



# ELLIOTT ELECTRIC SUPPLY

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## 54809 1/0 2WAY Cop Conn

*Thomas&Betts-Abb Ins Prod*

Catalog Number	54809
Manufacturer	Thomas&Betts-Abb Ins Prod
Description	
Weight per unit	0.0600 (lbs/each)
Product Category	Large Terminals & Connectors

### Features

Material	COPPER
Voltage Rating	600 VAC

### Material, Color, and Finish

Color	PINK
Finish	Tin-Plated

### Descriptions

Description	1/0 2WAY COP CONN
Product Type	Conn Bidirectional Cu 600V A 35KV
Special Features	Two-way connectors provide high pullout values, are easy to insulate and provide a low-resistance connection of high quality and low installed cost.

### Manufacturer Information

Brand	COLOR-KEYED
GTIN	00786210548098
Manufacturers Part Number	54809
UPC	786210548098

### Taxonomies, Classifications, and Categories

Category Description	Comp & Mech Lugs and Butt Splices
Type	Splice Connector

### Packaging

Carton	10
Package	100
Weight Per each	0.06

### Uses, Certifications, and Standards

standard	UL E9809, CSA 4503
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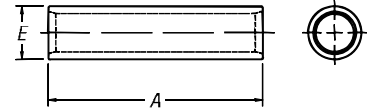
## Compression Connectors for Copper Conductor

### Two-Way Splice Connectors — Standard Barrel 600V to 35kV

**Material:** High-Conductivity Wrought Copper

**Finish:** Electro Tin Plate

Two-way connectors provide high pullout values, are easy to insulate and provide a low-resistance connection of high quality and low installed cost.



CAT. NO.	CODE	WIRE SIZE FLEX CLASS G, H, I, K, M†	DIMENSIONS (IN.)		DIE CODE	DIE COLOR
			A	E		
54504	#8 AWG	37/24 = 14.9 kcmil, #8 Weld	1.00	.27	21	RED
54505	#6 AWG	61/24 = 24.6 kcmil, #6 Weld, 133/.014	1.00	.30	24	BLUE
54506	#4 AWG	91/24 = 36.7 kcmil, 133/.0177, 49/.029	1.00	.37	29	GRAY
54507	#2 AWG	125/24 = 50.4 kcmil, #4 Weld	1.25	.41	33	BROWN
54508	#1 AWG	150/24 = 60.5 kcmil, 175/24 = 70.6 kcmil, #2 Weld, 133/.0223	1.50	.47	37	GREEN
54509	1/0 AWG	225/24 = 90.8 kcmil, #1 Weld, 133/.0254	1.63	.52	42	PINK
54510	2/0 AWG	275/24 = 111 kcmil, 1/0 Weld, 427/.0155, 133/.0282	1.75	.57	45	BLACK
54511	3/0 AWG	325/24 = 131 kcmil, 2/0 Weld, 133/.0316, 259/.0227, 427/.0177	1.75	.63	50	ORANGE
53962		375/24 = 179 kcmil, 133/.0355, 259/.0255, 427/.0199	1.81	.70	50	ORANGE
54512	4/0 AWG	450/24 = 182 kcmil, 3/0 Weld, 703/.0154	1.88	.70	54	PURPLE
54513	250 kcmil		2.25	.77	62	YELLOW
53964		550/24 = 222 kcmil, 4/0 Weld, 133/.0399, 259/.0286, 637/.0183	2.13	.79	62	YELLOW
54514	300 kcmil	—	2.13	.83	66	WHITE
54515	350 kcmil	—	2.25	.90	71	RED
54516	400 kcmil	—	2.75	.93	76	BLUE
53968		1100/24 = 444 kcmil, 500 Weld, 259/.0417, 427/.0325, 703/.0253	3.00	1.13	87	BROWN
54518	500 kcmil	—	2.75	1.11	87	BROWN
54520	600 kcmil	—	3.00	1.18	94	GREEN
54522-TB	700 kcmil	—	3.25	1.23	99	PINK
53969		1325/24 = 535 kcmil, 427/.0342	3.00	1.24	99	PINK
54523-TB	750 kcmil	—	3.00	1.30	106	BLACK
54528	1000 kcmil	—	3.63	1.50	125	N/A
54530	1250 kcmil	—	4.13	1.67	140	N/A

