

820i™ Programmable HMI Indicator/Controller

Panel Mount Enclosure Installation Instructions

This document contains drawings, replacement parts lists, and instructions for installing panel mount models of 820i indicators. See the *820i Installation Manual*, PN 93018, for general installation and configuration and calibration information.



The 820i has no on/off switch. Before opening the unit, ensure the power cord is disconnected from the power outlet.

Use a wrist strap for grounding and to protect components from electrostatic discharge (ESD) when working inside the indicator enclosure.

This unit uses double pole/neutral fusing which could create an electric shock hazard. Procedures requiring work inside the indicator must be performed by qualified service personnel only.

The supply cord serves as the power disconnect for the 820i. The power outlet supplying the indicator must be installed near the unit and be easily accessible.

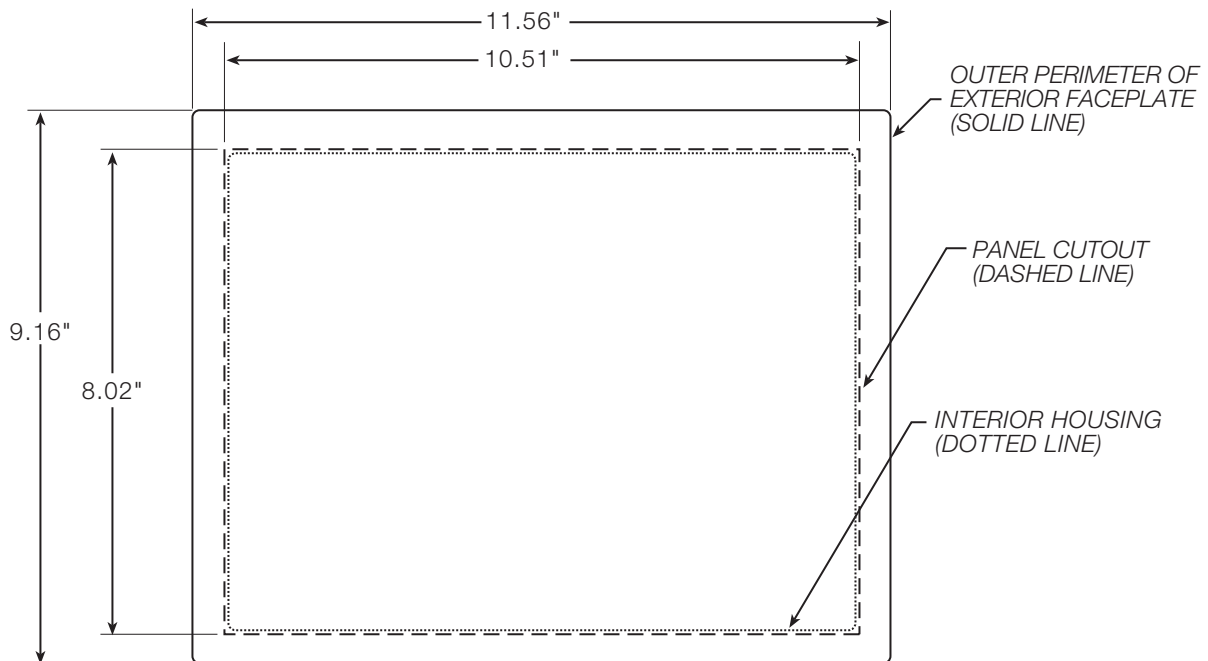


Figure 1. Panel Cutout for Panel Mount Enclosure



1.1 Installation

Use the dimensions shown in Figure 1 on page 1 to lay out the panel cutout for the panel mount enclosure. See Figure 2 for enclosure dimensions.

