

# Instructions for Three-Phase Power Supply Module



I.L. 17285A

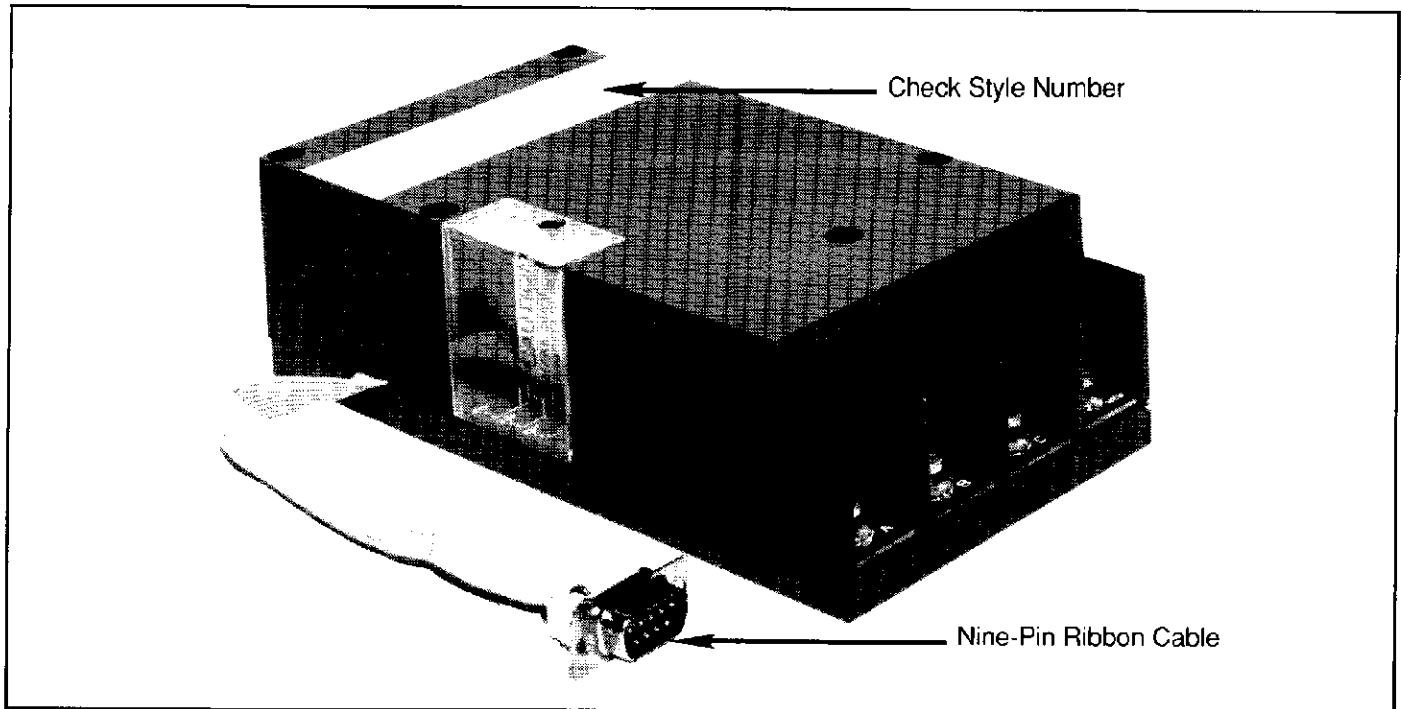


Fig. 1 Three-Phase Power Supply Module

## THE MODULE

Three-phase power supply modules are offered in two styles (9966D75G01 and G02) for the specific applications shown in Table I. If a power module is used with an IQ metering device other than as shown, equipment damage will result. The appropriate power module will permit an IQ DATA, IQ GENERATOR, IQ DATA PLUS or IQ DATA PLUS II to be powered from the 50 or 60 hertz lines being monitored. The three-phase power module is used in lieu of a separate 120 or 240 VAC power supply.

