

PWR33 MODEL 400VAC/110VDC 60A BATTERY CHARGER



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3-PH INDUSTRIAL BATTERY CHARGER

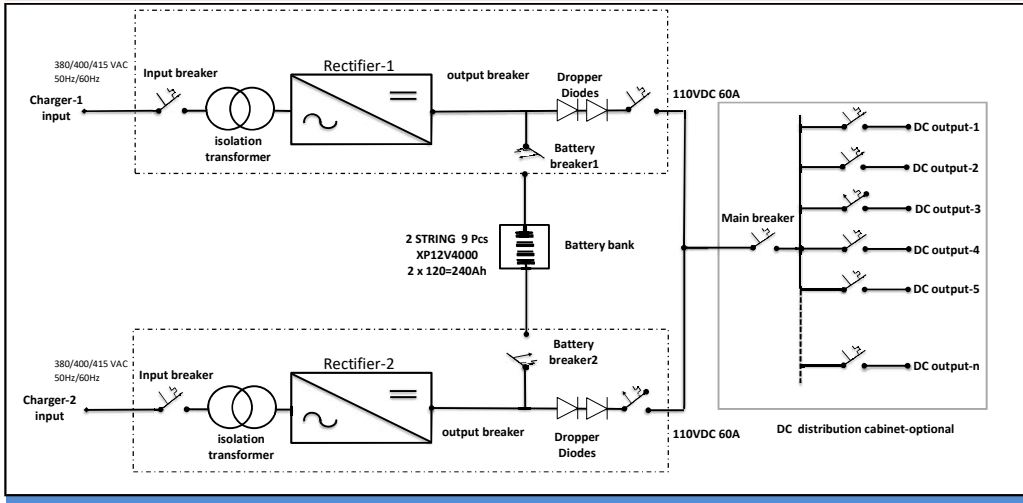
PWR33 MODEL 110VDC 50A



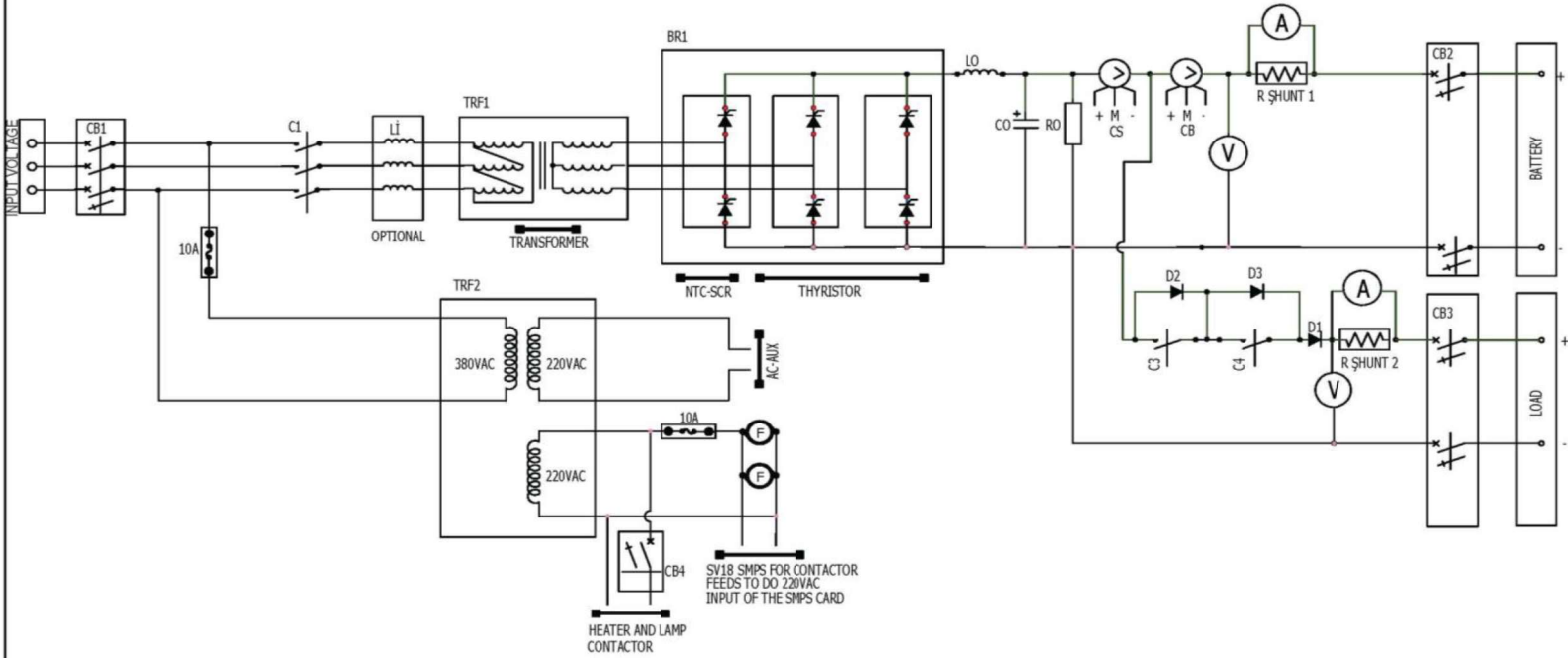
- ▶ 16-Bit DSP control
- ▶ Graphic LCD screen
- ▶ 5 control button
- ▶ 5% ripple
- ▶ Dry relay contacts for SCADA monitoring
- ▶ Over temperature protection
- ▶ Overload protection
- ▶ Programmable auto Boost Charge function
- ▶ Programmable Float Charge function
- ▶ Instantly input-output and battery voltage-current viewing
- ▶ Transformer and Thyristor based digital controlled rectifier technology
- ▶ Voltage and current full controls
- ▶ Dropper diode DC voltage regulation
- ▶ Fron access
- ▶ Input voltage tolerance $\pm 15\%$ 3-ph 380/400/440 VAC
- ▶ Input Frequency 50 Hz/60 Hz $\pm 5\%$
- ▶ Input Surge and fuse protections
- ▶ Special multimeters for input/output/battery voltage-current monitoring
- ▶ Output voltage 110VDC nominal
- ▶ DC+ and DC- leakage protection
- ▶ Output short circuit protection
- ▶ Status and alarm LEDs
- ▶ Optional high IP protections
- ▶ Double safety door protection
- ▶ Emergency stop button
- ▶ Startup rush current reducer button
- ▶ Mimic diagram



