## **Product Datasheet**





# NKT CPI Inner Cone Connectors

Easy to install, range-taking MV switchgear connections for EN 50180/50181 Sizes 2 and 3

DS0038 R3 NKT CPI Inner Cone Connectors Datasheet 10/2024

Our brand partner NKT, manufactures a wide range of cables and cable accessories and is the leading supplier of medium voltage screened connectors across much of Australasia.

NKT was the first to manufacture silicone rubber cable terminations and now has 50 years' experience, in applications up to 400 kV.

CPI is a screened inner cone cable connector made of silicone rubber for connecting to medium voltage switchgear, RMUs and transformers fitted with bushings Size 2 or 3 according to EN 50180/50181.

The silicone rubber grade used in the CPI is durable, UV and ozone resistant, waterproof, non-flammable, self-extinguishing and heat resistant. Together with its excellent mechanical and electrical properties, this makes silicone rubber a preferred material for 11-33 kV inner cone connectors.

In addition to offering high quality electrical insulation and superior corona and tracking resistance, the elasticity of silicone rubber facilitates a wide application range for each CPI. So, one product can be used for many different conductor cross-sections.

This connection type delivers a compact and reliable in-line interface with XLPE and EPR cables.

Installation is straightforward and fast thanks to the design of the CPI. The unique shear-bolt connector simplifies assembly and provides assurance of correct fit; the multi-range stress cone allows realistic cable preparation tolerances; the unique connector casing eliminates the requirement for special tools.

The outer screen is a fully bonded conductive layer. The cable screen can be tested without disassembly. Operation is maintenance free.

### **NKT Inner Cone Connectors for Size 2 and Size 3 Interfaces**

		Application Range								Dimensions
	Interface	Continuous Nominal Current				Cross Section <sup>1</sup> (mm <sup>2</sup> )		Insulation Diameter (mm)		Approx Length <sup>2</sup>
Hiko Code	Туре	(A)	11 kV	22 kV	33 kV	Min	Max	Min	Max	(mm)
NKT2647151	2	800	✓			35	70	12.7	19.2	190
NKT2647152			✓	✓	✓	95	120	17.0	24.3	
NKT2647153			✓	-	-	120	185	17.0	24.3	
NKT2647154			-	✓	✓	50	120	21.2	33.6	
NKT2647155			✓	✓	✓	120	185	21.2	33.6	
NKT2647156			✓	✓	-	240	300	21.2	33.6	
NKT2647157			-	-	✓	150	185	28.9	40.0 <sup>3</sup>	
NKT2647158			-	✓	✓	240	300	28.9	40.0 <sup>3</sup>	
NKT2647251HNZ	3	1250	-	✓	✓	95	120	21.2	33.6	195
NKT2647252HNZ			✓	✓	✓	120	185	21.2	33.6	
NKT2647253HNZ			✓	✓	-	240	300	21.2	33.6	
NKT2647254HNZ			-	-	✓	150	185	28.9	37.8	
NKT2647255HNZ			-	✓	✓	240	300	28.9	37.8	
NKT2647256HNZ			✓	-	-	400	500	28.9	37.8	
NKT2647257HNZ			-	-	✓	300		34.0	45.6	
NKT2647258HNZ			✓	✓	✓	400	630	34.0	45.6	
NKT2647259HNZ			-	-	✓	6	30	39.1	51.0	
NKT2647260HNZ			✓	✓	✓	80	00 <sup>4</sup>	39.1	51.0	
NKT2643798			✓	✓	-	80	00	45.5	57.8	300
NKT2643799			-	✓	✓	80	OO <sup>5</sup>	45.5	57.8	

### **NKT Accessories for Inner Cone Connectors**

Hiko Code	Description	Max system voltage (kV)	Notes
NKTFPI2	Final plug for Size 2 (set of 3)	42	Insulating plug for equipment interface
NKTFPI3	Final plug for Size 3 (set of 3)	52	Insulating plug for equipment interface
NKTPASTE	Assembly paste (60 g tube)	-	Always use the correct assembly paste

#### Notes

- 1. For round stranded conductors, designation RM
- 2. From mounting face to end of stress cone  $\,$
- 3. Three core cables 44.0 mm  $\,$
- 4. Fits  $800 \ mm^2$  round solid, designation RE
- 5. Max conductor diameter 36 mm (fits  $1000 \ \text{mm}^2$  round solid, designation

#### Other literature available on request

Reports, drawings, technical data sheets, installation instructions,  $\mathsf{O}\&\mathsf{M}$ guidelines

