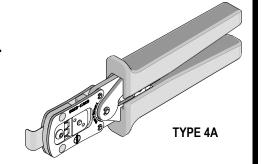


# HAND CRIMP TOOL **SPECIFICATION SHEET** Order No. 63819-4600



## **FEATURES**

- A full cycle ratcheting hand tool ensures complete crimps
- Ergonomically designed soft handles
- Precisely designed crimping profiles with simple contact positioning
- Easy handling due to outstanding force ratio
- % A-620 Class 2 compliant
- RoHS compliant although not required

# **SCOPE**

Products: 1.50mm (.059") Pitch CLIK-Mate™ Wire-to-Board Crimp Terminal 24-28 AWG (0.08 and 0.20mm²).

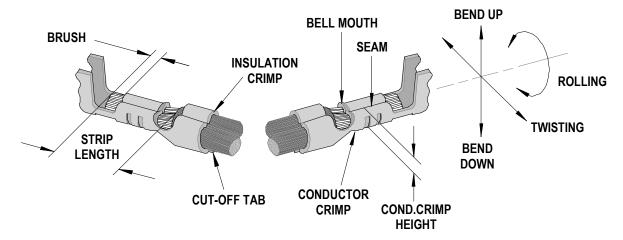
Terminal	Terminal	Wire Size			Insulation	Strip Length				
Series No.	Termina			IPC/WHI	MA-A620 <b>◆</b>	Term	inal 🔷 🔶	Strip Length		
Selles No.	Loose Piece	*Reel	AWG	mm²	mm	ln.	mm	ln.	mm	ln.
502579	502579-0100	502579-0000	24	0.20	0.97-1.20	0.038- 0.047	0.80-1.20	0.031- 0.047		.059075
			26		097 -1.20	0.038 - 0.047	0.80-1.20	0.031- 0.047	1.50-1.90	
			28	0.080	0.97 –1.17	0.035 - 0.046	0.80-1.20	0.031- 0.047		

\* Customer to cut off terminal from reel: 0.15mm (.006") maximum Cut-off Tab.

◆To achieve optimum IPC-A620 Class 2 insulation crimps, use this insulation OD using UL1061 wire.

♦ Overall insulation OD specification for terminal.

## **DEFINITION OF TERMS**



The above terminal drawing is a generic terminal representation. It is not an image of a terminal listed in the scope.

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# **CONDITIONS:**

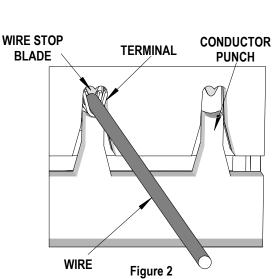
After crimping, the crimp profiles should measure the following (see notes on page 4).

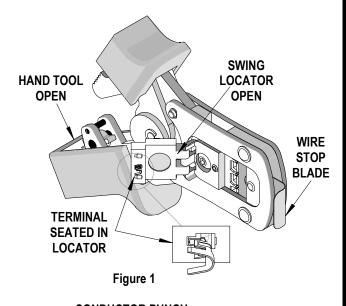
	Wire Size		Conductor Crimp				Insulation Crimp				Pull Force		*Profile		
Terminal			Height (Ref)		Width (Ref)		Height (Ref)		Width (Ref)		Minimum		*FIOIIIe		
Series No.	AWG	mm²	mm	ln.	mm	ln.	mm	ln.	mm	ln.	N	Lb.	28 AWG 0.08mm <sup>2</sup>	24 AWG 0.20 mm <sup>2</sup>	26 AWG
	24	0.20	0.60-0.65	.024026			1.65	.065			29.4	6.6		Χ	
502579	26		0.59-0.64	.023025	1		1.55	.061	-		19.6	4.4			Χ
	28	80.0	0.56-0.61	.022024	-	-	1.45	.057		-	9.8	2.20	Χ		

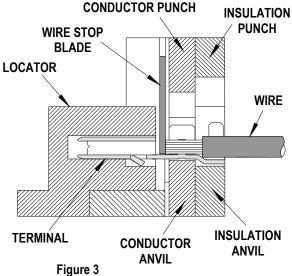
#### **OPERATION**

Open the tool by squeezing the handles together, at the end of the closing stroke, the ratchet mechanism will release the handles, and the hand tool will spring open.

