



Allen-Bradley IMC 123 Termination Panels (Cat. Nos. 1771-HT3, -HTR, -HTE, -HTT)

To the Installer

This document provides information on:

- mounting the termination panels
- cable routing and shielding practices
- connecting cables and wiring
- making your own cables
- specifications

Pre-installation Considerations

Four types of termination panels serve the connection needs of the IMC 123 motion controller module. They are:

- ESTOP I/O termination panel (cat. no. 1771-HT3) – connect E-Stop string, E-Stop Reset pushbutton, fast inputs and outputs, and servo drive enable
- Encoder feedback termination panel (cat. no. 1771-HTE) – for encoder feedback devices and servo drives
- Resolver feedback termination panel (cat. no. 1771-HTR) – for resolver feedback devices, servo drives, and auxiliary power
- Temposonic feedback termination panel (cat. no. 1771-HTT) – for temposonic transducer feedback devices, servo drives, transducer power, and auxiliary power

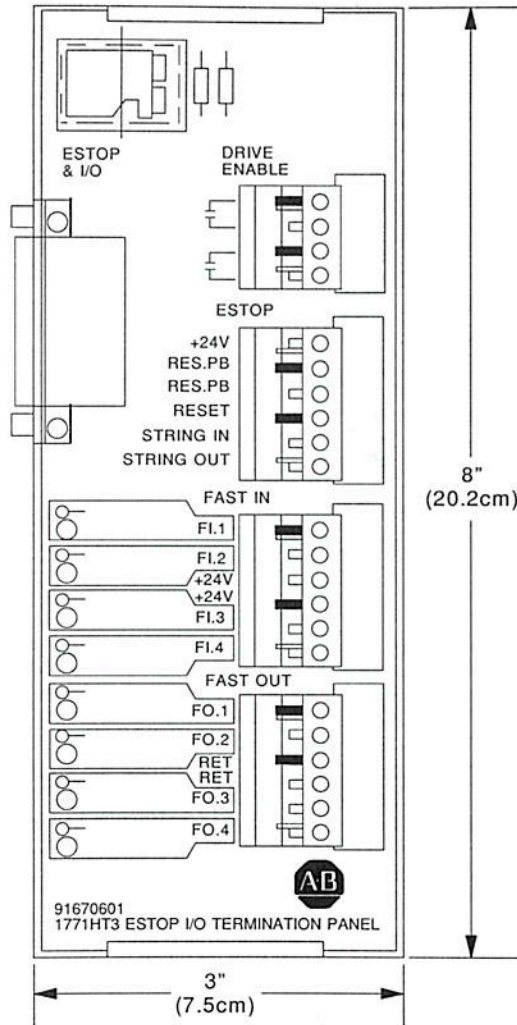
Important: Total cable length from the termination panel to the feedback devices should be no further than:

- 40 cable feet for +5VDC encoders if you don't use an external power supply
- 90 cable feet for +5VDC encoders if you use an external power supply
- 90 cable feet for + 15VDC encoders
- 90 cable feet for resolvers

Power Requirements

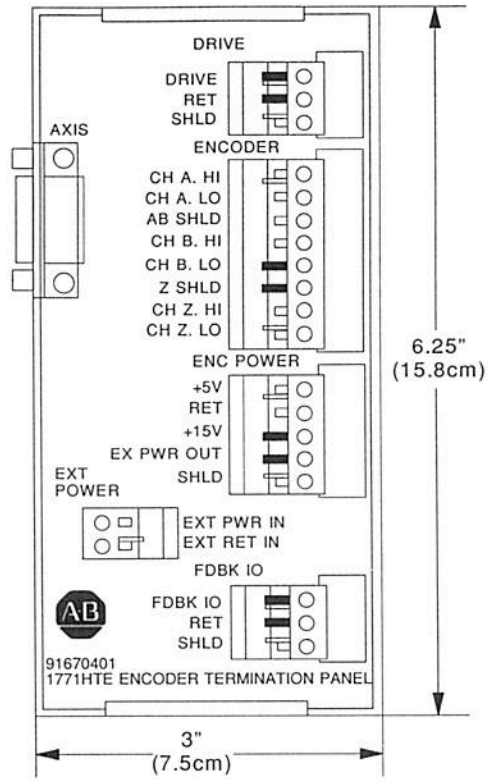
All user connections with the exception of the RS-232 port, RS-422, and user side power are routed through the termination panels. User side (isolated) voltages of +5VDC and +15VDC for encoder power (chosen by wiring to the appropriate connector pin), and +24VDC for fast I/O are available on-board. All connections are designated on the boards (see figures 1-4).

