



All **JOINTMASTER** XLPE and PILC cable joints have been independently tested by recognized test authorities and found to meet and exceed the requirements of VDE 0278, CENELEC HD629.1 S1 and IEC 60502. Parts 1-4

Test requirements for PILC and XLPE cable joints - In accordance with CENELEC HD629.1 S1

| TEST no | REQUIREMENT | 12kV | 24kV | 36kV |
|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|-----------------------------------------------|---------------------------------------------------|
| 1 | (a) Rated withstand voltage AC - Dry (b) Rated withstand voltage AC - Dry (c) Rated withstand voltage AC - Wet | 28,5kV - 5 min 16kV - 15 min 25,5kV - 1 min | 57kV - 5 min 32kV - 15 min 51kV - 1 min | 85,5kV - 5 min 47,5kV - 15 min 76kV - 1 min |
| 2 | D.C. Voltage withstand - Dry | 38kV - 15 min | 76kV - 15min | 114kV - 15 min |
| 3 | Rated impulse Voltage 10 pos & 10 neg | 95kV | 125kV | 195kV |
| 4 | Partial discharge (N/A to PILC) | <5pC @ 12kV | <5pC @ 12kV | <5pC @ 12kV |
| 5 | Load cycling @ max cable temp (a) In air 3 cycles (b) In air 123 cycles (c) In air 113 cycles (d) In air 60 cycles (e) In 1 mtr Water 63 cycles (f) Immersion in water 10 cycles | 16kV | 32kV | 47,5kV |
| 6 | Humidity test (a) 300hr @spray rate 0.3dm ³ /m ³ Salt Fog test (b) 1000hr @spray rate 0.3dm ³ /m ³ | 8kV | 16kV | 24kV |
| 7 | Impact test @ ambient temp | > 1000 M ohm | > 1000 M ohm | > 1000 M ohm |
| 8 | Impact test @ low temp -20°C for 2hr | > 1000 M ohm | > 1000 M ohm | > 1000 M ohm |

| Test Sequence: | Test Number |
|----------------------|------------------------------------------------------------|
| Indoor Terminations | 2, 1(a), 4, 3, 5(a), 4, 5(b), 4, 3, 1(b), 6(a) |
| Outdoor Terminations | 2, 1(a), 1(c), 4, 3, 5(a), 4, 5(c), 5(f), 4, 3, 1(b), 6(b) |
| Joints | 2, 1(a), 4, 7, 3, 5(a), 4, 5(d), 5(e), 4, 3, 1(b), 8 |

Setting the Standards in Cable Jointing