- 1. With the hand tool in the open position, pivot the terminal locator open by pulling up on the locator knob and lift the wire stop blade up. See Figure 1.
- Insert the terminal into the correct profile until the terminal is fully seated and stops. Make sure the wire stop blade is fully seated on the terminal behind the conductor grip section.
- 3. Gently pivot the locator closed.
- 4. Bring down the wire stop blade.







- 5. Slide the pre-stripped wire into the terminal; make sure to aim the wire brush towards the tip point on the wire stop blade. See Figure 2. Align the wire so that it is parallel and sitting into the terminal. Maintain a light and constant pressure on the wire that is seated in the terminal at all times. (Do not let go of the wire.) Be sure to hold the wire and terminal in place until the terminal is fully crimped. See Figure 3.
- 6. Close the tool until the ratchet releases.

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- 7. Lift the wire stop blade up.
- 8. Carefully remove the crimped terminal.

**Note:** To maintain a good brush control and a consistent bell mouth the crimping instructions must be followed.

#### Maintenance

It is recommended that each operator of the tool be made aware of, and responsible for, the following maintenance steps:

- 1. Remove dust, moisture, and other contaminants with a clean brush, or soft, lint free cloth.
- 2. Do not use any abrasive materials that could damage the tool.
- 3. Make certain all pins; pivot points and bearing surfaces are protected with a thin coat of high quality machine oil. Do not oil excessively.
- 4. When tool is not in use, keep the handles closed to prevent objects from becoming lodged in the crimping dies, and store the tool in a clean, dry area.

# Miscrimps or Jams (See Figure 5)

Should this tool ever become stuck or jammed in a partially closed position, **Do Not** force the handles open or closed. The tool will open easily by pushing the ratchet release lever.

# Warranty

This tool is for electrical terminal crimping purposes only. This tool is made of the best quality materials. All vital components are long life tested. All tools are warranted to be free of manufacturing defects for a period of **30 days**. Should such a defect occur, we would exchange the tool free of charge. This will not be applicable to altered, misused, or damaged tools. This tool is designed for hand use only. Any clamping, fixturing, or use of handle extensions voids this warranty.

Hand held crimping tools are intended for low volume, prototyping, or repair requirements only.

**CAUTION:** Repetitive use of this tool should be avoided.

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## Notes:

- 1. This tool should only be used for the terminals and wire gauges specified on this sheet.
- 2. This tool is not adjustable. Variations in tools, terminals, and wire stranding and insulation types may affect crimp height.
- 3. This tool is intended for standard conductor sizes. It may not give a good insulation crimp support for all insulation sizes.
- 4. Molex does not repair hand tools (see warranty above). The replacement parts listed are the only parts available for repair. If the handles or crimp tooling is damaged or worn, a new tool must be purchased.
- 5. Pull force should be used as the final criteria for an acceptable crimp. Pull force is measured with no influence from the insulation crimp. The insulation should be stripped long (1/2 in.) so the insulation grips on the terminal do not grip the wire insulation or the conductor. Refer to Molex Quality Crimping Handbook 63800-0029 for additional information on crimping and crimp testing.
- 6. Molex does not certify crimp hand tools.

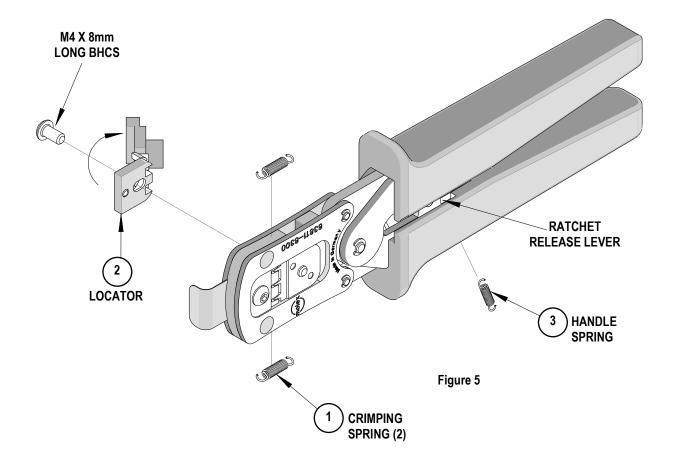
**CAUTION**: Molex crimp specifications are valid only when used with Molex terminals, applicators and tooling.

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# **PARTS LIST**

Item Number	Order Number	Description	Quantity
1	63600-0520	Crimping Spring	2
2	63819-4675	Locator	1
3	63600-0525	Handle Spring	1



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