

**EZA2500-32048**

V008-01-11C

**SPECIFICATIONS**

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Item		Model Name	EZA2500-32048	
			LVDC (Battery side)	HVDC (Grid side)
1	Rated Voltage	-	48VDC	320VDC
2	Voltage Range (*1,*2)	-	36VDC - 60VDC	300VDC - 380VDC
3	Rated Current	-	±52A	±7.8A
4	Constant Current Setting Range (*1,*2)	-	2.4A - 56A	0.5A - 8.5A
5	Maximum Output Power	-	±2,496W	±2,496W
6	Efficiency (typ) (*3)	-	92%	92%
7	Required Pre-charge Voltage	-	More than 36VDC	More than 300VDC
8	Inrush Current (typ) (*4)	-	5.5A	3.6A
9	Maximum Line Regulation	-	240mV	1.52V
10	Maximum Load Regulation	-	480mV	3.04V
11	Maximum Temperature Regulation	-	300mV	1.9V
12	Output Ripple and Noise (*5)	-	Less than 480mVp-p	Less than 3.2Vp-p
13	Sink Current (typ) (*6)	-	0.3A	0.05A
<b>Protection</b>				
1	Output Over Current Protection (typ) (*7,*8)	-	60A (Output shut down)	9.5A (Output shut down)
2	Over Power Protection (typ) (*7)	-	2,600W (Constant power)	2,600W (Constant power)
3	Over Voltage Protection (*2)	-	Possible (Setting range : 32V - 68V)	Possible (Setting range : 260V - 410V)
4	Under Voltage Protection (*2)	-	Possible (Setting range : 32V - 68V)	Possible (Setting range : 260V - 410V)
<b>Function</b>				
1	Remote ON/OFF	-	Possible (Control via RS-485 or Extra signal)	
2	Remote Reset	-	Possible (Latch off via RS-485, RESET SW or External Signal)	
3	External Signal	-	RUN : Operate at short, Stop at open STOP : Stop at rising edge CHRГ : Change function by Operation mode (*10) ALMCLR : Alarm clear and Run at rising edge ALM : Open under Alarm condition (Open Drain) PG : Short under Operation (Open Drain)	
4	Parallel operation (*9)	-	Possible (Droop method)	
<b>External Function (RS-485 )</b>				
1	Voltage Setting Accuracy	-	LVDC Less than ±0.6V, HVDC Less than ±4V	
2	Current Setting Accuracy	-	LVDC Less than ±0.8A, HVDC Less than ±0.125A	
3	Voltage Setting Resolution	-	LVDC Less than 60mV, HVDC Less than 0.4V	
4	Current Setting Resolution	-	LVDC Less than 50mA, HVDC Less than 8mA	
5	Voltage Reading Accuracy	-	LVDC Less than ±0.6V, HVDC Less than ±4V	
6	Current Reading Accuracy	-	LVDC Less than ±0.8A, HVDC Less than ±0.125A	
7	Voltage Reading Resolution	-	LVDC Less than 60mV, HVDC Less than 0.4V	
8	Current Reading Resolution	-	LVDC Less than 50mA, HVDC Less than 8mA	
9	RS-485 Baud Rate	-	19.2kbps / 33.6kbps / 57.6kbps (Set by DIP-SW)	
10	RS-485 Maximum Connection	-	14	

