



SMPS Power Plant Division

## Introduction of DACS

DACS Electrosystems Pvt.Ltd is located in Pune (Mah), India Ever since it was established in 1981 it commenced with design, manufacturing and supply of various power supply systems required in the field of telecommunication and had gained expertise in DC-DC Converters, AC-DC Converters and SMPS Based Power Plant systems.

Over the years DACS has identified the necessity of highly reliable, efficient power supplies for various applications. In view of disparity of the power situations in India, the power supply plays a vital role in a reliable performance of telecom equipments.

To cater the requirements of telecom service providers DACS has developed a product range in order of 24V and 48VDC systems of various capacities and has succeeded to meet the stringent norms on reliable operations of such systems. Also it is equipped with the most advanced and unique manufacturing facility comprising of inhouse Surface Mount Line (SMT), CNC Fabrication, and Powder Coating facility including seven tank pre-treatment process.

DACS over the years has always ensured the enhancement of customer satisfaction and are committed to comply with the requirements and continually improve the effectiveness of the Quality management system.

### Product overview:

- **SMPS Power Plants:**  
Ratings 48Vdc.....200A, 450A, 600A, 800A, 1000A, 1500A,  
3000 Amps..  
24Vdc.....300Amps..
- **AC-DC Converters:**  
Rectifier rating 48Vdc.....25A, 50A, 100Amps..  
24Vdc.....50Amps..

### Our Customers:

- BSNL
- ITI Limited
- Ericsson India Ltd.
- Alcatel India
- Motorola
- Huawei Telecommunications(India)  
Co.,PVT.LTD

### Future scope:

- Energy Generation using Renewable energy source.



## Quality Policy

We at DACS Electrosystems Pvt Ltd. shall ensure the enhancement of customer satisfaction by delivering the best quality products within stimulated time frame.

We are committed to comply with the requirements and continually improve the effectiveness of Quality Management System.

### CERTIFICATE OF REGISTRATION



PHOENIX PROGRESSIVE CERTIFICATIONS ENTERPRISE PVT. LTD.

ISO 9001:2000

CERTIFIED  
QUALITY MANAGEMENT SYSTEM  
THIS IS TO CERTIFY THAT THE  
QUALITY MANAGEMENT SYSTEM OF

**DACS Electrosystems Pvt. Ltd.**

Gat No.1/3/4, A/p- Marunji, Near Hinjwadi, Dist.Pune- 411 057, Maharashtra, India.

has been assessed and registered as complying with the requirements of the International Standard shown above.

The registration covers design, manufacture and supply of SMPS based power plants.

Exclusions: NIL.

Chairman  
Phoenix Progressive  
Certifications  
Enterprise Pvt. Ltd.  
Pune, INDIA

Certifying Authority  
Phoenix Progressive  
Certifications  
Enterprise Pvt. Ltd.  
Pune, INDIA

Registration Number : PPCE-0091-0805  
Registration Date : 09 May 2008  
Valid upto : 27 Apr 2011



PHOENIX  
PROGRESSIVE  
CERTIFICATIONS  
ENTERPRISE  
PVT. LTD.



541, Clover Centre, 7, Moledina Road, Pune 411001, Maharashtra, India.

## **DSR 24-50-1P Rectifier**

The DSR 24-50-1P is an switched mode rectifier designed to deliver 50Amps of current in an 24V system. The in built microprocessor controls the rectifier in any given input conditions (wide input range) to provide constant power and also protects it from short circuit, output voltage high / low, over current etc...

The technology used in the rectifier is most advanced one so as to deliver an efficient and a reliable performance. The rectifier is also incorporated with hot plug in insertion method along with the system.