† Contact Technical Services for specific stranding listings

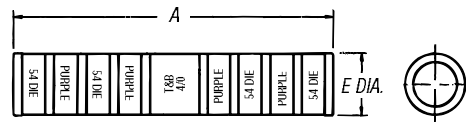
Tooling: pp. F-80-F-100

Die Selector Chart: pp. F-101-F-104

### Two-Way Splice Connectors — Long Barrel 600V to 35kV

**Material:** High-Conductivity Wrought Copper

**Finish:** Electro Tin Plate



CAT. NO.	CODE	WIRE SIZE FLEX CLASS G, H, I, K, M†	DIMENSIONS (IN.)		DIE CODE	DIE COLOR
			A	E		
54804	#8 AWG	37/24 = 14.9 kcmil	1.75	.27	21	RED
54805	#6 AWG	61/24 = 24.6 kcmil	1.75	.31	24	BLUE
54806	#4 AWG	91/24 = 36.7 kcmil	1.75	.39	29	GRAY
54807	#2 AWG	125/24 = 50.4 kcmil	1.88	.43	33	BROWN
54808	#1 AWG	150/24 = 60.5 kcmil, 175/24 = 70.6 kcmil	2.00	.49	37	GREEN
54809*	1/0 AWG	225/24 = 90.8 kcmil	2.00	.54	42	PINK
54810*	2/0 AWG	275/24 = 111 kcmil	2.13	.59	45	BLACK
54811	3/0 AWG	325/24 = 131 kcmil	2.25	.65	50	ORANGE
54812*	4/0 AWG	450/24 = 182 kcmil	2.75	.72	54	PURPLE
54813*	250 kcmil	550/24 = 222 kcmil	3.38	.79	62	YELLOW

† Contact Technical Services for specific stranding listings

\* UL Listed for direct burial applications

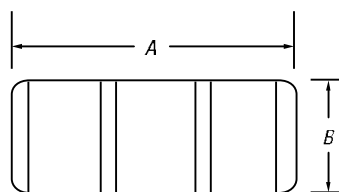
CAT. NO.	CODE	WIRE SIZE FLEX	DIMENSIONS (IN.)		DIE CODE	DIE COLOR
			A	E		
54814	300 kcmil	—	3.50	.87	66	WHITE
54815	350 kcmil	650/24 = 262 kcmil	3.75	.95	71	RED
54816	400 kcmil	775/24 = 313 kcmil	3.75	.98	76	BLUE
54818*	500 kcmil	925/24 = 373 kcmil	4.75	1.11	87	BROWN
54820	600 kcmil	1100/24 = 444 kcmil	4.25	1.21	94	GREEN
54823	750 kcmil	1325/24 = 535 kcmil	4.75	1.34	106	BLACK
58524		1600/24 = 646 kcmil	5.00	1.39	106	BLACK
58526	900 kcmil	1925/24 = 777 kcmil	5.50	1.51	115	YELLOW
54828	1000 kcmil	—	5.63	1.56	125	N/A
54833	1500 kcmil	—	5.63	1.56	125	N/A
54839	2000 kcmil	—	7.06	2.125	—	N/A

Tooling: pp. F-80-F-100

Die Selector Chart: pp. F-101-F-104

## Compression Connectors for Copper Conductor

### Copper Two-Way Splice Connectors for 600V to 35kV Applications



CAT. NO.	CABLE SIZE+	DIMENSIONS		INSTALLING TOOLS		
		A	B	DIE SET CAT. NO.	STRIP LENGTH (IN.)	COLOR CODE
54006	#4 AWG	2.00	.37	15CA29R	1½	GRAY
54007	#2 AWG	2.13	.41	15CA33R	1⅝	BROWN
54008	#1 AWG	2.25	.47	15CA37R	1⅞	GREEN
54009	1/0 AWG	2.38	.52	15CA42R	1¾	PINK
54010	2/0 AWG	2.38	.57	15CA45R	1¾	BLACK
54011	3/0 AWG	2.63	.63	15CA49R	1⅞	ORANGE
54012	4/0 AWG	2.69	.69	15CA54R	1⅞	PURPLE
54013	250 kcmil	3.19	.74	15CA60R	2⅝	RUBY
54015	350 kcmil	4.13	.89	15CA71R	2⅞	RED
54018	500 kcmil	4.13	1.06	15CA87R	2⅞	BROWN
54023	750 kcmil	4.75	1.30	15CA106R	2⅞	BLACK

