



Modular Splicing

- **Modular Splicing Kits** pg. 238
- **Cable Adapter Kits** pg. 240

3M™ Modular Splice Kits form a 5 to 25 kV 600 Amp separable insulated connector system. The system is easy to expand and is flexible—allowing for easy disconnects and additions.

Using one or more of the versatile kits, you can make virtually any kind of splice—2-way, 3-way, 4-way, dead-end or connect cable to your gear’s 600 Amp bushing with an equipment connection kit.

Matching a particular cable in accordance with any 3M modular splicing kit is also easy and precise. Kits are comprised of modular components (shown on the right) and are assembled following the provided instructions. The only additional supplies you need are an adapter kit for each cable being connected, which provides a custom fit of your cable to the modular system. A T-wrench is also available for the kits containing a connecting plug.

With 3M modular splicing kits, you can install critical splices in the field quickly and reliably. And, you can reenter for splice expansion or temporary dead-ending.

With 3M modular technology, every splice can maintain the insulating and shielding integrity of the original cable.

3M cold shrink insulator (included in adapter kit) provides fast, easy means of re-jacketing over the shield adapter and seals the splice to the cable jacket, permitting use in submerged locations such as manholes and vaults.

3M modular splicing kits install easily on standard shielded power cables and are compatible with copper and aluminum conductors. The 5815 series kits are designed for use Tape Shield, Wire Shield, UniShield® and Jacketed Concentric Neutral Cables. Meets requirements of ANSI/IEEE Standard 386.



106

Modular Splicing Kits

3M™ Modular Splicing Kit

Basic Splice 5815-S

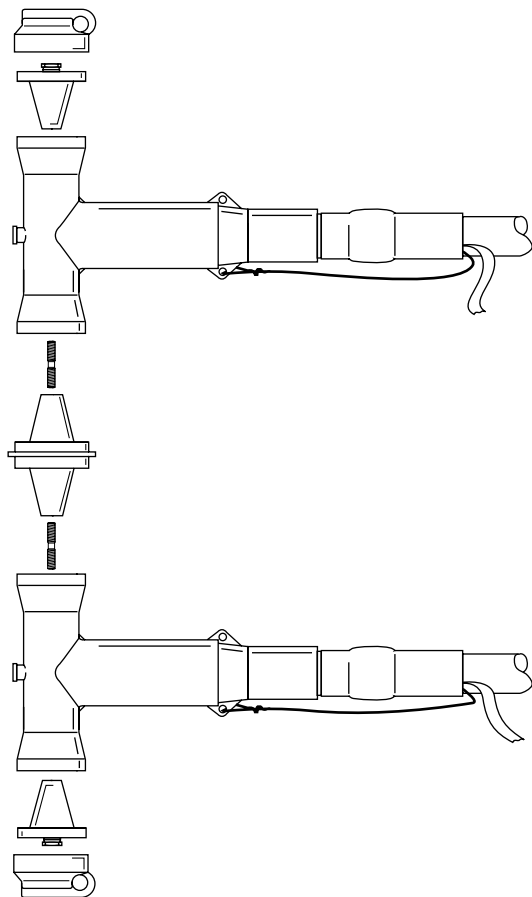
Voltage Rating: 5-25 kV
ANSI/IEEE Std. 386

The 5815-S, your basic splice, is for two-way shielded power cable connections. The 5815-S is easy to disconnect, without affecting integrity, while adding or removing cables. It is also an excellent alternative to expensive switches when isolating circuits for maintenance. The “square corner” configuration saves space.

Each 5815-S kit contains:

- 2 tee-modules
- 1 connecting plug
- 2 dead-end plugs
- 2 connecting studs
- 1 instruction booklet
- silicone lubricant

Note: A cable adapter kit is required for each cable.



Ordering Information

Product Number	Conductor Size Range	Stranded	UPC (054007-)
5815-S	2 AWG - 750 kcmil	2 AWG - 1000 kcmil	04230

3M Modular Tap Splicing Kit

5815-T Tap (Add On)

