

Application Tooling Specification Sheet



Order No. 63891-7000

FEATURES

Mini-Mac Applicator

- 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: Sabre™ Female Flat Blade Crimp Terminal, (2) 18 AWG.

| Terminal Series No. | Terminal Order No. | Wire Size | | Insulation | Diameter | Strip Length | |
|---|--------------------|---------------------|----------|------------|----------|--------------|---------|
| terminal Series No. | rerminal Order No. | AWG mm ² | mm | ln. | mm | In. | |
| 43374 | 43374-1001 | 18 (2) | 0.80 (2) | 2.80 (2) | .110 (2) | 3.96-5.54 | .156218 |
| 43375 43375-1001 18 (2) 0.80 (2) 2.80 (2) .110 (2) 3.96-5.54 .1562 | | | | | | | .156218 |
| This applicator provides a special narrow insulation crimp. For use in 6313, 43275, and 41644-24 housings. For standard 4 80mm wide insulation crimp applications, use 63891-6100 applicator | | | | | | | |



CRIMP SPECIFICATIONS

| Terminal Series No. | Bell n | nouth | Cut-off 1 | ab Max. | Conductor Brush | | |
|---------------------|-----------|---------|-----------|---------|------------------------|-----------|--|
| Terminal Series No. | mm | ln. | mm | ln. | mm | ln. | |
| 43374 | 0.20-0.50 | .008020 | 0.30 | .012 | 0.76 Max. | .030 Max. | |
| 43375 | 0.20-0.50 | .008020 | 0.30 | .012 | 0.76 Max. | .030 Max. | |

| | Bend up Bend down Degree | | Twist Roll | | Punch Width (Ref) | | | | Seam |
|----------------------------|-----------------------------|---|------------|---|-------------------|------|------------|------|-------------------------|
| Terminal Series No. | | | | | Conductor | | Insulation | | |
| | | | Degree | | mm | In | mm | In | Seam shall not be open |
| 43374 | 3 | 3 | 4 | 8 | 2.50 | .098 | 3.90 | .154 | and no wire allowed out |
| 43375 | 3 | 3 | 4 | 8 | 2.50 | .098 | 3.90 | .154 | of the crimping area |

After crimping, the conductor profile should measure the following.

| | Terminal Series No. | Wire | e Size | Cond Crimp | uctor Height | Pull Force Minimum | |
|---|---------------------|--------|-----------------|---------------|-----------------|--------------------|-----|
| | | AWG | mm ² | mm | ln. | N | Lb. |
| ĺ | 43374 | 18 (2) | 0.80 (2) | 1.47-1.57 | .058062 | 88.9 | 20 |
| | 43375 | 18 (2) | 0.80 (2) | 1.47-1.57 | .058062 | 88.9 | 20 |

<u>* Tool Qualification Notes:</u>

- 1. Pull Force should be measured with no influence from the insulation crimp.
- 2. The above specifications are guidelines to an optimum crimp.

PARTS LIST

| Mini-Mac Applicator 63891-7000 | | | | | | | | | |
|--------------------------------|--------------------------------------|------------|---------------------------------|-----|--|--|--|--|--|
| ltem | Order No Engineering No. Description | | | | | | | | |
| Perishable Tooling | | | | | | | | | |
| | 63891-7070 | 63891-7070 | 1-7070 Tool Kit (All "Y" Items) | | | | | | |
| 1 | 11-18-5418 | 60843A106 | Conductor Punch | 1 Y | | | | | |
| 2 | 63445-2562 | 63445-2562 | Conductor Anvil | 1 Y | | | | | |
| 3 | 11-18-5414 | 60842A108 | Insulation Punch | 1 Y | | | | | |
| 4 | 63445-3947 | 63445-3947 | Insulation Anvil | 1 Y | | | | | |
| 5 | 63443-0002 | 63443-0002 | Front Cut-Off Plunger | 1 Y | | | | | |
| 6 | 63443-0012 | 63443-0012 | Cut-off Plunger Retainer | 1 Y | | | | | |
| | | Other Com | ponents | | | | | | |
| 7 | 11-18-5007 | 60800D114 | Hold Down Plunger Spring | 1 | | | | | |
| 8 | 11-18-5115 | 60805A119 | Wire Stop/Stripper | 1 | | | | | |
| 9 | 11-18-5410 | 60832A141 | Hold Down Block | 1 | | | | | |
| 10 | 11-18-5411 | 60832A142 | Spring Retainer | 1 | | | | | |
| 11 | 11-18-5412 | 60832A143 | Hold Down Plunger | 1 | | | | | |
| 12 | 11-18-5420 | 60843A111 | Anvil Mount | 1 | | | | | |
| 13 | 11-18-5442 | 60843A123 | Front Cover | 1 | | | | | |
| 14 | 11-24-1067 | 4996-4 | Cut-off Plunger Spring | 1 | | | | | |
| 15 | 63443-0009 | 63443-0009 | Scrap Chute | 1 | | | | | |
| 16 | 63443-0021 | 63443-0021 | Lower Tooling Key | 1 | | | | | |
| 17 | 63443-6125 | 63443-6125 | Rear Cover | 1 | | | | | |
| 18 | 63803-5105 | 63803-5105 | Conductor Bushing | 1 | | | | | |
| 19 | 63830-3001 | 63830-3001 | Plunger Striker | 1 | | | | | |
| 20 | 63830-3005 | 63830-3005 | Tooling Washer | 1 | | | | | |
| Frame | | | | | | | | | |
| 21 | 63801-3201 | 63801-3201 | Тор | 1 | | | | | |
| 22 | 63801-3282 | 63801-3282 | Base | 1 | | | | | |
| 23 | 63801-6550 | 63801-6550 | Track | 1 | | | | | |
| | | Hardw | /are | | | | | | |
| 24 | N/A | N/A | M3 by 6 Long SHCS | 4** | | | | | |
| 25 | N/A | N/A | M4 by 6 Long SHCS |]** | | | | | |
| 26 | N/A | N/A | M4 by 10 Long BHCS | 2** | | | | | |
| 27 | N/A | N/A | M4 by 12 Long BHCS | 2** | | | | | |
| 28 | N/A | N/A | M4 by 12 Long SHCS | 2** | | | | | |
| 29 | N/A | N/A | M4 by 25 Long SHCS | 2** | | | | | |
| 30 | N/A | N/A | M5 by 10 Long SHCS |]** | | | | | |
| 31 | N/A | N/A | M8 by 20 Long BHCS |]** | | | | | |
| 32 | N/A | N/A | 3MM by 6 Long Roll Pin |]** | | | | | |
| ** A | | | | | | | | | |



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 wire-processing 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