

RAIL ELECTRICAL PRODUCTS



Pentair Engineered Electrical & Fastening Solutions is a leading global manufacturer and marketer of superior engineered products for niche electrical, mechanical and concrete applications. These Pentair products are sold globally under a variety of market-leading brands: ERICO welded electrical connections, facility electrical protection, and rail and industrial products; CADDY fixing, fastening and support products; ERIFLEX low voltage power and grounding connections; and LENTON engineered systems for concrete reinforcement.

For more information on ERICO, CADDY, ERIFLEX and LENTON, please visit erico.pentair.com.

CADDY Fixings, Fasteners and Supports for Electrical Applications

Specialty clips, clamps, hangers and straps for electrical and information transport system installations.

CADDY Fixings, Fasteners and Supports for Mechanical Applications

Hangers, fasteners and support products for plumbing, HVAC, fire protection and seismic systems.

ERIFLEX Low Voltage Panel Components

Current carrying connectors, supports and other non-active electric panel components.

ERIFLEX FLEXIBAR flexible insulated busbar.

ERICO Electrical Products

Products for grounding, bonding, surge protection and lightning protection that are designed to offer a coordinated system approach to facility electrical protection.

CADWELD welded electrical connections

ERICO grounding and bonding products, lightning protection systems, surge protection devices

LENTON Concrete Reinforcement Products

Rebar splicing systems and other reinforcing products utilized to connect steel reinforcement rods in concrete.

Rail and Industrial Products

Connecting and bonding products based on exothermic connection technology

CADWELD welded connections

ERICO surge protection devices

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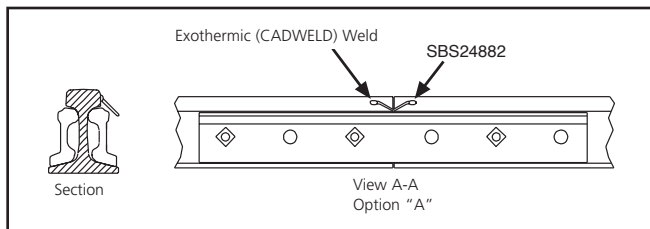
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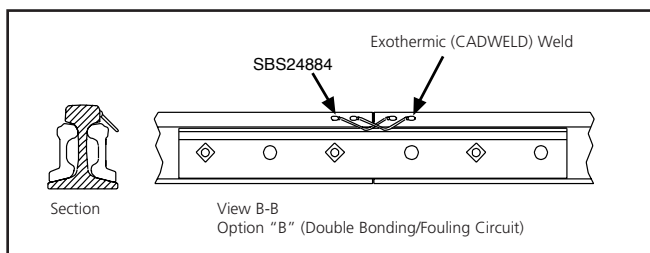
Typical Applications

Signal Bonding

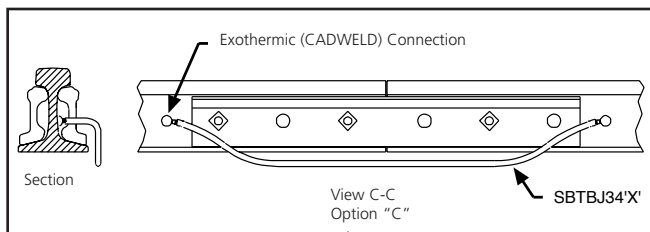
Joint Head Bond



Fouling Circuit



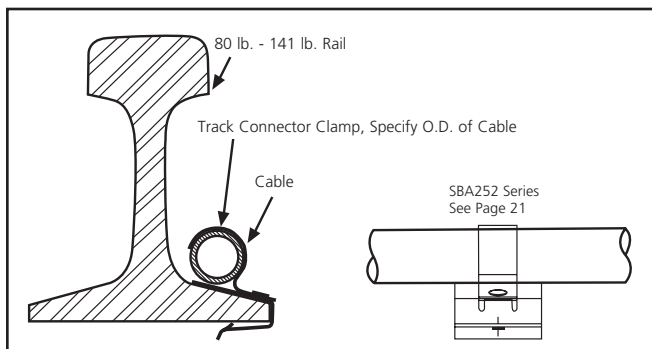
Web Bonding



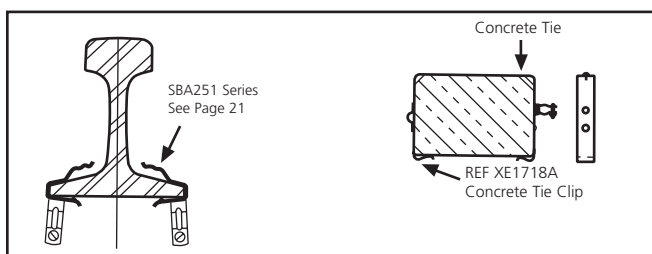
Typical Applications

Track Clips

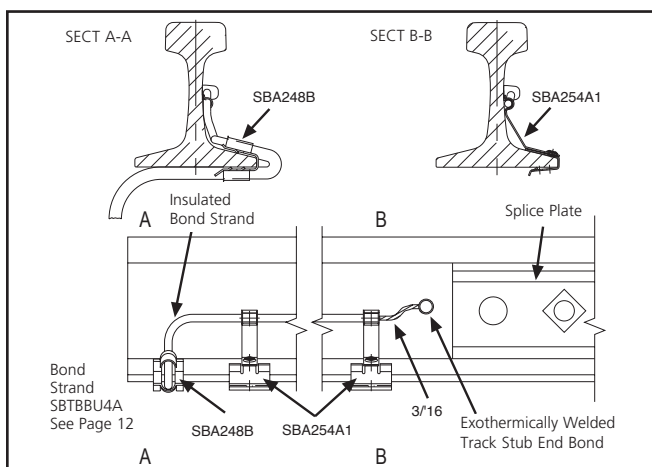
Track Retainer Clip



Rail Clip and Concrete Tie Clip (Contact Pentair)



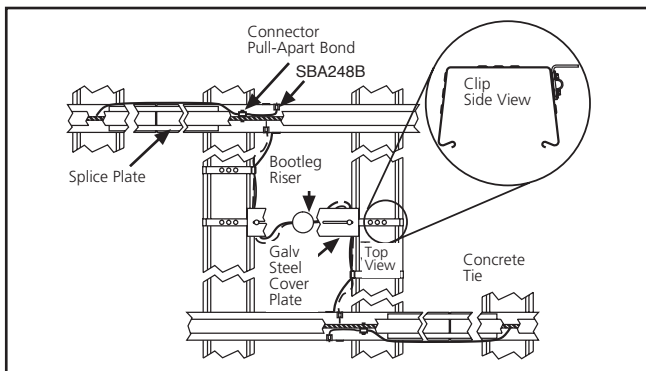
Clip, Bootleg, Track Connector



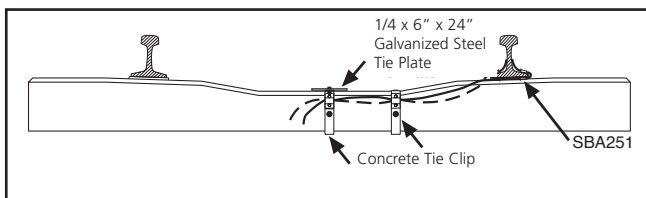
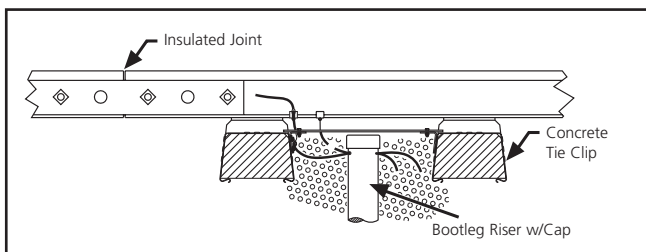
Typical Applications

Concrete Tie Clips

Concrete Tie Clip Bootleg Riser 4-Wire Kit



Concrete Tie Clip Applications

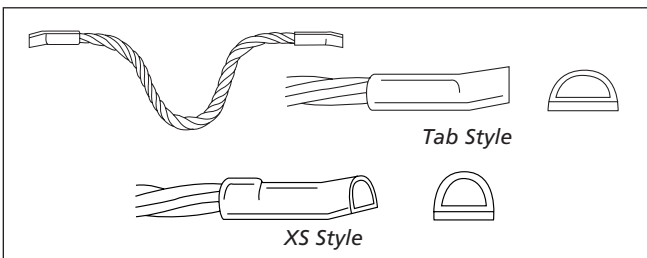


CADWELD Bonding Products

Bonds

Joint Head Bonds

Order in boxes of 100 - Includes one pair of replacement molds, flint ignitor and necessary F80 formulation welding material.



Bond	6-1/2"	7"	7-1/2"	9-3/4"	9-3/4"
3/16" Dia. XS Style	SBS24882		SBS24883	SBS24884	
XS Style Tinned Conductor	SBXSHU2		SBXSHU3	SBXSHU4	
Tab Style	SB20104		SB20136	SB20108	
Head Free Rail	SB20112		SB20128	SB20116	
5/16" Dia. Tab Style		SB20175			SB20118
Head Free Rail		SB20175HF			

Also available as bond only.