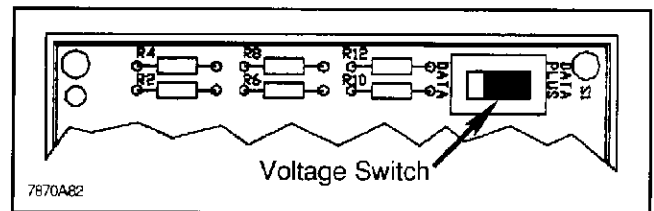


Fig. 2 Location of Voltage Switch

## VOLTAGE SWITCH

The difference between style 9966D75G01 and 9966D75G02 is the setting of the voltage switch located on the printed circuit board. See Figures 2 and 4. This switch position determines the voltage supplied to the IQ

device via the 9-pin ribbon cable. Modules are marked with the style number corresponding to the switch position. Style number 9966D75G01 denotes the switch in the "Data Plus" position for use with the IQ Data Plus/Data Plus II/Data Plus II HV. Style number 9966D75G02 denotes the switch in the "Data" position for use with the IQ Data or IQ Generator.

TABLE I — MODULE APPLICATIONS

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Style No. 9966D75G01 is a replacement for style 5281C55G02 power module.		Style No. 9966D75G02 is a replacement for style 5281C55G03 power module.
Style No. 9966D75G01 may also be used with:		Style No. 9966D75G02 may also be used with:
IQ Metering Device	Style No. with Power Module Originally	IQ Metering Device
IQ DATA PLUS	9966D38G01	Style No. with Power Module Originally
IQ DATA PLUS II	2D78522G01	Style No. w/o Power Module Originally
IQ DATA PLUS II HV	2D78544G01	IQ DATA
		2D78533G03
		IQ GENERATOR
		2D78533G04
		2D78533G02

# THREE-PHASE POWER SUPPLY MODULE

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## VOLTAGE SWITCH (cont.)

**NOTE: Switch position should NOT be changed from the factory setting. Switch setting changes void the validity of the style number and may damage unit.**

## INSTALLATION

This device is designed to be installed, operated, and maintained by adequately trained workmen. These instructions do not cover all details, variations, or combinations of the equipment, its storage, delivery, installation, check-out, safe operation, or maintenance. Care must be exercised to comply with local, state, and national regulations, as well as safety practices, for this class of equipment.

## REMOVING EXISTING POWER MODULE

If an existing power supply module is being replaced, disconnect all power to the IQ metering device including power to the relay contacts of the metering device where applicable. Label and remove each wire connected to the old power module. Unscrew the plug lock assembly (see Figure 3) on the ribbon cable to the IQ metering device and disconnect the cable plug. Remove the two mounting screws that hold the power module in position.

**CAUTION: Be prepared to support the power module once the screws have been removed.**

## MOUNTING TO AN IQ METERING DEVICE

Use two mounting screws to attach the power module to

the back of the IQ device as shown in Figure 3. Connect terminals A, B, C and NEU to the three-phase lines and neutral being monitored under the feeder tap rules of Article 240, National Electrical Code. Insert the ribbon cable plug into its receptacle and tighten the plug lock screws.

## REMOTE MOUNTING

The three-phase power supply module may be panel mounted separate from the IQ metering device by using the 36-inch long extension cable 7871A40G02 (cable must be ordered separately) which has a plug at one end and a socket at the other. Use the power module as a drilling template for the two #8-32 mounting screws. Complete the electrical connections as described above.

## FUSES

The three-phase power supply module is supplied with three Class CC primary fuses rated 3/4 ampere, 600 VAC as shown in Figure 4. These current-limiting fuses have an interrupting rating of 200,000 amperes, rms symmetrical.

The transformer secondary is protected by one .3 ampere fuse with an interrupting rating of 10,000 amperes.

Remove the three cover screws to gain access to the fuses.

## REPLACEMENT FUSES

Primary: Class CC, Type KTK-R-3/4, or equivalent.

Secondary: Very-fast Littlefuse #272-300, or equivalent.