### **The technical specifications are as mentioned below:**

#### ***Input :***

AC Supply Single Phase	: L, N, Earth
Input Voltage Range	: 150...275Vac
Frequency Range	: 45...60Hz
Efficiency	: >88% @230Vac, 50...100% Load >85% @150Vac, 50...100% Load
Power Factor	: >0.99 at 50...100% Load
Total harmonic Distortion (THD)	: <10%

#### ***Output :***

Nominal Voltage	: 24Vdc
Voltage range	: 22...29Vdc
Nominal Current	: 50Amps @ 27Vdc (150...275Vac)
Voltage regulation	: +/- 1% at 0...100% Load, 150...275Vac
Start-up-Time	: <5000msec
Protection	: Over Voltage shutdown Short Circuit protection / shutdown, Fan Fail shutdown

#### ***Features :***

- Hot-swap insertion method along with the system
- Ultra reliable, compact design & efficient performance.
- Wide input range 150...275Vac.
- Power Factor Correction > 0.99.
- Intelligent microprocessor controlled.
- Low Harmonic Distortion < 10%.

#### ***Environment :***

Ripple & Noise	: <100mVp-pk at 0...100% load, 30 MHz BW <0.6mVrms at 0...100% load
Safety isolation	: 2.0KVA - Input & Output 1.5KVA - Input & Earth 1.5KVA - Output & Earth
Operating Temperature	: -10.....+55 deg C
Storage Temperature	: -40.....+70 deg C

#### ***Mechanical:***

Dimensions	: 91 X 450 X 220mm (WxDxH)
Weight	: <8Kg.
Forced air Cooled	: Forced air Cooled

#### ***Alarms & Indications :***

Rectifiers Alarms &	: AC on...Green LED DC Fail/UV...Red LED
Visual Indications	: Over Load...Yellow LED Over Voltage...Red LED Fan Fail...Red LED



**DSR 24-50-1P Rectifier**

## **DSR 48-50-1P Rectifier**

The DSR 48-50-1P is an switched mode rectifier designed to deliver 50Amps of current in an 48V system. The in built microprocessor controls the rectifier in any given input conditions (wide input range) to provide constant power and also protects it from short circuit, output voltage high / low, over current etc...

The technology used in the rectifier is most advanced one so as to deliver an efficient and a reliable performance. The rectifier is also incorporated with hot plug in insertion method along with the system.

### **The technical specifications are as mentioned below:**

#### **Input :**

AC Supply Single Phase : L, N, Earth  
Input Voltage Range : 150...275Vac  
Frequency Range : 45...60Hz  
Efficiency : >88% @230Vac, 50...100% Load  
>85% @150Vac, 50...100% Load  
Power Factor : >0.99 at 50...100% Load  
Total harmonic Distortion (THD) : <10%

#### **Output :**

Nominal Voltage : 48Vdc  
Voltage range : 44...57Vdc  
Nominal Current : 50Amps @ 54Vdc  
(150...275Vac)  
Voltage regulation : +/- 1% at 0...100% Load,  
150...275Vac  
Start-up-Time : <5000msec  
Protection : Over Voltage shutdown  
Short Circuit protection /  
shutdown, Fan Fail shutdown

#### **Features :**

- Hot-swap insertion method along with the system
- Ultra reliable, compact design & efficient performance.
- Wide input range 150...275Vac.
- Power Factor Correction > 0.99.
- Intelligent microprocessor controlled.
- Low Harmonic Distortion< 10%.

#### **Environment :**

Ripple & Noise : <100mVp-pk at 0...100% load,  
30 MHz BW  
<0.6mVrms at 0...100% load  
Safety isolation : 2.0KVA - Input & Output  
1.5KVA - Input & Earth  
1.5KVA - Output & Earth  
Operating Temperature : -10.....+55 deg C  
Storage Temperature : -40.....+70 deg C

#### **Mechanical:**

Dimensions : 91 X 450 X 220mm  
(WxDxH)  
Weight : <8Kg.  
Forced air Cooled : Forced air Cooled

#### **Alarms & Indications :**

Rectifiers Alarms & : AC on...Green LED  
DC Fail/UV...Red LED  
Visual Indications : Over Load...Yellow LED  
Over Voltage...Red LED  
Fan Fail...Red LED



**DSR 48-50-1P Rectifier**

## **DSR 48-25-1P Rectifier**

The DSR 48-25-1P is an switched mode rectifier designed to deliver 25Amps of current in an 48V system. The in built microprocessor controls the rectifier in any given input conditions (wide input range) to provide constant power and also protects it from short circuit, output voltage high / low, over current etc...

