

Indoor terminations for screened, 3-core polymeric insulated cables 10 kV, 20 kV and 35 kV



Cable

The indoor termination is designed for 10 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, NA2XSY, N2XSEY, NA2XS2Y, АпвБ, АпвБШв, АХЕКVCY, АХЕКVCEY, N(A)2XSY, XHP 81, EpHP 81, PHP 48, PHP 84, XHP 48.

Design of termination

The cable is transformed to quasi 3 single core cables which allow crossing 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 -13 include mechanical lugs with a busbar connection hole for M12 connection bolts, with code -17 for M16 bolts.

Nominal voltage U_0/U (kV)	Terminations with mechanical lugs			Terminations without lugs**		
	Cross section (mm ²)	Ordering description by length		Cross section (mm ²)	Ordering description by length	
		L = 450 mm	L = 1200 mm		L = 450 mm	L = 1200 mm
6/10	25– 35	POLT-12B/3XIH1-ML-1-13	POLT-12B/3XIH4-ML-1-13	16– 35	POLT-12B/3XIH1	POLT-12B/3XIH4
	25– 70	POLT-12C/3XIH1-ML-1-13	POLT-12C/3XIH4-ML-1-13	25– 70	POLT-12C/3XIH1	POLT-12C/3XIH4
	70– 150	POLT-12D/3XIH1-ML-2-13	POLT-12D/3XIH4-ML-2-13	95–240	POLT-12D/3XIH1	POLT-12D/3XIH4
	95–240	POLT-12D/3XIH1-ML-4-13	POLT-12D/3XIH4-ML-4-13			
	240–300	POLT-12E/3XIH1-ML-5-13	POLT-12E/3XIH4-ML-5-13	240–500	POLT-12E/3XIH1	POLT-12E/3XIH4
12/20	25	POLT-24B/3XIH1-ML-1-13	POLT-24B/3XIH4-ML-1-13	10– 25	POLT-24B/3XIH1	POLT-24B/3XIH4
	25– 70	POLT-24C/3XIH1-ML-1-13	POLT-24C/3XIH4-ML-1-13	25– 50	POLT-24C/3XIH1	POLT-24C/3XIH4
	70– 150	POLT-24D/3XIH1-ML-2-13	POLT-24D/3XIH4-ML-2-13	70– 185	POLT-24D/3XIH1	POLT-24D/3XIH4
	95– 185	POLT-24D/3XIH1-ML-4-13	POLT-24D/3XIH4-ML-4-13			
	185–300	POLT-24E/3XIH1-ML-5-13	POLT-24E/3XIH4-ML-5-13	185–400	POLT-24E/3XIH1	POLT-24E/3XIH4
20/35	50– 120	–	POLT-42D/3XIH4-ML-2-13	50– 120	–	POLT-42D/3XIH4
	150–300	–	POLT-42E/3XIH4-ML-5-13	150–300	–	POLT-42E/3XIH4
	400	–	POLT-42F/3XIH4-ML-6-13*	400–500	–	POLT-42F/3XIH4

* The termination is also available with mechanical lugs for busbar connection by M20 bolts (modification code -21).

** Longitudinally sealed cable lugs are not part of the kit and can be ordered separately.

Note: The core lengths can be reduced to the requirements at the place of installation, the minimum core length is 320 mm for $U_0/U = 6/10$ kV, 360 mm for $U_0/U = 12/20$ kV and 600 mm for $U_0/U = 20/35$ kV.

For terminations with mechanical lugs for M16 bolts use modification code -17.

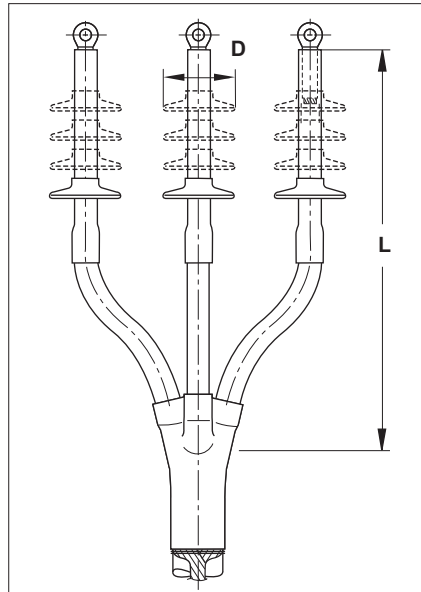
Solderless earth connections for cables with tape shield have to be ordered separately.