General Redundant Connection Single Line Diagram



RECTIFIER SINGLE LINE DIAGRAM



	DRAWING	EBRU DOĞAN	REVISION MAKING	-----	MODEL	PWR33	PROJECT	TEİAŞ KASIM 2016	DATE	18.03.2019	PAGE	
		CONTROL	KAYHAN KABİL	REVISION NO/ DATE	-----	POWER	INPUT	380/400 VAC 50/60 Hz	OUTPUT	24-48-110-220VDC	CONFIRMATION	

PWR33 INDUSTRIAL BATTERY CHARGER



110VDC /60A BATTERY CHARGER TECHNICAL TABLE

Rectifier Input:

Voltage	415	VAC	-%15	+%15
Current	18	A		
Frequency	50	Hz		
Input Fuse	25	A	Special value	No
Configuration	Redundant Charger			
Input Isolation transformer	Yes			

Load Output:

Voltage	110	Vdc	Max. Voltage	126	by dropper
Current	60	Amp			
Dropper	Yes				
Ripple	<0.'5 %				
Voltage Regulation:	± %1	rms	* battery mode		
Output Breakers	1X100A MCB				

Battery and Charging:

Battery Voltage	12V	Battery Brand	Exide Sprinter XP12V4000		
Battery Type	VRLA	Battery Strings / Cells / Block	1	2X54	2X54
Charging Current	1 to 60	Amper	Battery Breaker ampere	not specified	
Float Charge Voltage	121,50	V/Cell	Battery placement	EXT Steel Rack	
Boost Charge Voltage	135,00	V/Cell	Battery capacity	240	ah
Battery test voltage	110,00	V/Cell	Battery sizes	L X H X W	See datasheet mm
Load Current Limit	60	A	Battery unit weight	See datasheet	kg
Charge Characteristic	DIN 41773		Battery Configuration	1 common for 2 charger	

Cabinet:

Cabinet type	Stand Floor	Control and LCD	Graphic LCD		
Cooling	Fan cooling	Door stop	Right		
Cable Entry	Bottom	LCD language	English		
Label	Grey	Color	RAL 7035		
Cabinet Lighting	Yes	Locking	Lockable		
Cabinet dimensions	WxDxH: 600x650x1200 mm		Weight	200	kg

General Values:

Operating Temperature	0 /+50 °C	IEC Standard	IEC 60146-1-1		
Condensing resistance	Yes	Noisy	<65 dB		
Environmental temp.	-25 /+55 °C	Humidity	<90%		
Communication	RS232,dry relay, RS 485	Isolation Voltage	2kV	1 min	
Altitude	Max. 1000m NN	Protection degree	IP41		

Protections:

DC Low-High protection	<input checked="" type="checkbox"/>	Overload	<input checked="" type="checkbox"/>	Over Temp	<input checked="" type="checkbox"/>
Phase Failure	<input checked="" type="checkbox"/>	DC± to GND Leakage	<input checked="" type="checkbox"/>	Reverse Battery	<input checked="" type="checkbox"/>
Inpur Mains Surge protection	<input checked="" type="checkbox"/>	DC Surge protection	<input checked="" type="checkbox"/>	Emergency Stop	<input checked="" type="checkbox"/>

Lamp Indicators:

