

**FCBC / SMPS POWER PLANT  
MODEL DY 31400ERC (48V/75A)  
With Hot Plug-in Dual Controller to increase System reliability**



**MODEL DY 31400ERC is a Modular Power System, which uses 3 nos. Hot-Pluggable DY 1400E Rectifier Modules of 1400Watts and a detachable additional Controller to ensure break-free System operation.**

**ELECTRICAL SPECIFICATIONS**

**INPUT SPECIFICATIONS**

Nominal Voltage	230 VAC, Single Phase
Voltage Range	150 - 275 VAC
Switching Frequency	47 - 53 Hz
Input Current	< 24A RMS
Power Factor	0.98 MIN.(50% Load to 100% Load)
Efficiency	>90%
Dielectric Strength	1.5 KV AC (I/P to O/P & Case)

**OUTPUT SPECIFICATIONS**

Nominal Voltage	54 VDC
Output Voltage Span Adjustment	48V - 56V
Output Current	3 X 25A (MAX.)
Power	3 X 1400W (MAX.)
Net Regulation	±0.5V
Ripple	< 300mV p -p
Psophometric	< 4mV
Audible Noise	< 50 dBA
Battery Current Limit	0.1AH of Battery Capacity
Battery Protection	LVD (43- 44V)

**SPECIAL FEATURES**

- ❖ Modular System, easy for Maintenance
- ❖ Hot Plug-In Modules
- ❖ Wide Input Voltage Range
- ❖ Active Current Sharing
- ❖ Potential Free Contacts for Remote Fault Annunciation
- ❖ Power Factor Correction
- ❖ Input High Voltage Disconnect (HVD) & Battery Low Voltage Disconnect(LVD)
- ❖ Analog Controllers- Replaceable and Standby
- ❖ Common O/P Voltage Control
- ❖ Battery Current Limiting for each battery path (presettable to suit battery Capacity).

**ALARMS LED DISPLAY**

- |                            |                     |
|----------------------------|---------------------|
| 1. AC FAIL                 | 6. LOAD ON          |
| 2. Battery Low             | 7. Battery ON       |
| 3. AC ON Battery discharge | 8. System On Float  |
| 4. Battery Reverse         | 9. System On Charge |
| 5. Module Fail             |                     |

**FUNCTION MONITORING DISPLAY**

- LED DPM Provided for-
1. Battery Voltage
  2. Load Voltage
  3. Battery Current
  4. Load Current

**MECHANICAL**

Weight	Approx. 60 Kgs
Dimensions	302 (H) x 483 (W) x 403 (D) mm
Enclosure	IP-41, CRC Sheet, Powder coated Case, Tabletop or Rack Mounting
Input Connection	Wago Terminals (3 Nos.)
Output Connection	Wago Terminals (4 Nos.-Load/Battery)

**ENVIRONMENT**

Operating Temperature	0° to 50° C
Storage Temperature	-10° C to +70° C
Cooling	Convection
Humidity	< 95% RH

**Specification No - FCBC/ DY 31400ERC- (Rev. 0)**

\* Enhancement to the above specifications & Customizing can be considered on request.

\* Specifications may or can be altered without notice as per company's continuous improvement Program.