

Troubleshooting Tips

When SMPS Power Plant does not function properly, please check the following Troubleshooting Table before returning a unit. If the product still has a problem, please contact our Customer Service desk.

This Trouble shooting Table is applicable for FCBC/ SMPS Power Plants with Model Nos. DY 41400E, DY 61400E and DY 32000 only (Systems with Microprocessor Controller).

Different Fault Indications on Front Panel of System:

Fault Indications	Fault Description	Corrective Action
ACOR (AC Out of Range)	Activates when Input AC Voltage goes out of nominal range of 140V-280VAC. MCU activates the HVD Circuit which disconnects the input voltage.	System will resume back when voltage drops to 275V.
SSFL (Surge Suppressor Fail)	Activates when Class ' C ' Surge Suppressor gets disconnected due to overheating caused by excessive over voltage or repeated surges in AC Supply.	Surge Suppressors automatically reset when their temperature drops to a safe operate limit.
DCLO/ DCHI Alarm	Activates when System Voltage is < 43V. DCLO is generated mainly due to battery discharge during the absence of AC Input supply. This alarm may be used as advance warning for battery total discharge. DCHI is generated if system Voltage is > 66V. This can occur only due to internal fault in Modules.	DC LO Alarm will be disabled, when AC is available and Battery starts Charging then battery voltage increase > 44-45V. DCHI Alarm can occur only due to internal fault in Modules. Check each Output of the Module.
MDFL (Module Fail)	Lights ON when One or more modules Output drops to zero (due to internal malfunction) * This alarm may get generated if any module MCB is in OFF condition.	Replace the faulty module (or check if Module MCB is Off)
ORLD (Over Load)	Lights ON when Load Current exceeds 100% current rating of all the Modules in the Rack. This can be either due to LOAD fault or insufficient no. of Modules	Check the Output Voltage & Current of all the Modules, if found exceeding rated limit, reduce the Load Current. If Module found faulty then Replace the Module.
TCFL (Temperature Compensation Fail)	Lights ON when Temperature sensor connected to the Rack is short or open circuited.	Automatically Power Plant switches to MANUAL mode and sets FLOAT Voltage to 54V.
CBTP (Circuit Breaker Trip)	CBTP Light ON When Any MCB is Off	Keep all MCB's in ON Position
AC ON BTDSH (AC ON Battery Discharge)	Lights ON when Battery supplies the load current even if AC input is present. This happens in case when total output current is not sufficient to supply the Load demand or due to fault in MCU.	Check the Microprocessor Card mounted inside the rack. reduce the current at Load or check HVD card.
BT1, BT2, BT3 ISO	Lights ON when Battery MCB is kept in the OFF Position	Keep all Battery MCB in ON position even Batteries are not connected.

Protection Features:

High Voltage Disconnect (HVD)	HVD Circuit protects from excessive input AC voltage > 280V and recovers when AC below 275V.	If HVD does not disconnect the AC supply then replace HVD card mounted at rear side.
Battery Low Voltage Disconnect (LVD)	LVD circuit protects Battery from discharging below 43V (21V for 24V Battery).	When battery discharged below 43V (21V for 24V Battery) and system is not disconnected then Replace LVD card mounted on rear side.

Different Fault Indications provided by LED's on Front Panel of Rectifier Modules:

Fault Indications	Fault Description	Corrective Action
AC ON LED ON	Lights ON when AC is Available. If AC is available and the LED is OFF then indicates Fault condition.	If LED is OFF Check AC supply at the Input connector of the Module. Check Input Fuse of the Module. (Replace with suitable rating) Check ON / OFF Switch on the Module.
DC ON LED ON	Lights ON when Module is functioning OK. If this LED is OFF then indicates fault condition	If this LED is OFF and AC ON LED is ON then unplug the Output 9 pin connector and check Voltage at + & - terminals marked on the Rectifier Module. If Voltage is zero then replace the Module.
Over Volt LED ON	Lights ON when Rectifier Module Output Voltage exceeds rated Voltage.	Switch OFF the AC MCB & Switch it ON after 2 min. If fault is still present, replace the module.
Over Temp LED ON	Lights ON when Module Temperature exceeds 90°	Check the Temperature in the ambient of the Module and look for free air flow. When the module Temperature is in the normal range, the supply should start automatically.
Over Load	Lights ON when Module Load Current exceeds rated Current.	Reduce the current on Load side and set at Rated current.