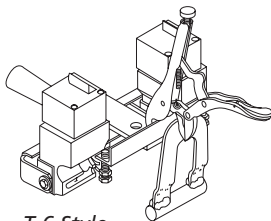
CADWELD rail head joint bonds provide:

- Maximum broken rail protection
- Unchanging electrical resistance
- Maximum corrosion resistance
- Easy installation, minimum installer skill required
- Simple and highly portable installation equipment
- Versatility, equally usable on old, worn, or new rail
- Durability, not destroyed by rail end build up

CADWELD Bonding Products

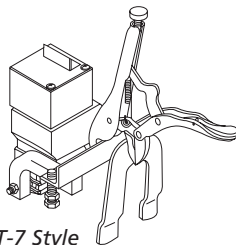
Welders and Molds

Rail Head Welders And Molds



T-6 Style

	T-6 Style One-Piece Rail Welder Complete			
With Molds Bond	6-1/2"	7"	7-1/2"	9-3/4"
3/16" Dia. XS Style	SBXST6A		SBXST6C	SBXST6D
Tab Style	SBTBT6A		SBTBT6C	SBTBT6D
Head Free Style	SBHFT6A		SBHFT6C	SBHFT6D
5/16" Dia. Tab Style		SBTBT6B		SBTBT6E
Head Free		SBHFT6B		



T-7 Style

T-7 Style Bond Terminal	3/16" Dia. Bonds		5/16" Dia. Bonds	
	Welder Pair	Molds Only (Pair)	Welder Pair	Molds Only (Pair)
3/4" XS	SBXST7D	SBM456		
3/4" Tab	SBTBT7F	SB55838		
1" Tab	SBTBT7G	SB55839	SBTBT7B	SB5898
Head Free	SBHFT7E	SB5925	SBHFT7K	SBB492

T-7 Welders are a convenient means of attaching rail head bonds wherever the standard T-6 Welder will not fit properly such as transposed rail and compromised joints.

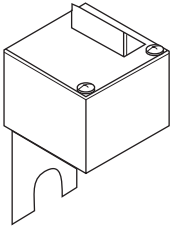
CADWELD Bonding Products

Welders and Molds

Rail Head Welders And Molds Continued

Bond	Replacement Parts		
	Molds Only (Pair)	Molds With Mounting Parts And Clips	Bond Clips
3/16" Dia. XS Style Tab Style Head Free Style	SBM456 SBS5838 SBS925	SBM456F SBS5838F SBS925F	S2659 S2659 S2044
5/16" Dia. Tab Style Head Free	SBS898 SBB492	SBS898F SBB492F	S119 B194D

Replacement Mold Covers for T-6 and T-7 Welders

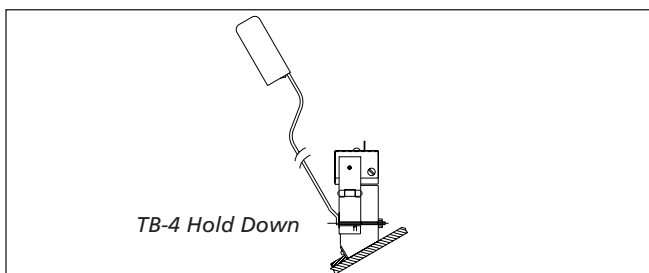
	
Part Number	Description
SBB2516A SBB2516APRWH	Single Replacement Cover Pair of Replacement Covers with Hardware

Replacement Mold Covers for T21 and TB5 Welders

Part Number	Description
B30174 B2516C1 B2516C	Single Replacement Cover Single Replacement Cover Hardware Single Replacement Cover with Hardware

CADWELD Bonding Products

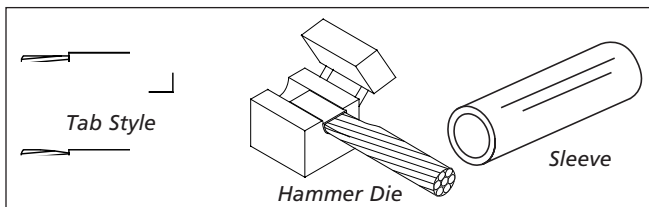
Welders and Molds Frog and Special Track Work



Terminal Style	TB-4 Welder		Replacement Mold
	Hold Down	Frame Only	
3/16" Dia.	SBXSTB4A	B323L	SBB343A
3/4" XS	SBTBTB4B	B323L	SBB343B
3/4" Tab	SBTBTB4C	B323L	SBB343C
1" Tab	SBTBTB4D	B323L	SBB343D
1-1/2" Tab			
5/16" Dia.			
1" Tab	SBTBTB4E	B323L	SBB343E

(Not to be used on base of load bearing rail)

Field Made Bonds Tab-Style Terminals



Cable Size	Terminal Length	Sleeves		Hammer Dies	F80 Welding Material	
		Part Number	Std. Pkg.		Part Number	Std. Pkg.
#6 Sol	1"	SBS10	100	NA	SB25	50
3/16"	3/4"	SBS11C	100	SBD50	SB25	50
	1"	SBS12C	100			
	1-1/2"	SBS13C	100			
5/16"	1"	SBS09C	100	SBD51	SB32	50

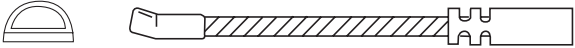
Cable - supplied by Pentair in 3/16" and 5/16" copper alloy stranded signal cable (bare) and 3/16" signal cable with 4/64" and 6/64" PVC insulation. Available in 100' coils, 500' and 1000' reels. See page 17.

CADWELD Bonding Products

Bonds

Track Connectors - Web

Order in boxes of 100 - Includes one pair of replacement molds, flint ignitor and necessary F80 formulation welding material.

 <i>Tab Style</i>	
Part Number	Description
SBTBBU4A	3/16" Dia. x 1" Tab x 4" Long Bootleg
SBTBCU412	3/16" Dia. x 1" Tab x 12" Long Bootleg

For complete Welder (SBTBT21C) see page 13 and compression tool (SBT031DJ) see page 16.

The CADWELD track connector from Pentair is used when the advantages of a welded connection to the rail web are desired and standard compression connection to track wire is required. The connector provides flexibility and resistance to vibration fatigue by incorporating a length of bond strand between the CADWELD connection and the sleeved end. The SBTBBU4A and SBTBCU412 are 3/16" tinned copper alloy. (Other lengths available.)

Jumper, Switch and Bootleg Bonds

Substitute desired length of bond in even inches for 'X'. Replacement molds sold separately. All CADWELD bonds are furnished with the necessary F80 formulation welding material.

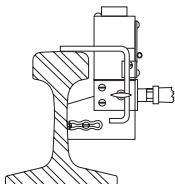
<i>Jumper</i> <i>Switch</i> <i>Bootleg</i>			
Diameter	Jumper	Switch	Bootleg
3/16" Dia.	SBXSJ33"X"	SBXSS33"X"	SBXSB33"X"
3/4" XS Style	SBTBJ33"X"	SBTBS33"X"	SBTBB33"X"
3/4" Tab	SBTBJ34"X"	SBTBS34"X"	SBTBB34"X"
1" Tab	SBTBJ36"X"	SBTBS36"X"	SBTBB36"X"
1-1/2" Tab			
5/16" Dia.			
1" Tab	SBTBJ54"X"	SBTBS54"X"	SBTBB54"X"

Also available as bond only.
STD Packs of 10 or 25

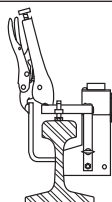
CADWELD Bonding Products

Welders and Molds

Web (Field Made and Factory Made)



TB-5 Hand Held



T-21 Clamping

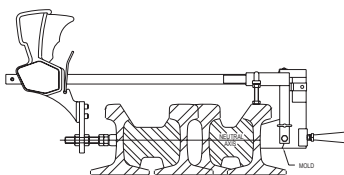
Terminal Style	TB-5 Welder		T-21 Welder		Replace-ment Mold
	Hand Held	Frame Only	Clamping	Frame Only	
3/16" Dia. 3/4" XS 3/4" Tab 1" Tab 1-1/2" Tab	SBXSTB5A SBTBTB5B SBTBTB5C SBTBTB5D	M22	SBXST21A SBTBT21B SBTBT21C SBTBT21D	C105B	SBB200A SBB200B SBB200C SBB200D
5/16" Dia. 1" Tab	SBTBTB5E	M22	SBTBT21E	C105B	SBB200E

TB-5 & T-21 Web welders are for installation of track circuits and jumper bonds to the neutral axis.

TB-5 & T-21 Welders and replacement molds are supplied in pairs.

Welder frames are sold as pairs.

Extension Clamps On Rail Head And Rail Web



SBC105R Special Track Work

Part No.	Description	Mold
SBC105S SBC105SA	Head Ext. Clamp Head Ext. Clamp w/ Mold Cover	See T-7 Style Molds See T-7 Style Molds
SBC105R	Web Ext. Clamp	See TB-5 / T-21 Style Molds

- Adjusts for wide span usage - e.g. frogs, switches, etc. (25-1/2" Max. Span)
- Easy to use and lightweight.
- Can be used with existing head and web molds.
- Can also be used on standard (single) rail.

Mechanical Connectors

Bonds

Plug Bonds

Standard Package 30

Specify bond length as a suffix to part number (XX), i.e., SBPAJA24 is an S-1 cable type, 24" long.

			
Part Number	Cable Type AREMA ⁺ Drawing 8.1.25-#1	Description	Bare Dia. Inches
SBPAJA"XX"	S-1	1 Copper, 6 Galvanized Steel	0.3270
SBPAJB"XX"	S-5	3 Copper, 16 Galvanized Steel	0.3300
SBPAJC"XX"	7-#10	7-40% Copper-bonded	0.3060
SBPAJD"XX"	7-#12	7-40% Copper-bonded	0.2430
SBPAJ3"XX"	S-8	133 Cadmium Bronze	0.1875
SBPAJR"XX"	S-8 Insul	133 Cadmium Bronze w/ 4/64" PVC Insulation	0.1875
SBPAJG"XX"	S-12	42 Cadmium Bronze, 91 Hard Drawn Stain, Steel	0.2510
AREMA Drawing 8.1.25-#2			
SBPAJP"XX"	DS-1		
SBPAJN"XX"	14-#12		

XX= Lengths 24, 30, 34, 36, 42, 48, 60, 72, and 96.

