INSTRUCTION MANUAL

™ KEPCO

ENCLOSURES AND HARDWARE SYSTEMS

| CA-3, -4, & 5 |

GENERAL DESCRIPTION (Refer to FIG. 1)

The Kepco Model CA–3 (single slot), CA–4 (two slot) and CA–5 (three slot) HOUSINGS are bench cabinets, designed to accommodate Kepco modular equipment of one-sixth rack width. Kepco modular power supplies equipped with front panels (series PCX–MAT, OPS–BTA and CC for example) can be directly installed without mounting accessories. Kepco modular power supplies without front panels (PBX, OPS for example) require the optional BPA–22 SLIDE ASSEMBLY.

All Kepco Housings consist of a steel chassis with premounted bottom slide-guides and a cover with handle and premounted top slide guides. At the rear of the CA– Housings are plug-in adapters, which provide the correct terminations for Kepco modular plug-in supplies, transferring the PC terminals to a rear barrier strip. A line cord is provided and is wired internally to the plug-in adapter barrier-strips.
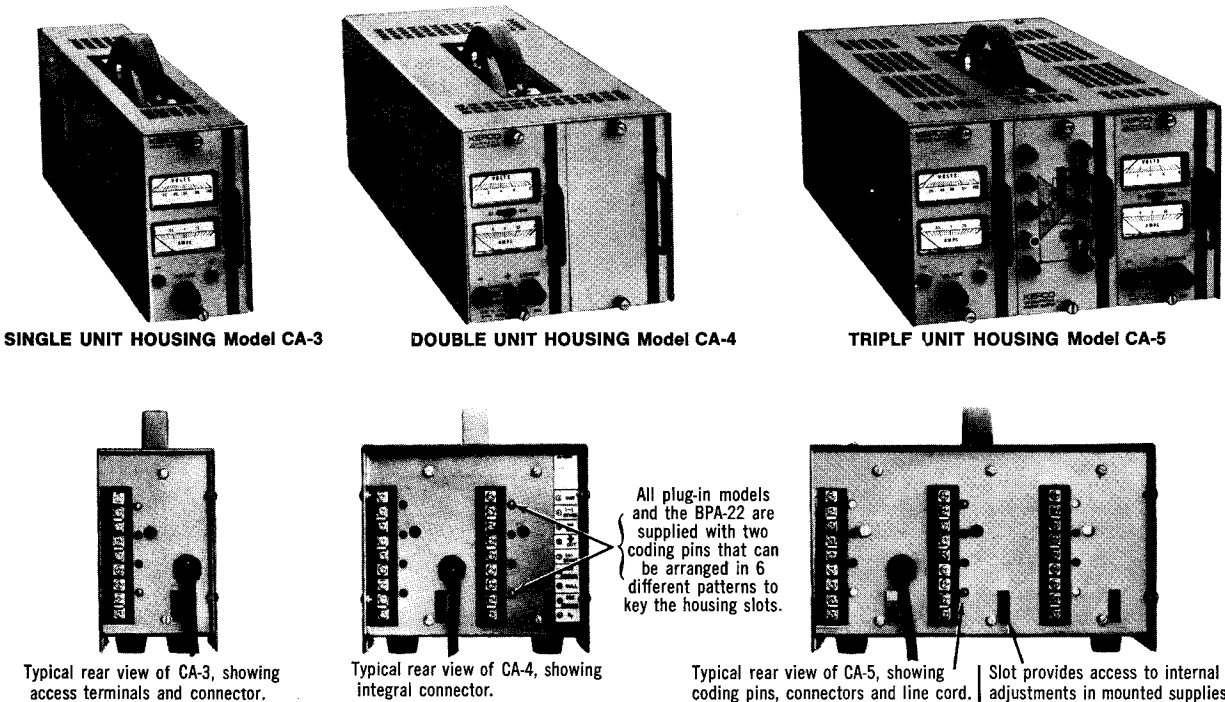

SINGLE UNIT HOUSING Model CA-3   **DOUBLE UNIT HOUSING Model CA-4**   **TRIPLE UNIT HOUSING Model CA-5**

All plug-in models and the BPA-22 are supplied with two coding pins that can be arranged in 6 different patterns to key the housing slots.

