



CONTACT

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AIN - Indoor slip-on termination, silicone, for multiple voltage levels up to 42 kV

STANDARDS

Test CENELEC HD 629.1

DESCRIPTION

Application

AIN 10, AIN 20, AIN 30 and AIN 36 terminations are suitable for indoor installation on polymeric insulated medium voltage cables with extruded easy strip conductive screen or bonded extruded conductive screen.

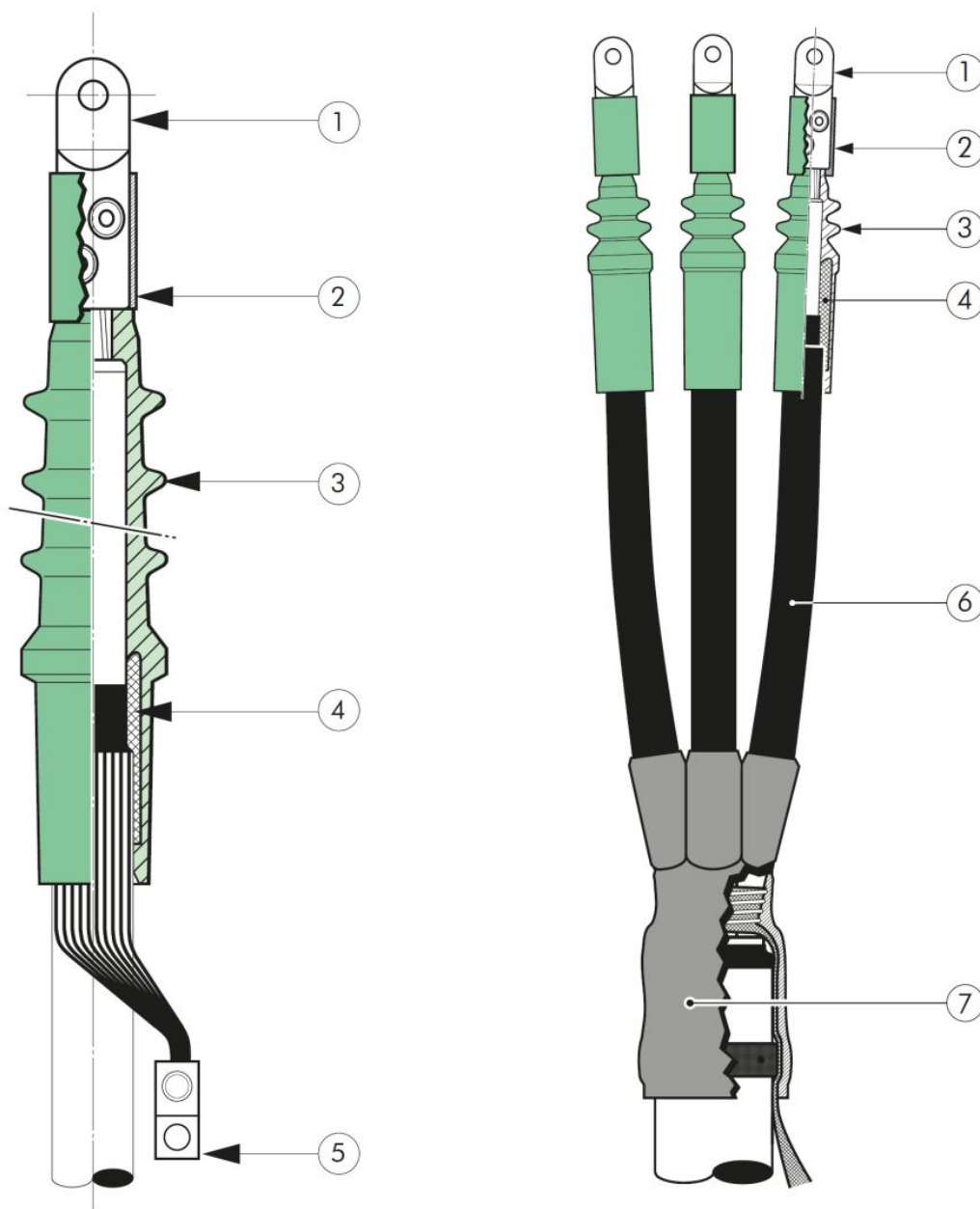
With this high-quality silicone termination, the entire range of cross-sections is covered with just a few sizes per voltage level. Another benefit given by using the AIN termination is the quick and easy assembly.

