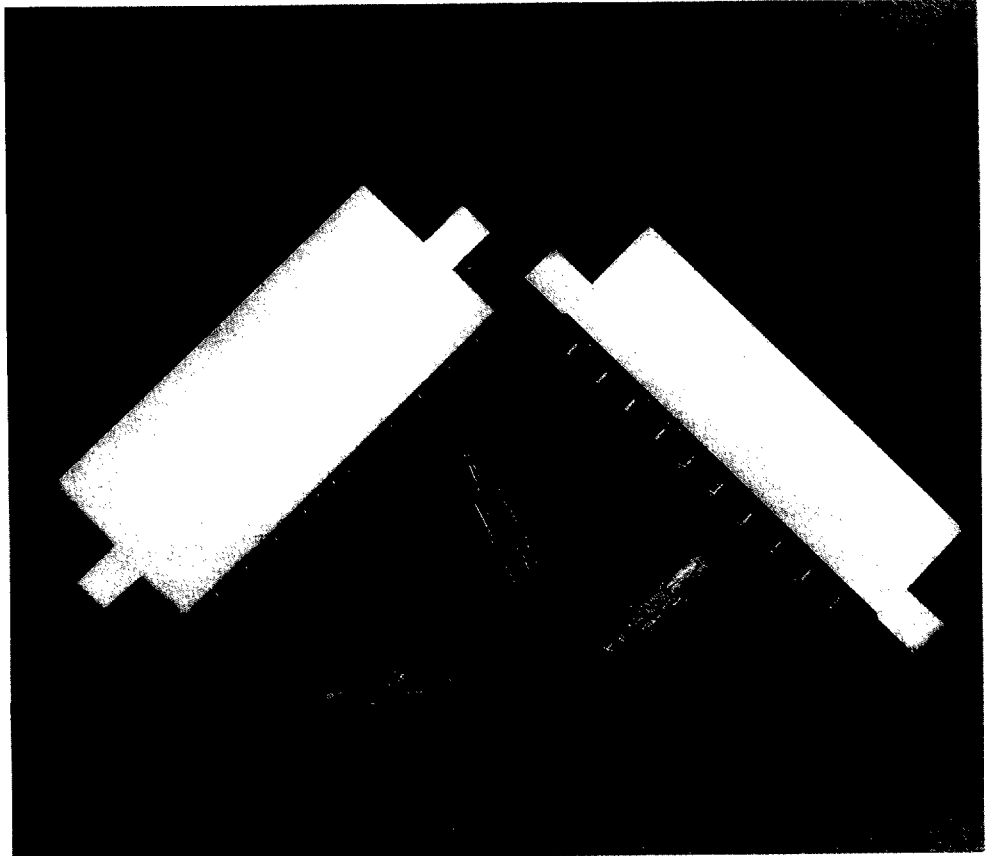


A-61-41-90 D

## High Current Connectors

### Product Facts

- High current capability up to 30 amperes\*
- UL rated 94V-0 glass-filled thermoplastic housings
- Choice of wire-to-board and board-to-board (solder tail) connector configurations in 3, 4, 8, 9, 10 and 12 contact sizes
- Heavy duty contacts made of high conductivity copper alloy with tin-over-nickel plating
- Contacts on .312 [7.92] centers
- Large redundant areas of contact assure excellent electrical continuity
- Connectors available for mating with .062 [1.57], .093 [2.36] and .125 [3.18] thick double-sided PC boards
- Contacts furnished in strip form for automatic machine termination and loose form for hand tool application
- Recognized under the Component Program of Underwriters Laboratories Inc. File No. E28476
- Certified by Canadian Standards Association File No. LR 7189



AMP High Current Edge Connectors are an economical answer to the costly problem of interconnecting high current printed circuitry. Designed for a current capability of up to 30 amperes\*, these connectors feature UL rated 94V-0, rugged glass-filled thermoplastic housings and high conductivity copper alloy contacts with bright tin-over-nickel plating. Contacts are on .312 [7.92] centers.

Connectors are available in 3, 4, 8, 9, 10 and 12 contact positions and in a choice of two styles for board-to-board and wire-to-board applications.