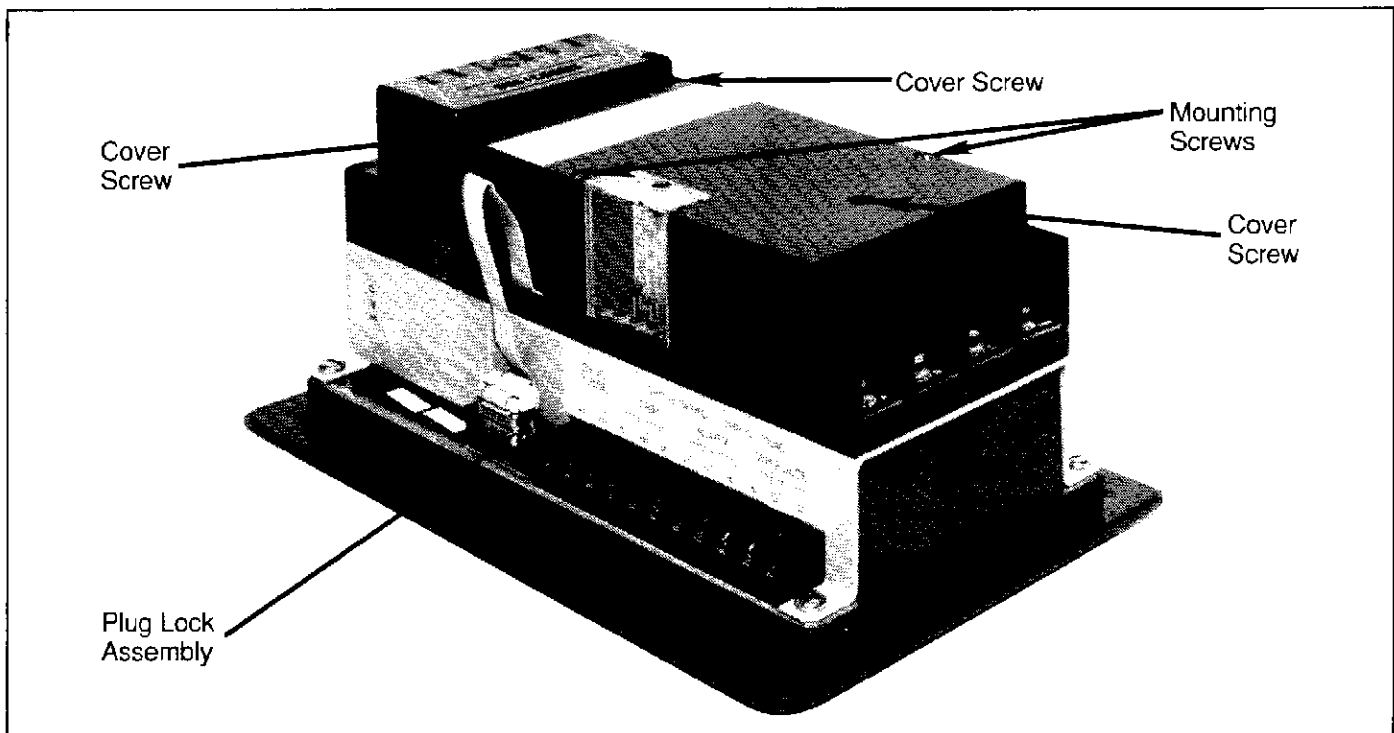


Fig. 3 Three-Phase Power Supply Module Mounted on an IQ DATA PLUS II

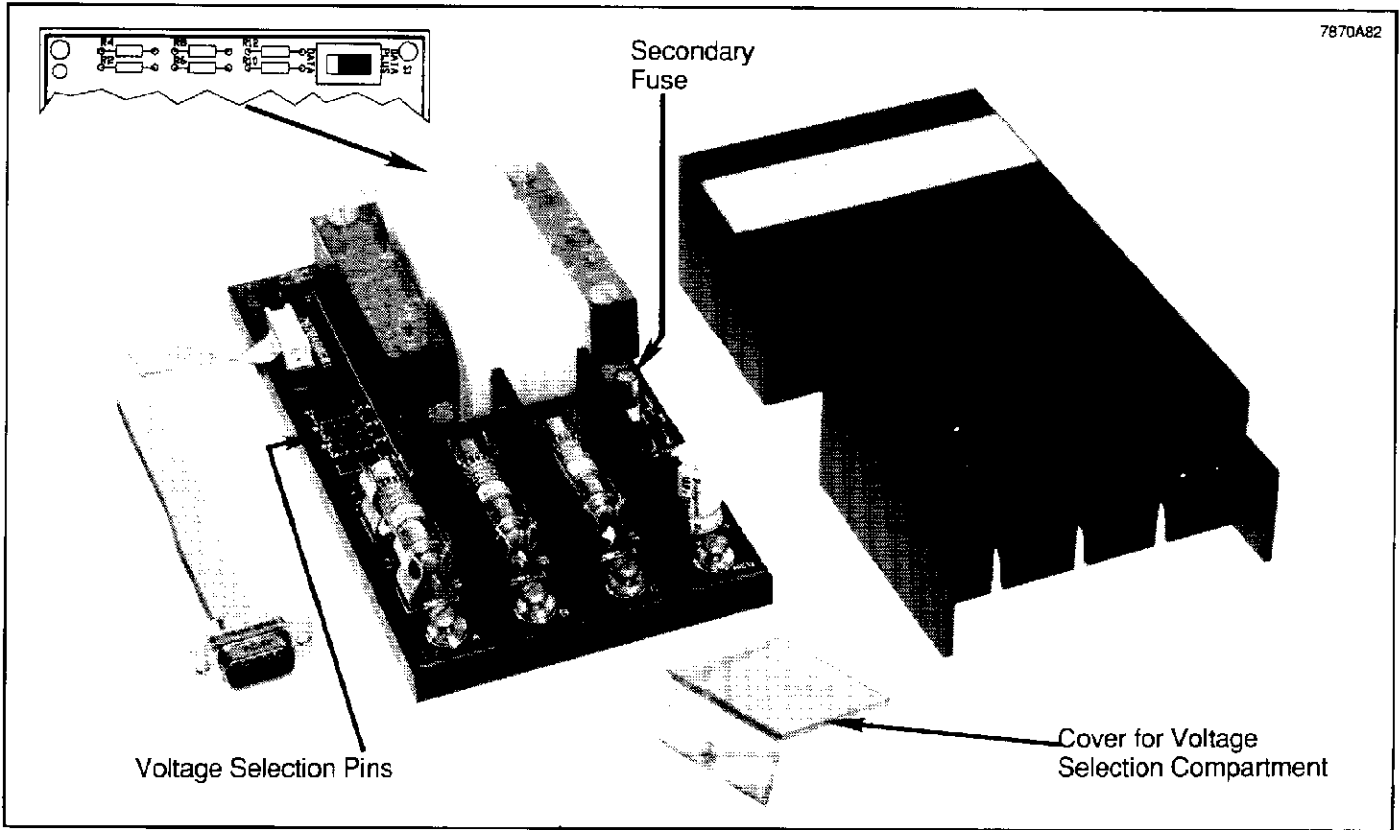


Fig. 4 Three-Phase Power Supply Module with Covers Removed

**WARNING**

Failure to disconnect the module and its associated metering device prior to installation or changing jumpers or fuses may result in severe injury or death.

**VOLTAGE SELECTION JUMPER (PINS)**

Input to the three-phase power supply module must be limited to not more than 600 volts, nominal. For lines at higher voltages use a step-down potential transformer. Insert the jumper located in the voltage selection compartment at the voltage to be supplied to the module:

DESIGNATION	VOLTAGE RANGE
460/575 V	425 to 660 VAC
380/415 V	270 to 432 VAC
208/220/240 V	170 to 272 VAC
120 V	96 to 154 VAC

Those pins not covered by the jumper are live parts when the power module is energized!

Keep the cover for the voltage selection compartment in place with the #4-40 flat head screw supplied whenever the module is energized.

**OPERATION CHECK**

After installing the power module, completing all the electrical connections and replacing covers, apply power and check the IQ metering device for proper operation.

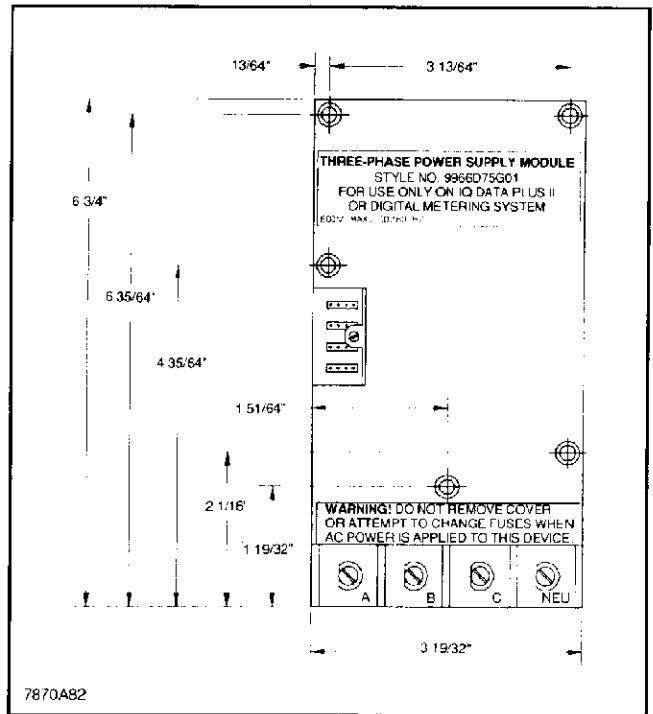


Fig. 5 Screw Locations

**RECOMMENDED CONNECTIONS**

Use copper conductors only.  
#14 AWG Red or Black for AC  
Tighten to 7 lb.-in.