The conductor can be alternatively connected with mechanical or compression cable lugs. The termination is available with additional splitting accessories for three-core, copper wire screened or copper tape screened and armored cables.

Specifications and standards

Meets the requirements of CENELEC HD 629.1

DRAWING AIN



DESIGN AIN

1. Longitudinally sealed mechanical or compression cable lug
2. Silicone tube or cap as additional sealing at the transition of cable lug to the termination housing when using mechanical cable lugs
3. High flexibility silicone rubber housing, ensuring a perfect fit to the cable even during load changes
4. Integrated conductive rubber insert
5. Earth cable lug
6. Heat-shrinkable tube
7. Heat-shrinkable break-out

TECHNICAL DATA AIN

Termination type	Nominal voltage U_0/U (kV)	Conductor cross-section (mm ²) ¹⁾	
		min.	max.
AIN 10	6/10	25	1000 (1200)
AIN 20	12/20	35	1000 (1200)
AIN 30	18/30	50	1000 (1200)
AIN 36	20.8/36	150	1000 (1200)

¹⁾ Other cross-sections are available on request.

KIT CONTENT AIN

- 3 termination housings
- 3 mechanical or compression cable lugs for the conductor
- 3 mechanical or compression screen wire cable lugs
- Installation instructions
- Silicone grease
- Assembly incidentals

ORDERING INSTRUCTIONS AIN

Table 1 - Classification and dimensions AIN

Table 2 - Ordering part number AIN

Indicate the part number when ordering (see table).

Order example:

1 AIN 20 kit for 12/20 kV, for 95-240 mm² with mechanical cable lug (palm hole diameter 13 mm).

Order according to table 2: 1 kit – AIN 20 size 2 with part number 49756.

Note:

The classification does only apply for polymeric insulated XLPE cables (dimensions acc. to DIN VDE 0276-620) with extruded conductive screen. Please contact our sales representative, when using other cable types.

²⁾Since the dimensions for cables at voltage level 20.8/36 (42) kV are not yet standardised, the conductor cross-sections and their assignment of diameters over core insulation given in the table are to be considered approximate values.

When ordering accessories, we would like to ask you to indicate the checked diameters over core insulation.

TABLE 1 - CLASSIFICATION AND DIMENSIONS AIN

Nominal voltage U_0/U (kV)	Conductor cross-section (mm ²)		Dia. over core insulation (mm)		Number of sheds	L (mm)	Dia. D (mm)	Ordering part number
	min.	max.	min.	max.				
6/10	25	95	13.0	20.8	2	150	37	3 x AIN 10 Gr. 1
	120	240	19.4	28.4	2	150	43	3 x AIN 10 Gr. 2
	300	500	27.7	36.4	2	150	60	3 x AIN 10 Gr. 3
	630	800	34.0	45.0	3	225	68	3 x AIN 20 Gr. 4
	1000		39.0	50.0	7	405	98	3 x AIN 36 Gr. 5
	1200		46.0	58.0	7	405	98	3 x AIN 36 Gr. 6
12/20	35	70	18.3	23.5	3	225	47	3 x AIN 20 Gr. 1
	95	240	22.5	33.0	3	225	56	3 x AIN 20 Gr. 2
	300	500	31.0	41.0	3	225	68	3 x AIN 20 Gr. 3
	400	630	34.0	45.0	3	225	68	3 x AIN 20 Gr. 4
	630	800	39.0	50.0	7	405	98	3 x AIN 36 Gr. 5
	1000	1200	46.0	58.0	7	405	98	3 x AIN 36 Gr. 6
18/30	50	70	23.8	28.4	6	300	74	3 x AIN 30 Gr. 1
	95	240	27.1	37.6	6	300	74	3 x AIN 30 Gr. 2
	240	400	31.5	42.8	6	300	81	3 x AIN 30 Gr. 3
	400	630	39.0	50.0	7	405	98	3 x AIN 36 Gr. 5
	630	1200	46.0	58.0	7	405	98	3 x AIN 36 Gr. 6
20.8/36 ²⁾	50	70	23.8	28.4	On request			
	95	120	27.1	32.0				
	150	300	31.5	41.0	7	405	98	3 x AIN 36 Gr. 4
	400	630	39.0	50.0	7	405	98	3 x AIN 36 Gr. 5
	630	1200	46.0	58.0	7	405	98	3 x AIN 36 Gr. 6

