INSTALLATION INSTRUCTIONS

(These Instructions are applicable for FCBC/ SMPS Power Plants with Model Nos. DY 41400E, DY 61400E, DY 32000E, ie Microprocessor Controller Systems ONLY.)

New Power Plant is delivered with wired cabinet and Rectifier modules in separate package.

1) GENERAL INSTRUCTIONS:

a) Unpack the cabinet and install at the assigned place.
b) Power Plant to be kept at least one foot away form the wall to ensure proper ventilation.
c) Switch OFF all the MCB / MCCB'S provided on the unit front Panel / Rear Panel.
d) Connect AC Cables (proper rating) to 230V AC Input Terminals by passing through near by cable gland at the rear of the cabinet.
e) Connect the Load & Battery cables of proper rating (one or more) to corresponding LOAD / BATTERY Terminals with correct Polarity.

2) MODULE INSTALLATION:

a) Open the cabinet front door. Remove module fixing screws from the cabinet (normally fixed and supplied along with cabinet).
b) Unpack Rectifier Modules from their packing.
c) Place them and slide in on the shelf and fix the front panel using the fixing screws. See that all the module input/output MCB'S are in the OFF position.
d) Plug-in both AC input & DC output connectors of all the modules.

3) PRESTART TESTING:

Before switching ON Rectifier modules the following checks need to be conducted to verify correctness of external wiring :

(a) Keep BATT MCB in ON position
(b) Connect battery with voltage greater that 48V, (24V incase of L series – 24V systems) to one of the BATT Terminals and switch ON the Battery MCB.
(c) If LCD lights ON and shows the battery Voltage (VDC) then connection is proper. If Display does not lights ON then battery polarity is wrong. Disconnect Battery wires and connect with correct polarity.

NOTE: Please ensure that battery is always connected when operating the Power plant system on mains supply, to avoid chattering of high voltage disconnect relay.

4) POWER PLANT STARTUP:

After successful completion of prestart Test, Power Plant can be started by connecting load cable to the actual load.

(a) Keep battery MCB in ON position.
(b) Keep Load MCB in the OFF position
(c) Now Switch ON Mains input MCB
(d) Switch ON Modules AC MCB first, then AC ON LED and DC ON LED must light ON which indicates Module is OK.
(e) Switch ON AC & DC Switch / MCB's all the modules.
(f) In case of a vacant Module Slot, keep the AC MCB (single pole) in OFF position but switch ON O/P MCB (2 Pole) to prevent MCB TRIP Alarm.

NOTE: Make sure that there is at least 25% of the rated load connected other wise DC ON LED on the Modules may be flickering.

(g) Switch ON Load MCB.
(h) Now LCD Display must read ACL: AC Line Voltage
VDC: DC Voltage
IL: Load Current
IR: Rectifier Current of the system
ALARM: NO of Alarm

(i) Monitor Lamp provided on front panel
1) AC Alarm: If any Alarm generate than this lamp lights ON.
2) AC Available: When AC Available this Lamp must light ON.
3) Float: When battery is in Float then this lamp must light ON.
4) Charge: If Battery goes in charge then this lamp must light ON.

Now the Power Plant is fully operational.

RECTIFIER MODULE REPLACEMENT:

Rectifier Modules can be easily installed in an operating Power Plant without interrupting normal functioning. The following steps must be adopted to remove module from a live cabinet.

(a) Switch OFF both input AC Switch / MCB and output Switch / MCB of the module and plug out AC Input connector and Output connector. Note that both connecters are live and to left hanging with Pins facing down words.

(b) Remove fixing screws (2 nos. / 4 nos.) and pull the module out of the cabinet.

For installing a new module in an empty slot of an operating Power Plant the method to be adopted is given as below:

a) Slide in the module into their respective guides.
b) Fasten it with bottom Screws Switch / MCB.
c) Keep the Module Input/Output MCB in the OFF position
d) Plug-In Input and output Connectors.
e) Switch ON I/P AC Switch / MCB first, Switch ON O/P Switch / MCB only after all the normal indicators (AC ON, DC ON) light up. This procedure prevent any transacts (Voltage dip) being generated at load terminal.