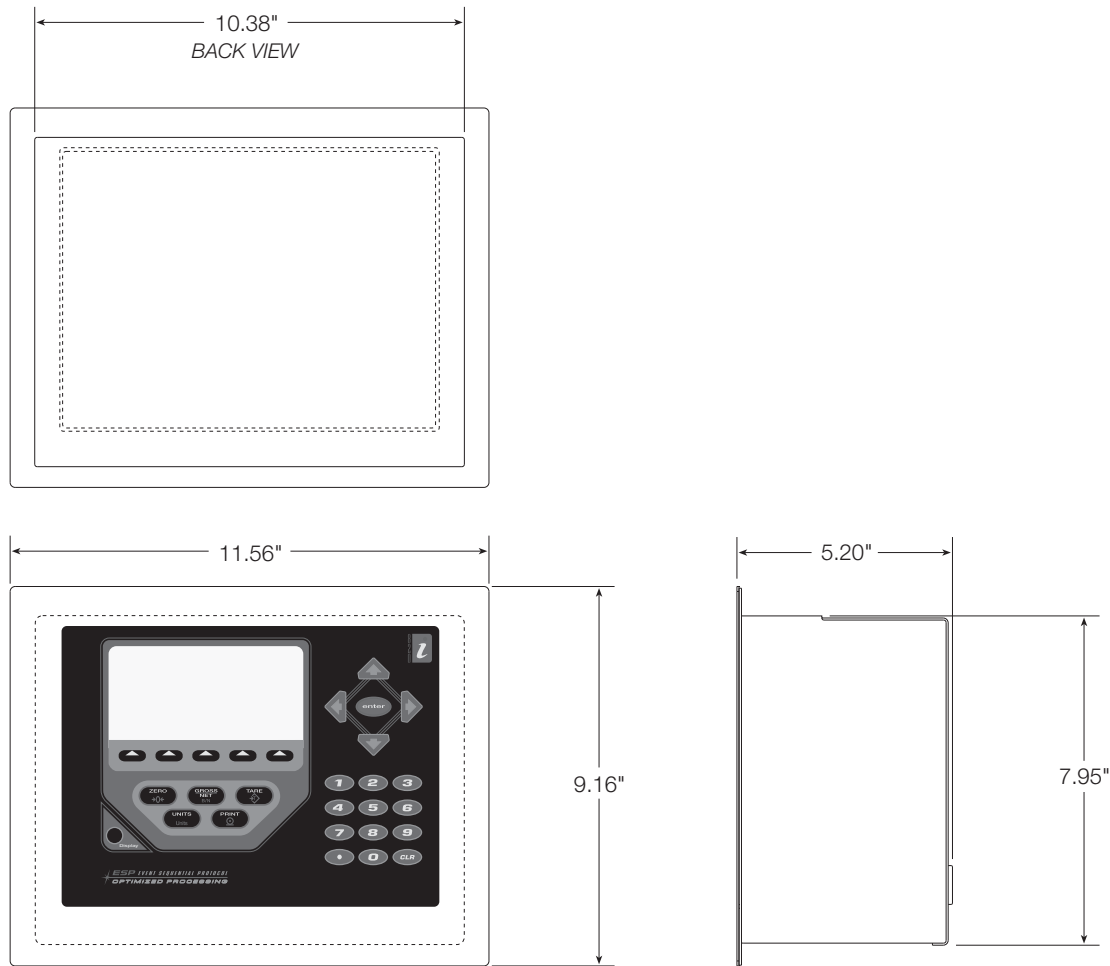


Figure 2. Panel Mount Enclosure Dimensions

Once the cutout has been prepared, slide the enclosure into the cutout from the front of the panel. Slide the clinching bracket around the enclosure from inside the panel. Secure the bracket to the enclosure using the six 1/4" screws provided in the parts kit (PN 94435), then use the nine 1-1/2" screws (PN 82425) to secure the clinching bracket to the panel door. See Figure 3.

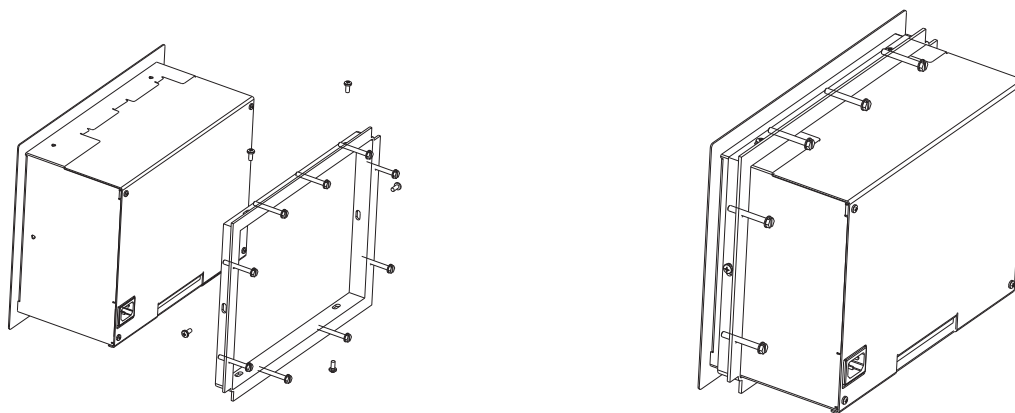


Figure 3. Clinching Bracket Assembly

3.2 Cable Grounding

All cables routed into the panel mount enclosure should be grounded against the indicator enclosure. Do the following to ground shielded cables:

