











## B. Soldering Guidelines

Eurostyle Connectors can be soldered using wave or equivalent soldering techniques. Refer to Manual 402-40 for soldering guidelines. The temperatures and exposure time shall be as specified in Figure 7.

### NOTE



*SMT High Temperature Connectors that are compatible with typical surface mount soldering techniques are also available. They can withstand a maximum temperature of 260° C [500° F] for 1 minute maximum.*

SOLDERING PROCESS	TEMPERATURE●		TIME (At Max Temp)
	CELSIUS	FAHRENHEIT	
Wave Soldering	250°	482°	5 Seconds

●Wave Temperature (Under PC Board)

Figure 7

## C. Reflow Parameters

Due to the many variables involved with the reflow process (ie, component density, orientation, etc), we recommend that the user conduct trial runs under actual manufacturing conditions to ensure product and process compatibility.

## D. Cleaning

After soldering, removal of fluxes, residues, and activators is necessary. Consult with the supplier of the solder paste and flux for recommended cleaning solvents. The following is a listing of common cleaning solvents that will not affect the connectors. The connectors will be unaffected by any of these solvents for the time and temperatures listed in Figure 8.

Cleaners must be free of dissolved flux and other contaminants. We recommend cleaning with the pc board on its edge. If using an aqueous cleaner, we recommend standard equipment such as a soak-tank or an automatic in-line machine.

### CAUTION



*Even when using “no clean” solder paste, it is imperative that the contact interface be kept clean of flux and residue, since it acts as an insulator. Flux may migrate under certain conditions with elevated temperatures and, therefore, cleaning is necessary even with “no clean” paste.*

CLEANER		TIME (Minutes)	TEMPERATURES (Maximum)	
NAME	TYPE		CELSIUS	FAHRENHEIT
Alpha 2110■	Aqueous	1	132	270
Bioact EC-7◆	Solvent	5	100	212
Butyl Carbitol●	Solvent	1	Room Ambient	
Isopropyl Alcohol	Solvent	5	100	212
Kester 5778⚡	Aqueous	5	100	212
Kester 5779⚡	Aqueous	5	100	212
Loncoterge 520●	Aqueous	5	100	212
Loncoterge 530●	Aqueous	5	100	212
Terpene Solvent	Solvent	5	100	212

■ Product of Fry's Metals, Inc.    ◆ Product of Petroferm, Inc.    ● Product of Union Carbide Corp.    ⚡ Product of Litton Systems, Inc.

Figure 8

### DANGER



*Consideration must be given to toxicity and other safety requirements recommended by the solvent manufacturer. Trichloroethylene and Methylene Chloride can be used with no harmful affect to the connectors; however, Tyco Electronics does not recommend them because of the harmful occupational and environmental effects. Both are carcinogenic (cancer-causing) and Trichloroethylene is harmful to the earth's ozone layer.*

**NOTE**

*If you have a particular solvent that is not listed, contact the Product Information number at the bottom of page 1.*

**E. Drying**

Air drying of cleaned connectors is recommended. Temperature for the connectors should not exceed  $-40$  to  $105^{\circ}\text{C}$  [ $-40$  to  $221^{\circ}\text{F}$ ]. Degradation of the housings could result from extreme temperatures.

**3.8. Repair**

Damaged wires can be removed from screw clamp connectors and replaced. If a post in a header is damaged, it can not be repaired; the solder must be removed and the header must be replaced with a new one.