Typical rear view of CA-3, showing access terminals and connector.

Typical rear view of CA-4, showing integral connector.

Typical rear view of CA-5, showing coding pins, connectors and line cord. | Slot provides access to internal adjustments in mounted supplies.

FIG. 1 FRONT AND REAR VIEW OF KEPCO MODEL
CA–3, CA–4 AND CA–5 HOUSINGS

INSTALLATION INSTRUCTIONS (KEPCO PLUG-IN MODELS WITH FRONT PANELS)

Kepco plug-in modules which are to be installed into CA— Housings are factory-aligned for the correct front panel-to-PC connector edge distance. Due to tolerance build-up, slight alignment may be necessary to insure proper fit.

LATERAL ALIGNMENT CORRECTION (Refer to FIG. 1)

A)   Loosen the three rear holding screws (A) on the CA— Housing.

B)   *Carefully,* slide the Kepco plug-in module into the CA— Housing until the PC connector of the plug-in module mates with the rear connector of the CA— Housing (check by observing through side panel perforations of CA— Housing).

C)   Re-tighten the three rear holding screws (A) on the CA— Housing.

DEPTH ALIGNMENT CORRECTION (Refer to FIG. 1)

A)   *Proper depth alignment* is indicated by a fully engaged rear connector (check by observing through side panel perforations of the CA— Housing). The front panel of the plug-in module should not be further than approximately 1/32 of an inch from the front of the CA— Housing. Complete the installation by tightening of the two knurled screws on the plug-in module front panel.

B)   *Improper depth alignment* is indicated *either* by the incomplete engagement of the rear connector, with the front panel of the plug-in module seated against the front of the CA— Housing (condition "S"), *or* by the front-panel of the plug-in module being too far away from the front of the CA— Housing, while the rear connector is fully engaged (condition "L"). In *either* case, measure or estimate the error distance and remove the plug-in module from the CA— Housing. Proceed as follows:

        1)   Place the plug-in module on a bench top with the front panel facing to your *left.*

        2)   Loosen the nine (9) mounting screws (B) which hold the blue anodized chassis assembly with the attached printed circuit board to the plug-in module. DO NOT LOOSEN THE SCREWS WHICH HOLD THE PC BOARD TO THE CHASSIS.

        3)   Slide the blue anodized chassis assembly either to the *right* for the estimated error distance (Condition "S") or to the *left* for the estimated error distance (Condition "L").

        4)   Re-tighten the nine (9) mounting screws (B) and re-check proper alignment as described in par. "A". This concludes the installation procedure.

INSTALLATION INSTRUCTIONS (KEPCO PLUG-IN MODULES WITHOUT FRONT PANELS)

Kepco modular equipment without front panels may be installed into the CA— Housing using the optional Kepco Model BPA—22 Panel Assembly. This adapter converts the modular equipment into a plug-in module with front panel, which can subsequently be installed as described in the previous paragraphs.

GENERAL INSTALLATION NOTES

1)   If more than one plug-in module is installed (Models CA—4, CA—5) repeat the installation instructions given for the single module in the previous paragraphs.

2)   Two (2) locating pins are part of all Kepco plug-in modules as well as of the optional BPA 22 Panel Assembly. The pins mate with pre-drilled holes in the rear adapter panel of the CA— Housings and can be "keyed" six different ways by changing their original position on the plug-in module. The purpose of the locating pins is to prevent accidental intermixing of plug-in modules in multi-unit housings.