- Use the lockwashers, clamps, and keps nuts provided in the parts kit to install grounding clamps on the enclosure studs adjacent to cord grips.

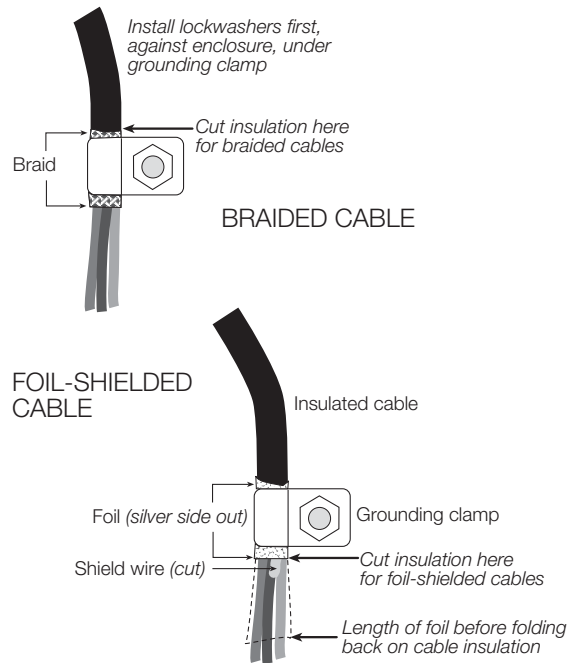


Figure 4. Grounding Clamp Attachment for Foil-Shielded and Braided Cabling

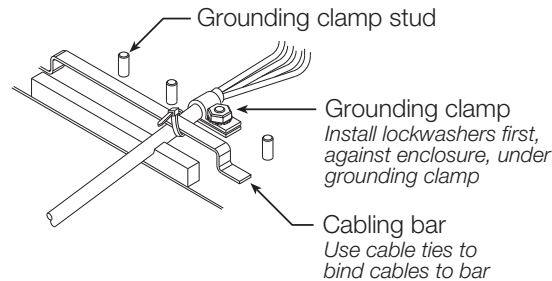


Figure 5. Cable Installation with Grounding Clamp

- Route cables under cabling bar (see Figure 5) and through grounding clamps to determine cable lengths required to reach cable connectors. Mark cables to remove insulation and shield as described below:
 - For cables with foil shielding, strip insulation and foil from the cable half an inch (15 mm) past the grounding clamp (see Figure 4). Fold the foil shield back on the cable where the cable passes through the clamp. Ensure silver (conductive) side of foil is turned outward for contact with the grounding clamp.
 - For cables with braided shielding, strip cable insulation and braided shield from a point just past the grounding clamp. Strip another half inch (15 mm) of insulation *only* to expose the braid where the cable passes through the clamp.
 - For load cell cables, cut the shield wire just past the grounding clamp. Shield wire function is provided by contact between the cable shield and the grounding clamp.
- Route stripped cables under cabling bar and through the clamps. Ensure shields contact grounding clamps. Tighten grounding clamp nuts.
- Use cable ties to secure cables to cabling bar.

5.3 Power Specifications

Line Voltages 115 or 230 VAC

Frequency 50 or 60 Hz

Power Consumption 25W maximum

See the *820i Installation Manual* for additional specifications.

5.4 Parts Kit Contents

Table 6 lists the parts kit contents for the panel mount version of the *820i*.