\* Cat. No. 15500-TB Die Adapter required for TBM15I

+ Cable Size: Concentric and Compact strandings

Tooling: pp. F-80-F-100

Die Selector Chart: pp. F-101-F-104

### Cast-Copper Two-Way Splice Connectors for 600V to 35kV Applications — Heavy-Duty



CAT. NO.	CABLE SIZE	DIE CODE
53504	#8 AWG	29
53505	#6 AWG	29
53506	#4 AWG	29
53507	#2 AWG	45
53508	#1 AWG	45
53509	1/0 AWG	45
53510	2/0 AWG	66
53511	3/0 AWG	66
53512	4/0 AWG	66
53513	250 kcmil	76
53515	350 kcmil	99
53518	500 kcmil	99
53523	750 kcmil	112

Use hydraulic tools with hex dies.

Tooling: pp. F-80-F-100

Die Selector Chart: pp. F-101-F-104

**Material:** Cast Copper

**Finish:** Electro Tin Plate

Satisfies requirements of NEC® 250.64(C)(1) for connecting to the grounding electrode system.

NEC and National Electrical Code are registered trademarks of the National Fire Protection Association, Inc.

## Compression Connectors for Copper Conductor

Compact design for low-profile installation.

### Copper Reducing Splices

Thomas & Betts copper reducing splices are the most recent addition to the telecom line of copper compression lugs and connectors. They are designed for use in Central Office equipment installations in place of H-Taps in applications where the main cable is stepped down. When space is at a premium and standard H-Tap splicing options are too cumbersome, the Thomas & Betts reducing splices can be the right choice. These splices are available for a range of cables from 750 Flex to 6 Code.

- Requires less “real estate” in a Central Office
- Does not require a cover other than clear heat shrink
- One-person installation — each side crimped separately
- Utilizes standard lug crimping dies — more standard tooling options — lower tonnage tools can now install even the largest splice
- Hand tools can be used on splices for 500 Code/350 Flex and smaller
- Inspection holes verify cable is fully inserted into each barrel



Splices for the following cable combinations are available. Appropriate quantities of pre-cut lengths of UL<sup>®</sup> Listed clear-heat shrink are provided with each splice.

CAT. NO. CODE	MAIN	COLOR CODE	BRANCH	COLOR
TBRS75F-75C50FHS	750 Flex	YELLOW	750 Code/500 Flex	BLACK
TBRS75F-50C35FHS	750 Flex		500 Code/350 Flex	BROWN
TBRS75F-25C4/0FHS	750 Flex		250 Code/4/0 Flex	YELLOW
TBRS75C50F-75C50FHS	750 Code/500 Flex	BLACK	750 Code/500 Flex	BLACK
TBRS75C50F-50C35FHS	750 Code/500 Flex		500 Code/350 Flex	BROWN
TBRS75C50F-25C4/0FHS	750 Code/500 Flex		250 Code/4/0 Flex	YELLOW
TBRS75C50F-4/0CHS	750 Code/500 Flex		4/0 Code	PURPLE
TBRS4/0C-2CHS	4/0 Code	PURPLE	2 Code	BROWN
TBRS4/0C-6CHS	4/0 Code		6 Code	BLUE
TBRS2/0C1/0F-2CHS	2/0 Code/1/0 Flex	BLACK	2 Code	BROWN
TBRS2/0C1/0F-6CHS	2/0 Code/1/0 Flex		6 Code	BLUE
TBRS1/0C1F-2CHS	1/0 Code/1 Flex	PINK	2 Code	BROWN
TBRS1/0C1F-6CHS	1/0 Code/1 Flex		6 Code	BLUE
TBRS2C-6CHS	2 Code	BROWN	6 Code	BLUE

Tooling: pp. F-80-F-100

Die Selector Chart: pp. F-101-F-104

## Compression Connectors for Copper Conductor

Constant O.D. enables faster, easier installation than contoured design.

### Cast-Copper Reducing Splices



Thomas & Betts takes the splicing of different-sized conductors to a new level of economy and efficiency with Cast-Copper Reducing Splices. In addition to a lower cost, the key benefit to these splices is in their constant outer diameter. Unlike screw-machined, externally contoured splices, Cast-Copper Reducing Splices require no change of tool or die between crimping each end. Just slide each wire easily into the chamfered barrel, and use the same Color-Keyed tool and die to crimp both ends. The consistent O.D. also makes these splices faster and easier to insulate with clear heat-shrink wrap than a contoured splice. Sand-cast construction ensures high tensile strength for heavy-duty applications, and tin-plated copper material provides high conductivity and superior corrosion resistance.