The rectifier is designed using the most advanced technology which indeed plays an vital role in an efficient performance and thus adding to its reliability.

### **The technical specifications are as mentioned below:**

#### ***Input :***

AC Supply Single Phase : L, N, Earth  
Input Voltage Range : 90...300Vac  
Frequency Range : 45...60Hz  
Efficiency : >90% @230Vac, 50....100% Load  
>85% @90Vac, 50....100% Load  
Power Factor : >0.99 at 50...100% Load  
Total harmonic Distortion (THD) : <10%

#### ***Output :***

Nominal Voltage : 48Vdc  
Voltage range : 44...57Vdc  
Nominal Current : 25Amps @ 54Vdc  
(90...300Vac)  
Voltage regulation : +/- 1% at 0...100% Load,  
90...300Vac  
Start-up-Time : <10000msec  
Protection : Over Voltage shutdown  
Short Circuit protection /  
shutdown, Fan Fail shutdown

#### ***Features :***

- Wide input range 90....300Vac
- Power factor Correction >0.99.
- Microprocessor Based Controller.
- Highly reliable and efficient rectifier.
- Low Harmonic Distortion <10%.

#### ***Environment :***

Ripple & Noise : <300mVp-pk at 0...100% load,  
Psopho < 4mV  
Safety isolation : 2.0KVA - Input & Output  
1.5KVA - Input & Earth  
1.5KVA - Output & Earth  
Operating Temperature : -10.....+55 deg C  
Storage Temperature : -40.....+70 deg C

#### ***Mechanical:***

Dimensions : 119 X 340 X 217mm  
(WxDxH)  
Weight : <8Kg.  
Forced air Cooled : Forced air Cooled

#### ***Alarms & Indications :***

AC on  
DC Fail/UV  
Over Load  
Over Voltage  
Fan Fail

All alarms are displayed on  
: the LCD mounted on the front  
panel of the rectifier.



**DSR 48-25-1P Rectifier**

## **DSR 48-50-3P Rectifier**

The DSR 48-50-3P is an switched mode rectifier designed to deliver 50Amps of current in an 48V system. The in built microprocessor controls the rectifier in any given input conditions (wide input range) to provide constant power and also protects it from short circuit, output voltage high / low, over current etc...

The rectifier is designed using the most advanced technology which indeed plays an vital role in an efficient performance and thus adding to its reliability. The rectifier is also incorporated with hot plug in insertion method along with the system.

### **The technical specifications are as mentioned below:**

#### ***Input :***

AC Supply	: 3 Phase : R, Y, B, Earth
Input Voltage Range	: 320...480Vac
Frequency Range	: 45...60Hz
Efficiency	: >90% @400Vac, 50....100% Load >85% @320Vac, 50....100% Load
Power Factor	: >0.99 at 50...100% Load
Total harmonic Distortion (THD)	: <10%

#### ***Output :***

Nominal Voltage	: 48Vdc
Voltage range	: 44...57Vdc
Nominal Current	: 50Amps @ 54Vdc (320...480Vac)
Voltage regulation	: +/- 1% at 0....100% Load, 320...480Vac
Start-up-Time	: <10000msec
Protection	: Over Voltage shutdown Short Circuit protection / shutdown, Fan Fail shutdown

#### ***Environment :***

Ripple & Noise	: <300mVp-pk at 0...100% load, Psopho :< 4mV
Safety isolation	: 2.0KVA - Input & Output 1.5KVA - Input & Earth 1.5KVA - Output & Earth
Operating Temperature	: -10.....+55 deg C
Storage Temperature	: -40.....+70 deg C

#### ***Features :***

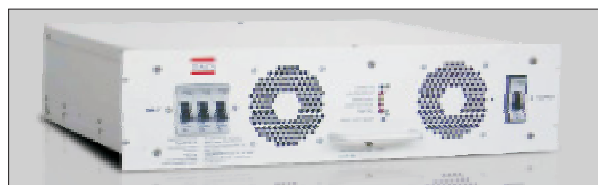
- Wide input range 320....480Vac
- Power factor Correction >0.99.
- Microprocessor Based Controller.
- Highly reliable and efficient rectifier.
- Hot-swap insertion method.