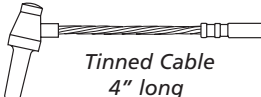
ERICO plug bonds are designed for application to the rail web. Plug bonds are hammered into a 3/8" diameter hole drilled through the rail web (driven from same side hole was drilled). This recommended method of installation requires a bond 12 inches longer than the splice bar.

Mechanical Connectors

Bonds

Track Connectors "Chicken Heads"

Standard Package 200

 <i>Tinned Cable 4" long</i>		
Part Number	Cable	Connector
SBPAC3A	3/16"	3/16" - #6 str
SBPAC3G		#8 str/#6sol
SBPAC3R		#9 str/#8sol
SBPAC3Y		#10 str/#9sol
SBPAW35		3/8" tapered plug
SBPACGBJ4	1/4"	3/16" - #6 str

The ERICO track connector is used when bond strand is being utilized for track connections, fouling circuits, and even bonding around the splice bar. The plug terminal is hammered into a 3/8" diameter hole drilled through the rail web (driven from same side hole was drilled).

Compression tool (SBT031DJ) sold separately. See page 16.



Multi-Purpose Bonds

Standard Package 48

	
Part Number	Cable Type
SBPMJ3 "X"	Bare - 3/16" S-8
SBPMJR "X"	Black Insul. - 3/16" S-8
SBPMJS "X"	Orange Insul. - 3/16" S-8

Substitute length for "X" (10", 12", or 14")

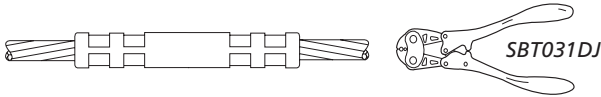
The ERICO multi-purpose bond is used when a standard plug bond cannot be installed from the field side of rail due to tight areas such as frogs and switches.

Mechanical Connectors

Associated Material

Sleeves - Compression Type

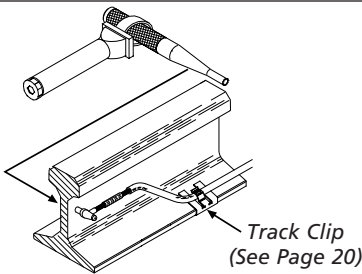
Standard Package 100

	
Part Number	3/16" Bond Strand To: Description
A2314J	#9 solid or #10 str
A2364J	#8 solid or #9 str
A2363J	#6 solid or #8 str
A2367J	#3/16" or #6 str
A2412J	1/4" Binding Post, Lug
SBT031DJ	Compression Tool

No-Oxide Grease

Part Number	Description
T369	1 ounce tube

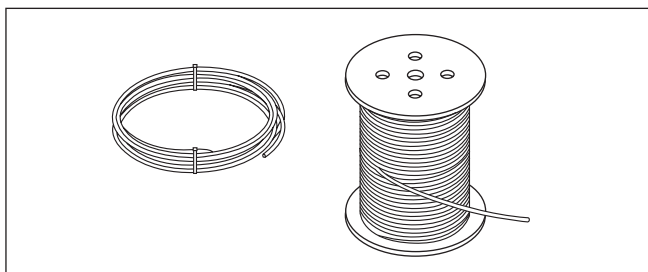
Bond Removal Punch

	
Part Number	Description
SBT382B	Punch Only
SBT408	Plastic Handle Only
SBT382BWH	Punch w/Handle
SBT382BWP	Punch w/Plastic Handle

Mechanical Connectors

Related Materials

Bond Strand



Part Number			Description
100' Coil	500' Reel	1000' Reel	
SBS8CINSUL	SBS8LINSUL	SBS8INSUL	S-8, 3/16", Black 4/64 PVC
SBS8CINORG	SBS8LINSORG	SBS8INORG	S-8, 3/16", Orange 4/64 PVC
SBS8TCINS	SBS8TDINSUL	SBS8TINSUL	S-8, 3/16" Tinned, Black 4/64 PVC
SBS8TCINS664	SBS8TLINS664		S-8, 3/16" Tinned, Black 6/64 PVC
SBS8TCINSRD		SBS8TINSRD	S-8, 3/16" Tinned, Red 6/64 PVC
SBS8CBARE	SBS8LBARE	SBS8BARE	S-8, 3/16", Bare
SBS17CBARE			S-17, 5/16", Bare
A806A12F100		A806A12F1000	S-8, 3/16" Tinned, Orange 6/64 PVC

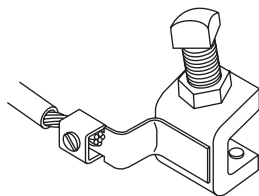
Miscellaneous Bonding Items

Part Number	Description	Std. Pkg.
B154A	3/8" Straight head plug terminal	25
B101AA	Lug - 1/16" x 1/2", 1-hole (1/4" stud)	25
SBK012A	1/4" split stud kit	10
SBK012B	1/4" split stud kit	100
SB25	Rail Welding Material F80	50
SB32	Rail Welding Material F80	50

Mechanical Connectors

Temporary Connectors

Temporary Track Connector



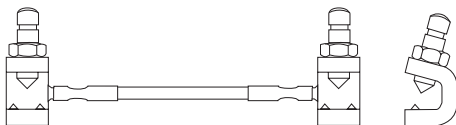
Part Number	Description
A140	Bolt Type
A140WT	T-Handle Type

Standard Package 4

Makes temporary signal bonds and track circuit connections using your cable.

- Accepts cable sizes #6 thru 1/0, including 3/16" and 5/16" diameter bond strand.
- Hardened contact points on clamps bite through rust and scale.

Temporary Signal Bond 3/16"



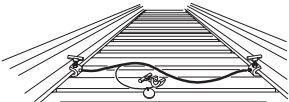
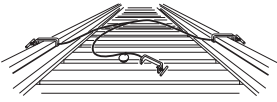
Part Number	Description
SBS3086S48	3/16" Orange Insul. 48" long
SBS3086S48WT	3/16" Orange Insul. w/T-handle 48" long
SBS3086R48	3/16" Black Insul. 48" long
SBS3086R48WT	3/16" Black Insul. w/T-handle 48" long

- Lightweight - made from 3/16" PVC insulated bond strand.
- PVC insulation available in black or orange.
- Hardened contact points on clamps bite through rust and scale.
- Cable welded to terminal for electrical reliability.

Mechanical Connectors

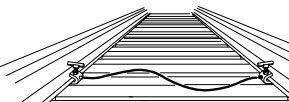
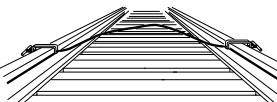
Track Circuit Shunts

Dual Shunt

 <i>Dual Base Style</i>	 <i>Dual Head Style</i>
Part Number	Description
SBB2721S	Dual Shunt (0.06 ohm/hard) Base style 2 pt. clamp
SBB2721T	Dual Shunt (0.06 ohm/hard) Head style 2 pt. clamp
SBB2721G	Dual Shunt (0.06 ohm/hard) Head style 3 pt. clamp
SBB2721B	Dual Shunt (0.06 ohm/hard) Base style 3 pt. clamp
SBB2721V	Dual Shunt (0.06 ohm/hard) Head style 2 pt. clamp with locking hardware

- One easy-to-carry assembly.
- No resistor to fail. Product is pre-engineered to provide permanent 0.06 ohm shunting.
- 100% tested and tagged to assure reliability.
- Hardened contact points on clamps bite through rust and scale.
- 0.06 ohm clamps painted red for easy identification.

Single Shunt

 <i>Single Base Style</i>	 <i>Single Head Style</i>
Part Number	Description
SBB2721F	0.06 ohm Shunt only, Base style, 3 pt. clamp
SBB2721H	0.06 ohm Shunt only, Head style, 2 pt. clamp
SBB2721CS72	Hard Shunt only, Base style, 3 pt. clamp
SBB2721JS72	Hard Shunt only, Head style, 3 pt. clamp
SBB2721VS72	Hard Shunt only, Base style, 2 pt. clamp
SBB2721JS72SP	Hard Shunt only, Head style, 2 pt. clamp with locking hardware
SBB2721WS300	Hard Shunt only, Head style, 2 pt. clamp, 25 foot length
SBB2721WS600	Hard Shunt only, Head style, 2 pt. clamp, 50 foot length

Two shunt assemblies are available - "hard" zero ohm or 0.06 ohm.

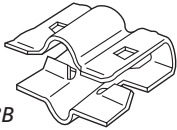
- 0.06 ohm style has no resistor to fail. Product is pre-engineered to provide permanent 0.06 ohm shunting.
- Hardened contact points on clamps bite through rust and scale.
- Bright orange insulation on "Hard" shunt for high visibility and easy identification.

Retainer Clips

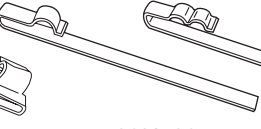
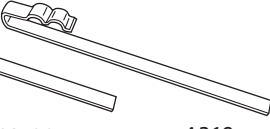
Design Features

- Spring steel and “snap-on” designs mean no more holes to drill.
- Flexibility - wide range of clips fit all standard rails and a variety of conductors.
- Versatility - Pentair now enables you to secure cables — reducing maintenance and improving wayside safety.

