8kV, Medium Voltage Trifurcating Joint

Three-core to three, single core 7.2-11kV, extruded dielectric shielded power cables

Description

The Innovative Power Products MVJT 080T series joint is a heatshrinkable system for jointing shielded three-core 8kV (7.2-11kV) extruded dielectric medium voltage cable to three, single-core extruded dielectric power cables. The kit has a heatshrinkable cable breakout boot and jacketing tubings to convert the three-core cable into three, single-core cables. After converting the three-core cable, the MVJT 080T kits are installed to complete the trifurcation. The joint can be installed on three-core armored and unarmored cables.

MVJT 080T kits provide a lightweight, compact and environmentally sealed system for splicing extruded dielectric shielded power cable. These features allow the installation of this jointing system in duct systems, vaults, submersible or direct-buried applications. This system provides a total environmental seal; joint failures in flooded vaults are eliminated.

Versatility

MVJT 080T kits cover a wide range of conductor sizes and shapes. It will accommodate out-of-round or off-tolerance cables, in both round and sector shaped conductor. The standard kit fits all cable constructions including: metallic tape, drain wire shielded or Unishield® power cable. The MVJT kits can be used for size transitions within the actual kit's cable use range. Four (4) kit sizes cover all cable sizes from 6 AWG through 1000 kcmil. When preparing the cable ends, no pencilling of the cable insulation is required.

Performance

MVJT 080T kits are factory engineered to provide fast and easy installations with reliable performance.

All MVJT kits are designed to meet or exceed the requirements of the applicable sections of the following cable and cable accessory standards: IEEE-404, IEEE-48, ICEA-66-524, ICEA-66-516, and ANSI C119.2.



Convenient Packaging

Each MVJ factory engineered kit is an individually packaged single-core shielded cable joint. Everything is included to splice three single-core cables less the butt-splice connector and external grounding components. External grounding components can be included as a kit option. Connectors can be supplied in the kits; subject to factory quote. See section 5 for connector information.

Related Product Information

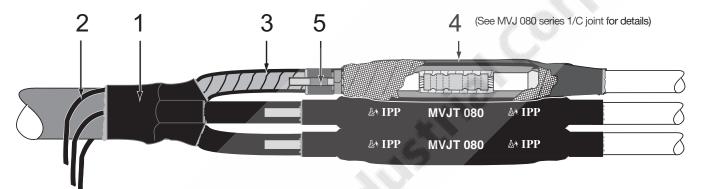
MVJT 080T: Price List PL-626

Electrical Specifications: 8kV Rated Trifurcating Joints

| Test Requirement | Value | MVJT 080T |
|---|----------------|----------------|
| AC withstand, 1 minute (60 hz) | 23 kV | PASS |
| DC withstand, 15 minutes | 45 kV | PASS |
| Partial Discharge (Corona) Voltage (<3pC) | 6.9 kV | > 6.9kV |
| Impulse withstand 1.2 x 50 µs (crest kV) | 95 kV | > 95kV |
| AC withstand, 1 hour (60hz) | 34.5 kV | PASS |
| AC withstand, 5 hour (60hz) | 23 kV | PASS |
| Continuous current rating | = Cable | = Cable |
| Submersion test (ANSI C119.2) | Pass 52 cycles | Pass 52 cycles |

Bill of Materials: Std. Pkg.: 1 kit = 1 each, 3/C to 3-1/C Joint

| Key | Item Description | Quantity | Supplied | Key | Item Description | Quantity | Supplied |
|-----|---|-----------|-------------|-----|-----------------------|-----------|-----------------|
| 1 | Cable Breakout Boot | 1 per kit | In All Kits | 5 | Sealed Grounding Kit | 3 per kit | Gmod** |
| 2 | Ground Jacketing Tube | 3 per kit | In All Kits | - | Cable Preparation Kit | 3 per kit | Pmod** |
| 3 | Core Jacketing Tube | 3 per kit | In All Kits | - | Butt-Splice Connector | 1 per kit | Factory Quoted* |
| 4 | MVJT 080T series Kit Black Jacketing Tube or Wraparound Sleeve*** | 3 per kit | In All Kits | - | Installation Guide | 1 per kit | In All Kits |



8kV Selection Guide

| Conductor Range All Dimensions in Inches | Kit Catalog Number | Insulation Min. | Diameter Max. | Connector Length Max. | Connector O.D. Max. | Installed Length Min. | Installed Length Max. |
|--|-----------------------|--------------------|------------------|--------------------------|---------------------|--------------------------|--------------------------|
| 6 - 2 AWG | MVJT 081T | 0.35 | 0.65 | 3.00 | 0.55 | 28.0 | 68.0 |
| 1 - 4/0 kcmil | MVJT 082T | 0.55 | 0.91 | 4.25 | 0.85 | 30.0 | 70.0 |
| 250 - 350 kcmil | MVJT 083T | 0.80 | 1.25 | 6.00 | 1.20 | 34.0 | 72.0 |
| 500 - 1000 kcmil | MVJT 084T | 0.98 | 1.60 | 8.00 | 1.60 | 36.0 | 78.0 |

Ordering Information

- 1. Find your cable size in the selection guide above and identify the kit catalog number. This kit will be all that is needed to splice one three-core cable to three single-core cables less the connectors and shield grounding kits. **Confirm dimensions at the extremes of the size range.**
- 2. Add the mod kit letter designation as needed to change the base kit:
 - G sealed grounding kit (Gmod)
 - P cable cleaning kit (Pmod)

EXAMPLE 1:

For a 3/C (armored or unarmored), 8kV, 2 AWG, cable spliced to a 3-1/C, 8kV, 2 AWG, cables with a solderless grounding kit (G mod):

MVJT 081TG

EXAMPLE 2:

For a 3/C, 4/0 AWG, copper conductor 8kV cable spliced to 3-1/C, 300 kcmil, copper conductor, 8kV cable with a cable cleaning kit:

MVJT 083TP

^{*} CONNECTORS: To have connectors supplied in the kits, please refer to Section 5 in this catalog for connector selection information. The connectors must be ordered separately but can be packaged within the kits if detailed information is supplied. **Supplied if specified. ***WRAPAROUND SLEEVE with stainless steel channel-Contact IPP for more information.