#### ***Alarms & Indications :***

Rectifiers Alarms &	: AC on...Green LED DC Fail/UV...Red LED
Visual Indications	: Over Load...Yellow LED Over Voltage...Red LED Fan Fail...Red LED

#### ***Mechanical:***

Dimensions	: 483 X 400 X 115 mm (WxDxH)
Weight	: <10Kg.
Forced air Cooled	: Forced air Cooled



**DSR 48-50-3P Rectifier**

## **DSR 48-100-3P Rectifier**

The DSR 48-100-3P is an switched mode rectifier designed to deliver 100Amps of current in an 48V system. The in built microprocessor controls the rectifier in any given input conditions (wide input range) to provide constant power and also protects it from short circuit, output voltage high / low, over current etc...

The rectifier is designed using the most advanced technology which indeed plays an vital role in an efficient performance and thus adding to its reliability. The rectifier is also incorporated with hot plug in insertion method along with the system.

### **The technical specifications are as mentioned below:**

#### ***Input :***

AC Supply	: 3 Phase : R, Y, B, Earth
Input Voltage Range	: 320...480Vac
Frequency Range	: 45...60Hz
Efficiency	: >90% @400Vac, 50....100% Load >85% @320Vac, 50....100% Load
Power Factor	: >0.99 at 50...100% Load
Total harmonic Distortion (THD)	: <10%

#### ***Output :***

Nominal Voltage	: 48Vdc
Voltage range	: 44...57Vdc
Nominal Current	: 100Amps @ 54Vdc (320...480Vac)
Voltage regulation	: +/- 1% at 0....100% Load, 320...480Vac
Start-up-Time	: <10000msec
Protection	: Over Voltage shutdown Short Circuit protection / shutdown, Fan Fail shutdown

#### ***Environment :***

Ripple & Noise	: <300mVp-pk at 0... 100% load, Psopho :< 4mV
Safety isolation	: 2.0KVA - Input & Output 1.5KVA - Input & Earth 1.5KVA - Output & Earth
Operating Temperature	: -10.....+55 deg C
Storage Temperature	: -40.....+70 deg C

#### ***Features :***

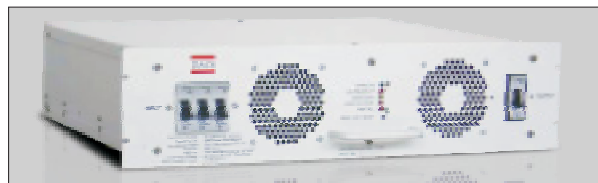
- Wide input range 320....480Vac
- Power factor Correction >0.99.
- Microprocessor Based Controller.
- Highly reliable and efficient rectifier.
- Hot-swap insertion method.

#### ***Alarms & Indications :***

Rectifiers Alarms &	: AC on...Green LED DC Fail/UV...Red LED
Visual Indications	: Over Load...Yellow LED Over Voltage...Red LED Fan Fail...Red LED

#### ***Mechanical:***

Dimensions	: 483 X 400 X 115 mm (WxDxH)
Weight	: <15Kg.
Forced air Cooled	: Forced air Cooled



**DSR 48-100-3P Rectifier**



## **DSP 24-300-3P SMPS POWER PLANT**

The DSP 24-300-3P is an SMPS based power plant designed to deliver 300Amps at an nominal output of 24VDC for telecom applications. Advanced technology used and compact design makes it suitable for all BTS applications. The microprocessor based DSA Controller adds to its reliable performance along with intelligent power features and state of the art technology. It consists of 6 rectifiers of 50Amps in order to deliver 300Amps along with DC distribution.