DIMENSIONS AIN

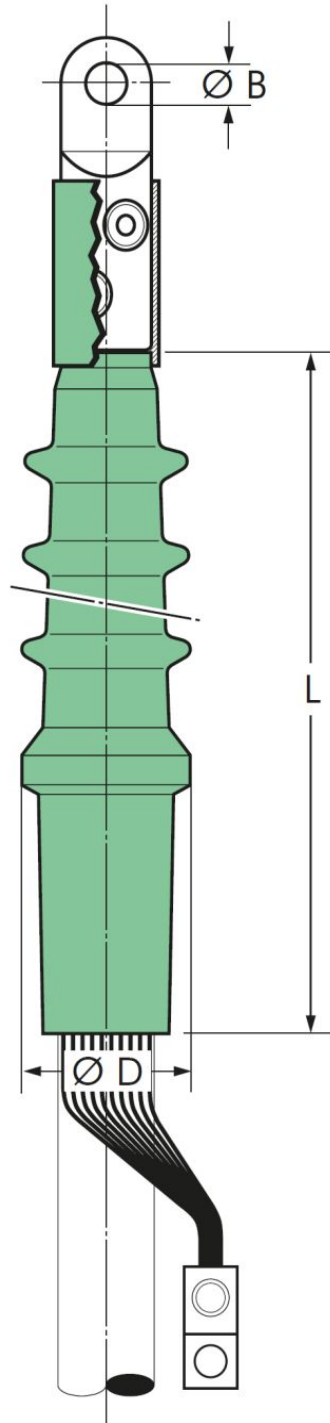
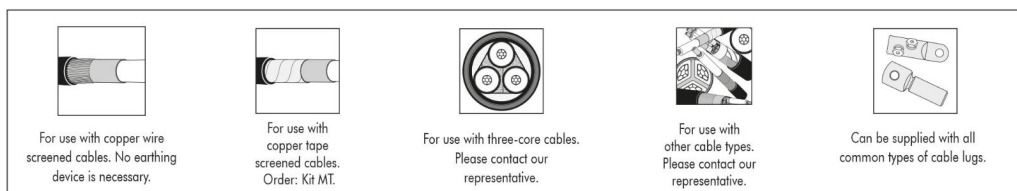