TERMINATIONS ON THE CA— HOUSINGS

After completing the mechanical installation and alignment procedures, the terminations of the plugged-in module are available at the rear terminals of the CA— Housings. The rear terminals of the CA— Housing consist of an eleven-terminal barrier-strip (See FIG. 2). CERTAIN JUMPER LINKS MUST BE INSTALLED ACROSS SOME OF THE BARRIER-STRIP TERMINALS. Jumper links are provided in the small polyethylene bag, delivered with the CA— Housing. The table below (Table 1) shows the required jumper connections for Kepco plug-in modules. Note: KEPCO MODULAR UNITS EQUIPPED WITH *MINIATURE BARRIER STRIPS* MAY HAVE JUMPER LINKS ALREADY INSTALLED. REMOVE ALL JUMPER LINKS ON THE MINIATURE BARRIER-STRIP AND RECONNECT THE EXTERNAL LINKS ON THE CA— HOUSING AS DIRECTED.
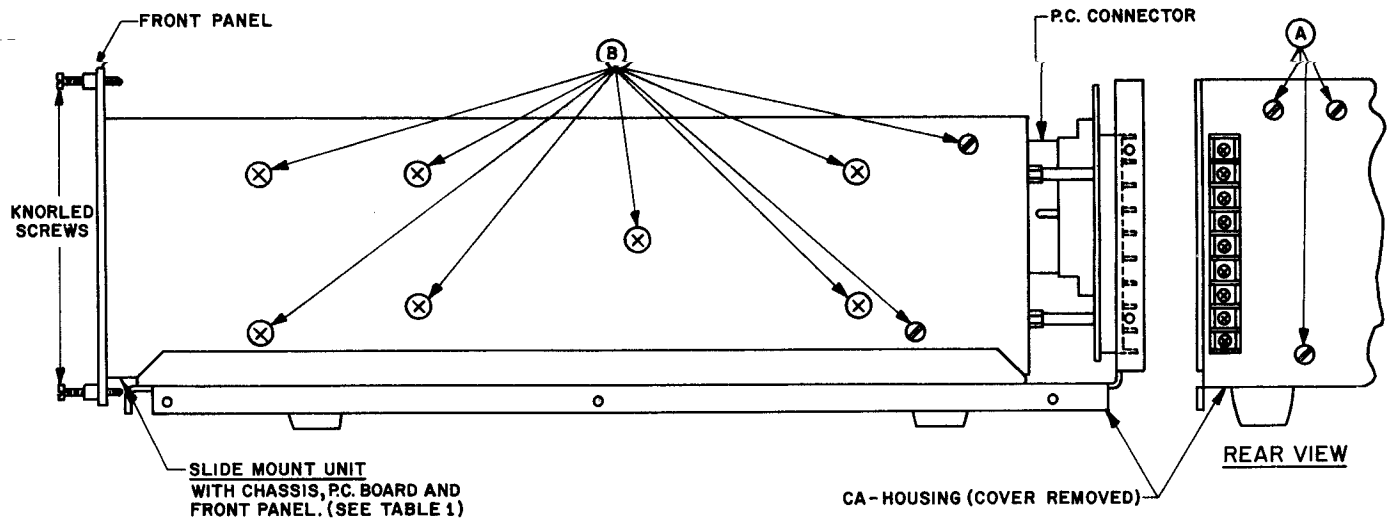
FIG. 1 INSTALLATION AND ALIGNMENT OF PLUG-IN
MODULES INTO THE CA– HOUSING.

TABLE 1	
MODULAR UNIT KEPCO DESIGN GROUP	JUMPER LINKS ON PC–2:
PAX, PBX, PBX–MAT, PCX	(4)–(5), (6)–(7), (10)–(11)
OPS	(4)–(5), (6)–(7)
OPS–TA	DO NOT CONNECT ANY LINKS
OPS–B (GROUP I)	(6)–(7)–(8)
(1) OPS–BTA (GROUP II)	(7)–(8)
(1) CC–M	(8)–(9), (10)–(11)
(1) PCX–MAT	(4)–(5), (6)–(7), (8)–(9), (10)–(11)

