



Hot- Swappable

MODULAR RECTIFIER SYSTEM

EWT380/48-100AS Rectifier system

Feature

- ◆ Wide operating range of AC input voltage: 90~415Vac
- ◆ current/voltage switching tech with high efficiency $\geq 96\%$
- ◆ Perfect battery management, battery temperature
- ◆ RS485 communication, SNMP optional
- ◆ Temperature compensation, LVLD and LVBD protection,
- ◆ Automatic battery test function, cycle test, quick test
- ◆ Supports power system & module sleep, efficiency mixing, energy saving
- ◆ Support real-time detection of the operating status of the power system
- ◆ Support alarm real-time detection and reporting
- ◆ Hot-swap able
- ◆ Input over/under voltage protection
- ◆ Output over voltage protection
- ◆ Output over current protection
- ◆ Output short circuit protection
- ◆ Auto current sharing, parallel operation



Application

- ✧ Telecom station/base/ Cabinet Equipment
- ✧ SCADA Networks and Data Room
- ✧ Transmission equipment
- ✧ Radio base station/cell sites
- ✧ Railway & metro
- ✧ Direct-current emergency power units in power stations and chemical plants

Description

Modular rectifier System is a modular Extra-able power system based on building blocks for both 19 inch system solutions. It is consist of Rectifier module & Control Monitor & 19"framework. This rectifier system 90~415 V AC supply voltage, support 90~290Vac single phase supply voltage. into stable nominal 48VDC voltage adjustable to the needs of the application.

All versions provide options for alarming and battery temperature probes.

Technical specifications 48Vdc-3000W

GENERALLY DETAILS

BR483000HH*2. Rectifier module (I/P 220Vac,O/P:48Vdc);
M30.1.2V*1.....Monitor module (I/P 220Vdc);
SRM-191**19" Inch 2U size chassis;
ClassificationIP20;
Safety..... GB4943-2001& IEC 60950-1;
EMI EN 55032:2015;
.....EN 55035:2017;
.....EN61000-3-2:2014;
.....EN61000-3-3:2013;
.....EN55022, CLASS A;
.....EN300386,CLASS ;
ESD.....GB17626.2-1998/IEC61000-4-2;
EFT.....GB17626.4-1998/IEC61000-4-4;
SURGE.....GB17626.5-1998/IEC61000-4-5;
DIP.....GB17626.11-1998/IEC61000-4-11;
Conducted Immunity..... IEC61000-4-6;
Radiated ImmunityIEC61000-4-3;
EnvironmentETSI EN 300 019-2 RoHS;

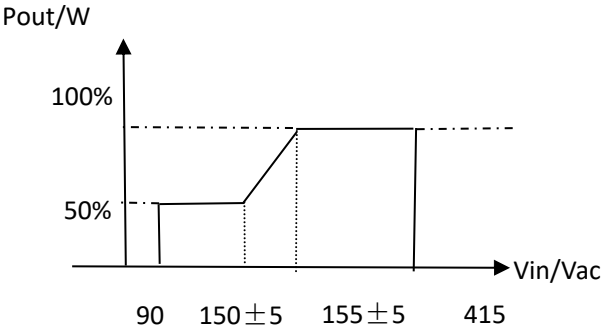
DISTRIBUTION

AC Distribution3L+N+PE/380VAc;
Input MCB1* @ 63A ,2P;
LLVD.....1×125A MCB (Micro Circuit Breaker), 2×32A MCB;
BLVD 1×80A MCB, 2×32A MCB, 1×16A MCB ;
Battery MCB 2x125A MCB

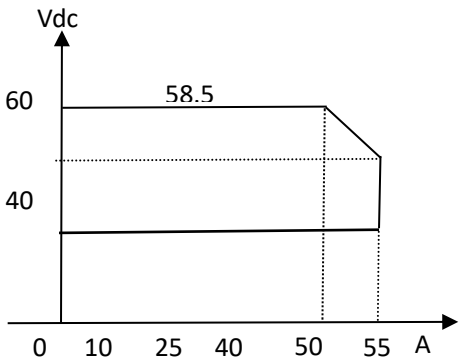
RECTIFIER MODULE -----BR1102500

Technical		
AC Input	Input	Three phase 380Vac .50hz or Single phase 220Vac,50hz
	Frequency	50HZ, Range: 45Hz~66Hz
	Voltage Range	90V~415VAC
DC output	Rated current (A)	50A
	Max Output Current	0~55A
	Rated power (W)	3KW@Vout put>380V
	Rated voltage(V)	380V
	Equ- charge (V)	56.4V(42-58Vdc adjustable);
	Float voltage (V)	53.5V(42-58Vdc adjustable);
	Output Accuracy (V)	≤0.6%
	Output ripple voltage	≤200mV<0-20mHZ>
	PF	0.99@220VAC/50A, ≥0.98@220VAC/25A;
	Leakage current	≤1.5mA
Indicator	LCD display	Input/output voltage、Frequency、 output current、 Environment、 Rate
	Power status	City power、 Output、 Under voltage、 overload voltage
Current Sharing		±5% from true average current between modules;
Load regulation		2%
Line regulation		1%
Dimension		220X103X88mm (D*W*H)