Figure 1
E-stop/Fast I/O Termination Panel



17263

Figure 2
Encoder Termination Panel



17264

Figure 6
Encoder System

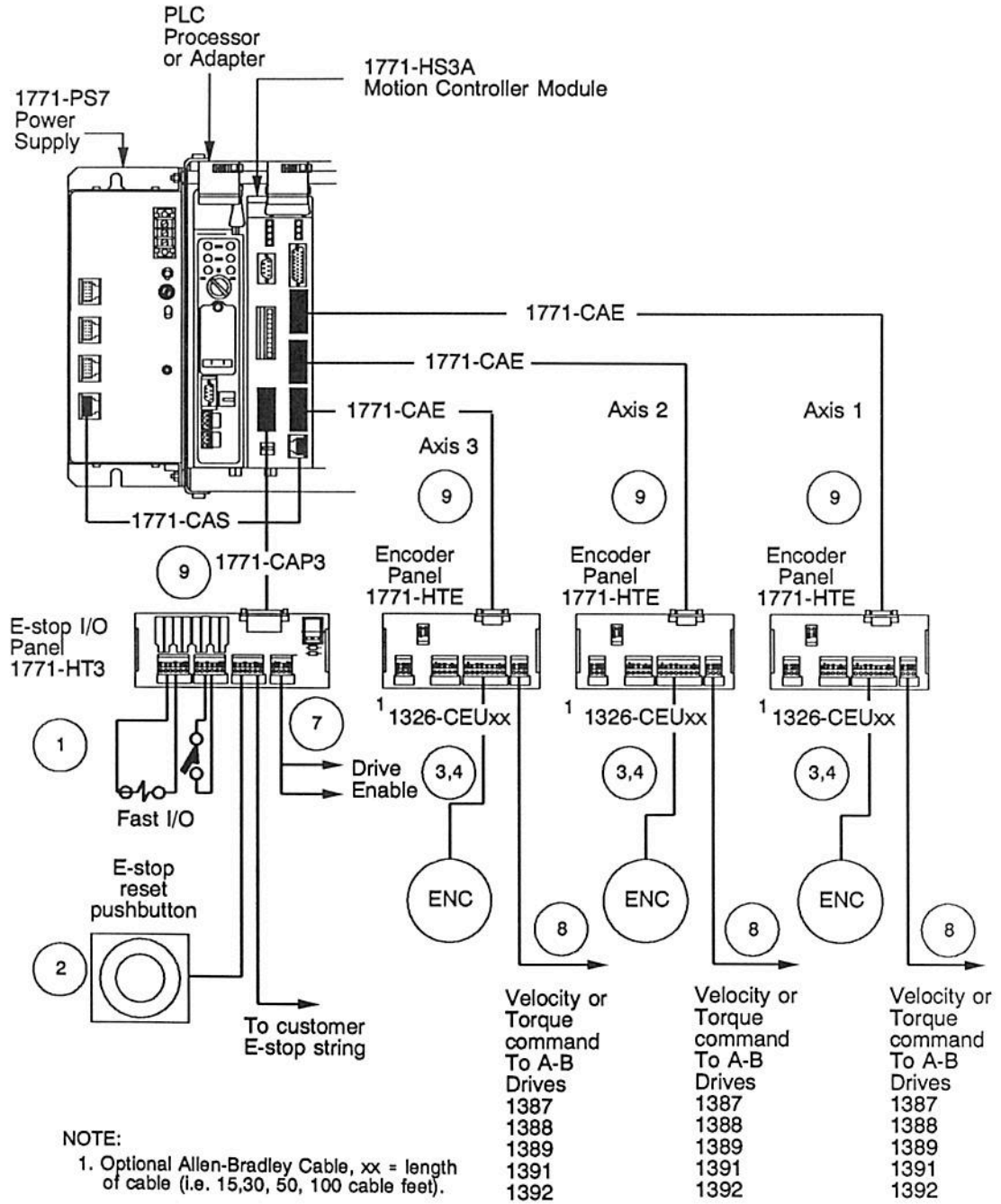
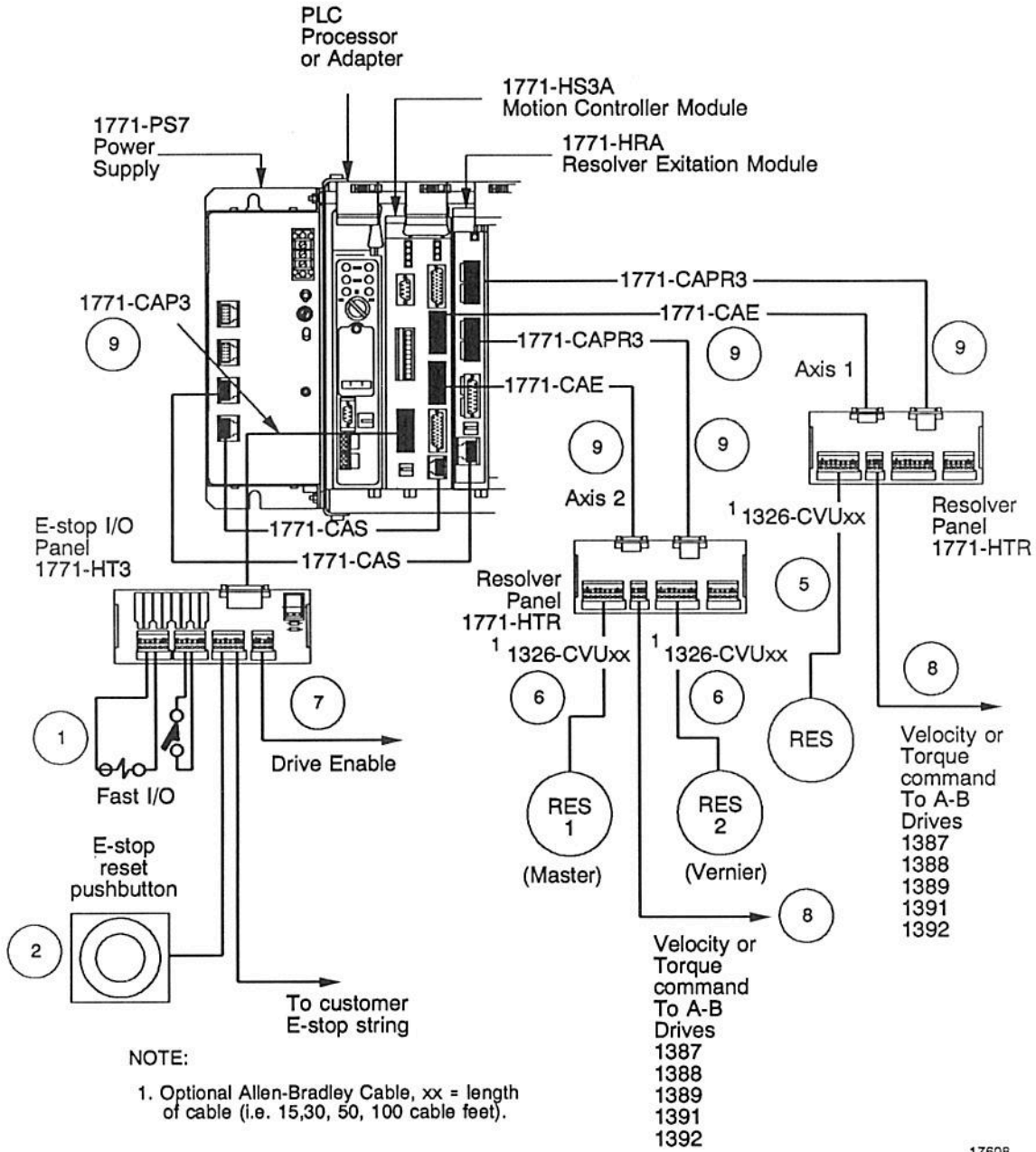
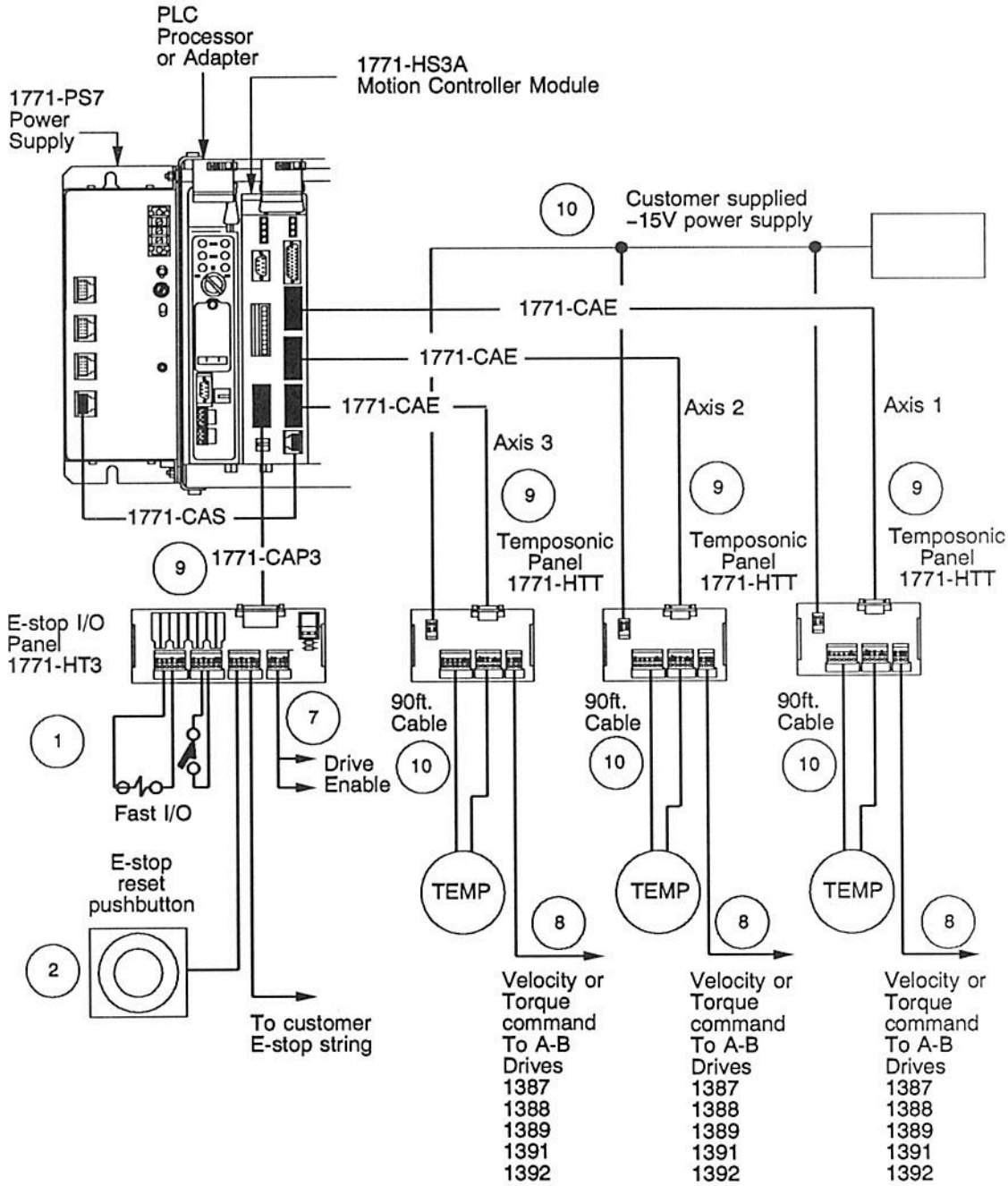