- Ideal for telecom (inside office/outside plant), commercial, industrial MRO and any other 600V–35kV applications requiring splicing of different-sized conductors
- Tin-plated, sand-cast copper construction provides superior tensile strength, high conductivity, and excellent corrosion resistance
- Easier to install and insulate than screw-machined, contour-designed reducing splices
- Constant O.D. saves time on installation by eliminating the need for crimp tool/die change
- Fast and simple to insulate with clear or colored heat-shrink wrap
- Chamfered barrel facilitates easy wire insertion
- Compact, low-profile design takes up minimal space in cable tray or wire run
- Simple installation with Blackburn® compression tools (see pp. F-80–F-100) and dies (see pp. F-101–F-104)



CAT. NO.	COND. 1 SIZE	COND. 2 SIZE	DIM. A	DIM. E	DIE CODE	DIE COLOR
251-30485-19	4/0 Str.	#2 Str.	2¼"	1¼"	66	WHITE
251-30485-91	500 kcmil Str.	300 kcmil Str.	3¾"	1¼"	99	PINK
251-30485-229	2/0 Str.	250 kcmil Str.	2⅝"	1¼"	76	BLUE
251-30485-247	#2 Str.	#8 Str.	1⅞"	1½"	45	BLACK
251-30485-294	#4 Str.	2/0 Str.	2¼"	2½"	66	WHITE
251-30485-295	4/0 Str.	#4 Str.	2¼"	1¼"	66	WHITE
251-30485-331	4/0 Str.	350 kcmil Str.	3¾"	1½"	99	PINK
251-30485-445	4/0 Str.	2/0 Str.	2¼"	1¼"	66	WHITE
251-30485-495	1/0 Str.	#2 Str.	1¾"	1½"	45	BLACK
251-30485-610	#6 Str.	#8 Str.	1½"	¾"	29	GRAY
251-30485-611	#4 Str.	#8 Str.	1½"	¾"	29	GRAY
251-30485-612	#4 Str.	#6 Str.	1½"	¾"	29	GRAY
251-30485-613	#2 Str.	#6 Str.	1¾"	1½"	45	BLACK
251-30485-640	4/0 Str.	1/0 Str.	2¼"	1¼"	66	WHITE
251-30485-653	#2 Str.	250 kcmil Str.	2⅝"	1¼"	76	BLUE
251-30485-739	1/0 Str.	250 kcmil Str.	2⅝"	1¼"	76	BLUE
251-30485-882	400 kcmil Str.	350 kcmil Str.	3¾"	1½"	99	PINK
251-30485-950	1/0 Str.	#6 Str.	1¾"	1½"	45	BLACK
251-30485-951	#6 Str.	2/0 Str.	2¼"	2½"	66	WHITE
251-30485-1027	1/0 Str.	#4 Str.	1¾"	1½"	45	BLACK
251-30485-1029	1/0 Str.	#12 Str.	1¾"	3¼"	45	BLACK
251-30485-1030	10 Str.	#4 Str.	1½"	¾"	29	GRAY
251-30485-1031	12 Str.	#4 Str.	1½"	¾"	29	GRAY
251-30485-1032	#6 Str.	#10 Str.	1½"	¾"	29	GRAY
251-30485-1033	#12 Str.	#6 Str.	1½"	¾"	29	GRAY
251-30485-1034	#14 Str.	#8 Str.	1½"	¾"	29	GRAY
251-30485-1035	#1 Str.	1/0 Str.	1¾"	1½"	45	BLACK
251-30485-1044	#10 Str.	#8 Str.	1½"	¾"	29	GRAY
251-30485-1045	#12 Str.	#8 Str.	1½"	¾"	29	GRAY
251-30485-1085	#10 Str.	1/0 Str.	1¾"	1½"	45	BLACK
251-30485-1086	#10 Str.	2/0 Str.	2¼"	2½"	66	WHITE
251-30485-1087	#4 Str.	250 kcmil Str.	2⅝"	1¼"	76	BLUE
251-30485-1088	400 kcmil Str.	250 kcmil Str.	3¾"	1½"	99	PINK
251-30485-1089	#14 Str.	#8 Sol.	1½"	¾"	29	GRAY
251-30485-1090	#12 Str.	#8 Sol.	1½"	¾"	29	GRAY
251-30485-1091	#10 Str.	#8 Sol.	1½"	¾"	29	GRAY
251-30485-1092	#12 Str.	#6 Sol.	1½"	¾"	29	GRAY
251-30485-1093	#8 Str.	#6 Sol.	1½"	¾"	29	GRAY
251-30485-1094	#4 Str.	#6 Sol.	1½"	¾"	29	GRAY
251-30485-1095	#2 Str.	#6 Sol.	1¾"	1½"	45	BLACK
251-30485-1096	#12 Str.	#4 Sol.	1½"	¾"	29	GRAY
251-30485-1097	#10 Str.	#4 Sol.	1½"	¾"	29	GRAY
251-30485-1098	#8 Str.	#4 Sol.	1½"	¾"	29	GRAY
251-30485-1099	#6 Str.	#4 Sol.	1½"	¾"	29	GRAY
251-30485-1100	1/0 Str.	#4 Sol.	1¾"	1½"	45	BLACK
251-30485-1130	Cast Solid*	#12–#4 Str.	1½"	¾"	29	1
251-30485-1245	1/0 Flex	#4 Flex	2¼"	1¼"	66	WHITE
251-30485-1246	#4 Flex	#8 Flex	1¾"	3¼"	45	BLACK