**The technical specifications are as mentioned below:**

### ***Input :***

AC Supply : 3 Phase : R, Y, B, N & Earth  
Input Voltage Range : 320...480Vac  
Frequency Range : 45...60Hz

### ***Output :***

Nominal Voltage : 24Vdc  
Voltage range : 22...29Vdc  
Float Voltage : 27Vdc  
Charge/Boost Voltage : 27.6Vdc  
Max.System Power : 8100W at 27Vdc Constant Power  
Load sharing : <+/-10%  
Ultimate Capacity : 300Amps  
Basic Rectifier : 50Amps@24Vdc  
Max.no.of rectifiers : 6

### ***Environment :***

Operating Temperature : -10...+50 deg C  
Storage Temperature : - 40...+70 deg C  
Relative humidity : 10...95% non-condensing  
Altitude : 0...3000mtr

### ***Mechanical:***

System Dimensions : 600 X 600 X 650mm  
(WxDxH)  
System color : Pebble Grey  
Cabinet Type : IP20

### ***Alarms & Indications :***

AC Fail  
DC High / low  
Rectifier fail  
Surge protection fail  
DSA Controller fail  
DC distribution fail  
System overload

All Alarms are extended to potential free contacts & also displayed on the LCD mounted on the front panel of the system.

### ***Features:***

DSA Controller : Microprocessor based intelligent controller  
Battery Health Check : Real time based Battery health check  
Remote Communication : through RS-232 Interface

### ***Features :***

- 3 Phase input, wide range 320...480Vac
- Microprocessor based intelligent DSA Controller
- Highly reliable, compact design
- Constant power up to 8.1KW
- User friendly LCD display
- 23" mountable rack



**DSP 24-300-3P Rectifier**

## **DSP 48-300-3P SMPS POWER PLANT**

The DSP 48-300-3P is an SMPS based power plant designed to deliver 300Amps at an nominal output of 48VDC for telecom applications. Advanced technology used and compact design makes it suitable for all BTS applications. The microprocessor based DSA Controller adds to its reliable performance along with intelligent power features and state of the art technology. It consists of 6 rectifiers of 50Amps in order to deliver 300Amps along with DC distribution.

**The technical specifications are as mentioned below:**

### ***Input :***

AC Supply : 3 Phase : R, Y, B, N & Earth  
Input Voltage Range : 320...480Vac  
Frequency Range : 45...60Hz

### ***Output :***

Nominal Voltage : 48Vdc  
Voltage range : 44...57Vdc  
Float Voltage : 54Vdc  
Charge/Boost Voltage : 55.2Vdc  
Max.System Power : 16200W at 54Vdc Constant Power  
Load sharing : <+/-10%  
Ultimate Capacity : 300Amps  
Basic Rectifier : 50Amps@48Vdc  
Max.no.of rectifiers : 6

### ***Environment :***

Operating Temperature : -10...+50 deg C  
Storage Temperature : - 40...+70 deg C  
Relative humidity : 10...95% non-condensing  
Altitude : 0...3000mtr

### ***Mechanical:***

System Dimensions : 600 X 600 X 650mm  
(WxDxH)  
System color : Pebble Grey  
Cabinet Type : IP20

### ***Alarms & Indications :***

AC Fail  
DC High / low  
Rectifier fail  
Surge protection fail  
DSA Controller fail  
DC distribution fail  
System overload

All Alarms are extended to potential free contacts & also displayed on the LCD mounted on the front panel of the system.

### ***Features:***

DSA Controller : Microprocessor based intelligent controller  
Battery Health Check : Real time based Battery health check  
Remote Communication : through RS-232 Interface

### ***Features :***

- 3 Phase input, wide range 320...480Vac
- Microprocessor based intelligent DSA Controller
- Highly reliable, compact design
- Constant power up to 16.2KW
- User friendly LCD display
- 23" mountable rack



**DSP 48-300-3P Rectifier**

## **DSP 48-200-1P SMPS POWER PLANT**

The DSP 48-200-1P is an SMPS based power plant designed to deliver 200Amps at an nominal output of 48VDC for telecom applications. Its advanced technology and highly skilled engineering makes it suitable in all kinds of environmental conditions. The microprocessor based DSA Controller adds to its reliable performance along with intelligent power features and state of the art technology. It consists of 8 rectifiers of 25Amps in order to deliver 200Amps.