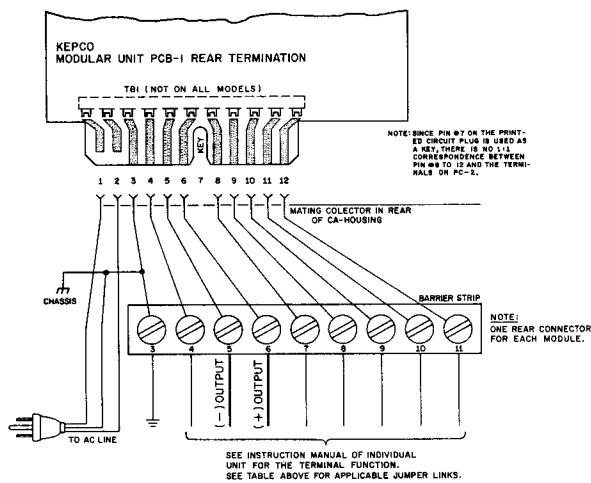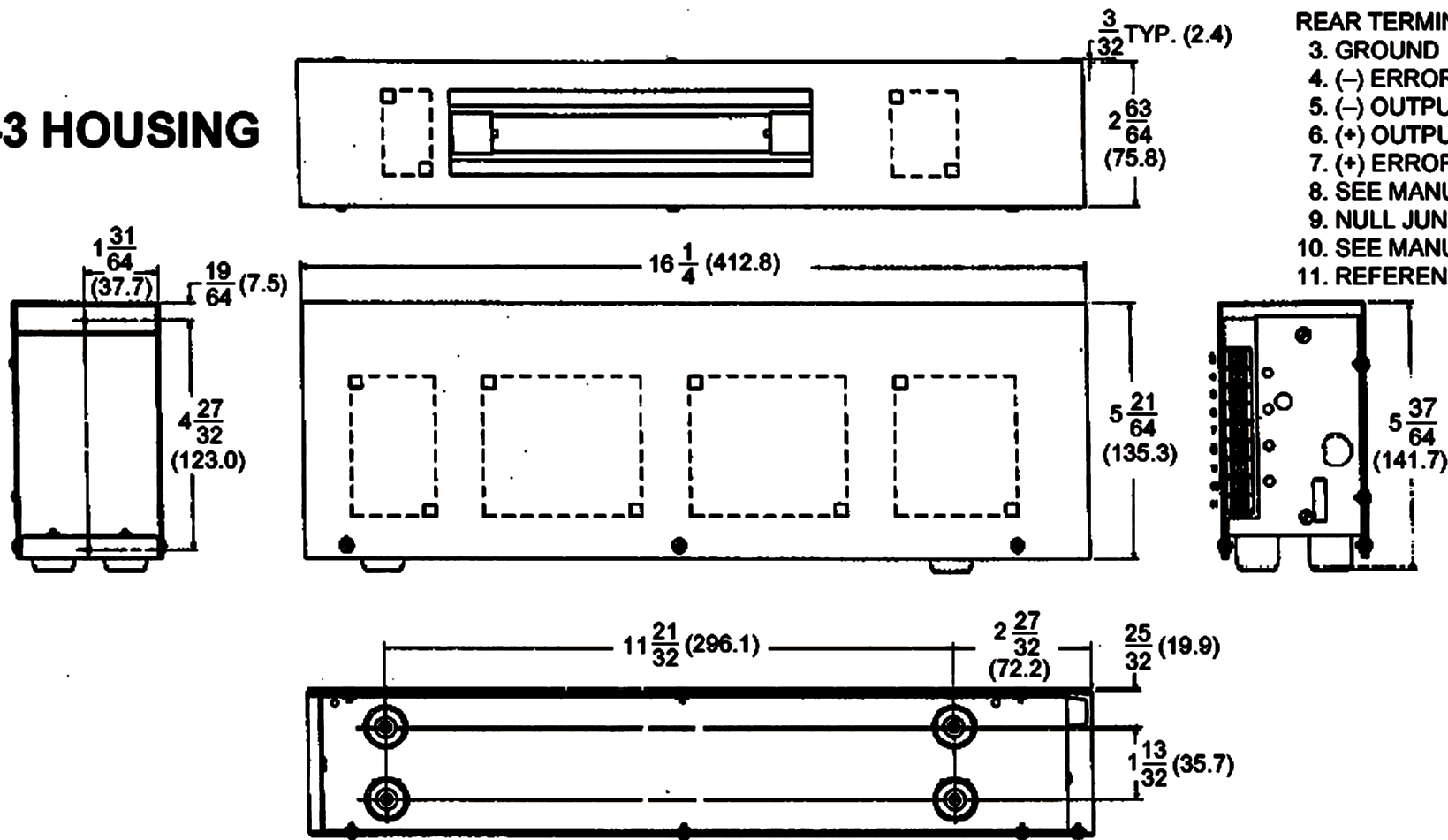(1) Equipped with front