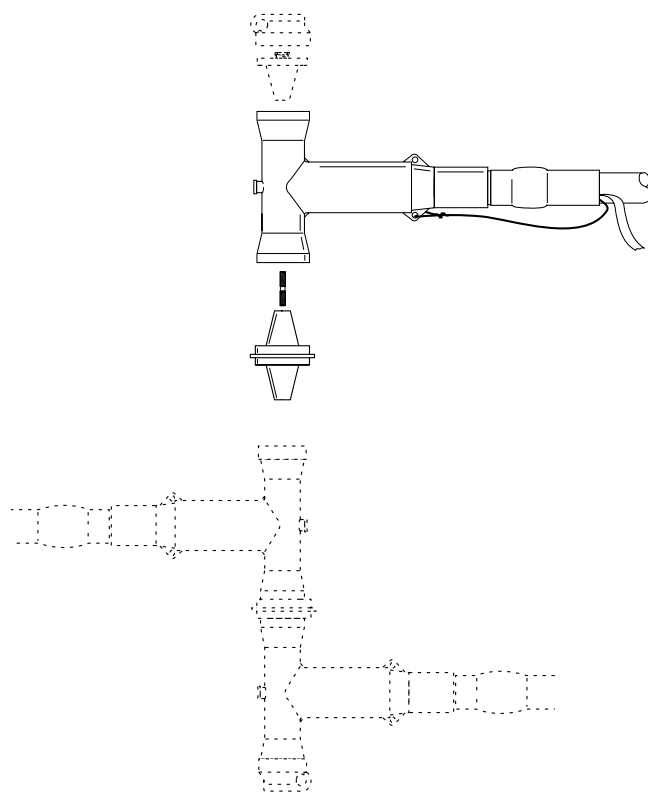
Voltage Rating: 5-25 kV
ANSI/IEEE Std. 386

The 5815-T provides an easy way to tap into an existing dead-end or to combine with a 5815-S splice for a 3-way installation, while maintaining integrity of the original connection. Add-on to the 5815-E equipment connection for an easy method of connecting parallel feeds.

Each 5815-T kit contains:

- 1 tee-module
- 1 connecting plug
- 1 connecting stud
- 1 instruction booklet
- silicone lubricant

Note: A cable adapter kit is required for each cable.



Ordering Information

Product Number	Conductor Size Range	Stranded	UPC (054007-)
5815-T	2 AWG - 750 kcmil	2 AWG - 1000 kcmil	04231

3M™ Dead-End Modular Kit Dead-End 5815-D

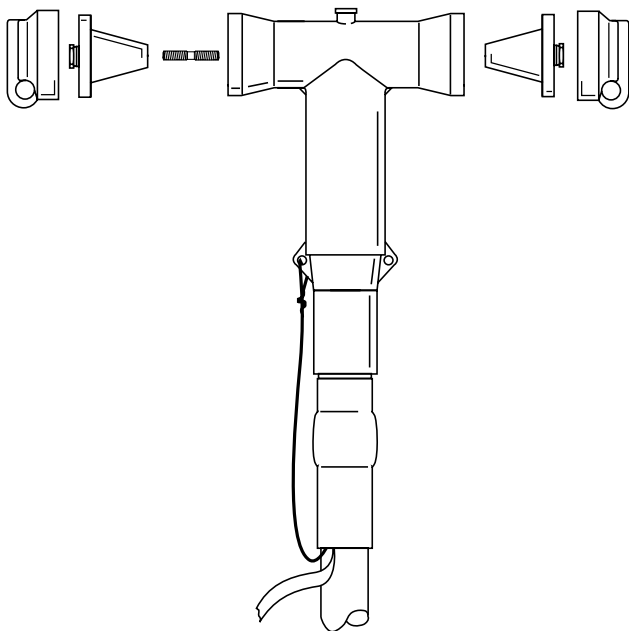
Voltage Rating: 5-25 kV
ANSI/IEEE Std. 386

Use the 5815-D for plan-ahead cable systems including submersible dead-end for cables put down during site construction.

Each 5815-D kit contains:

- 1 tee-module
- 2 dead-end plugs
- 1 connecting stud
- 1 instruction booklet
- silicone lubricant

Note: A cable adapter kit is required for each cable.



Ordering Information

Product Number	Conductor Size Range	Stranded	UPC (054007-)
5815-D	2 AWG - 750 kcmil	2 AWG - 1000 kcmil	04233