# THREE-PHASE POWER SUPPLY MODULE

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7870A82

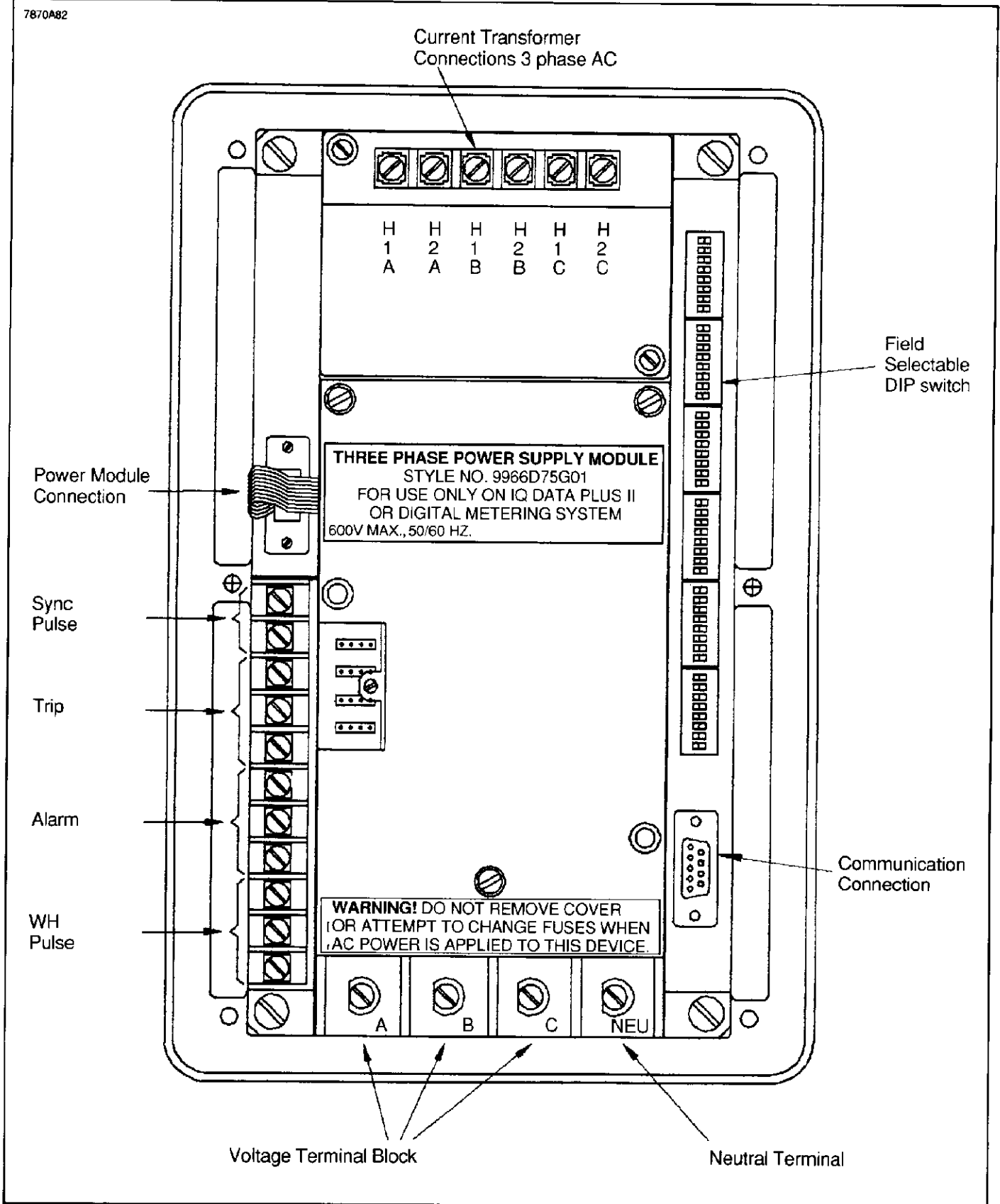


Fig. 6 IQ DATA PLUS II with Three-Phase Power Supply Module Installed

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