

# Indoor termination for screened, 3-core polymeric insulated cables 10 kV, 15 kV, 20 kV and 35 kV



## Cable

The indoor termination is designed for 10 kV, 15 kV, 20 kV and 35 kV screened, three core polymeric insulated cables with or without armour or copper tape shield.

For example: N(A)YSEY, NA2XS2Y, АнвБ, АнвБШБ, AXEKVCY, AXEKVCEY, N(A)2XS2Y, XHP 81, EpHP 81, PHP 48, PHP 84, XHP 48.

## Design of termination

The cable is transformed to quasi 3 single core cables which allows to cross the cores even in confined connection spaces. The cores are covered with conductive tubing from the crutch area close to the screen end. The crutch area is sealed and protected with an adhesive lined, conductive breakout which is installed over the cores and the end of the oversheath.

Yellow stress grading mastic is laid around the end of the screen cut. A non-tracking insulating tubing coated with stress control and sealing mastic is installed between the end of the conductive tubing and the cable lug.

Solderless earth connections for cables with tape shield or armour have to be ordered separately.

Kits with the modification code -L12 include mechanical lugs with a busbar connection hole for M12 connection bolts, with code -L16 for M16 bolts (note: M16 not available for kits with cross section 25–50 mm<sup>2</sup>).

Nominal voltage U <sub>o</sub> /U (kV)	Terminations with mechanical lugs		Terminations without lugs			
	Cross section (mm <sup>2</sup> )	Ordering description by length	Cross section (mm <sup>2</sup> )	Ordering description by length		
		L = 450 mm	L = 1200 mm	L = 450 mm	L = 1200 mm	
6/10	25–50	POLT-12C/3XI-H1-L12	POLT-12C/3XI-H4-L12	10–16	POLT-12A/3XI-H1	POLT-12A/3XI-H4
	70–120	POLT-12D/3XI-H1-L12A	POLT-12D/3XI-H4-L12A	25–70	POLT-12C/3XI-H1	POLT-12C/3XI-H4
	120–240	POLT-12D/3XI-H1-L12B	POLT-12D/3XI-H4-L12B	95–240	POLT-12D/3XI-H1	POLT-12D/3XI-H4
	240–400	–	POLT-12E/3XI-H4-L12	240–400	–	POLT-12E/3XI-H4
8,7/15	25–50	POLT-24C/3XI-H1-L12	POLT-24C/3XI-H4-L12	10–25	POLT-24B/3XI-H1	POLT-24B/3XI-H4
	70–120	POLT-24D/3XI-H1-L12A	POLT-24D/3XI-H4-L12A	35–70	POLT-24C/3XI-H1	POLT-24C/3XI-H4
	120–240	POLT-24D/3XI-H1-L12B	POLT-24D/3XI-H4-L12B	70–240	POLT-24D/3XI-H1	POLT-24D/3XI-H4
	150–300	–	POLT-24E/3XI-H4-L12	185–400	–	POLT-24E/3XI-H4
12/20	25–50	POLT-24C/3XI-H1-L12	POLT-24C/3XI-H4-L12	10–25	POLT-24B/3XI-H1	POLT-24B/3XI-H4
	50–120	POLT-24D/3XI-H1-L12A	POLT-24D/3XI-H4-L12A	25–50	POLT-24C/3XI-H1	POLT-24C/3XI-H4
	120–185	POLT-24D/3XI-H1-L12B	POLT-24D/3XI-H4-L12B	70–185	POLT-24D/3XI-H1	POLT-24D/3XI-H4
	150–300	–	POLT-24E/3XI-H4-L12	185–400	–	POLT-24E/3XI-H4
20/35	50–120	–	POLT-42D/3XI-H4-L12	50–120	–	POLT-42D/3XI-H4
	150–300	–	POLT-42E/3XI-H4-L12	150–300	–	POLT-42E/3XI-H4
	300–400	–	POLT-42F/3XI-H4-L12	300–500	–	POLT-42F/3XI-H4

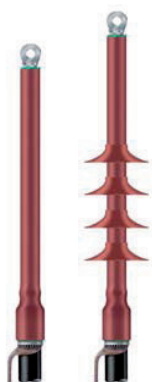
**Note:** The core lengths can be reduced to the requirements at the place of installation, the minimum core length is 320 mm for U<sub>o</sub>/U = 6/10 kV, 360 mm for U<sub>o</sub>/U = 12/20 kV and 600 mm for U<sub>o</sub>/U = 20/35 kV. For terminations with mechanical lugs for M16 bolts use modification code -L16 (not available for kits with cross section 25–50 mm<sup>2</sup>). Solderless earth connections for cables with tape shield have to be ordered separately.

## Solderless earth connection for copper tape shielded cables with or without armour

Nominal voltage U <sub>o</sub> /U (kV)	Cross section (mm <sup>2</sup> )	Ordering description for cables with tape shield		
		without armour	with tape armour	with wire armour
6/10	10–50	EAKT-1655	–	–
	35–120	EAKT-1656	EAKT-1675-CEE01	–
	95–240	EAKT-1657	EAKT-1676-CEE01	EAKT-1657 + EAKT-1643
	240–500	EAKT-1658	EAKT-1677-CEE01	EAKT-1658 + EAKT-1645
8,7/15	10–25	EAKT-1655	–	–
	35–95	EAKT-1656	EAKT-1675-CEE01	–
	70–185	EAKT-1657	EAKT-1676-CEE01	EAKT-1657 + EAKT-1643
	185–400	EAKT-1658	EAKT-1677-CEE01	EAKT-1658 + EAKT-1645
12/20	25–70	EAKT-1656	EAKT-1675-CEE01	–
	50–150	EAKT-1657	EAKT-1676-CEE01	EAKT-1657 + EAKT-1643
	120–400	EAKT-1658	EAKT-1677-CEE01	EAKT-1658 + EAKT-1645
20/35	50–150	EAKT-1658	EAKT-1677-CEE01	EAKT-1658 + EAKT-1644
	50–300	EAKT-1658	EAKT-1677-CEE01	EAKT-1658 + EAKT-1645
	300–500	EAKT-1659	–	–

**Note:** The solderless earth connection kit must be ordered separately. It includes 3 roll springs and 3 earth leads, for cables with tape armour in addition one larger roll spring. For cables with wire armour, the kit includes clamping rings, an earth lead and a sealing sleeve.