TABLE 2 - ORDERING PART NUMBER AIN

Table 2 - Ordering part number

Conductor sizes (mm ²)	Dia. over core insulation (mm)		Ordering part number (1 Kit = 3 Items)					Termination type (Kit)
			with mechanical connector		with compression connector			
	min.	max.	Ordering part number	Dia. B	Al - rm(V)	Cu - rm(V)	Dia. B	
Nominal voltage U ₀ /U 6/10 kV								
25 35 50 70 95	13.0	20.8	52175	13	15311061 15311062 15311063 15311064 15311065	15311021 15311022 15311023 15311024 15311025	13 13 13 13 13	AIN 10 Gr. 1
120 150 185 240	19.4	28.4	49494	13	15311066 15311067 15311068 15311069	15311026 15311027 15311028 15311029	13 13 17 17	AIN 10 Gr. 2
300 400 500	27.7	36.4	51262	17	15311070 15311071 15311072	15311030 15311031 -	17 17 17	AIN 10 Gr. 3
630 800	34.0	45.0	54919	21	-	-	21 21	AIN 20 Gr. 4
1000	39.0	50.0	54920	21	-	-	21	AIN 36 Gr. 5
1200	On request							
Nominal voltage U ₀ /U 12/20 kV								
35 50 70	18.3	23.5	49755	13	15321062 15321063 15321064	15321022 15321023 15321024	13 13 13	AIN 20 Gr. 1
95 120 150 185 240	22.5	33.0	49756	13	15321065 15321066 15321067 15321068 15321069	15321025 15321026 15321027 15321028 15321029	13 13 13 17 17	AIN 20 Gr. 2
300 400 500	31.0	41.0	59085	17	15321070 15321071 15321072	15321030 15321031 15321032	17 17 17	AIN 20 Gr. 3
400 500 630	34.0	45.0	54921	17	54959 54960 -	54962 - -	17 17 21	AIN 20 Gr. 4
630 800	39.0	50.0	54922	21	-	-	21 21	AIN 36 Gr. 5
1000	46.0	58.0	59757	21	-	-	21	AIN 36 Gr. 6
1200	On request							
Nominal voltage U ₀ /U 18/30 kV								
50 70	23.8	28.4	51361	13	44694 45159	44486 45389	13 13	AIN 30 Gr. 1
95 120 150 185 240	27.1	37.6	51363	13	45810 44640 44733 45305 44589	45334 44851 44646 45395 52188	13 13 13 17 17	AIN 30 Gr. 2
240 300 400	31.5	42.8	52186	17	44448 45306 52189	44608 44676 45362	17 17 17	AIN 30 Gr. 3
400 500 630	39.0	50.0	54923	17	54911 54912 -	54927 - -	17 17 21	AIN 36 Gr. 5
630 800 1000	46.0	58.0	54924	21	- - -	- - -	21 21 21	AIN 36 Gr. 6
1200	On request							
Nominal voltage U ₀ /U 20.8/36 kV								
50 70	23.8	28.4	On request					
95 120	27.1	32.0						
150 185 240 300	31.5	41.0						
400 500 630	39.0	50.0	54926	17	54938 54939 -	54953 - -	17 17 21	AIN 36 Gr. 5
630 800 1000	46.0	58.0	54862	21	- - -	- - -	21 21 21	AIN 36 Gr. 6
1200	On request							

PICTOGRAMS AIN



TECHNICAL INSTRUCTIONS AND APPLICATION INFORMATION (ACCESSORIES)

The data given were determined diligently, but do not release our customers of the duty to carry out tests themselves in order to check the suitability of the products delivered by us for the intended use. We reserve the right to modify characteristic and performance data according to the present state of technology. Processing and use of the products cannot be controlled by us and are therefore exclusively in your field of responsibility.

Our products meet the VDE standards respectively correspond to DIN pages and IEC recommendations.

Attention: Before first design in please contact manufacturer.

The products, described in this catalogue, are designed for connection of bare energy cable conductors (Class 1 & 2) with description of round solid (RE), round stranded (RM), as well as sector solid (SE), sector stranded (SM) and round stranded compacted (RMV) for conductor temperatures up to 90 °C. All conductor filling materials like tapes, yarn, powder or similar need to be completely removed before the installation. A check on basis of the actual existing conductor dimensions by the user is indispensable. This applies also for the application of Class 6 conductors or other special conductor types.

Impact wrenches have to be approved by Nexans! Depending on different conductor material or conductor type, indicated values may differ from test values acc. to IEC 61238-1. The use of fine stranded conductors has to be approved by Nexans Power Accessories Germany GmbH.

Our responsibilities are only those listed in the latest edition of "General terms and conditions for the supply of products and services of the electrical and electronics industry". We can provide a copy on request.

Our products are mainly delivered in cartons. We only use package materials able to be recycled due to the latest packing system. Collapsible cardboard boxes are not taken back. Please try to order complete standard packages.

Reprinting, even partial, only with special allowance. We reserve the right to alter or modify the characteristics described. Illustrations and drawings may only show a close reflection and are not decisive. The weights are approximate and include the carton package. This catalogue substitutes all former editions. Types or versions not part of the catalogue are available on request.

Hof, May 2021