Figure 7
Resolver System



17608

Figure 8
 Temposonic System



17609

Termination Panels Specifications

Encoder Feedback Panel (cat. no. 1771-HTE)

Mounting

DIN-type rail

Mount up to 10 cable feet (3 m) from motion controller module

Pluggable connectors for easy installation, only screwdriver and wirestripper required

Cable Lengths

85ft to encoder (using an AB845L encoder with one axis, wired with 16GA, 1pr twisted, shielded cable, 19x29. To determine the cable lengths for your application refer to the IMC 123 Installation Manual (publication 1771-6.2.3)

Dimensions

6.25 x 3 in. (15.8 cm x 7.5 cm)

Resolver Feedback Panel (cat. no. 1771-HTR)

Mounting

DIN-type rail

mount up to 10 cable feet (3 m) from motion controller module
pluggable connectors for easy installation, only screwdriver and wirestripper required

Cable Lengths

90 cable feet (30 m) max (consult factory for longer distances)

Dimensions

7 x 3 in (18 m x 7.5cm)

E-Stop and I/O Interface Panel (cat. no. 1771-HT3)

Mounting

DIN-type rail

Mount up to 10 cable feet (3m) from motion controller module

Pluggable connectors for easy installation, only screwdriver and wire stripper required

Touch Probe Connection

Touch probe connection on FIN (1)

E-Stop Relay

Contacts rated at: 30VDC or 120/240VAC @ 3A continuous; 15ms operating time

← 700 HC 14 Z 24
Coil Rated:
24 VDC

Cable Lengths

90 cable feet (30m) max
consult factory for longer distances

Temposonics Panel (cat. no. 1771-HTT)

Mounting

DIN type rail

Mount up to 10 cable feet (3m) from motion controller module

Pluggable connectors for easy installation, only screwdriver and wirestripper required.

Cable Lengths

90 cable feet (30m) max consult factory for longer distances

Dimensions

5.10 x 2.75 in (13 cm x 7.5 cm)