# 42 kV



## Termination for crimp lug Screened single core plastic and rubber cable

Cross section [mm <sup>2</sup> ]	Kit number Indoor	Kit number Outdoor	Diameter over insulation HD 620 A2 [mm]
35	IXSU-F 7121		26.0 – 27.5
50 – 120	IXSU-F 7131	OXSU-F 7131	27.2 – 34.0
150 – 300	IXSU-F 7141	OXSU-F 7141	33.5 – 41.6
400 – 500	IXSU-F 7151	OXSU-F 7151	42.8 – 47.6

## Termination with mechanical lug BLMT Screened single core plastic and rubber cable

Cross section [mm <sup>2</sup> ]	Kit number Indoor	Kit number Outdoor	Diameter over insulation HD 620 A2 [mm]
50 – 120	IXSU-F7131-ML-2-13	OXSU-F7131-ML-2-13	27.2 – 34.0
150 – 300	IXSU-F7141-ML-5-13 IXSU-F7141-ML-5-17	OXSU-F7141-ML-5-13 OXSU-F7141-ML-5-17	33.5 – 41.6
185 – 400	IXSU-F7141-ML-6-13 IXSU-F6141-ML-6-21	OXSU-F7141-ML-6-13 OXSU-F7141-ML-6-21	35.1 – 44.8
500 – 630	IXSU-F7151-ML-7-17 IXSU-F7151-ML-7-21	OXSU-F7151-ML-7-17 OXSU-F7151-ML-7-21	45.6 – 51.2

# 42 kV



## Termination for crimp lug Screened 3-core plastic and rubber cable without armour

Cross section [mm <sup>2</sup> ]	Tail Length [mm]	Kit number Indoor	Kit number Outdoor
50 – 120	1200	IXSU-F 7334	OXSU-F 7334
150 – 300	1200	IXSU-F 7344	OXSU-F 7344

## Termination with mechanical lug BLMT Screened 3-core plastic and rubber cable without armour

Cross section [mm <sup>2</sup> ]	Tail Length [mm]	Kit number Indoor	Kit number Outdoor
50 – 120	1200	IXSU-F7334-ML-2-13	OXSU-F7334-ML-2-13
150 – 300	1200	IXSU-F7344-ML-5-13 IXSU-F7344-ML-5-17	OXSU-F7344-ML-5-13 OXSU-F7344-ML-5-17

### Solderless earthing connection EAKT-16xx for single and 3-core polymeric cables up to 42 kV (set of 3)

Diameter over metal tape shield [mm]	Application range [mm <sup>2</sup> ]				Kit number	Mod. code number
	12 kV	17.5 kV	24 kV	36 kV/42 kV		
12 – 18	16 – 50	16 – 25	–	–	EAKT-1655	G55
19 – 24	70 – 150	35 – 95	25 – 70	25 – 35	EAKT-1656	G56
25 – 30	185 – 240	120 – 185	95 – 150	50 – 70	EAKT-1657	G57
31 – 44	300 – 630	240 – 500	185 – 500	95 – 300	EAKT-1658	G58
41 – 65	800 – 1000	630 – 1000	630 – 1000	400 – 1000	EAKT-1659	G59

The accessory kit can be ordered individually by using the Raychem part number EAKT-16xx, or in conjunction with the termination kit by adding the Mod. code number Gxx to the appropriate termination kit number.

**Example:** IXSU-F5331-G58 termination for 3-core polymeric cables 24 kV with solderless earthing connection.

### Armour earthing assemblies (clamping ring) EAKT-16xx for single core polymeric cables up to 42 kV (set of 3)

Diameter over armour [mm]	Application range [mm <sup>2</sup> ]				Kit number	Mod. code number
	12 kV	17.5 kV	24 kV	36 kV/42 kV		
21 – 32	16 – 70	16 – 50	16 – 50	–	EAKT-1636	G36
33 – 50	95 – 400	70 – 400	70 – 300	16 – 185	EAKT-1637	G37
51 – 67	500 – 800	500 – 800	400 – 800	240 – 630	EAKT-1638	G38

### Armour earthing assemblies (clamping ring) EAKT-16xx for 3-core polymeric cables up to 42 kV

Diameter over armour [mm]	Application range [mm <sup>2</sup> ]				Kit number	Mod. code number
	12 kV	17.5 kV	24 kV	36 kV/42 kV		
40 – 67	16 – 120	16 – 95	16 – 35	16 – 25	EAKT-1642	G42
50 – 86	150 – 240	120 – 185	50 – 120	35 – 95	EAKT-1643	G43
60 – 94	300 – 400	240 – 300	150 – 185	120 – 185	EAKT-1644	G44
70 – 110	–	–	240 – 300	240 – 300	EAKT 1645	G45

The accessory kit can be ordered individually by using the Raychem part number EAKT-16xx, or in conjunction with the termination kit by adding the Mod. code number Gxx to the appropriate termination kit number.

**Example:** IXSU-F5331-G43 termination for 3-core polymeric cables 24 kV with armour earthing assembly.