

AFN72

**Slip-on termination
for indoor and outdoor use**

72.5 kV

Application

Dry type, non size sensitive terminations for use indoors, outdoors and exposed to prolonged sunshine and other weather conditions. To connect polymeric insulated cable to equipment and for the outdoor terminating onto overhead lines or bus bars.

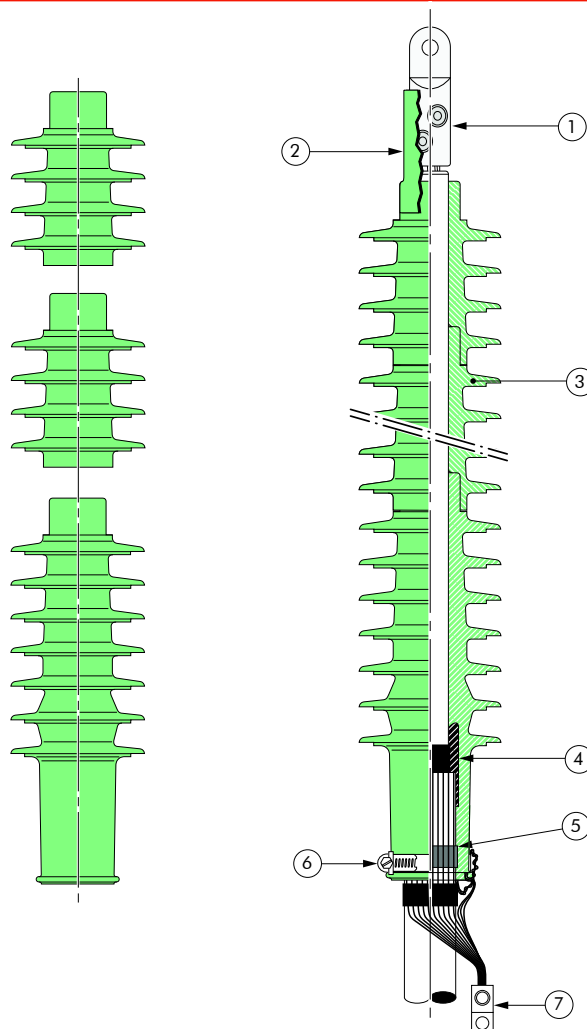
Technical characteristics

- Its compact and modular design supports the suitability for different pollution levels.
- All termination housings are tested for AC withstand and partial discharge prior to leaving the factory.

U (U_m)
60-69 (72.5) kV

Design

1. Longitudinally sealed mechanical cable lug (topbolt or crimped cable lugs available on request)
2. Water sealing cover
3. Silicone shed modules providing different pollution levels
4. Silicone housing with sheds and integrated conductive silicone rubber insert providing stress relief for the cable
5. Water sealing mastic
6. Earthing clamp
7. Earthing lug



Specifications and standards

The AFN72 slip-on termination is type tested acc. to IEC 60840, and meets the requirements of IEC/TS 60815-3; SPS class d and e.

According to IEC 60112:
CTI > 600

Termination type	Max. operating voltage U _m (kV)	Ø over core insulation (mm)		Conductor cross-section* (mm ²)	
		min.	max.	min.	max.
AFN72	72.5	31,5	82	95	2000

* Indicative for cables with 10 mm insulation wall thickness.

For detailed electrical ratings please see page 29-30.

Kit contents

A kit always comprises:

- + 1 termination housing
- + modules with sheds
- + conductor cable lug
- + screen wire cable lug
- + water sealing sleeve
- + installation instructions
- + special lubricant
- + wiper
- + earthing clamp
- + water sealing mastic
- + adhesive tape

Ordering instructions

To order the termination, select the ordering part number which gives you the best centering of your core insulation diameter and substitute **X** using **Table X**, according to your conductor cable lug size and type and add the screen wire cable lug.

Order example:

One outdoor termination for a 72.5 kV - 630 mm² stranded aluminium cable with 50 mm² copper wire screen to be used

in pollution class environment d.
The diameter over core insulation is 54 mm.

Order

AFN72-6-D + C400-630x16 + 1070/1x10MS

For screen wire cable lug please see page 17-18.