\*Cast Solid — Field Modifiable Special

## C-Tap Connectors for Copper Conductor

Positive, all-around compression with low resistance and high pull-out values.

### C-Taps for 600V Applications

- Ideal for pigtailing, two-way splicing or tapping to an unbroken continuous main
- Heavy reinforcing ribs help locate compression dies and strengthen compressed joint

**Material:** High-Conductivity Wrought Copper

**Finish:** Plain

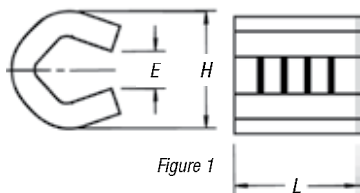


Figure 1

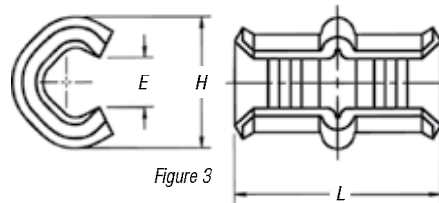


Figure 3



"E" represents gap in side

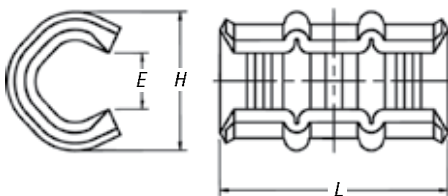


Figure 2

CAT. NO.	FIG. NO.	DIMENSIONS (IN.)			COLOR KEY
		L	H	E	
54705	1	5/16	3/16	7/64	RED
54710	1	3/16	1/16	3/64	BLUE
54715	1	1/16	3/8	1/64	GRAY
54720	2	1 1/32	1 1/16	1/32	BROWN
54725	2	1 1/32	1 3/16	1/4	GREEN
54730	2	1 1/32	2 1/32	3/32	PINK
54735	3	1 1 1/16	1/8	2 1/64	BLACK
54740	3	1 1 1/16	3 1/32	2 3/64	ORANGE
54745	3	1 1 1/16	1 1/16	1 3/32	PURPLE
54750	3	1 1 1/16	1 3/16	1 1/32	YELLOW

UL® approved for direct burial.

For covers, see page F-48.

Taps can be supplied tin-plated. Add suffix "TP" to any catalog number (i.e., 54725TP).

### Typical Cable Combinations

MAIN	BRANCH							
	#12 SOL. OR STR.	#10 SOL. OR STR.	#8 SOL. OR STR.	#6 SOL. OR STR.	#4 STR.	#2 STR.	#1 STR.	1/0 STR.
#10 Sol. or Str.	54705	54710	54715	54715	54720	54730	54735	54740
#8 Sol. or Str.	54710	54715	54715	54720	54720	54730	54735	54740
#6 Sol. or Str.	54715	54715	54720	54720	54725	54730	54735	54740
#4 Str.	54720	54720	54720	54725	54730	54735	54740	54740
#2 Str.	54730	54730	54730	54730	54735	54740	54745	54745
#1 Str.	54735	54735	54735	54735	54740	54745	54745	54750
1/0 Str.	54740	54740	54740	54740	54740	54745	54750	54750
2/0 Str.	54745	54745	54745	54745	54745	54750	54750	
3/0 Str.	54750	54750	54750	54750	54750	54750		

Tooling: pp. F-80-F-100

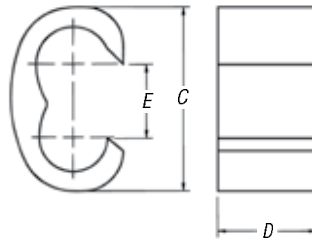
Die Selector Chart: p. F-101-F-104

## C-Tap Connectors for Copper Conductor

Easy to work with in tight spaces.