PN	Description
14626	Keyp nuts, 8-32NC (5)
54206	Machine screws, 6-32 x 3/8 (2)
15133	Lock washers, No. 8, Type A (5)
71522	Machine screws, 8-32NC x 1/4 (6)
82425	Machine screws, 10-32NF x 1-1/2 (9)
15631	Cable ties (4)
53075	Cable shield ground clamps (5)
77925	<i>iRev</i> ™ CD (1)
15887	6-position screw terminal for load cell connection (1 or 2)
76514	6-position screw terminal for J10 (1)
76513	4-position screw terminal for J9 (1)
71344	10-position screw terminals for J5 and J11 (2)

Table 6. Parts Kit Contents

6.1 Replacement Parts and Assembly Drawings

Table 7 lists replacement parts for the *820i* panel mount models, including all parts referenced in Figures 8 and 9.

Ref Number	PN	Description (Quantity)	See Figure No.
1	93247	Switch panel membrane (1)	8
2	94823	Enclosure, panel mount (1)	
3	69291	3V Lithium coin battery	
4	93015	CPU board (1)	
5	94824	Housing backplate (1)	
6	14839	Machine screws, 6-32NC x 1/4 (7)	
7	71698	Polyurethane foam strips (2)	
8	58248	Lock nuts, 6-32NC nylon (2)	
9	97907	AC inlet socket assembly (1)	
10	16861	High voltage warning label (1)	
11	94392	Power supply bracket (1)	
12	14822	Machine screws, 4-40NC x 1/4 (4)	
13	67613	Power supply, ±6VDC, 25W (1)	
14	67796	Power supply cable assembly, to CPU board (1)	
16	53308	Model/serial number label (1)	
17	14626	Keyp nuts, 8-32NC (1)*	
18	15134	Lock washer, No. 8, Type A (1)	
19	16892	Ground/Earth label (1)	
21	71095	Clinching bracket (1)	

Table 7. Replacement Parts

Ref Number	PN	Description (Quantity)	See Figure No.
22	69144	Faceplate gasket (1)	8
—	93246	Display board assembly (1)	—
—	15438	Power cord, 115 VAC and 230 VAC North American units (1)	—
	72512	Power cord, 230 VAC European units (1)	—

* Additional parts included in parts kit.



CAUTION To protect against the risk of fire, replace fuses only with same type and rating fuse.

Table 7. Replacement Parts (Continued)