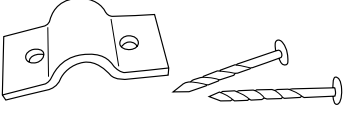
Electroplated Spring Steel

			
A248B		A251	
Part Number	Max Cable Diameter	Position on Rail Base	Standard Packaging
A248B	3/8"	Perpendicular	50
A251	3/8"	Double Parallel	50

Electroplated Steel

					
A154/A206		A203/A205		A219	
Part Number	Max Cable Diameter	Position on Rail Base	Standard Packaging		
A154	5/16"	Perpendicular	50		
A203	5/16"	Parallel	100		
A205	1/2"	Parallel	100		
SBA206	1/2"	Perpendicular	50		
A219	5/16"	Double Parallel	100		

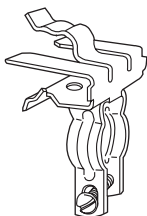
PVC Cable Keeper

	
Part Number	Description
T375	7/16" Diameter Cable Keeper – 2 Holes w/nails

Cable Clips

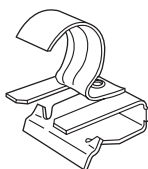
Retrainer Clip Assemblies

Below Rail Base



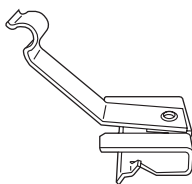
Part Number	Description	Standard Packaging
SBA2510B	3/4" Dia.	50
SBA2511B	1" Dia.	50
SBA2512B	1-1/4" Dia.	50

Rail Base



Part Number	Description	Standard Packaging
SBA252S0	3/4" Dia.	50
SBA252S1	1" Dia.	50
SBA252S2	1-1/4" Dia.	50

Web



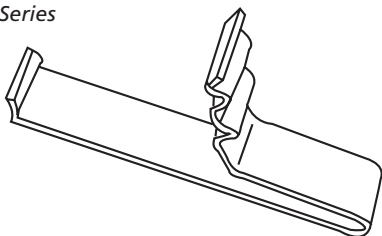
Part Number	Description	Standard Packaging
SBA254A1	3/8" Dia.	25
SBA255D1	1/2" Dia.	25

Cable Clips

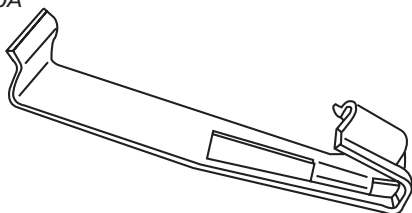
"Snap-on" Styles

Stainless Steel Rail Type

SBA258 Series



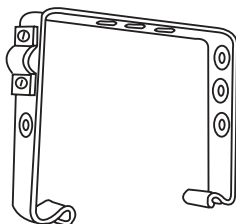
SBA260A



Part Number	Description	Std Pack
SBA258A1	6" Rail Base – Two 3/8"	25
SBA258B1	5.5" Rail Base – Two 3/8"	25
SBA258D1	5.5" Rail Base – One .5" Cable	25
SBA260A	6" Rail Base – Perpendicular Cable - One 3/8" Cable	25

Concrete Tie Clips

"Snap-On" Style Stainless Steel



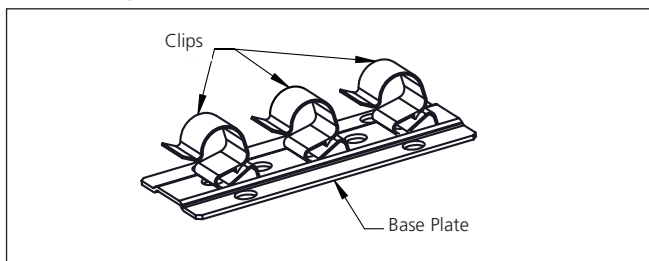
Flexible configurations

Contact Pentair with Application Information &
Concrete Tie Dimensions

Cable Clips

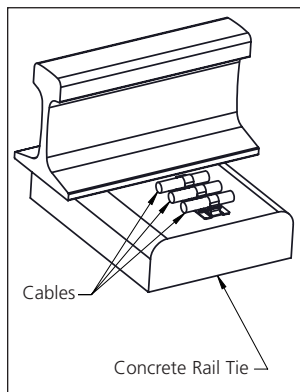
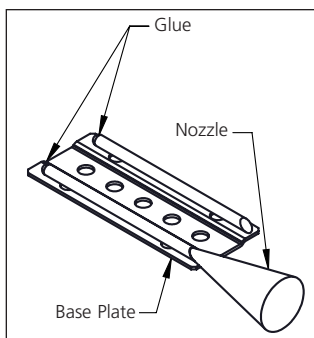
Glued Rail Clips

Cable Clip Kit for Concrete Rail Ties



Part Number	Description	Std Pack		Max. clips per base
		Base	Clips	
GCHSC67	Cable Dia. 0.24-0.28 in	30	120	4
GCHSC78	Cable Dia. 0.28-0.31 in	30	120	4
GCHSC89	Cable Dia. 0.31-0.35 in	30	120	4
GCHSC910	Cable Dia. 0.35-0.39 in	30	120	4
GCHSC1011	Cable Dia. 0.39-0.43 in	30	120	4
GCHSC1214	Cable Dia. 0.47-0.55 in	30	120	4
GCHSC1518	Cable Dia. 0.59-0.71 in	30	90	3
GCHSC1924	Cable Dia. 0.75-0.94 in	30	90	3
GCHSC2530	Cable Dia. 0.98-1.19 in	30	60	2

- Each kit includes one container of adhesive. Additional containers available upon request with part no. GCGLUE.
- Glue container suitable for a 10 oz. dispensing gun.
- Usable for longitudinal or transversal cable applications.



Grinders & Bonding Accessories

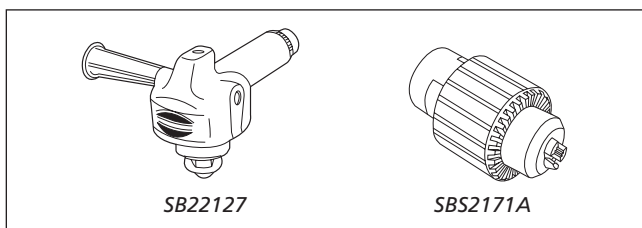
Rail Grinders

Pedestal Rail Grinder (Gas Powered)



Part Number	Description
SBG141	3.5 HP (Briggs & Stratton® I/C) Grinder with 6' Shaft & Housing Base Plate Shaft Adapter Straight Spindle 6" Wheel & Guard Dressing Stone

SBG141 Drill Attachment Parts

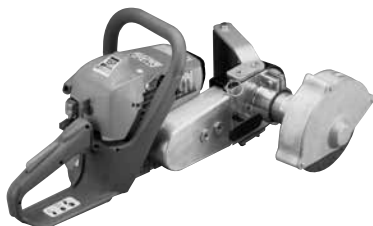


Part Number	Description
SB165	Drill Attachment – complete with angle spindle & drill chuck
SB165SA	Drill Attachment – Frame Only
SB22127	Angle spindle – 10:1 ratio
SB22127A	Replacement gear kit for Angle spindle
SBS2171A	Drill chuck – 1/8" to 5/8" key type
SBS2171AK	Drill chuck key
SBT385B	3/8" Bonding bit / round shank

Grinders & Bonding Accessories

Rail Grinders

Portable Grinder (2 cycle gasoline powered)



Part Number	Description
SBG150	Rail Grinder – 39cc, 6,000 rpm, 18 lbs.
SBG150WC	Rail Grinder with Storage Case
SBS2333	6" Grinding Wheel – 3/4" original replacement
SB22122	6" Grinding Wheel – 1" replacement
S2129	6" Beveled Grinding Wheel – Head Free Rail
SBK104	Slotting Wheel Kit – Includes 6" x 1/8" slotting wheel, spacer, depth gauge, insulation
22128	6" Slotting Wheel with mounting spacer
22128P	6" Slotting Wheel
SBT365	Silicon Rubber Insulation – 3 oz tube

Grinders & Bonding Accessories

Rail Grinders

Portable Grinder (4 cycle gasoline powered)



Part Number	Description
SBG200	Rail Grinder – 1.1 hp, 10,500 rpm, 13 lbs.
SBG20015	Cup Style Wheel for SBG200
SBG20018	Plug Style Wheel for SBG200
SBG200COFF	Cutting Adapter, Guard, and Cutting Wheel
SBG20027	Cutting Wheel replacement (std. package of 5)

Portable Grinder (battery powered)



Part Number	Description
SBG100	Rail Grinder, 18 volt, 6,500 rpm, 7 lbs
SBG20025	Cleaning Wheel, 4.5" x .25" Depressed center, designed for right angle use (std. package of 5)
SBG20027	Cutting Wheel, Disk type, 4.5" x .08" (std. package of 5)
SBG20046	Cleaning and Cutting Wheel, Depressed center, designed for right angle use (std. package of 5)

Grinders & Drilling Machines

Rail Drilling Machines

Portable Drilling Machine
(2 cycle gasoline powered)



Part Number	Description
715685	Rail Drilling Machine SBV-VS, 28 lbs for drill hole dia. 3/8" up to 1-3/8", 267 rpm

Portable Drilling Machine
(quiet 4 cycle gasoline powered)