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

Nominal voltage U_0/U (kV)	Cross section (mm ²)	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	EAKT-1656 + EAKT-1642
	95– 240	EAKT-1657	EAKT-1676-CEE01	EAKT-1657 + EAKT-1643
	240– 500	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 tubing.

Outdoor terminations for screened, 3-core polymeric insulated cables 10 kV, 20 kV and 35 kV



Design of termination

The design and installation is the same as for indoor terminations. In addition skirts are installed onto the tubing (see table). Solderless earth connections for cables with tape shield or armour have to be ordered separately.

Kits with the modification code -13 include mechanical lugs with a busbar connection hole for M12 connection bolts, with code -17 for M16 bolts.

Dimensions L, D see table

Terminations including mechanical lugs

Nominal voltage U_o/U (kV)	Cross section (mm ²)	Ordering description by length		D (mm)	No. of skirts
		L = 450 mm	L = 1200 mm		
6/10	25– 70	POLT-12C/3XOH1-ML-1-13	POLT-12C/3XOH4-ML-1-13	85	3 x 1
	70–150	POLT-12D/3XOH1-ML-2-13	POLT-12D/3XOH4-ML-2-13	95	3 x 1
	95–240	POLT-12D/3XOH1-ML-4-13	POLT-12D/3XOH4-ML-4-13	95	3 x 1
	240–300	–	POLT-12E/3XOH4-ML-5-13	115	3 x 1
12/20	25– 70	POLT-24C/3XOH1-ML-1-13	POLT-24C/3XOH4-ML-1-13	85	3 x 3
	70–150	POLT-24D/3XOH1-ML-2-13	POLT-24D/3XOH4-ML-2-13	95	3 x 3
	95–185	POLT-24D/3XOH1-ML-4-13	POLT-24D/3XOH4-ML-4-13	95	3 x 3
	185–300	–	POLT-24E/3XOH4-ML-5-13	115	3 x 3
20/35	50–120	–	POLT-42D/3XOH4-ML-2-13	95	3 x 4
	150–300	–	POLT-42E/3XOH4-ML-5-13	115	3 x 4
	400	–	POLT-42F/3XOH4-ML-6-13*	135	3 x 4

* The termination is also available with mechanical lugs for busbar connection by M20 bolts (modification code -21).

Note: The core lengths can be reduced to the requirements at the place of installation, the minimum core length is 320 mm for $U_o/U = 6/10$ kV and 460 mm for $U_o/U = 12/20$ kV and 800 mm for $U_o/U = 20/35$ kV.

For terminations with mechanical lugs for M16 bolts use modification code -17.

Solderless earth connections for cables with tape shield have to be ordered separately, see table on the previous page.

Terminations without lugs

Nominal voltage U_o/U (kV)	Cross section (mm ²)	Ordering description by length		D (mm)	No. of skirts
		L = 450 mm	L = 1200 mm		
6/10	10– 16	POLT-12A/3XOH1	POLT-12A/3XOH4	76	3 x 1
	25– 70	POLT-12C/3XOH1	POLT-12C/3XOH4	85	3 x 1
	95–240	POLT-12D/3XOH1	POLT-12D/3XOH4	95	3 x 1
	240–500	–	POLT-12E/3XOH4	115	3 x 1
12/20	10– 25	POLT-24B/3XOH1	POLT-24B/3XOH4	76	3 x 3
	25– 50	POLT-24C/3XOH1	POLT-24C/3XOH4	85	3 x 3
	70–185	POLT-24D/3XOH1	POLT-24D/3XOH4	95	3 x 3
	185–400	–	POLT-24E/3XOH4	115	3 x 3
20/35	50–120	–	POLT-42D/3XOH4	95	3 x 4
	150–300	–	POLT-42E/3XOH4	115	3 x 4
	400–500	–	POLT-42F/3XOH4	135	3 x 4

Note: The core lengths can be reduced to the requirements at the place of installation, the minimum core length is 320 mm for $U_o/U = 6/10$ kV, 460 mm for $U_o/U = 12/20$ kV and 800 mm for $U_o/U = 20/35$ kV.

Longitudinally sealed cable lugs are not part of the kit and can be ordered separately.

Solderless earth connections for cables with tape shield have to be ordered separately, see table on the previous page.