16 Pcs	Mains ON	Mains OFF	Start	Stop	Mains High	Mains Low	DC High	DC Low	+DC Leakage	-DC Leakage	Current Limit	Fan Fault	Over Temp.	Battery Fault	Temp. Comp.	General Fault
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Notes:

-
-
-

BATTERIES

*2 String 12V 120Ah

*Totally 240Ah / 18 Pcs

*Exide Sprinter Brand

*XP12V4000 Model

Sprinter P-XP / XP12V4000

INDUSTRIAL BATTERIES / NETWORK POWER

The extremely powerful, compact AGM batteries of the Sprinter P and Sprinter XP series are an ideal energy source for uninterrupted power supply and are particularly good in UPS applications and other security systems. GNB's experience and innovation with VRLA technology makes Sprinter batteries the preferred choice for high rate emergency battery backup.

Part Number: NAXP124000HP0FA



APPLICATIONS



SPECIFICATIONS

- Maintenance-free (no topping up) during the whole service life
- High-Compression Absorbent Glass Mat (AGM) technology
- Design life: »10-12 Years – Long Life« according to EUROBAT 2015 classification
- Available as standard or flame retardant version (UL 94-V0)
- Designed in accordance with IEC 60896-21/-22
- Grid plates with superior lead calcium alloy for excellent corrosion resistance
- Very low gassing due to internal gas recombination (99% efficiency)
- No restrictions for rail, road, sea and air transportation (IATA, DGR clause A67) – trouble-free transportation of operational blocks
- Approval: UL (Underwriters Laboratories)
- Manufactured in Europe in our ISO 9001 certified production plants



Design life
10-12 years
– Long Life



Block battery



Grid plate



Recyclable



Valve
regulated
lead-acid
batteries



Maintenance
free (no
topping up)



Special high
current
performance

RECYCLE WITH EXIDE.



Exide Technologies takes pride in its commitment to a better environment. An integrated approach to manufacturing, distributing and recycling of lead-acid batteries has been developed to ensure a safe and responsible life cycle for all of its products.



For more information please
[contact your local dealer](#)

TECHNICAL CHARACTERISTICS AND DATA

Nominal voltage	12 V
Float charge	2,27 V/C @ 25 °C
Capacity	CP 10min 1,6V/C 25°C 4100W/Bloc CC 10h 1,8V/C 25°C 120Ah
Short circuit current	2973 A (IEC60896-21/22)
Internal resistance	4,22 mΩ (IEC60896-21/22)

Terminal	F - M6
Terminal Torque	11 Nm
Container	UL 94-HB (Polypropylene)
Temperature range	-40°C to 55°C
Dimensions (l x b/w x h)	351 x 172 x 275 mm
Weight	43,6 kg
Origin	Castanheira, Portugal

CONSTANT POWER DISCHARGE

W @ 25 °C	1 min	2 min	3 min	5 min	10 min	15 min	20 min	30 min	45 min	1 h	2 h	3 h	5 h	8 h	10 h
1,900 V/C	2857	2848	2841	2755	2420	2161	1862	1446	1076	865	535	373	236	153	123
1,850 V/C	3191	3182	3177	3082	2792	2443	2141	1652	1230	988	573	396	250	162	132
1,800 V/C	4762	4571	4353	3863	3165	2724	2383	1837	1354	1078	590	406	255	165	134
1,750 V/C	5619	5190	4879	4282	3584	2959	2550	1921	1399	1110	613	417	263	169	136
1,700 V/C	6335	5935	5488	4725	3863	3053	2606	1948	1419	1126	620	421	265	172	139
1,650 V/C	6962	6335	5925	5103	4008	3194	2653	2001	1482	1173	641	438	276	178	144
1,600 V/C	7350	6768	6313	5434	4100	3232	2699	2048	1505	1186	647	442	279	180	147

CONSTANT CURRENT DISCHARGE

A @ 25 °C	1 min	2 min	3 min	5 min	10 min	15 min	20 min	30 min	45 min	1 h	2 h	3 h	5 h	8 h	10 h	20 h
1,900 V/C	235	231	226	218	198	175	150	116	87,8	70,2	43	30,9	19,5	12,7	10,1	5,2
1,850 V/C	273	269	265	259	238	206	179	138	103	81,5	46,7	33,3	21	13,7	10,9	5,7
1,800 V/C	432	414	397	357	294	241	209	161	121	95,9	52,1	37	23,2	15,1	12	6,3
1,750 V/C	510	479	449	405	327	265	223	168	125	99,5	54,3	38	24	15,4	12,3	6,3
1,700 V/C	582	542	499	441	353	279	231	170	126	100	54,8	38,4	24,2	15,7	12,5	6,4
1,650 V/C	627	585	541	479	367	288	237	176	133	105	56,6	39,8	25,1	16,2	13	6,7
1,600 V/C	670	620	576	509	380	296	241	179	134	106	57,2	40,2	25,4	16,4	13,2	6,9

Float Voltage vs Temperature