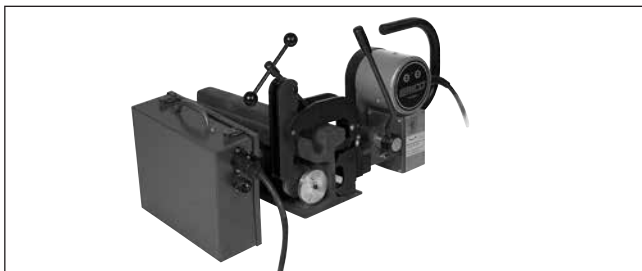


Part Number	Description
715412	Rail Drilling Machine SBV-V4, 28 lbs for drill hole dia. 3/8" up to 7/8", 267 rpm

Grinders & Drilling Machines

Rail Drilling Machines

Portable Drilling Machine
(battery powered)



Part Number	Description
715400	Rail Drilling Machine SBM-E391, 28 lbs, 48V for drill hole dia. 3/8" up to 7/8", 390 rpm

Portable Drilling Machine
(AC electric powered)



Part Number	Description
715404	Rail Drilling Machine SBM-E230, 28 lbs for drill hole dia. 3/8" up to 1-3/8", 280 rpm, requires 220/230V AC

Grinders & Drilling Machines

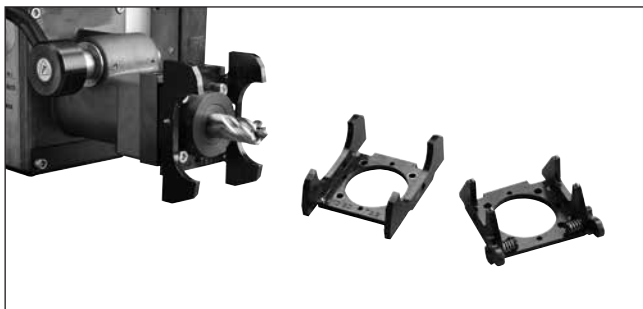
Rail Drilling Machines

Clamping Devices



Part Number	Description
715360	BSK1 head clamping for normal rails, 7 lbs.
715370	BSK2 head clamping for grooved rails, 9 lbs.
715380	BSF1 rail foot clamping device, 9 lbs.

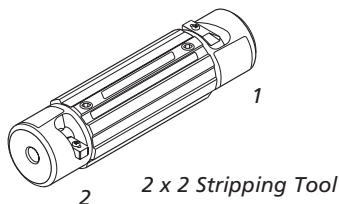
Rail Drilling Accessories



Part Number	Description
716207	Rail Drilling Template 90 LB, 2.58 in.
716204	Rail Drilling Template 100 LB, 2.63 in.
716203	Rail Drilling Template 115 LB, 2.98 in.
716211	Rail Drilling Template 132 RE, 3.20 in.
716212	Rail Drilling Template 136 LB, 3.36 in.
716213	Rail Drilling Template 141 AB, 3.47 in.
XXXXXX	Other Drilling Templates available on request
715075	Drilling Coolant Concentrate, 2.64 gal. (10 ltr.)
715375	Coolant Tank & Pump

Tools & Bonding Accessories

Stripping Tools 2 x 2



Part Number	Description	
	Bushing 1	Bushing 2
SBRT36100106	3/16" Bond Strand, 4/64" Insulation	#6 Solid, Concentric 8/64" Insulation
SBRT36100134	3/16" Bond Strand, 6/64" Insulation	#6 Concentric, 5/64" Insulation
SBRT36100135	3/16" Bond Strand, 4/64" Insulation	#9 Solid, 10/64" Insulation
SBRT36100136	3/16" Bond Strand, 4/64" Insulation	3/16" Bond Strand, 6/64" Insulation
SBRT36100138	3/16" Bond Strand, 6/64" Insulation	#6 Solid, Concentric 8/64" Insulation
SBRT36100139	3/16" Bond Strand, 4/64" Insulation	#6 Solid, 11/64" Insulation
SBRT36100140	3/16" Bond Strand, 6/64" Insulation	#6 Solid, 11/64" Insulation
SBRT36100142	#6 Solid, 1/64" Insulation	#6 Solid, 12/64" Insulation
SBRT36100147	3 Conductor, 6/64" Insulation	#6 Solid, 6/64" Insulation
SBRT36100148	7 Conductor, 6/64" Insulation	#9 Solid, 6/64" Insulation
SBRT36100149	3/16" Bond Strand, 6/64" Insulation	#6 Solid, 7/64" Insulation
SBRT36100150	5 Conductor, 6/64" Insulation	#9 Solid, 6/64" Insulation
SBRT36100152	10 Conductor, 6/64" Insulation	12 Conductor, 6/64" Insulation
SBRT36100177	3/16" Bond Strand, 4/64" Insulation	#6 Solid, 12/64" Insulation

Blades

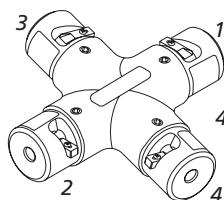
Part Number	Description
SBRTCB6667	Replacement Blades-Pkg of 5

Accessory

Part Number	Description
SBRT36024	2 x 2 Tool Driver Adapter

Tools & Bonding Accessories

Stripping Tools 4 x 4



4 x 4 Stripping Tool

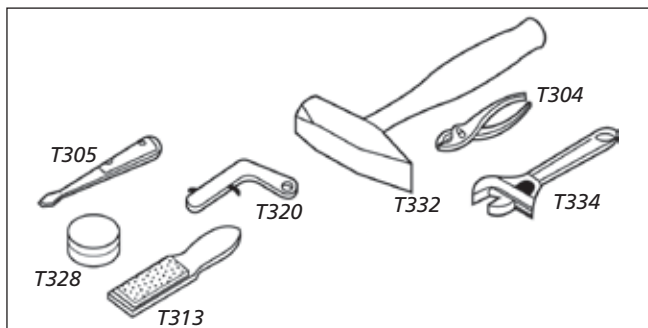
Part Number	Description	
	Bushing 1	Bushing 2
SBRT36000906	3/16" Bond Strand, 4/64" Insulation	#6 Solid, 11/64" Insulation
SBRT36000907	3/16" Bond Strand, 4/64" Insulation	#6 Solid, 11/64" Insulation
SBRT360001004	3/16" Bond Strand, 4/64" Insulation	#6 Solid, 11/64" Insulation
SBRT360001010	3/16" Bond Strand, 6/64" Insulation	3/16" Bond Strand, 6/64" Insulation
	Bushing 3	Bushing 4
SBRT36000906	#6 Solid, 12/64" Insulation	#9 Solid, 10/64" Insulation
SBRT36000907	#6 Solid, 12/64" Insulation	2/0 Ropelay, 6/64" Insulation
SBRT360001004	#6 Solid, 12/64" Insulation	3/16" Bond Strand, 6/64" Insulation
SBRT360001010	#6 Solid, 11/64" Insulation	#6 Solid, 12/64" Insulation

Replacement & Additional Bushings

Part Number	Description
SBRT1034048	3/16" Bond Strand, 4/64 Insul.
SBRT1040075	3/16" Bond Strand, 6/64 Insul.
SBRT1037590	#6 Solid, 7/64" Insulation
SBRT10450110	#6 Solid, Concentric 8/64" Insul.
SBRT10515145	#6 Solid, 11/64" Insulation
SBRT10550162	#6 Solid, 12/64" Insulation
SBRT1030075	#9 Solid, 6/64" Insulation
SBRT10430135	#9 Solid, 10/64" Insulation
SBRT1036060	#6 Concentric, 5/64" Insulation
SBRT11102575	3 Conductor, 6/64" Insulation
SBRT11100075	5 Conductor, 6/64" Insulation
SBRT11105075	7 Conductor, 6/64" Insulation
SBRT1187575	10 Conductor, 6/64" Insulation
SBRT1197575	12 Conductor, 6/64" Insulation
SBRT1067575	2/0 Ropelay, 6/64" Insulation

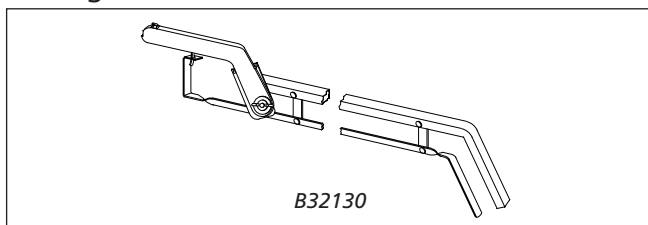
Tools & Bonding Accessories

Miscellaneous Tools



Part Number	Description
T304	Slip Joint Pliers
T305	Screw Driver
T313	Card Cloth Brush
T320	Flint Ignitor
T320A	Replacement Flints (10 each/package)
T328	Disk Container
T332	Engineers Hammer, 3 lb. size
T334	Adjustable 6" Wrench for Welder
SBB394C	T-34 Rail Head and Web Cleaner, One Universal Tool
SBA127A	Replacement Cutting Disk for T-34
B136D	Mold Cleaner
T403	Mold Sealer - 2 Pound Tub
B32130	Flint Ignitor Extension (30")

Flint Ignitor Extension



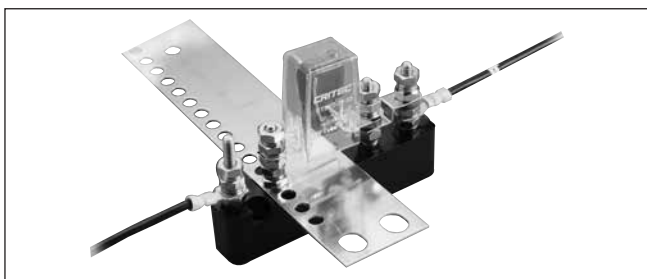
Total Facility Protection

Products For High Frequency, Low Impedance, Path to Ground

- Meets AAR Recommendations
- Modular Design for Field Assembly and Future Expansion
- Pre-Engineered and Manufactured Panels
- Design Assistance for Special Applications
- Separation of "Clean" from "Dirty" Wiring
- Improved Arrester Performance