**4. QUALIFICATIONS**

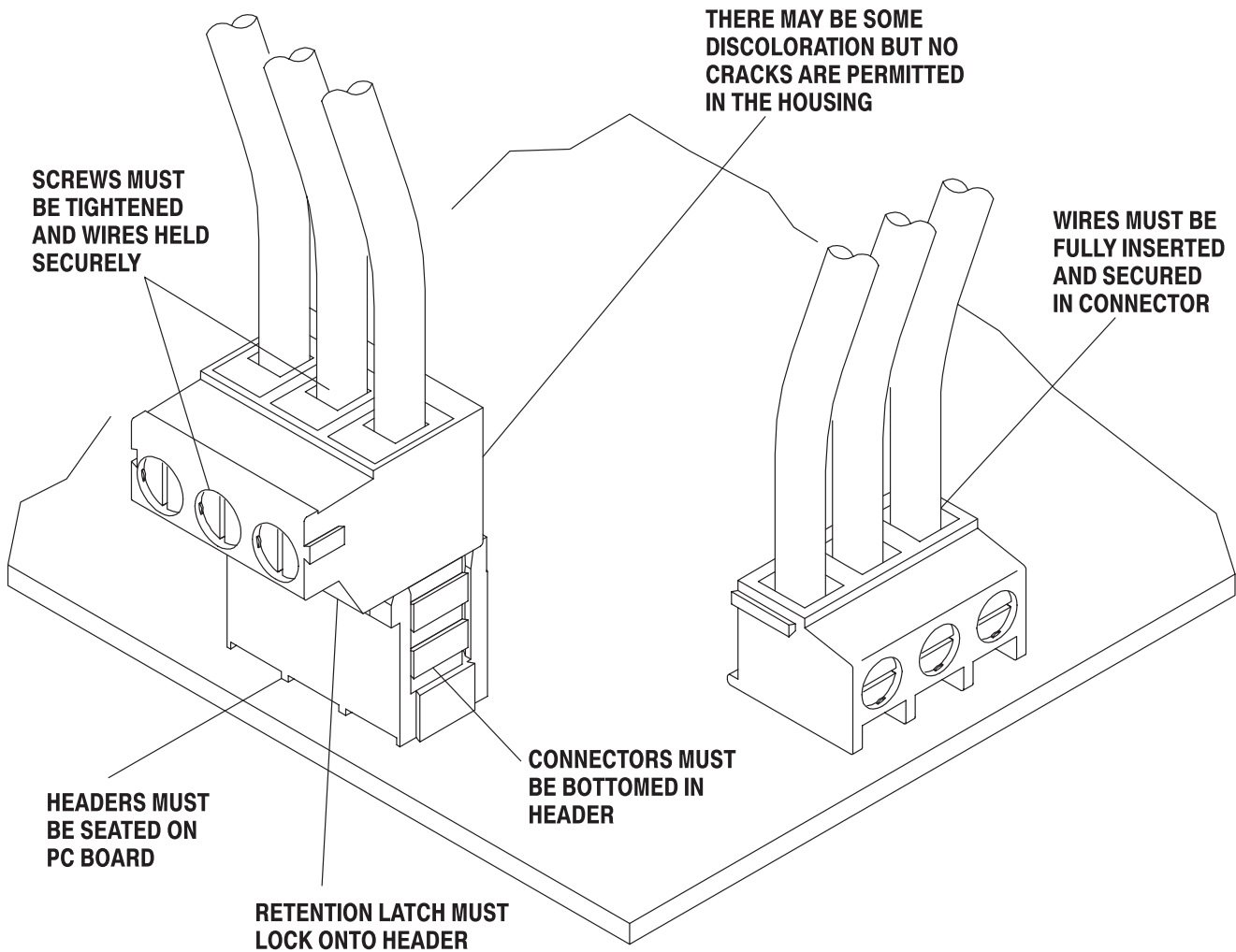
Terminal Block Stacking Connectors are Recognized by Underwriters Laboratories Inc. (UL) in File Number E66717 and certified to CSA International in File LR7189. The Istituto Italiano del Marchio di Qualita (IMQ) certifies these products to IEC 998-1 and 998-2-1.

**5. TOOLING**

The only tooling required to attach the wire to these connectors is a flat-bladed screwdriver 785730-[ ]. Refer to Figure 4 for specific usage.

## 6. VISUAL AID

Figure 9 shows typical application of Terminal Block Stacking Connectors and calls out the conditions that production personnel should check to ensure a good installation. For dimensional inspection, refer to the details in the preceding pages of this specification.



**FIGURE 9. VISUAL AID**