### C-Taps — Large Size for 600V Applications

- More economical than other taps and split bolts in terms of purchase, inventory, installation time, insulation and maintenance
- Color-coded for easy matching with proper die
- Barely larger than conductor insulation once installed



**Material:** High-Conductivity Wrought Copper

**Finish:** Plain



CAT. NO.	WIRE SIZE		DIMENSIONS (IN.)			INSTALLING DIE		DIE CODE	NO. OF CRIMPS	COLOR KEY
	MAIN	BRANCH	C	D	E	TOOL	CAT. NO.			
54755	#1 AWG	#1 AWG	1 <sup>1</sup> / <sub>6</sub>	¾	½	TBM14M	15512	76	1	BLUE
	1/0 AWG	1/0-#2 AWG				TBM15I	15512*	76		
	2/0 AWG	2/0-#4 AWG				TBM12	TBM12D-4	76		
	3/0 AWG	1/0-#6 AWG				13100A	15512	76		
54760	4/0 AWG	#1-#8 AWG	1 <sup>1</sup> / <sub>6</sub>	¾	½	TBM14M	15506	87H	2	BROWN
	2/0 AWG	2/0-#1 AWG				TBM15I	15506*	87H		
	3/0 AWG	3/0-#3 AWG				TBM12	TBM12D-3	87H		
	4/0 AWG	4/0-#4 AWG				13100A	15506	87H		
54765	250 kcmil	#1-#8 AWG	1 <sup>1</sup> / <sub>6</sub>	1	¾	TBM14M	15505	99H	2	PINK
	2/0 AWG	2/0-#1 AWG				TBM15I	15505*	99H		
	3/0 AWG	3/0-#2 AWG				TBM12	TBM12D-2	99H		
	4/0 AWG	4/0-#4 AWG				13100A	15505	99H		
54770	300 kcmil	2/0-#8 AWG	1 <sup>1</sup> / <sub>6</sub>	1	½	TBM14M	15515	106H	2	BLACK
	4/0 AWG	4/0-2/0 AWG				TBM15I	15515*	106H		
	250 kcmil	250 kcmil-#1 AWG				TBM12	TBM12D-2	106H		
	300 kcmil	4/0-#4 AWG				13100A	15515	106H		
54775**	350 kcmil	3/0-#6 AWG	1 <sup>1</sup> / <sub>6</sub>	1	¾	TBM14M	15504	115H	2	YELLOW
	250 kcmil	250 kcmil				TBM15I	15504*	115H		
	300 kcmil	300 kcmil-3/0 AWG				TBM12	TBM12D-1	115H		
	350 kcmil	350 kcmil-1/0 AWG				13100A	15504	115H		
	400 kcmil	300 kcmil-#2 AWG								
54780	450 kcmil	250 kcmil-#4 AWG	2 <sup>1</sup> / <sub>6</sub>	1 <sup>1</sup> / <sub>4</sub>	¾	TBM14M	15603	125H	2	N/A
	500 kcmil	250 kcmil-#6 AWG				TBM15I	15603	125H		
	350 kcmil	350 kcmil-4/0 AWG								
	400 kcmil	400 kcmil-2/0 AWG								
54785	450 kcmil	450 kcmil-#1 AWG	2	1		TBM15I	15603	125H	3	
54790	500 kcmil	500 kcmil-#2 AWG	2	1 <sup>1</sup> / <sub>6</sub>		TBM15I	15603	125H	3	

UL approved for direct burial.

For covers, see p. F-48

Taps can be supplied tin-plated. Add suffix "1P" to any catalog number (i.e., 547251P).

\* Cat. No. 15500-TB adapter required if using TBM15I and 155XX series dies.

\*\* #6 AWG branch must be doubled.

Tooling: pp. F-80-F-100

Die Selector Chart: p. F-101-F-104