4 Terminal Block

- Integrated Test Terminal
- Slot for Low Impedance Busbar
- Integral, High Current Busbar



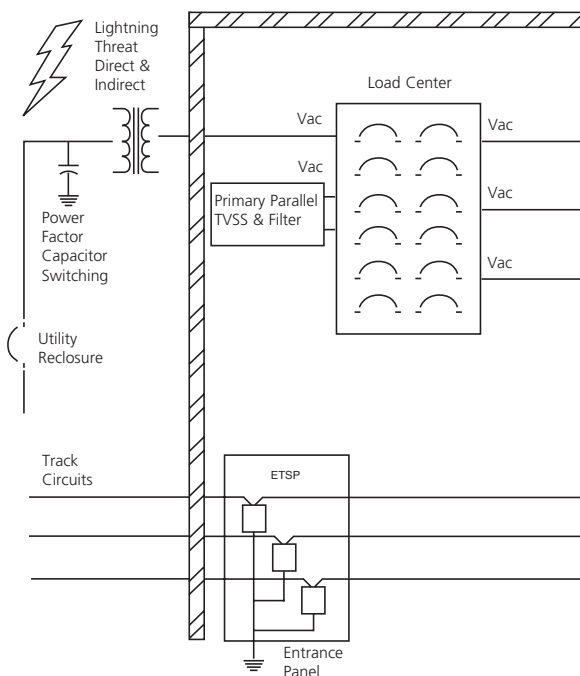
Part Number	Description
SBB2700A2B10	Terminal Block - Box of 10
B2700A2C1WH	Terminal Block with AAR Hardware
B2700HC36T	Terminal Strip - 36"
B2700HC48T	Terminal Strip - 48"
B2700HC60T	Terminal Strip - 60"

Contact Pentair For Design Assistance

Solutions to Power

Typical Signal Bungalow Power Protection Layout

With Transient

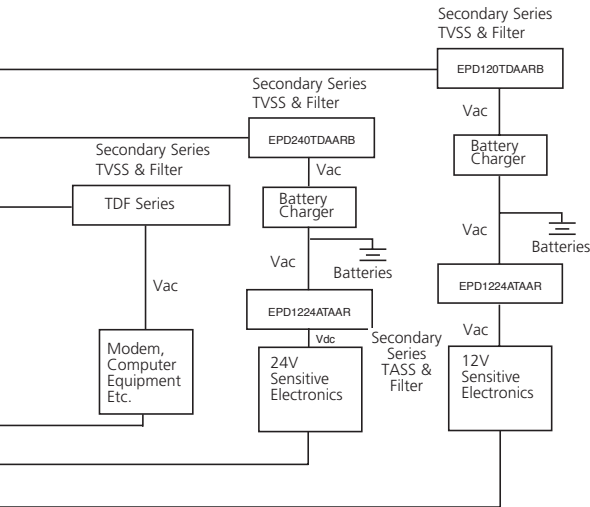


Part Number	Description
EPD120/240TDFL	120/240VAC primary surge protector, TD Technology, flying lead, 85kA
EPD100HZ120V	120VAC, 100HZ primary surge protector, fused, TD Technology, 120kA
EPD100HZ120240V	120/240VAC, 100HZ, primary surge protector, fused, TD Technology, 120kA
EPD100HZ240V	240VAC, 100HZ primary surge protector, fused, TD Technology, 120kA

Quality Problems

Using Protection Devices From Pentair For Total Facility Protection

Discriminating (TD) Technology



Part Number	Description
EPD1224ATAAR EPD120TDAARB EPD240TDAARB	12 & 24VDC secondary power protector, 30A max load 120VAC secondary power protector, 30A max load 240VAC secondary power protector, 30A max load
ETSP23050	50VDC / 35VAC Signal Protector, 30kA, 2 terminal arrestor
ETSP33050	50VDC / 35VAC Signal Protector, 30kA, 3 terminal arrestor
ETSP230170	170VDC / 120VAC Signal Protector, 30kA, 2 terminal arrestor
ETSP330170	170VDC / 120VAC Signal Protector, 30kA, 3 terminal arrestor



Primary Surge Protection

EPD Power Surge Devices

- Transient Discriminating Technology provides increased service life
- Parallel hybrid TVSS technology
- Low let-through voltage
- Visual status indication
- 5 year limited warranty



Part Number	Description
EPD120/240TDFL	120/240VAC primary surge protector, TD Technology, flying lead, 85kA

- Transient Discriminating Technology provides increased service life
- Series hybrid TVSS technology
- Optimal let-through voltage performance
- Visual status indication
- 5 year limited warranty

Part Number	Description
EPD100HZ120V	120VAC, 100HZ, primary surge protector, fused, TD Technology, 120kA
EPD100HZ120240V	120/240VAC, 100HZ, primary surge protector, fused, TD Technology, 120kA
EPD100HZ240V	240VAC, 100HZ, primary surge protector, fused, TD Technology, 120kA

Contact Pentair for additional information on our full line of ERICO surge protection devices.

Primary Surge Protection

ETSP Track Circuit Protection Devices

- Hybrid technology comprising gap-type voltage switching and varistor-type voltage clamping components
- Design helps ensure a fail-safe, open-circuit, failure mode
- Visual status indication to aid serviceability
- Device and cover plainly marked with voltage and part number to help ensure proper application
- 50kA maximum surge rating provides protection suitable for exposed trackside equipment
- Low let-through voltage
- Epoxy coating helps ensure stability of operation under adverse conditions and in locations of high humidity
- 5 year limited warranty



Part Number	Description
ETSP23050	50VDC/35VAC Signal Protector, 30kA, 2 terminal arrester
ETSP33050	50VDC/35VAC Signal Protector, 30kA, 3 terminal arrester
ETSP230170	170VDC/120VAC Signal Protector, 30kA, 2 terminal arrester
ETSP330170	170VDC/120VAC Signal Protector, 30kA, 3 terminal arrester

Secondary Surge Protection

EPD Power Surge Devices

- Series hybrid TVSS technology
- Universal design for 12VDC & 24VDC applications
- 30A series filter
- High surge rating provides a high level of protection and long operational life
- Low let-through voltage
- RFI/EMI filtering
- Visual status indication
- AAR terminals
- 5 year limited warranty



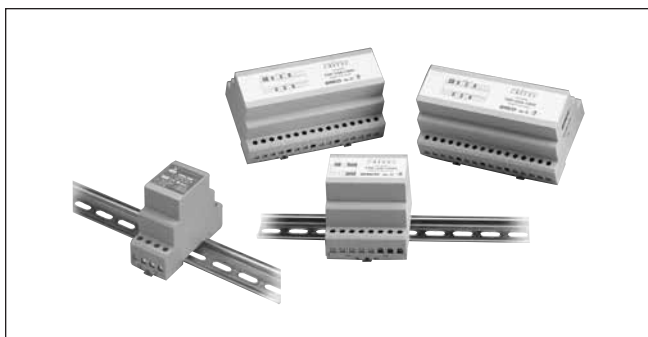
Part Number	Description
EPD1224ATAAR	12 & 24VDC secondary power protector, 30A max load
EPD120TDAARB	120VAC secondary power protector, 30A max load
EPD240TDAARB	240VAC secondary power protector, 30A max load

Peripheral Power Protection

Dinline Surge Filters

- Compact design – small footprint
- High efficiency sine wave filtering
- DIN rail mount
- Status indication
- High surge rating, 50kA (TDF), 8kA (DSF)
- TD technology

Transient Discriminating Filter & DINLINE Surge Filter (TDF & DSF)



Part Number	Description
DSF6A30V	24VDC/30VAC 1 phase 2W+G, 6A series filter
TDF3A120V	120V 1 phase 2W+G, 50kA, 3A series filter
TDF3A240V	240V 1 phase 2W+G, 50kA, 3A series filter
TDF10A120V	120V 1 phase 2W+G, 50kA, 10A series filter
TDF10A240V	240V 1 phase 2W+G, 50kA, 10A series filter
TDF20A120V	120V 1 phase 2W+G, 50kA, 20A series filter
TDF20A240V	240V 1 phase 2W+G, 50kA, 3A series filter
557850	Din Rail, 2 meters in length, 7.5 mm height

DIN SURGE DIVERTER

- Photo Voltaic and Telepower distribution
- Surge rating to 40kA - Ideal for exposed wiring
- 24VDC & 48VDC distribution systems

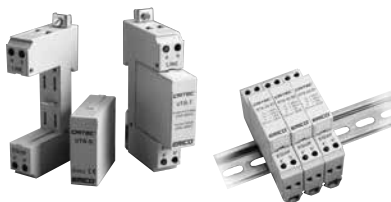
Part Number	Description
DSD1402BR24/48	24/48VDC 36 mm DIN 43 880 Profile, 40kA 8/20μs

Communications & Data Equipment Protection

Control Signal Equipment Protection

- Protection of low voltage circuits and transducers
- Separate plug and base design – facilitates ease of module replacement
- Efficient multiple stage clamping circuit technology helps ensure lowest possible residual let-through voltage
- Common-mode and differential-mode protection – protects against both possible surge conditions
- Ease of grounding – through DIN mounting rail or via terminal
- Surge rating to 20kA – ideal for exposed wiring
- 5 year Limited Warranty

Universal Transient Barrier (UTB and UTBTA)



Part Number	Description
UTB5SP	0-7V _{dc} pk, 20kA, 2A Load Current
UTB15SP	5-18V _{dc} pk, 20kA, 2A Load Current
UTB30SP	15-33V _{dc} pk, 20kA, 2A Load Current
UTB60SP	30-64V _{dc} pk, 20kA, 2A Load Current
UTB110SP	170V _{dc} , 20kA, 2A Load Current
UTBTA	UTB, Secondary Telephone Protector
557850	Din Rail, 2 meters in length, 7.5 mm height

Rail Transient Barriers (RTB)

- Includes all features of UTB plus fail-safe, open circuit, failure mode.