### **The technical specifications are as mentioned below:**

#### **Input :**

AC Supply : 1 Phase: L, N and Earth  
Input Voltage Range : 90.....300Vac  
Frequency Range : 45.....60Hz

#### **Output :**

Nominal Voltage : 48Vdc  
Voltage range : 44...57Vdc  
Float Voltage : 54Vdc  
Charge/Boost Voltage : 55.2Vdc  
Max.System Power : 10800W at 54Vdc Constant Power  
Load sharing : <+/-10%  
Ultimate Capacity : 200Amps  
Basic Rectifier : 25Amps@48Vdc  
Max.no.of rectifiers : 8

#### **Environment :**

Operating Temperature : -10...+50 deg C  
Storage Temperature : - 40...+70 deg C  
Relative humidity : 10...95% non-condensing  
Altitude : 0...3000mtr

#### **Mechanical:**

System Dimensions : 600 X 600 X 1000mm  
(WxDxH)  
System color : Satin Blue  
Cabinet Type : IP20 & IP55

#### **Alarms & Indications :**

AC Fail  
DC High / low  
Rectifier fail  
Surge protection fail  
DSA Controller fail  
DC distribution fail  
System overload

All Alarms are extended to potential free contacts & also displayed on the LCD mounted on the front panel of the system.

#### **Features:**

DSA Controller : Microprocessor based intelligent controller  
Battery Health Check : Real time based Battery health check  
Remote Communication : through RS-232 Interface

#### **Approvals:**

- TSEC approved as per GR/SMP 01/05.Jan'2005.

#### **Features :**

- 1 Phase input, wide range 90...300Vac
- Microprocessor based intelligent DSA Controller
- Highly reliable, compact design
- Constant power up to 10.8KW
- User friendly LCD display
- Highly reliable, compact design



**DSP 48-200-1P OUTDOOR POWER PLANT**



**DSP 48-200-1P INDOOR POWER PLANT**

## **DSP 48-450-3P SMPS POWER PLANT**

The DSP 48-450-3P is an SMPS based power plant designed to deliver 450Amps at an nominal output of 48VDC for telecom applications. Its advanced technology and highly skilled engineering makes it suitable in all kinds of environmental conditions. The microprocessor based DSA Controller adds to its reliable performance along with intelligent power features and state of the art technology. It consists of 9 rectifiers of 50Amps in order to deliver 450Amps.

### **The technical specifications are as mentioned below:**

#### **Input :**

AC Supply : 3 Phase: R, Y, B and Earth  
Input Voltage Range : 320.....480Vac  
Frequency Range : 45.....60Hz

#### **Output :**

Nominal Voltage : 48Vdc  
Voltage range : 44...57Vdc  
Float Voltage : 54Vdc  
Charge/Boost Voltage : 55.2Vdc  
Max.System Power : 24300W at 54Vdc Constant Power  
Load sharing : <+/-10%  
Ultimate Capacity : 450Amps  
Basic Rectifier : 50Amps@48Vdc  
Max.no.of rectifiers : 9

#### **Environment :**

Operating Temperature : -10...+50 deg C  
Storage Temperature : - 40...+70 deg C  
Relative humidity : 10...95% non-condensing  
Altitude : 0...3000mtr

#### **Mechanical:**

System Dimensions : 600 X 600 X 1700mm  
(WxDxH)  
System color : Satin Blue  
Cabinet Type : IP20 & IP55

#### **Alarms & Indications :**

AC Fail  
DC High / low  
Rectifier fail  
Surge protection fail  
DSA Controller fail  
DC distribution fail  
System overload

All Alarms are extended to potential free contacts & also displayed on the LCD mounted on the front panel of the system.

