

Mini-Mac Applicator

Application Tooling Specification Sheet



Order No. 63891-8100

FEATURES

- Directly adapts to most automatic wire processing machines
- Applicator designed to industry standard mounting and shut height 135.80mm (5.346")
- Quick set-up time; plus the crimp height, track and feed adjustments can be set without removing the applicator from the press
- Fine adjustment allows users to achieve target with little effort by adjusting in increments of .015mm (.0006") for conductor crimp height and .063mm (.0025") for insulation height
- Independent adjustment rings allow users to quickly adjust the conductor or insulation crimp height without affecting each other.

SCOPE

Products: Board-In-Crimp Terminal, 18-24 AWG.

Terminel	Terminal Order No.			Wire Size		Insulation Diameter				Strip Length	
Terminal Series No.						IPC/WHMA-A620 (1)		Terminal (2)			
Selles NO.				AWG	mm²	mm	In.	mm	In.	mm	In.
	08-70-0106	39-00-0276	98-00-0193								
5298	39-00-0132	39-00-0277	98-00-0194	18-24	0.80-0.20	2.50-2.95	.098116	1.70-3.05	.067120	5.00-6.00	.200240
	39-00-0230			1							
(1) To achieve optimum IPC-A620 Class 2 insulation crimp, use this insulation diameter											
(2) Overall insulation diameter specification for terminal											

(2) Overall insulation diameter specification for terminal.

Applicator 63891-8300 should be used for insulation OD 1.70-2.20mm.



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CRIMP SPECIFICATIONS

	Wire Size		Dimensions (Figure 1)							Pull Force	
Terminal Series No.			D		E-E		F (Ref.)		Minimum		
	AWG	mm ²	mm	In	mm	In.	mm	In.	Ν	Lb.	
	18	0.80	1.14	.045	1.70-1.78	.067070	1.40	.055	13.30	3.0	
5298	20	0.50	1.14	.045	1.70-1.78	.067070	1.40	.055	13.30	3.0	
5290	22	0.35	1.14	.045	1.70-1.78	.067070	1.40	.055	13.30	3.0	
	24	0.20	1.14	.045	1.70-1.78	.067070	1.40	.055	13.30	3.0	

After crimping, the conductor profiles should measure the following (See Figure 1).

► The crimp on this terminal is not an electrical crimp; the final soldering operation is the electrical connection. This minimum force is what should be expected when pulling the terminal with both insulation and conductor crimped.

Notes:

1. The Conductor crimp (D dimension on Figure 1) should be set at the maximum height to contain all wire strands, meet minimum pull, and fit into the PCB Hole. Shimming may be required of the conductor punch to optimize this for different wire types.

PARTS LIST

Mini-Mac Applicator 63891-8100									
Item	Order No	Engineering No.	Description	Quantity					
Perishable Tooling									
	63891-8170	63891-8170	Tool Kit (All "Y" Items)	REF					
1	11-18-4393	60730A104	Conductor Punch	1 Y					
2	11-18-4391	60730A102	Combination Anvil	1 Y					
3	11-18-5343	60730B138	Insulation Punch	1 Y					
4	11-18-5342	60730B136	Barrel Form Punch	1 Y					
5	11-18-4032	60705A106	Cut-Off Plunger	1 Y					
6	11-18-4033	60705A107	Cut-off Plunger Retainer	1 Y					
7	11-18-5406	60730B105	Knock-Out Blade	1 Y					
Other Components									
8	11-18-4083	60707-8	Feed Guide	1					
9	11-18-4277	60702A108	Rear Plunger Retainer	1					
10	11-18-4278	60702A109	Rear Plunger Striker	1					
11	11-18-4394	60758A109	Wire Stop	1					
12	11-18-4848	60800A123	Spring Retainer	1					
13	11-18-4849	60800A124	Wire Hold down Spring	1					
14	11-18-5116	60804A141	Compression Spring (Knock-Out)	1					
15	11-18-5380	60712G124	Tooling Washer	1					
16	11-24-1067	4996-4	Cut-off Plunger Spring	2					
17	63443-6130	63443-6130	Rear Cover	1					
18	63466-0502	63466-0502	Front Plunger Striker	1					
19	63803-5121	63803-5121	Conductor Bushing	1					
Frame									
20	63801-3201	63801-3201	Тор	1					
21	63801-3282	63801-3282	Base	1					
22	63801-6550	63801-6550	Track	1					
		Ha	ardware						
23	N/A	N/A	M3 by 6 Long SHCS	2**					
24	N/A	N/A	M4 by 8 Long SHCS	2**					
25	N/A	N/A	M4 by 12 Long BHCS	2**					
26	N/A	N/A	M8 by 30 Long BHCS	1**					
27	N/A	N/A	#6-32 by 3/8 Long BHCS	1**					
28	N/A	N/A	#6-32 by 3/8 Long SHCS	1**					
29	N/A	N/A	#8-32 by 3/8 Long BHCS	4**					
** Available from an industrial supply company such as MSC (1-800-645-7270).									



NOTES

- 1. Molex recommends an extra perishable tooling kit be maintained at your facility.
- 2. Verify tooling alignment by manually cycling the press and applicator before crimping under power. Check that all screws are tight.
- 3. Slugs, terminals, dirt, and oil should be kept clear of work area.
- 4. Wear safety glasses at all times.
- 5. For recommended maintenance refer to the Mini-Mac Manual.

CAUTION: This applicator should only be used in a press with a shut height of 135.80 mm (5.346"). Tooling damage could result at a lower setting

CAUTION: To prevent injury, never operate this applicator without the guards supplied with the press or wireprocessing machine in place. Reference the press or wire processing manufacturer's instruction manual.

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

Contact Information

For more information on Molex application tooling please contact Molex at 1-800-786-6539.

Visit our Web site at http://www.molex.com