panels. All other units need Model BPA–22 PANEL ASSEMBLY.
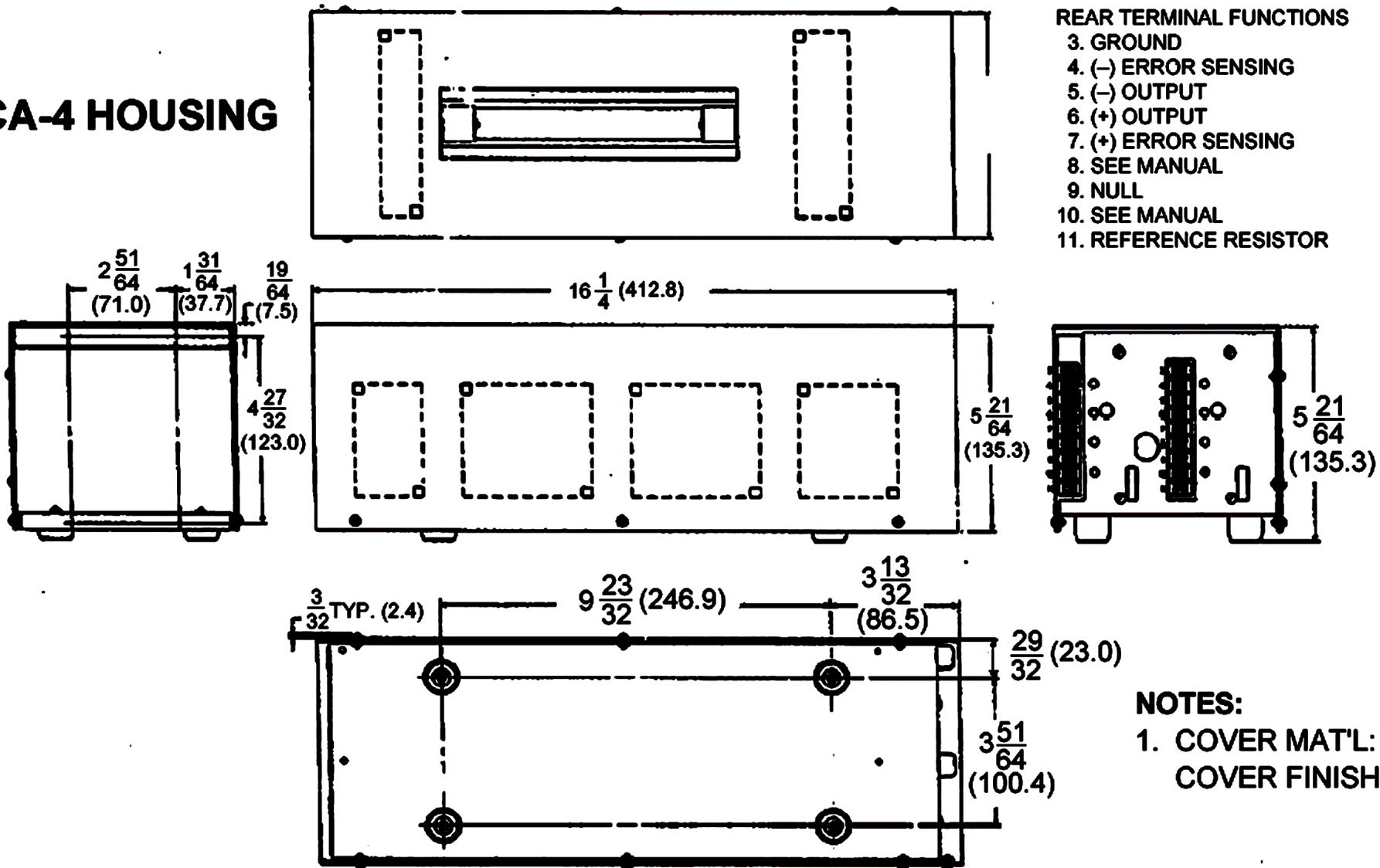