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Item		Model Name	
		EZA2500-32048	
		LVDC (Battery side)	HVDC (Grid side)
<b>Environmental</b>			
1	Operating Temperature	-	-10°C - +40°C
2	Operating Humidity	-	30 - 90%RH (No Condensing)
3	Storage Temperature	-	-20°C - +70°C
4	Storage Humidity	-	10 - 95%RH (No Condensing)
5	Vibration	-	No Operation, 10-500Hz (Sweep 1min) 10.2m/s <sup>2</sup> Constant, X, Y, Z Each Direction 1hour
6	Shock	-	196.1m/s <sup>2</sup> maximum
7	Cooling	-	Forced Air Cooling by built-in FAN (Air Intake)
8	Installation Location	-	Indoor use
9	Altitude	-	Less than 2,000m
<b>Isolation</b>			
1	Withstand Voltage	-	Primary (320V) - Secondary (48V) & Signals : 3kVAC(20mA) 1min Primary (320V) - Chassis : 2kVAC(20mA) 1min Secondary (48V) & Signals - Chassis : 707VDC 1min
2	Insulation Resistance	-	Secondary (48V) & Signals - Chassis, More than 100MΩ at 500VDC 25°C, 70%RH
<b>Safety</b>			
1	Safety	-	Approved by UL62368-1, CSA62368-1, EN62368-1. Approved by UL60950-1, CSA60950-1, EN60950-1. (Expire date of 60950-1:20/12/2020)
<b>Physical Characteristics</b>			
1	Weight	-	Less than 8 kg
2	Size (W x H x D)	mm	422.8 x 43.6 x400 (Refer to outline drawing)

Please read instruction manual Carefully, before using the unit.

=Notes=

- \*1. Please refer to Derating Curve.
- \*2. It can be set via RS-485.
- \*3. Ta=25°C, rated voltage and rated current.
- \*4. Not applicable for the inrush current to Noise filter for less than 0.2ms.
- \*5. Measure with Ripple Noise Meter (RM-103 : Made in KEISOKU GIKEN Co.Ltd).
- \*6. Current sink appear when applied voltage is greater than output target voltage.
- \*7. Parameter is fixed.
- \*8. Shut down method, manual reset.(Latch off via RS-485, RESET SW or External Signal)
- \*9. Droop ratio can be set via RS-485.
- \*10. Heteronomy CV mode : Generate at short, Regenerate at open.  
Grid Autonomy CV mode : Heteronomy Generate at Short, Autonomy at open.  
Battery Autonomy mode : No function.

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Item		Model Name	<b>EZA2500-32048</b>	
			<b>Operation Mode (*11)</b>	
<b>Heteronomy CV mode</b>				
1	Operation mode	-	Output voltage control at Generation and Regeneration.	
2	Power Conversion Direction State Method	-	External Signal CHRG or control via (RS-485)	
3	LVDC CC at Regeneration (*12)	-	Possible (Control LVDC current constant).	
4	LVDC 0V Ramp up (*13)	-	Possible	
5	Battery Over Charge Protection (*14)	-	Possible	
6	Battery Over Discharge Protection (*14)	-	Possible	
<b>Grid Autonomy CV mode</b>				
1	Power Conversion mode	-	Control HVDC voltage constant.	
2	Dead Zone set (*14)	-	Possible	
3	LVDC 0V Ramp up (*13)	-	Possible	
4	Battery CC mode (*14)	-	Possible (Control battery side current with constant current mode)	
5	Forced Charge mode (*12)	-	Possible (Change to Heteronomy CV mode)	
6	Battery Over Charge Protection (*14)	-	Possible	
7	Battery Over Discharge Protection (*14)	-	Possible	
<b>Battery Autonomy CV mode</b>				
1	Power Conversion mode	-	Control LVDC voltage constant.	
2	LVDC 0V Ramp up	-	Possible	

Please read instruction manual Carefully, before using.

=Note=

\*11. Control mode can be set via RS-485 or DIP-SW setting.

\*12. It can be changed by External Signal.

\*13. It can start up under pre-charge voltage (less than 36V).

\*14. It can be set via RS-485.

