,70 $\Omega$ /km
Conductor resistance at 20°C,dc	(6,0mm2)	$3,39 \Omega/km$
Conductor resistance at 90°C, do		4.32 Ω/km

Maximum current rating number of cores loaded: 3 -1 cable installed in free air of 30°C 52 A Core colours:

#### Power cores:

- 3 cores: green/yellow, blue, brown Control core:
  - red

#### Standards/References:

K175

# Additional information:

Minimum installation temperature: -40 °C Maximum conductor temperature: +90 °C\*)
Operating temperature: min. -40°C, max. +75°C\*)
Sheath colour: according to order

\*) The current rating is based on a conductor temperature of 60°C, which takes into account that the surface of the cable should not exceed 50°C, to avoid involuntary reaction in the event of contact with exposed skin.

# Marking:

DRAKA 03 EVC-07B1Q-F 450/750 V CHARGING CABLE 3G6 + 1x0,75 mm2 KEMA KEUR RATIO-ELECTRIC.COM