FIG. 2 TERMINATIONS, CA– HOUSING.

NOTE: ONE REAR CONNECTOR
FOR EACH MODULE.

C) CA-3 HOUSING

$\frac{3}{32}$ TYP. (2.4)

$2\frac{63}{64}$ (75.8)

REAR TERMINAL FUNCTIONS
3. GROUND
4. (−) ERROR SENSING
5. (−) OUTPUT
6. (+) OUTPUT
7. (+) ERROR SENSING
8. SEE MANUAL
9. NULL JUNCTION
10. SEE MANUAL
11. REFERENCE RESISTOR

$1\frac{31}{64}$ (37.7) $\frac{19}{64}$ (7.5)

$16\frac{1}{4}$ (412.8)

$4\frac{27}{32}$ (123.0)

$5\frac{21}{64}$ (135.3)

$5\frac{37}{64}$ (141.7)

$11\frac{21}{32}$ (296.1) $2\frac{27}{32}$ (72.2) $\frac{25}{32}$ (19.9)
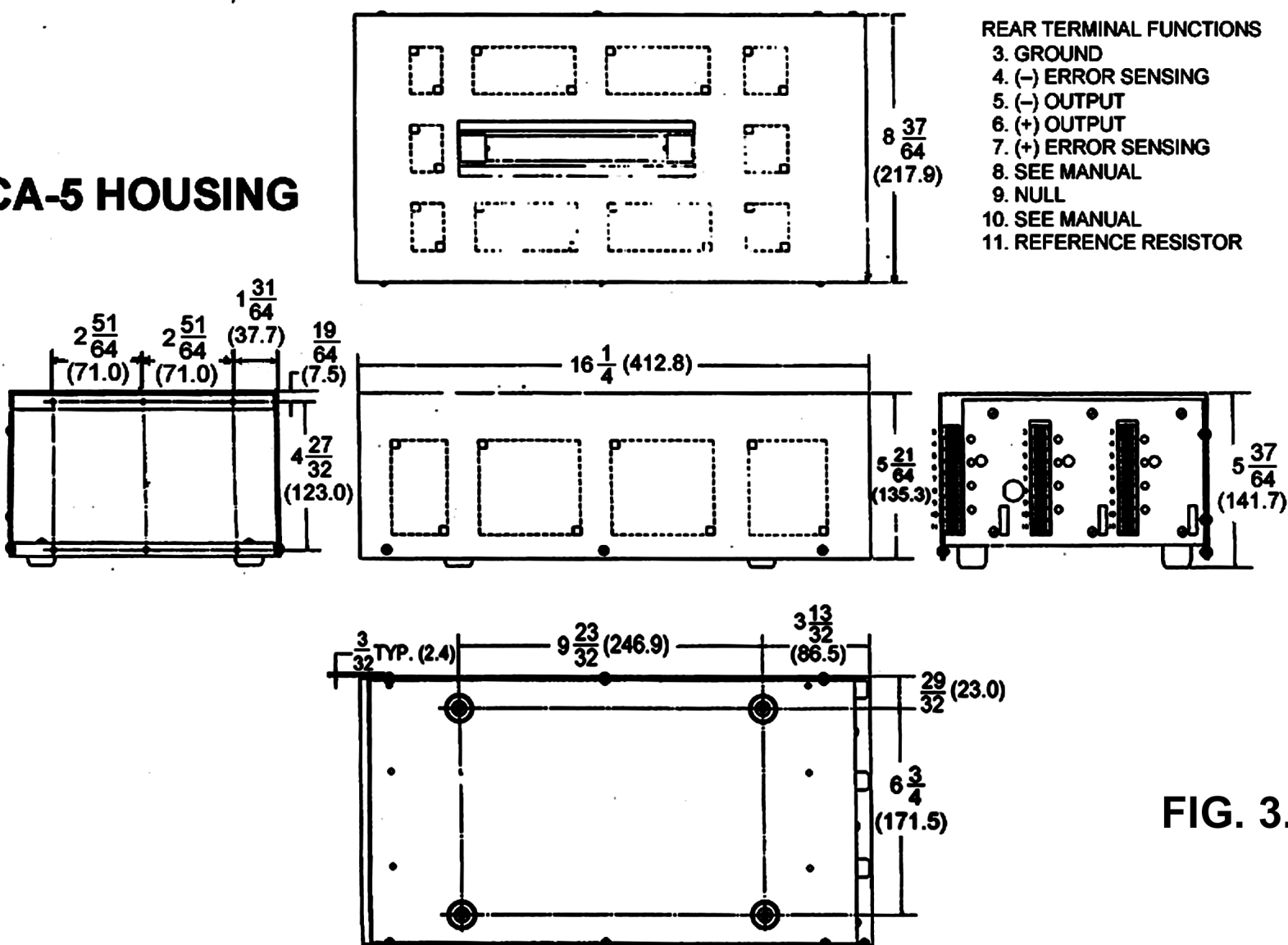
$1\frac{13}{32}$ (35.7)