Part Number	Description
RTB12S3	12V _{dc} , 20kA, 1.5A Load Current
RTB30S3	30V _{dc} , 20kA, 1.5A Load Current
RTB50S2	50V _{dc} , 20kA, 1.5A Load Current
RTB60S1	60V _{dc} , 20kA, 1.5A Load Current

Communications & Data Equipment Protection

Radio Communications Protection

- Robust design
- Simple plug-in installation
- CSP models to suit N and BNC cable terminations
- CSP bulkhead N-type versions available
- High impulse current rating (20kA 8/20μs)
- Wide operating frequency spectrum
- Low insertion and return loss
- Mounting bracket and ground lead included
- CE approved

Coaxial Surge Protector - CSP



Part Number	Description
CSPNMF90	N-Type M to F, 72-108V
CSPNMF600	N-Type M to F, 480-720V
CSP1BN90	BNC-Type M to F, 72-108V
CSPBNC600	BNC-Type M to F, 480-720V
CSPNB90	Bulkhead N-Type F to F, 72-108V
CSPNB600	Bulkhead N-Type F to F, 480-720V

How to Choose the Correct CSP

For RF circuit protection the CSP is available with a choice of two nominal clamping voltages. The selection of the CSP unit is based on the peak transmitting power of the communication circuit. From this the peak circuit voltage is calculated and the CSP with the next highest clamping voltage is selected.

The formula is:

$$V_{\text{peak}} = V_{\text{SWR}} \times 1.4 \times \text{Sqrt}(50 \times \text{Transmit Power})$$

Where VSWR is the Voltage Standing Wave Ratio (use 1.5 if unsure) and Transmit Power is in Watts.

If $V_{\text{peak}} < 72\text{V}$ use CSPxxx90

If $V_{\text{peak}} > 72\text{V}$ & $< 480\text{V}$ use CSPxxx600

Grounding

Ground Rods



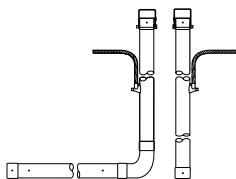
Figure 1



Figure 2

Part Number	Diameter	Figure	Standard Packaging	Length
Pointed Copper-Bonded Rods				
615850	5/8"	1	5	5'
615880	5/8"	1	5	8'
615800	5/8"	1	5	10'
613480	3/4"	1	5	8'
613400	3/4"	1	5	10'
Pointed Copper-Bonded Rod Couplings				
CC58	5/8"		25	
CC34	3/4"		25	
Sectional Copper-Bonded Rods				
635880	5/8"	2	5	8'
635800	5/8"	2	5	10'
633480	3/4"	2	5	8'
633400	3/4"	2	5	10'
Sectional Copper-Bonded Rod Couplers				
CR58	5/8"		25	
CR34	3/4"		25	

Chemical Ground Rod Electrode Kit



Part Number	Description
ECRV10 "xx" 4 "y"	10' Vert. w/4' Pigtail, Backfill Material, Cover
ECRV12 "xx" 4 "y"	12' Vert. w/4' Pigtail, Backfill Material, Cover
ECRV15 "xx" 4 "y"	15' Vert. w/4' Pigtail, Backfill Material, Cover
ECRV20 "xx" 4 "y"	20' Vert. w/4' Pigtail, Backfill Material, Cover
ECRH10 "xx" 4 "y"	10' Horiz. w/4' Pigtail, Backfill Material, Cover
ECRH12 "xx" 4 "y"	12' Horiz. w/4' Pigtail, Backfill Material, Cover
ECRH15 "xx" 4 "y"	15' Horiz. w/4' Pigtail, Backfill Material, Cover
ECRH20 "xx" 4 "y"	20' Horiz. w/4' Pigtail, Backfill Material, Cover

"xx" – Cable code for specified pigtail conductor (4/0 conc typical)

"y" – Pigtail orientation: U-up, D-down

Extended "sectional" versions available for rods longer than 20 feet.

Grounding

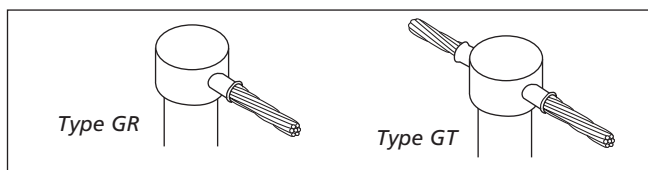
CADWELD ONE SHOT Connections

The CADWELD ONE SHOT consists of a ceramic mold, disk, F80 welding material and cover.

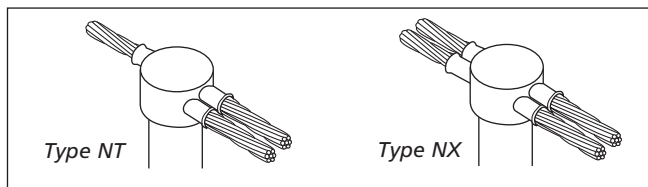
- Disposable ceramic unit eliminates graphite mold.
- Produces a permanent connection that will not loosen or corrode.
- Fits both plain or threaded copperclad and full size, steel and stainless steel rods.

Standard Package 6

Cable-To-Ground Rod



Ground Rod Size	Conductor Size		Connector Part Number	
	Solid	Stranded	Type GR	Type GT
1/2"	#6, 8 3, 4 1, 2	#8 4, 6 2, 3	SBGR1141G	SBGT1141G SBGT1141L SBGT1141V
5/8"	6, 8 3, 4 1, 2	8 4, 6 2, 3	SBGR1161G SBGR1161L SBGR1161V	SBGT1161G SBGT1161L SBGT1161V
3/4"	6, 8 3, 4 1, 2	8 4, 6 2, 3	SBGR1181G SBGR1181L SBGR1181V	SBGT1181G SBGT1181L SBGT1181V



Ground Rod Size	Conductor Size		Connector Part Number	
	Solid	Stranded	Type NT	Type NX
1/2"	#6, 8 3, 4 1, 2	#8 4, 6 2, 3	SBNT1141G SBNT1141L SBNT1141V	
5/8"	6, 8 3, 4 1, 2	8 4, 6 2, 3	SBNT1161G SBNT1161L SBNT1161V	SBNX1161G SBNX1161L SBNX1161V
3/4"	6, 8 3, 4 1, 2	8 4, 6 2, 3	SBNT1181G SBNT1181L SBNT1181V	SBNX1181G SBNX1181L SBNX1181V

Other sizes available - Contact Pentair with application.

Grounding

GEM Ground Enhancement Material



Part Number	Description
GEM25A	25 Pound Bag

A superior conductive material that helps solve the toughest grounding problems.

- Improves grounding effectiveness regardless of soil conditions.
- Can use where ground rods cannot be driven or where limited land area makes adequate grounding difficult with conventional methods.
- Unmatched for reducing earthing resistance and maintaining low resistance permanently.
- Effective - Typical resistivity 12-18 OHM cms (20 times lower than Bentonite clay)

Ground Testers

Earth Systems Tester Units



Part Number	Description
EST3640	Fall-of-Potential, ground resistance (2 & 3 Point) measurements
EST4620	4-Point Fall-of-Potential, 2 & 3-Point Fall-of-Potential, Step Voltage measurements
EST4630	4-Point Fall-of-Potential, 2 & 3-Point Fall-of-Potential, Step Voltage measurements
EST6472	4-Point Fall-of-Potential, 3-Point Fall-of-Potential, 3-Point Fall-of-Potential, 3-Point earth coupling measurements & frequency scan 40 to 513Hz noise

Grounding

Aluminum-Copper Grounding Stud

Aluminum Signal Mast

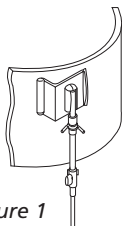


Figure 1

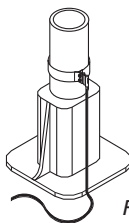


Figure 2

Part Number	Description (#6 Solid Copper Pigtail)	Figure Number
	Aluminum-Copper Grounding Stud	
SBB855E1G72	with 72" long Pigtail	1
SBB855E1G96	with 96" long Pigtail	1
	Signal Mast Grounding Clamp	
SBB852A8C1G48	with 48" long Pigtail - 3" to 8" Mast Dia.	2
SBB852A8C1G72	with 72" long Pigtail - 3" to 8" Mast Dia.	2
SBB852A12C1G96	with 96" long Pigtail - 3" to 12" Mast Dia.	2

Aluminum Signal Case

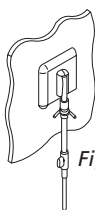


Figure 3

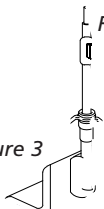


Figure 4

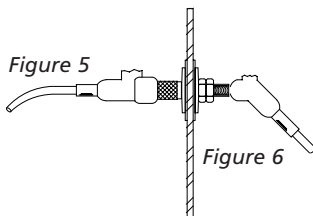


Figure 5

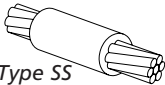
Figure 6

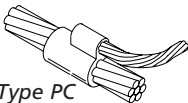
Part Number	Description	Figure Number
	Aluminum-Copper Grounding Stud	
SBB855C1G36	with 36" long Pigtail, #6 Solid	3
SBB855C1G48	with 48" long Pigtail, #6 Solid	3
SBB855C1K48	with 48" long Pigtail, #4 Solid	3
SBB855F1G48	with 36" long Pigtail, #6 Solid	4
SBB855G1G30	with 30" long Pigtail, #6 Solid	5
	Feed-Through Stud	
SBB853B	with Hardware	6
SBB853A72	with Hardware and 72" long Pigtail, #6 Solid	6

Other Pigtail sizes available.