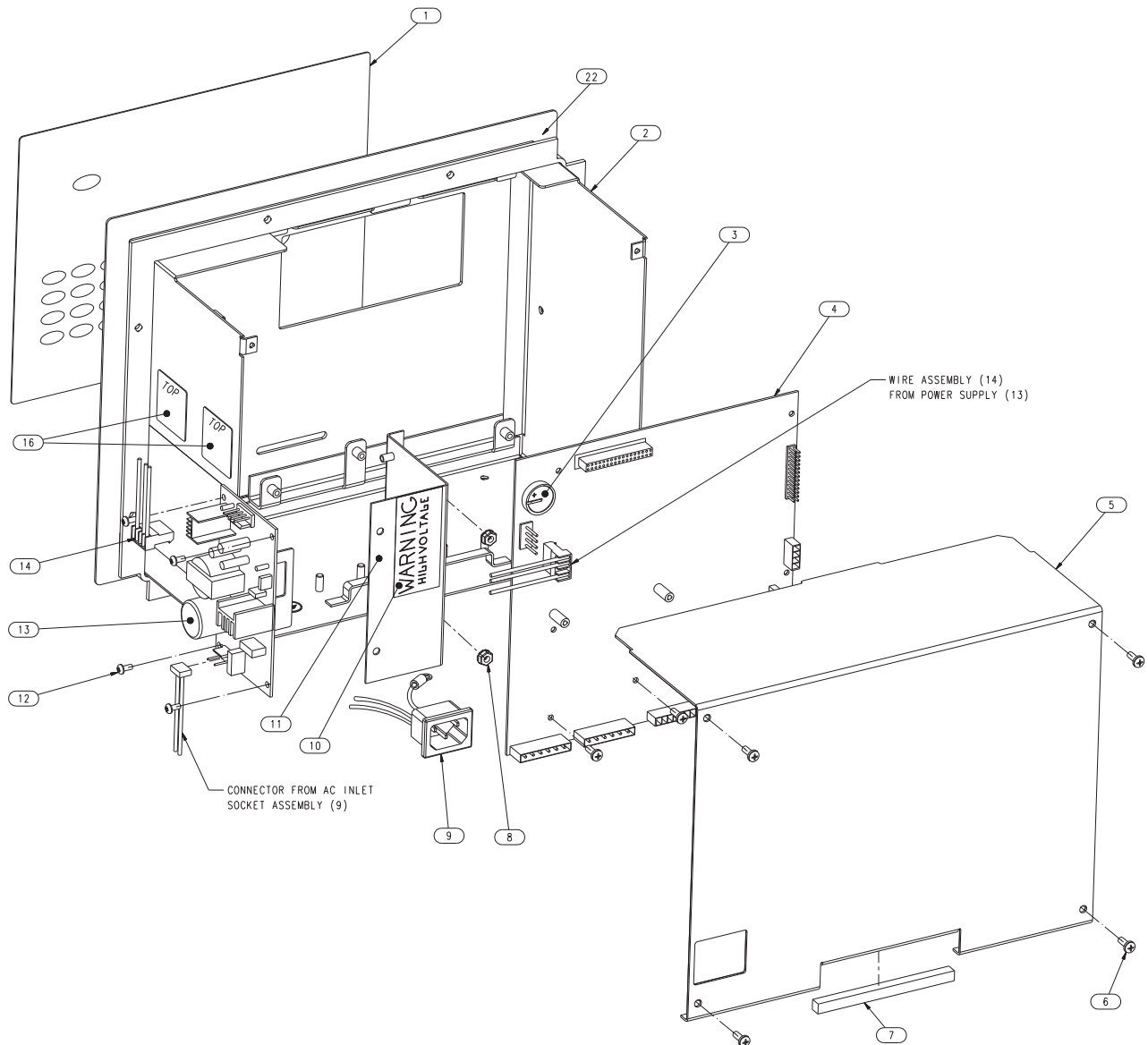


Figure 8. Panel Mount Enclosure

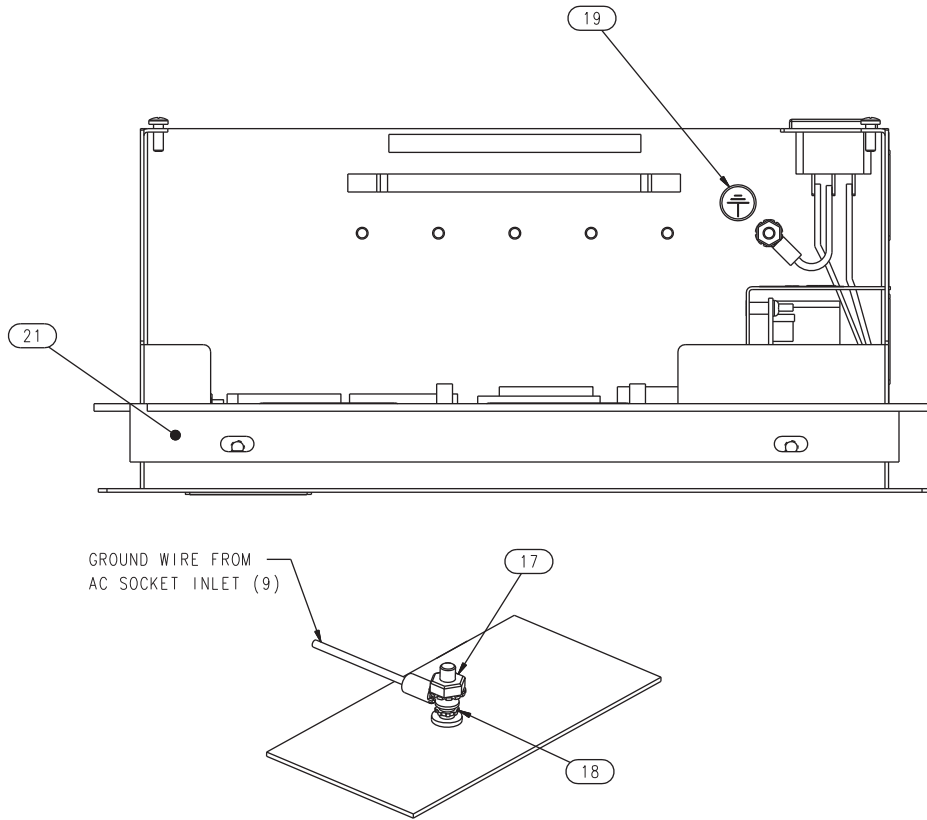


Figure 9. Panel Mount Enclosure, Ground Connections