**Derating Curve**

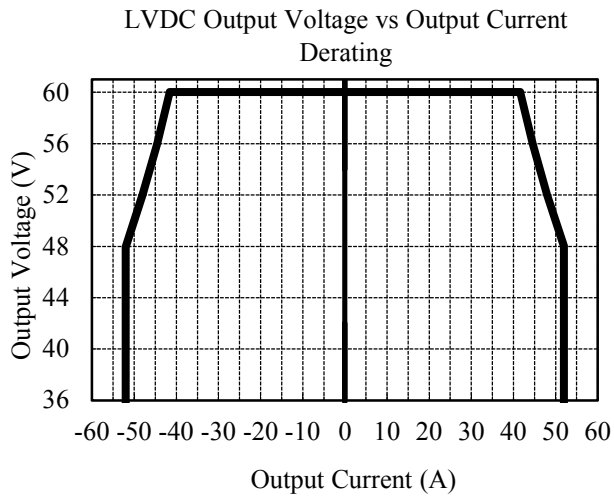


Fig. 1

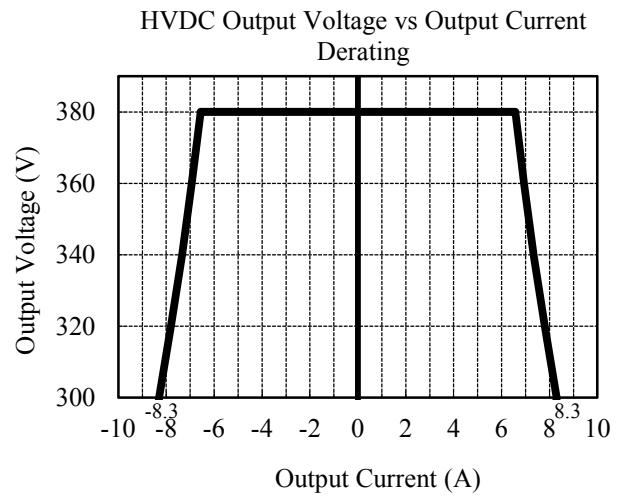


Fig. 2

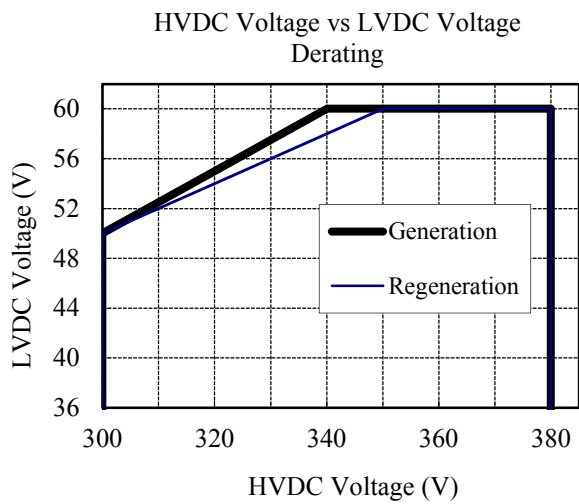


Fig. 3

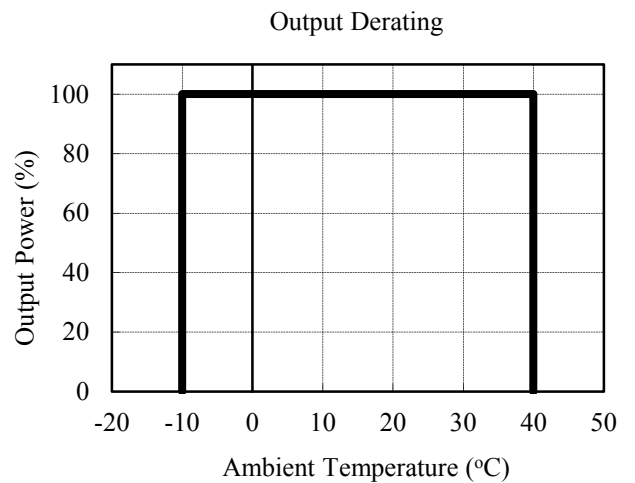


Fig. 4

Follow below figure describes Generation and Regenerati

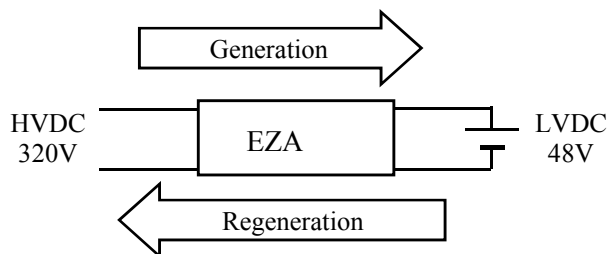


Fig. 5