Grounding

CADWELD Connections Cable-to-Cable

 Type SS		
Cable Size	Welder Part No.	F80 Welding Material
#6 Sol	SB02SS6	SB25
4	SB03SS1L	SB25
2	SB10SS1V	SB32
3/16"	SB02SS3	SB25
3/16"	SB02SS3001	SB32

 Type PC		
Cable Size	Welder Part No.	F80 Welding Material
Run #6 Sol	SB10PC66	SB32
Tap #6 Sol	SB02SC66001	SB25
#6 Sol	SB02SC65001	SB32
5/16"	SB02SC36001	SB25
#6 Sol	SB02SC33001	SB25
3/16"		
3/16"		

CADWELD ONE SHOT Connections

The CADWELD ONE SHOT consists of a ceramic mold, disk, F80 welding material and cover.

- Disposable ceramic unit eliminates graphite mold.
- Produces a permanent connection that will not loosen or corrode.

Standard Package 6

Cable-To-Cable

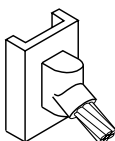
 Type PG		
Conductor Size		Parallel Tap Part Number
Solid	Stranded	
3, 4, 6	4, 6	SBPG11L

Grounding

Cable-to-Steel Structures

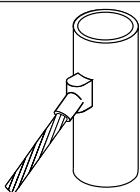
Flat Vertical Surface

Type VS



Cable Size	Welder Part No.	F80 Welding Material
Sol 4	SB01VS4	SB25
Sol 6	SB01VS6	SB25
Sol 6	SB01VS6001	SB32
Sol 8	SB01VS8	SB25
3/16"	SB01VS3	SB25

Round Vertical Surface

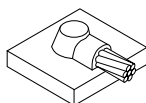


Cable Size	Welder Part No.	F80 Welding Material
Sol 6	SB01VS6V5C	SB25
Sol 6	SB01VS6V5C01	SB32

Grounding

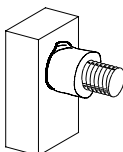
CADWELD Connections Cable-to-Steel Structures

Horizontal Flat Surface

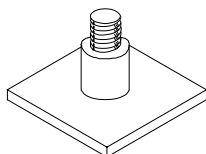


Type HA

Cable Size	Welder Part No.	F80 Welding Material
Sol 6 Sol 6	SB41HA6 SB41HA6001	SB32 SB25



Type HV

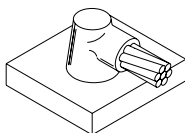


Type HX

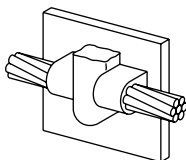
Cable Size	Welder Part No.	F80 Welding Material
1/4" AAR Split Stud	SB01HV10001 SB01HV10002 SB01HX10002	SB32 2-SB25 SB32

SBK012 - 1/4" Split Stud Kit (Includes AAR thread stud, washer, clamping nut and binding nut)

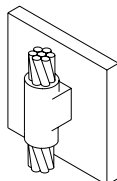
Other Types and Sizes Available



Type HS



Type VG



Type VV

Alpha-Numeric Listing

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22128P	25	B154A	17
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613480	42	B2516C	10
615800	42	B2700A2C1WH	33
615850	42	B2700HC36T	33
615880	42	B2700HC48T	33
633400	42	B2700HC60T	33
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715370	29	CC58	42
715375	29	CR34	42
715380	29	CR58	42
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715404	28	CSP1BN90	41
715412	27	CSPNB600	41
715685	27	CSPNB90	41
716203	29	CSPNMF600	41
716204	29	CSPNMF90	41
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716213	29	ECRH12"XX"4"Y"	42
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A140WT	18	ECRH20"XX"4"Y"	42
A154	20	ECRV10"XX"4"Y"	42
A203	20	ECRV12"XX"4"Y"	42
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A2364J	16	EPD100HZ240V	34, 36
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GCHSC89	23	SB20136	8
GCHSC910	23	SB20175	8
GCHSC1011	23	SB20175HF	8
GCHSC1214	23	SB22122	25
GCHSC1518	23	SB22127	24
GCHSC1924	23	SB22127A	24
GCHSC2530	23	SB25 11, 17, 46 - 48	
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RTB50S2	40	SBA206	20
RTB60S1	40	SBA2510B	21
S119	10	SBA2511B	21
S2044	10	SBA2512B	21
S2129	25	SBA252S0	21
S2659	10	SBA252S1	21
SB01HV10001	48	SBA252S2	21
SB01HV10002	48	SBA254A1	21
SB01HX10002	48	SBA255D1	21
SB01VS3	47	SBA258A1	22
SB01VS4	47	SBA258B1	22
SB01VS6	47	SBA258D1	22
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SB01VS6V5C	47	SBB200A	13
SB01VS6V5C01	47	SBB200B	13
SB01VS8	47	SBB200C	13
SB02SC33001	46	SBB200D	13
SB02SC36001	46	SBB200E	13
SB02SC65001	46	SBB2516A	10
SB02SC66001	46	SBB2516APRWH	10
SB02SS3	46	SBB2700A2B10	33
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SBB2721H	19	SBG20046	26
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SBB2721WS600	19	SBGR1181V	43
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SBB343C	11	SBGT1141V	43
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SBB343E	11	SBGT1161L	43
SBB394C	32	SBGT1161V	43
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SBB492	9, 10	SBGT1181L	43
SBB852A8C1G72	45	SBGT1181V	43
SBB852A8C1G48	45	SBHFT6A	9
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SBB855C1G48	45	SBHFT7K	9
SBB855C1K48	45	SBK012A	17
SBB855E1G72	45	SBK012B	17
SBB855E1G96	45	SBK104	25
SBB855F1G48	45	SBL165	24
SBB855G1G30	45	SBL165SA	24
SBC105R	13	SBM456	9, 10
SBC105SA	13	SBM456F	10
SBC105S	13	SBNT1141G	43
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SBPAJB"XX"	14	SBRT36100152	30
SBPAJC"XX"	14	SBRT36100177	30
SBPAJD"XX"	14	SBRTCB6667	30
SBPAJG"XX"	14	SBS09C	11
SBPAJN"XX"	14	SBS10	11
SBPAJP"XX"	14	SBS11C	11
SBPAJR"XX"	14	SBS12C	11
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SBRT1036060	31	SBS24884	8
SBRT1037590	31	SBS3086R48	18
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SBRT36000906	31	SBS8INSUL	17
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SBTBT21B	13	TDF10A120V	39
SBTBT21C	13	TDF10A240V	39
SBTBT21D	13	TDF20A120V	39
SBTBT21E	13	TDF20A240V	39
SBTBT6A	9	TDF3A120V	39
SBTBT6B	9	TDF3A240V	39
SBTBT6C	9	UTB110SP	40
SBTBT6D	9	UTB15SP	40
SBTBT6E	9	UTB30SP	40
SBTBT7B	9	UTB5SP	40
SBTBT7F	9	UTB60SP	40
SBTBT7G	9	UTBTA	40
SBTBTB4B	11		
SBTBTB4C	11		
SBTBTB4D	11		

Product Literature

Capabilities

R195S	Six Point Plan of Protection for Railway Facilities
R503B	Rail Products Brochure
X7A	Facility Electrical Protection Solutions

Grounding

E1A	CADWELD - Welded Electrical Connections
RT7F	GEM - Ground Enhancement Material

Lightning Protection

E256C	ERICO SYSTEM 2000 - Passive Protection
E429B	ERICO SYSTEM 3000 - Active Protection
R196S	Terminal Block
RT7J	Lightning Protection for Railway Electrical Equipment

Surge Protection

E430C	Catalog
R199S	EPD Primary Surge Protection Device
R558S	Electronic Track Circuit Protection
R601S	EPD 120V & 240V Secondary AC Surge Protection
R604S	EPD 12/24V ^{DC} 30A Secondary DC Surge Protection

Product Literature

Tools

R337S	SBG150 Portable Grinder
R408C	ERICO ERICONTACT Mechanical Connections to Rail
R464S	SBG100 Portable Grinder
R474S	SBG200 Portable Grinder

Training

R383D	Signal Bond Training CD
SBA7D	Installers & Inspectors Guide

Notes

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WARNING

Pentair products shall be installed and used only as indicated in Pentair's product instruction sheets and training materials. Instruction sheets are available at www.erico.pentair.com and from your Pentair customer service representative. Improper installation, misuse, misapplication or other failure to completely follow Pentair's instructions and warnings may cause product malfunction, property damage, serious bodily injury and/or death, and void your warranty.



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