3M Modular Equipment Kit Equipment Connection 5815-E

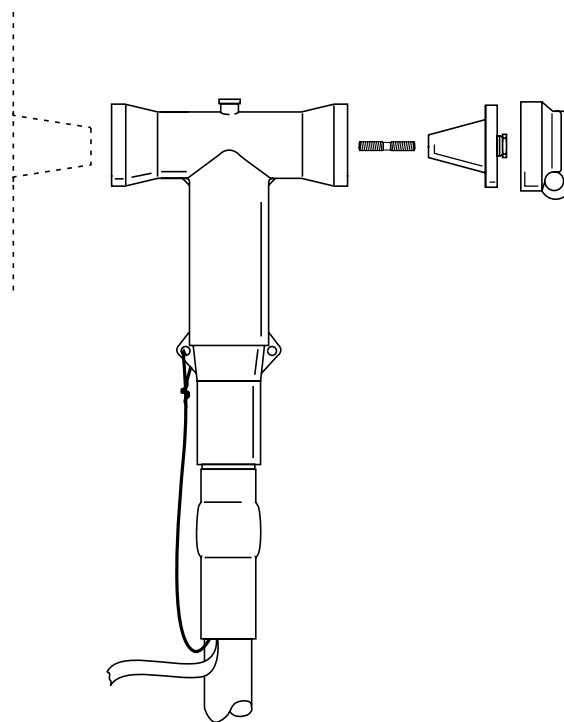
Voltage Rating: 5-25 kV
ANSI/IEEE Std. 386

This module permits connection to standard non-loadbreak 600 Amp bushings to provide fully shielded, dead-front cable connections to apparatus such as transformers, oil switches and transformer switches.

Each 5815-E kit contains:

- 1 tee-module
- 1 dead-end plug
- 1 connecting stud
- 1 instruction booklet
- silicone lubricant

Note: A cable adapter kit is required for each cable.



Ordering Information

Product Number	Conductor Size Range	Stranded	UPC (054007-)
5815-E	2 AWG - 750 kcmil	2 AWG - 1000 kcmil	04234

3M™ T-Wrench 5815-TW



107

The T-wrench 5815-TW, available from 3M, is required to install the connecting plugs on the 5815-S and 5815-T kits.

Ordering Information

Product Number	Application	UPC (054007-)
5815-TW	T-Wrench for use with kits containing Connecting Plug(s)	43468

Cable Adapter Kits

3M Quick Adapter Modular Kit 5815-B

Voltage Rating: 5 to 25 kV



108

Any of the cable adapter kits—each for a different combination of conductor size and insulation diameter—will fit directly into the main tee-module body of any 3M modular splicing kit. This permits splicing of common types of power cable (tape shield, wire shield, UniShield® and jacketed concentric neutral) with a minimum of basic kits.

Cable adapter kits include:

- 1 cable adapter
- 1 aluminum compression connector
- 1 cold shrink jacketing tube
- 1 constant force spring
- 1 ground braid assembly
- 2 mastic sealing strips
- 2 silicone lubricants
- 1 CC-3 cable cleaning pad kit
- 1 product information sheet

Note: One kit required for each cable being spliced.

Selection Guide for 5 and 8 kV Adapter Kits

Important - Final determining factor is Cable Insulation O.D. Range.

Kit No.	UPC (054007-)	Insulation Diameter Range Inches (mm)	5 kV (AWG/kcmil)				8 kV (AWG/kcmil)			
			100% (90 mils)		133% (115 mils)		100% (115 mils)		133% (140 mils)	
			Stranded	Compact /Solid	Stranded	Compact /Solid	Stranded	Compact /Solid	Stranded	Compact /Solid
5815-B1	04235	0.640 – 0.760 (16.3 – 19.3)			2/0	3/0	2/0	3/0		
5815-B2	04237	0.640 – 0.760 (16.3 – 19.3)	3/0	4/0						
5815-B5	04244	0.720 – 0.845 (18.3 – 21.5)							2/0	
5815-B6	04259	0.720 – 0.845 (18.3 – 21.5)			3/0	4/0	3/0	4/0	3/0	4/0
5815-B7	04260	0.720 – 0.845 (18.3 – 21.5)	4/0	250	4/0	250*	4/0	250*		
5815-B10	04263	0.720 – 0.845 (18.3 – 21.5)	250							
5815-B12	04603	0.785 – 0.970 (19.9 – 24.6)							4/0	250
5815-B15	04268	0.785 – 0.970 (19.9 – 24.6)			250		250		250	
5815-B17	04570	0.785 – 0.970 (19.9 – 24.6)	350							
5815-B23	04576	0.910 – 1.065 (23.1 – 27.1)			350		350		350	
5815-B29	43437	0.980 – 1.140 (24.9 – 29.0)	500		500		500			
5815-B35	43443	1.080 – 1.280 (27.4 – 32.5)							500	
5815-B40	43448	1.080 – 1.280 (27.4 – 32.5)	750							
5815-B43	43451	1.220 – 1.420 (31.0 – 36.1)			750		750		750	
5815-B45	43453	1.220 – 1.420 (31.0 – 36.1)	1000 Al							
4815-B46	43454	1.360 – 1.560 (34.5 – 39.6)			1000 Al		1000 Al		1000 Al	

One kit required for each cable being connected.