B) CA-4 HOUSING

REAR TERMINAL FUNCTIONS
3. GROUND
4. (−) ERROR SENSING
5. (−) OUTPUT
6. (+) OUTPUT
7. (+) ERROR SENSING
8. SEE MANUAL
9. NULL
10. SEE MANUAL
11. REFERENCE RESISTOR

$2\frac{51}{64}$ (71.0) $1\frac{31}{64}$ (37.7) $\frac{19}{64}$ (7.5)

$16\frac{1}{4}$ (412.8)

$4\frac{27}{32}$ (123.0)

$5\frac{21}{64}$ (135.3)

$5\frac{21}{64}$ (135.3)

$\frac{3}{32}$ TYP. (2.4) $9\frac{23}{32}$ (246.9) $3\frac{13}{32}$ (86.5)

$\frac{29}{32}$ (23.0)

$3\frac{51}{64}$ (100.4)

NOTES:
1. COVER MAT'L: #20 GA.CRS.
   COVER FINISH: HARTIN'S #6389
   CHARCOAL GRAY
   VINYL TEXTURE.
2. CHASSIS MAT'L: #16 GA. CRS.
   CHASSIS FINISH: CADMIUM PLATED
   WITH CHYROMATE
   WASH.
3. SEE INSTRUCTION MANUAL OF
   MODEL TO BE INSTALLED FOR
   TERMINAL FUNCTIONS AND
   APPLICABLE JUMPER-LINKS ON THE
   PC-2 BARRIER STRIPS.
4. ALL DIMENSIONS SHOWN IN
   PARENTHESES ARE IN MILLIMETERS.
5. TOLERANCES BETWEEN MOUNTING
   HOLE CENTERS ± 1/64, ALL OTHER
   DIMENSIONS 1/32.

A) CA-5 HOUSING

REAR TERMINAL FUNCTIONS
3. GROUND
4. (−) ERROR SENSING
5. (−) OUTPUT
6. (+) OUTPUT
7. (+) ERROR SENSING
8. SEE MANUAL
9. NULL
10. SEE MANUAL
11. REFERENCE RESISTOR

$8\frac{37}{64}$ (217.9)

$2\frac{51}{64}$ (71.0) $2\frac{51}{64}$ (71.0) $1\frac{31}{64}$ (37.7) $\frac{19}{64}$ (7.5)

$16\frac{1}{4}$ (412.8)

$4\frac{27}{32}$ (123.0)

$5\frac{21}{64}$ (135.3)

$5\frac{37}{64}$ (141.7)

$\frac{3}{32}$ TYP. (2.4) $9\frac{23}{32}$ (246.9) $3\frac{13}{32}$ (86.5)

$\frac{29}{32}$ (23.0)

$6\frac{3}{4}$ (171.5)

FIG. 3. MECHANICAL OUTLINE DRAWING