The board-to-board connectors are supplied preloaded with solder tail contacts and are designed to mate with .062 [1.57] thick double-sided daughter boards.

Wire-to-board housings are available with and without mounting ears and with capabilities of mating with .062 [1.57], .093 [2.36] and .125 [3.18] thick double-sided daughter boards. These housings are designed to accept crimp, snap-in contacts which can accommodate a wire size range of 16-10 AWG [1.25-6 mm<sup>2</sup>]. Contacts are furnished in strip form for automatic machine termination and in loose form for hand tool application.

While the basic contact is designed to carry 30 amperes\* of current, the actual number of contacts in a connector carrying 30 amperes is limited by the "T" rise of the connector and the PC board.

### Performance Specifications

**Contact Current Rating\*:**  
30 amperes, max.

**Dielectric Withstanding Voltage (Sea Level):**  
1800 VAC

**Operating Voltage:**  
250 VAC, max.

**Insulation Resistance:**  
1000 megohms, min.

**Contact Resistance @ 30 amperes:**  
2 milliohms, max.

**Operating Temperature:**  
-40°C to +95°C

**Contact Engagement Force:**  
40 oz. [11.12 N], max.

**\*When used with a .180 [4.57] wide double-sided PC board with 5 oz. [0.14 Kg] min. copper each side. Consult AMP engineering when paralleling contacts for power applications.**

## High Current Connectors (Continued)

### Crimp, Snap-In Contacts

#### Material and Finish:

Copper alloy CDA-195 plated .000150  
[0.00381] bright tin over .000030  
[0.00076] nickel

#### Related Product Data:

**Performance Specifications**—  
page 142

**Connector Housings**—page 144

**Application Tooling**—pages 165, 166

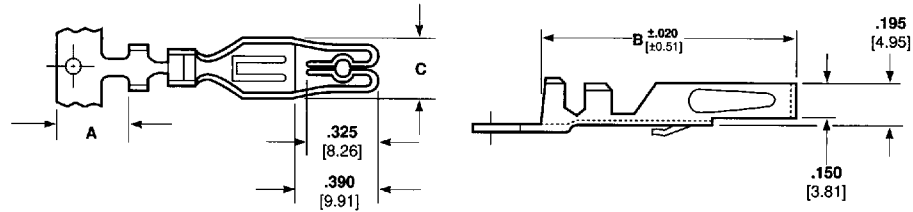
#### Technical Documents

(pages 172, 173):

AMP Product Specification  
108-9045

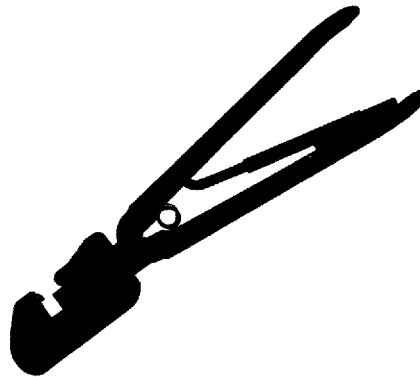
AMP Application Specification  
114-9005

AMP Instruction Sheets 408-7782,  
408-7783, 408-7802



Wire Size Range		Ins. Dia. Range	Dimensions			Mateable Daughter Board Thickness	Contact Part Numbers		Applicator for AMP-O-ELECTRIC Machine	Hand Tool 69710-1 Die Insert
AWG	mm <sup>2</sup>		A	B	C		Loose Piece	Strip Form		
16-14	1.25-2	.090-.145	.260	1.160	.285	.062 1.57	530518-1	530517-2	466439-2	90333-1
		2.29-3.68	6.60	29.46	7.24					
12-10	3-6	.160-.210	.190	1.230	.285	.062 1.57	530520-1	530519-2	466438-2	90332-1
		4.06-5.33	4.83	31.24	7.24					

\*Applicators are for Model "K" machines. Consult AMP for applicators for other bench machines and lead-making machines.



Hand Crimping Tool  
69710-1



Extraction Tool  
91116-1

07F ■ 0797312 0030768 218 ■