*NOTE: Check actual cable insulation diameter to verify correct kit selection.

Selection Guide for 15 and 25 kV Adapter Kits

Important - Final determining factor is Cable Insulation O.D. Range.

Kit	UPC (054007-)	Insulation Diameter Range Inches (mm)	15 kV (AWG/kcmil)				25 kV (AWG/kcmil)			
			100% (175 mils)		133% (220 mils)		100% (260 mils)		133% (320 mils)	
			Stranded	Compact /Solid	Stranded	Compact /Solid	Stranded	Compact /Solid	Stranded	Compact /Solid
5815-B3	04238	0.640 – 0.760 (16.3 – 19.3)	2	1						
5815-B4	04239	0.640 – 0.760 (16.3 – 19.3)	1	1/0*						
5815-B5	04244	0.720 – 0.845 (18.3 – 21.5)	2/0	3/0*						
5815-B8	04261	0.720 – 0.845 (18.3 – 21.5)	1/0	2/0						
5815-B9	04262	0.720 – 0.845 (18.3 – 21.5)			2	1				
5815-B11	04264	0.785 – 0.970 (19.9 – 24.6)			1	1/0	1	1/0		
5815-B13	04266	0.785 – 0.970 (19.9 – 24.6)			1/0	2/0				
5815-B14	04267	0.785 – 0.970 (19.9 – 24.6)					2	1		
5815-B16	04269	0.785 – 0.970 (19.9 – 24.6)	3/0	4/0						
5815-B18	04571	0.785 – 0.970 (19.9 – 24.6)	4/0	250						
5815-B19	04572	0.785 – 0.970 (19.9 – 24.6)			2/0	3/0				
5815-B20	04573	0.910 – 1.065 (23.1 – 27.1)					1/0	2/0		
5815-B21	04574	0.910 – 1.065 (23.1 – 27.1)					2/0	3/0		
5815-B22	04575	0.910 – 1.065 (23.1 – 27.1)			3/0	4/0				
5815-B24	04577	0.910 – 1.065 (23.1 – 27.1)	250							
5815-B25	04578	0.910 – 1.065 (23.1 – 27.1)							2	1
5815-B26	04579	0.910 – 1.065 (23.1 – 27.1)			4/0	250				
5815-B27	04581	0.910 – 1.065 (23.1 – 27.1)							1	1/0
5815-B28	04582	0.980 – 1.140 (24.9 – 29.0)					3/0	4/0		
5815-B30	43438	0.980 – 1.140 (24.9 – 29.0)							1/0	2/0
5815-B31	43439	0.980 – 1.140 (24.9 – 29.0)							2/0	3/0
5815-B32	43440	0.980 – 1.140 (24.9 – 29.0)			250					
5815-B33	43441	0.980 – 1.140 (24.9 – 29.0)	350							
5815-B34	43442	0.980 – 1.140 (24.9 – 29.0)					4/0	250*		
5815-B35	43443	1.080 – 1.280 (27.4 – 32.5)	500							
5815-B36	43444	1.080 – 1.280 (27.4 – 32.5)							3/0	4/0
5815-B37	43445	1.080 – 1.280 (27.4 – 32.5)					250			
5815-B38	43446	1.080 – 1.280 (27.4 – 32.5)			350					
5815-B39	43447	1.080 – 1.280 (27.4 – 32.5)							4/0	250
5815-B41	43449	1.220 – 1.420 (31.0 – 36.1)					350		350	
5815-B42	43450	1.220 – 1.420 (31.0 – 36.1)							250	
5815-B44	43452	1.220 – 1.420 (31.0 – 36.1)			500					
5815-B47	43455	1.360 – 1.560 (34.5 – 39.6)					500		500	
5815-B48	43456	1.360 – 1.560 (34.5 – 39.6)	750		750					
5815-B49	43457	1.480 – 1.700 (37.6 – 43.2)	1000 AI		1000 AI					
5815-B50	43461	1.480 – 1.700 (37.6 – 43.2)					750			
5815-B51	43465	1.640 – 1.840 (41.7 – 46.7)							750	
5815-B52	43466	1.640 – 1.840 (41.7 – 46.7)					1000 AI			
5815-B53	43467	1.780 – 1.965 (45.2 – 49.9)							1000 AI	

One kit required for each cable being connected.

*NOTE: Check actual cable insulation diameter to verify correct kit selection.