

# SB<sub>a</sub> Connector Assembly Sheet

**For all models: 50, 175 and 350 amperes**

Two Pole Power Connectors with Single-piece Housings.

## Cross Section View



- Insulated Housings · Stainless Steel Springs · Silver and Tin Plated Contacts

## ASSEMBLY INSTRUCTIONS

For installation by a qualified electrician in accordance with national and local electrical codes and the following instructions. The suitability of this type of termination must be evaluated by Underwriter's Laboratories, Inc. and Canadian Association for the end use application.

Assemble contacts to the cables according to the equipment manufacturer's assembly instructions. The following instructions are supplied as a reference.

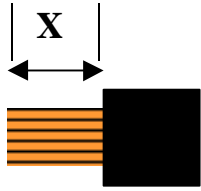
Please note:

Instructions are included with each crimp tool for terminating specific contacts. Use of non-Anderson Power crimp can effect UL & CSA Approval.

1. Strip cable to dimensions in Table A.
2. \* Crimp or solder contact to cable following Tables B, C and D.
3. Observing proper polarity, place contact in housing with notched side of tongue next to spring. (See cross section above).
4. Push contact and cable into housing until snaps over end of spring; tug slightly to make sure contact is locked into place.

- \* Soldering recommended for cables with solid or minimal conductor stranding (Ex. THHN type wire)

**Table A: Cable Stripping Dimensions**



Connector Series	"X" inches	"X" mm
SB50	9/16	14
SB175	1-1/8	29
SB350	1-3/8	35

**Table B: Recommended Soldering Techniques**

**Recommended Soldering Techniques**

Use rosin flux solder only. Wrap cable strands. Melt solder into well, heat, and insert stripped cable. Continue heating well until solder flows into wire, being careful not to overflow onto contact surfaces. Do not solder-dip contacts. Cable clamps for solder connections to unsupported leads (required by Underwriter's Laboratories, Inc.) are listed on Table E (over).

**Table C: Recommended Crimping Techniques**

SB Crimping Tool	Connector Rating	Wire Sizes AWG	Wire Sizes mm	Tool Part Number
Manual, noncycle controlled U-type crimping tool (1)	50 amps	#12-6	4.0 - 16.0	1351G3
Manual, cycle controlled U-type crimping tool	50 amps	#16 - 6	1.5 - 16.0	1352G1
Pneumatic, cycle controlled 4-indent crimping tool	50, 175 or 350	#16 - 4/0	1.5 - 107.0	1387G1 (3)
Hydraulic, noncycle controlled 4-indent crimping tool amps	175 or 350	#10 - 4/0	6.0 - 107.0	1368

- Notes:
1. Use appropriate Reducing Bushings for smaller cable sizes (Selected from table D).
  2. For appropriate crimping die set, see APP® catalog or consult factory.
  3. For high volume crimping (reeled contacts), see APP® catalog or consult factory.

PLEASE CONSULT YOUR AUTHORIZED ANDERSON REPRESENTATIVE FOR RECOMMENDED TERMINATION TOOLING.

**Table D: Contact Well Reducing Bushing**

<u>Catalog Number</u>	<u>For Use With</u>	<u>AWG Wire Size</u>
5912	SB50	#6 to #8
5910		#6 to #10 & #12
5913		#6 to #14 & #16
5687	SB175	1/0 to #1
5690		1/0 to #2
5693		1/0 to #4
5663		1/0 to #6
5648		1/0 to #10
5918	SB350	2/0 to 1/0

**Table E: Cable Clamp Catalog Numbers**

<u>Connector Series</u>	<u>For Two Single Conductor Cables</u>	<u>For One Twin Conductor Cables</u>	<u>For Single Conductor with "A" Frame Handle</u>
SB50	990 & 990G1	5905	
SB175	945	946G1	945G3
SB350	911	N/A	996G1

## **Disassembling Unmated SB<sub>a</sub> Housing Connector**

**Switch off power.** Remove contacts by depressing springs at the front end of the connector with an insulated screwdriver having a 1/4" blade. Pull the contact lightly out of the housing.

### **RECOGNITION**

Recognized under the Component Program of Underwriter's Laboratories, In.® File E26226, CSA Certified under Report LR25154. UL and CSA Reference.

### **PATENT INFORMATION**

SB® connectors are covered by one or more of the following patents:

U.S. 241, 649; 2,838, 739; 3,654, 586; 3,909,099.

Canada: 598, 493; 651, 109; 923, 589.

United Kingdom: 931,658; 1,295,598.

French Publication Number: 2,084,951.

France: 71,09872.

Other patents pending.

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