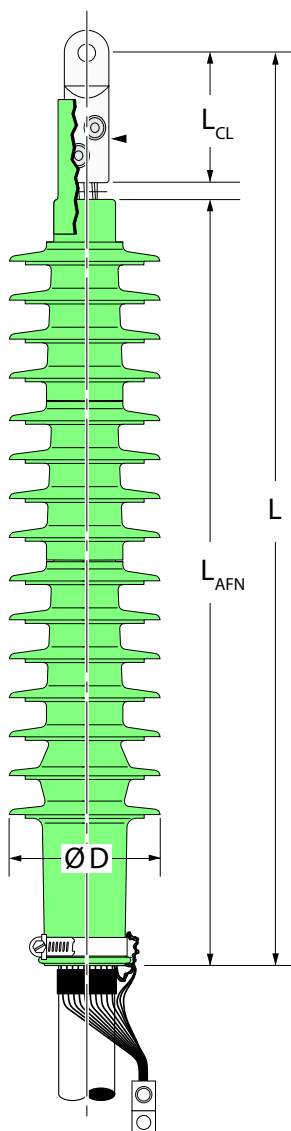


Table 1 - Classification and dimensions

Ordering part number termination	Ø over core insulation* (mm)		Ø D (mm)	Length L _{AFN} (mm)	Creepage distance (mm)	Site pollution survey (SPS) class**
	min.	max.				
AFN72-4-D-X	31.5	41	127	915	1975	d (Heavy)
AFN72-4-E-X	31.5	41	127	1040	2300	e (Very heavy)
AFN72-5-D-X	39.0	47	127	915	1975	d (Heavy)
AFN72-5-E-X	39.0	47	127	1040	2300	e (Very heavy)
AFN72-6-D-X	46.0	55	127	915	1975	d (Heavy)
AFN72-6-E-X	46.0	55	127	1040	2300	e (Very heavy)
AFN72-7-D-X	53	60	172	805	1965	d (Heavy)
AFN72-7-E-X	53	60	172	965	2475	e (Very heavy)
AFN72-8-D-X	59	67	172	805	1965	d (Heavy)
AFN72-8-E-X	59	67	172	965	2475	e (Very heavy)
AFN72-9-D-X	66	73	172	805	1965	d (Heavy)
AFN72-9-E-X	66	73	172	965	2475	e (Very heavy)
AFN72-10-D-X	72	82	172	805	1965	d (Heavy)
AFN72-10-E-X	72	82	172	965	2475	e (Very heavy)

* after cable preparation

** acc. to IEC/TS 60815-3: 2008

To determine the total termination length:

$$\text{Total Length } L = L_{AFN} + L_{CL} + 10 \text{ mm}$$

For detailed information see next pages.

Mechanical conductor cable lug with shear-off-head bolts



C95-240

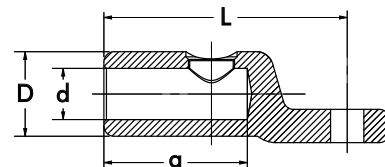


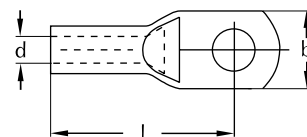
Table X

Ordering part number mechanical cable lug	Conductor cross-section Aluminium (mm ²)		Conductor cross-section Copper (mm ²)	Length L _{CL}	Dimensions (mm)			Palm hole diameter (mm)
	rm(v)	re	rm(v)		d	D	a	
C95-240 x 16	95-240	95-240	95-240	95	20	33	56	17
C185-400 x 16	185-400	185-400	185-400	120	26	42	82	17
C400-630 x 16	400-630	400-630	400-630	130	34	52	94	17
C630-1000 x 20	630-1000	630-1000	630-1000	165	41	65	105	21
C800-1200 x 20	800-1200	800-1200	800-1000	170	45	72	105	21
Other cable lugs on request								

Screen wire cable lug, Cu compression type acc. to DIN 46235



KU-V



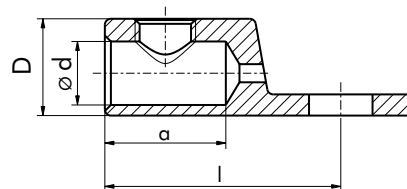
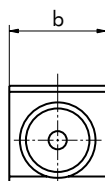
Ordering part number screen wire cable lug (compression type)	Conductor cross-section (mm ²) strand.	Dimensions (mm)			Palm hole diameter (mm)	Die code no.	Number of compressions	
		d	l	b			mech.	hydr.
16 x 10 KU-V 16 x 12 KU-V ¹⁾	16	5.5	36	17.0 21.0	10.5 13.0	8	2	1
25 x 10 KU-V 25 x 12 KU-V	25	7.0	38	17.0 19.0	10.5 13.0	10	2	1
35 x 10 KU-V 35 x 12 KU-V	35	8.2	42	19.0 21.0	10.5 13.0	12	2	1
50 x 10 KU-V 50 x 12 KU-V	50	10.0	52	22.0 24.0	10.5 13.0	14	3	1
70 x 10 KU-V 70 x 12 KU-V	70	11.5	55	24.0 24.0	10.5 13.0	16	3	1
95 x 10 KU-V 95 x 12 KU-V	95	13.5	65	28.0 28.0	10.5 13.0	18	4	2
120 x 10 KU-V 120 x 12 KU-V	120	15.5	70	32.0 32.0	10.5 13.0	20	4	2

¹⁾ These cable lugs differ from DIN 46235.

Mechanical screen wire cable lug with shear-off-head bolts



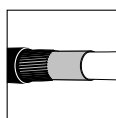
1070/1x...MS



Ordering part number screen wire cable lug	Copper in (mm ²)	Flat wire Aluminium		Dimensions mm					Palm hole dia. (mm)
		Quantity	Dimension	l	D	b	d	a	
1070/1 x 10 MS	10-50	3-13	1 mm x 5,2 mm	39	16	16	10,5	20	10,5
1070/1 x 12 MS	10-50	3-13	1 mm x 5,2 mm	41	16	19	10,5	20	13



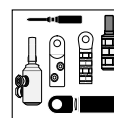
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