

MVJT 350T Series

35kV Medium Voltage Trifurcating Joint

Three-core to three, single-core 33-36kV extruded dielectric shielded power cables

Description

The Innovative Power Products MVJT 350T series joint is a heatshrinkable system for jointing shielded three-core 35kV (33-36kV) extruded dielectric medium voltage cable to three, singlecore 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 MVJ 350T kits are installed to complete the trifurcation. The oint can be installed on three-core armored and unarmored cables.

MVJT 350T 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 directburied applications. This system provides a total environmental seal; joint failures in flooded vaults are eliminated.

Versatility

MVJT 350T 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. Three (3) kit sizes cover all cable sizes from 1 AWG through 1000 kcmil. When preparing the cable ends, no pencilling of the cable insulation is required.

Performance

MVJT 350T 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.

	4 <u>8</u>	IPP MVJT 351	T & IPP	1/C
3/C	A+	IPP MVJT 351	T & IPP	1/C
	A+	IPP MVJT 351	T & IPP	1/C

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 350T series: Price List PL-659

Electrical Specifications: 35kV Rated Trifurcating Joints

Test Requirement	Value	MVJT 350T
AC withstand, 1 minute (60 hz)	69 kV	PASS
DC withstand, 15 minutes	125 kV	PASS
Partial Discharge (Corona) Voltage (<3pC)	30.3 kV	> 30.3kV
Impulse withstand 1.2 x 50 µs (crest kV)	200 kV	> 200kV
AC withstand, 1 hour (60hz)	103.5 kV	PASS
AC withstand, 5 hour (60hz)	69 kV	PASS
Continuous current rating	= Cable	= Cable
Cyclical 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

KeyItem Description1Cable Breakout Boot2Grounding Jacket Tube3Core Jacketing Tube4MVJ 350T Series KitBlack Jacketing Tube		Quantity 1 per kit 3 per kit 3 per kit 3 per kit	Supplied In All Kits In All Kits In All Kits In All Kits	KeyItem Description5Sealed Grounding Kit-Cable Cleaning Kit-Butt-splice Connector-Installation Guide		Quantity 3 per kit 1 per kit 1 per kit 1 per kit	Supplied Gmod** Pmod** Factory Quoted* In All Kits
					IPP MVJT 350	A IPP	C joint for details)

35kV Selection Guide

Conductor Range	Kit Catalog	Insulation Dia.		Connector Dimension		Installed Length	
All Dimensions in Inches	Number	Min	Max	Length Max	O.D. Max	Min.	Max
1 - 3/0 AWG	MVJT 351T	0.98	1.35	3.75	1.00	40.0	80.0
4/0 - 500 kcmil	MVJT 352T	1.25	1.69	5.50	1.50	46.0	80.0
600 - 1000 kcmil	MVJT 353T	1.60	2.18	8.00	1.88	54.0	90.0

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 Solderless Sealed Grounding Kit (Gmod)
- P cable cleaning kit (Pmod)

EXAMPLE 1:

For 3/C (armored or unarmored), 35kV, 1/0 AWG cable spliced to 3-1/C, 35kV 1/0 AWG, cables with a solder-less grounding kit: **MVJT 351TG**

EXAMPLE 2:

For a 3/C, 35kV, 250 kcmil cable spliced to 3-1/C, 35kV 400 kcmil cables with a cable cleaning kit: **MVJT 352TP**

* 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.