#### **Features:**

DSA Controller : Microprocessor based intelligent controller  
Battery Health Check : Real time based Battery health check  
Remote Communication : through RS-232 Interface

#### **Approvals:**

- TSEC approved as per GR/SMP 01/05.Jan'2005.

#### **Features :**

- 3 Phase input, wide range 320...480Vac
- Microprocessor based intelligent DSA Controller
- Highly reliable, compact design
- Constant power up to 24.3KW
- User friendly LCD display
- Highly reliable, compact design



**DSP 48-450-3P OUTDOOR POWER PLANT**



**DSP 48-450-3P INDOOR POWER PLANT**

## **DSP 48-1500-3P SMPS POWER PLANT**

The DSP 48-1500-3P is an SMPS based power plant designed to deliver 1500Amps at an nominal output of 48VDC for telecom applications. Its advanced technology and highly skilled engineering makes it suitable in all kinds of environmental conditions. The microprocessor based DSA Controller adds to its reliable performance along with intelligent power features and state of the art technology. It consists of 15 rectifiers of 100Amps in order to deliver 1500Amps.

### **The technical specifications are as mentioned below:**

#### **Input :**

AC Supply : 3 Phase: R, Y, B and Earth  
Input Voltage Range : 320.....480Vac  
Frequency Range : 45.....60Hz

#### **Approvals:**

- TSEC approved as per GR/SMP 01/05.Jan'2005.

#### **Output :**

Nominal Voltage : 48Vdc  
Voltage range : 44...57Vdc  
Float Voltage : 54Vdc  
Charge/Boost Voltage : 55.2Vdc  
Max.System Power : 81000W at 54Vdc Constant Power  
Load sharing : <+/-10%  
Ultimate Capacity : 1500Amps  
Basic Rectifier : 100Amps@48Vdc  
Max.no.of rectifiers : 15

#### **Features :**

- 3 Phase input, wide range 320...480Vac
- Microprocessor based intelligent DSA Controller
- Highly reliable, compact design
- Constant power up to 81KW
- User friendly LCD display
- Highly reliable.

#### **Environment :**

Operating Temperature : -10...+50 deg C  
Storage Temperature : - 40...+70 deg C  
Relative humidity : 10...95% non-condensing  
Altitude : 0...3000mtr

#### **Mechanical:**

System Dimensions : 600 X 600 X 2450mm (WxDxH)  
System color : Satin Blue  
Cabinet Type : IP20

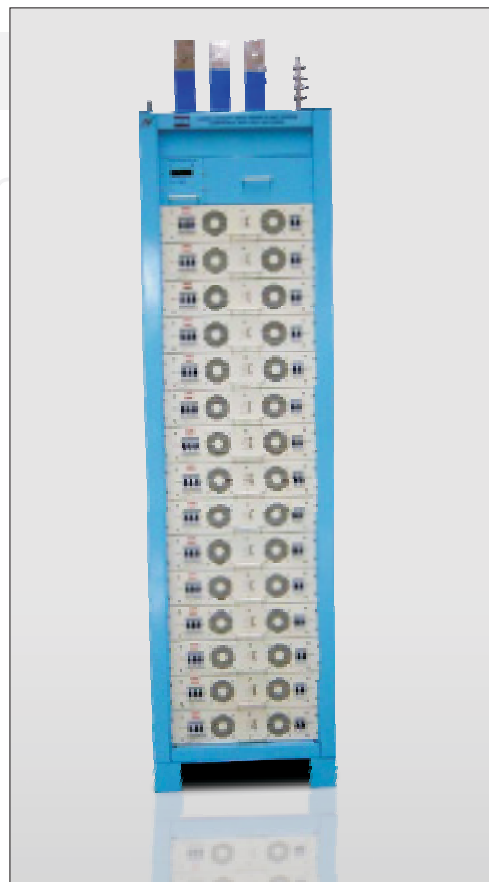
#### **Alarms & Indications :**

AC Fail  
DC High / low  
Rectifier fail  
Surge protection fail  
DSA Controller fail  
DC distribution fail  
System overload

All Alarms are extended to potential free contacts & also displayed on the LCD mounted on the front panel of the system.

