3M Electro & Communication India Pvt. Ltd.



Electrical Markets Division R&D Centre, Bangalor-560100

Guaranteed Technical Particulars

3M Heat Shrink Outdoor Termination For 33 kV (E), 1 or 3 Core, Al./Cu. Conductor, XLPE Insulated, Screened, Armoured/Unarmoured cable.

Type:- '3MHO' Outdoor Termination

Sr. No.	Particulars	Unit	Guaranteed Values
1	Manufacturer Name & Address		3M Electro and Communication India Pvt Ltd. Pimpri Pune-411018 (India)
2	Trade name of Termination kits		3M
3	Applicable Standards		IS:13573-II-2011, IEC 60502-4
4	For the nominal (phase to phase) System Voltages (U)	kV	33 kV
5	A.C. withstand voltage dry (ph/ground), 5 mins.	kV	85.5 kV
6	A.C. withstand voltage wet (ph/ground), 1 Min.	kV	75 kV
7	Partial Discharge	рC	< 10 pC @ 33 kV
8	Impulse Withstand 1.2/50/µs (10 +ve, 10-ve)	kVp	170 kVp
9	Load Cycle Test		
	a) Temperature of conductor during heating cycle	۰C	For XLPE cable 95°C-100°C
	b) Duration of heating after steady state temperature	Hrs.	2
	c) Total duration of cycle	Hrs.	8
	d) Duration of cooling	Hrs.	3
	e) Number of Cycles In Air		60 Cycles
	f) Continuous phase to ground Voltage Withstand	kV	47.5
10	Thermal Short circuit current Withstand 1Sec. (Is)	kA	As per cable conductor size/material.
11	Dynamic short circuit withstand	ka Peak	2.55 x Is As per IS:13573-II-2011
12	Leak Tightness		10 Cycles (Additional test as per IEC 60502-2010)
13	Salt fog Test (Conductivity of salt solution = 1600mS/m.	kV	1000 hrs. at 24 kV
14	Material of the tubing/ moulded parts		Polyolefin based.
15	Method of stress control		High Permitiviety.
16	Method of environmental seal		Sealing mastic and heat shrink breakout Boot/Tube for crutch sealing and lug sealing. Heat shrink tubes for core insulation.
17	Allowable Kit storage Temperature	°C	Indoor, Ambient Temperature (50°C Max.)
18	Type of Lug		Crimping / Mechanical
19	Material of lug		a) For Crimping type:- Same as cable conductor material b) For mechanical type:- Al. or Cu. alloys according to connector manufacturers technology.
20	Creepage distance		31 mm/kV
21	Shelf life of H.S. components	Years	5 Years
22	Installation Instructions	Yes/No	Yes

33kV-STD- GTP-0016 / R3 / 26.02.2015