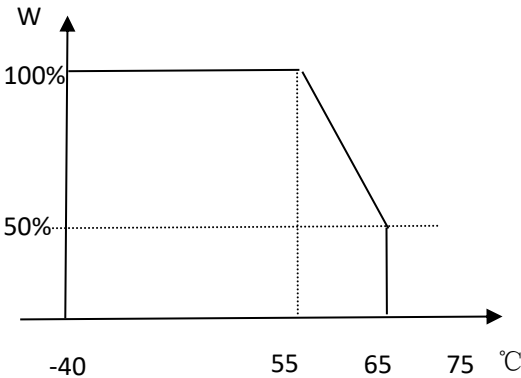
Output power Vs input voltage @ 45° C



Output voltage Vs output current @ 45° C



Output power Vs ambient temperature



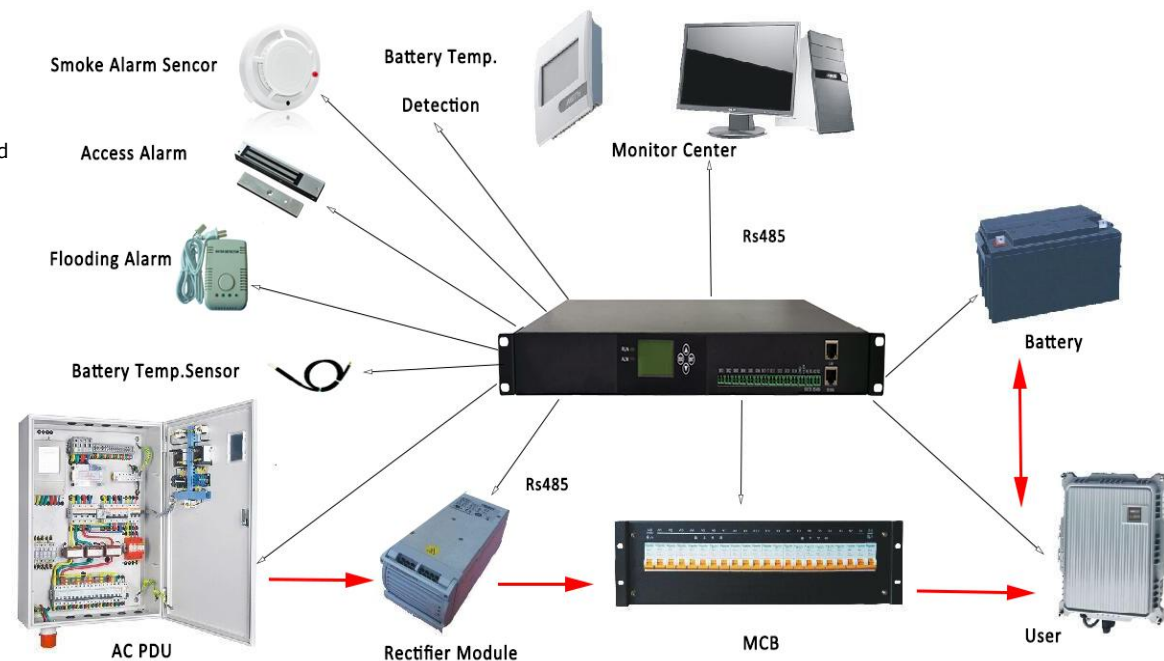
Monitor Control---M30.1.2V Serial



Features:

- ◆ 1.Support real-time detection of the operating status of the power system.
- ◆ 2. AC information detection (single-phase input mode / three-phase input mode optional).
- ◆ 3.DC information detection.
- ◆ 4.rectifier module information detection.
- ◆ 5.Battery information detection.
- ◆ 6.Ambient temperature, battery temperature, ambient humidity, Access Control, smoke, Flood detection.
- ◆ 7.Dry contact input signal detection.
- ◆ 8. AC lightning protection and DC lightning protection detection.
- ◆ 9.Battery in-position detection.
- ◆ 10.Support alarm real-time detection and reporting.
- ◆ 11.Support 6-channel alarm dry contact output, output logic normally open / normally closed optional, can be associated with different alarm information..
- ◆ 12.1000 historical alarm records.
- ◆ 13.RS485 interface, TCP/IP interface, YDN23 (YD/T 1363).
- ◆ 14. Controls the output voltage of the rectifier module .
- ◆ 15.Controls the maximum output current of the rectifier module.
- ◆ 16. Rectifier module intelligent sleep management.
- ◆ 17. Rectifier module system current limit management
- ◆ 18. Battery charging management (manual / automatic, equalizing / floating charge)
- ◆ 19. Battery temperature compensation
- ◆ 20.Battery high and low temperature alarm
- ◆ 21. Battery charging current limit management
- ◆ 22. Battery low voltage protection (manual / automatic, voltage / duration)
- ◆ 24.Battery test (timing/manual)
- ◆ 27Support users, battery discharge measurement

Technical		
DC Input	Voltage (V)	40~60Vdc
	Current (A)	≤0.5A
	Power(W)	Less than 20W
Communication Interface	Rs485	Default (Modbus Protocol RTU)
	TCP/IP	Default
	SNMP	Customized
	6 Dry Contact	Default SPD,Flood, Access Control,Smoke,Oil,Fans, air conditioning,No Battery ,User1~ User 6
	Signal Input	Battery Temp,Ambient Temp,Air Conditioning ,Smoke Alarm,Flooding Alarm,Access Alarm,Fan , generator ,Surge arrest,,
Storage Capacity	Baud Rate	9600 Bit/s
	Historical Alarm Records	Up to 1000 Units



OTHER SPECIFICATIOIS

Alarms:	Low mains shutdown High temperature shutdown Rectifier Failure Over voltage shutdown on output Fan failure, one or two fans. Low voltage alarm CAN bus failure
Warnings:	Low temperature shutdown Remote battery current limit activated Input voltage out of range,Over voltage Loss of CAN communication with control
Isolation	3500Vdc/10mA//1min Input - output 3500Vdc/10mA//1min Input-chassis 750Vdc/10mA//1min Output - chassis
MTBF	> 10,0000 hours (Tambient : 25°C)
Operating temp	-40 to +55°C (-40 to +131°F)
Storage temp	-40 to +70°C (-40 to +158°F)
Acoustic Noise	< 55dBA at nominal input and full load(Tambient < 30°C)
Altitude	<2000M
Cooling	fans (front to back airflow)
Fan Speed	Temperature and current regulated
Humidity	Operating: 5% to 95% RH non-condensing

Parameters	Setting range	Default value
Battery capacity	20Ah-300Ah	60Ah
Battery H-temp.Protection Voltage	127-150V	127V
Float Switch to Equalizing Charging Coefficient	0.05-0.25	0.06 C10
Equalizing Switch to Float charging Coefficient	0.01-0.25	0.04C10
Charging current limit	0.05-0.5C	0.1C
Charging over current	0.05-0.5C	0.25C
Battery Com Coeff	0-500 mV	50mV
Battery test termination voltage	198-260V	240 V
Note: 1. The battery protection voltage should be set according to the requirements of the battery manufacturer 2. If the user configures iron lithium battery, the relevant charging parameters should be set according to the requirements of the battery manufacturers 3. For more details about the Common Parameters of rectifier system, please refer to the Factory Testing reports.		

Other type can be supply

Model.No	Rectifier module	Output Capacity
EWT220Vac/48Vdc-30AS	BR483000H*1	1.8KW
EWT220Vac/48Vdc-50AS	BR483000H*1	3KW
EWT220Vac/48Vdc-80AS	BR483000H*2	4.8KW
EWT220Vac/48Vdc-100AS	BR483000H*2	6KW
EWT220Vac/48Vdc-120AS	BR483000H*3	7.2KW
EWT220Vac/48Vdc-200AS	BR483000H*4	12KW

Application for other type, please advise to us

This publication is issued to provide outline information only and is not deemed to form any part of any offer and contract. EPI has a policy of continous product development and improvement, and we therefore reserve the right to vary any information without prior notice.



EPI UPS (Asia-Pacific) Pte Ltd
101 Thomson Road, United Square,
#06-01/06, Singapore 307591

Website: www.epi-ups.com Tel. +65-6809 3073 Fax: +65-6491 5230

EPI UPS (Italy) SRL
Via Decio Raggi, 411
Forlì 447121, Italy