#### **Features:**

DSA Controller : Microprocessor based intelligent controller  
Battery Health Check : Real time based Battery health check  
Remote Communication : through RS-232 Interface



**DSP 48-1500-3P POWER PLANT**

## **DSP 48-3000-3P SMPS POWER PLANT**

The DSP 48-3000-3P is an SMPS based power plant designed to deliver 3000Amps at an nominal output of 48VDC for telecom applications. Its advanced technology and highly skilled engineering makes it suitable in all kinds of environmental conditions. The microprocessor based DSA Controller adds to its reliable performance along with intelligent power features and state of the art technology. It consists of 30 rectifiers of 100Amps in order to deliver 3000Amps.

### **The technical specifications are as mentioned below:**

#### **Input :**

AC Supply : 3 Phase: R, Y, B and Earth  
Input Voltage Range : 320.....480Vac  
Frequency Range : 45.....60Hz

#### **Approvals:**

- TSEC approved as per GR/SMP 01/05.Jan'2005.

#### **Output :**

Nominal Voltage : 48Vdc  
Voltage range : 44...57Vdc  
Float Voltage : 54Vdc  
Charge/Boost Voltage : 55.2Vdc  
Max.System Power : 162000W at 54Vdc Constant Power  
Load sharing : <+/-10%  
Ultimate Capacity : 3000Amps  
Basic Rectifier : 100Amps@48Vdc  
Max.no.of rectifiers : 30

#### **Features :**

- 3 Phase input, wide range 320...480Vac
- Microprocessor based intelligent DSA Controller
- Highly reliable, compact design
- Constant power up to 162KW
- User friendly LCD display
- Highly reliable.

#### **Environment :**

Operating Temperature : -10...+50 deg C  
Storage Temperature : - 40...+70 deg C  
Relative humidity : 10...95% non-condensing  
Altitude : 0...3000mtr

#### **Mechanical:**

System Dimensions : 600 X 600 X 2450mm  
X 2(WxDxH) Dual rack  
System color : Satin Blue  
Cabinet Type : IP20

#### **Alarms & Indications :**

AC Fail  
DC High / low  
Rectifier fail  
Surge protection fail  
DSA Controller fail  
DC distribution fail  
System overload

All Alarms are extended to potential free contacts & also displayed on the LCD mounted on the front panel of the system.

#### **Features:**

DSA Controller : Microprocessor based intelligent controller  
Battery Health Check : Real time based Battery health check  
Remote Communication : through RS-232 Interface



**DSP 48-3000-3P POWER PLANT**

## **Battery Health Monitoring Unit**

The Battery Health Monitoring Unit comprises of a master unit & a battery control unit. The battery control unit is controlled by the intelligent microprocessor based in the main master unit. It is based on real time clock which monitors individual cell voltage, cell temperature & cell conductance.

Another advantage of real time based system is the battery health check can be performed as per user convenience. The data is available through RS-485 interface & also through TCP/IP via remote monitoring.

### ***Features :***

Monitoring Parameters:

- Cell voltage
- Cell temperature
- Cell conductance
- Max. 3 batteries of 24 cells (in case of 48V batt.) can be monitored.
- Real time based system.
- Storage of reference data for max.3 batteries.
- Default 30 days periodic check is programmed.
- Data available through RS-485 and also through TCP/IP via remote monitoring.

### ***Approvals:***

- TSEC approved as per GR/SMP-01/05.Jan'2005

### ***Applicable Models:***

- 48V-200Amps using 25Amp rectifiers.
- 48V-450Amps using 50Amp rectifiers.
- 48V-1500Amps using 100Amp rectifiers.
- 48V-3000Amps using 100Amp rectifiers.

SMPS Power Plant Division



***Battery Health Monitoring Unit***



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*DACS Electrosystems Pvt. Ltd, Pune, India.*

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