

AZN-90Kva/23Kw 飞机地面电源机组（交流/直流）
AZN-90kVA/23Kw Ground power unit-AC/DC

技术参数

Technical parameter

序号	系统配置 System configuration features	交流（AC）	直流（DC）
1	容量 Capacity	90KVA（三相四线 3-phase 4-wire）；	23KW
2	额定电压 Rated Voltage	115V/200V $\pm$ 2V	28.5V（Adjustable）
3	输出接线方式 Utput Connection	A、B、C、N	二线制 2-line
4	输出模式 Output Mode	1路输出 1 output cable	1路输出 1 output cable
5	电压调节范围 Voltage Regulation Range	103V $\sim$ 127V	20 $\sim$ 32V
6	稳压电压范围 Stable Voltage Range	113V $\sim$ 117V	28.5V $\pm$ 0.5%
7	额定频率 Rated Frequency	400Hz	/
8	额定电流 Rated Current	260A	800A
9	额定功率因素 (cos Φ) Rated Power Factor	0.8(lag) $\sim$ 1	/
10	瞬态电压范围 Transient-state Voltage	90V $\sim$ 140V	17 $\sim$ 35V
11	电压反应时间 Voltage Response Time	$<$ 0.1s	$<$ 0.1s
12	稳态频率范围 Steady-state Frequency	400Hz $\pm$ 0.1%	/
13	瞬态频率范围 Transient-state Frequency	370Hz $\sim$ 420Hz	/
14	频率稳定时间 Frequency Response Time	$\leq$ 1s	/
15	电压调制量 Voltage Modulation	$\leq$ 1.5%	/
16	频率调制量 Frequency Modulation	$\leq$ 2Hz	/
17	峰值系数 Crest Factor	1.31 $\sim$ 1.51	/
18	总谐波含量 Total Harmonic Content	$\leq$ 4%	/
19	脉动幅值 Fluctuating Amplitude	/	$\leq$ 1.5V
20	纹波电压 Ripple Voltage	/	$\leq$ 0.5%(rms)
21	畸变系数 Distortion Coefficient	$\leq$ 0.04	$\leq$ 0.035
22	三相电压波形相位差 Waveform Phase	120 $^{\circ}$ $\pm$ 2 $^{\circ}$	/
23	相电压不平衡 Phase Voltage Imbalance	$\leq$ 3V	/
24	过载性能 Overload Rating	120% 10s; 150% 2s	850 A (5 min)、1200 A (1min)、1500 A (30 s)、2000 A (5s)
25	连续工作时间 Continuous Working Time	$\geq$ 8h (Fuel tank 320L)	
26	线压降补偿 Line voltage drop compensation	输出电缆线压降自动补偿 Output cable voltage drop automatic compensation function	
27	平均无故障时间 Mean Time Between Failure	MTBF $\geq$ 1000h	

28	平均修复时间 Mean Time To Repair	MTTR≤30min
29	使用寿命 Service Life	≥10年 (Year)
30	环境温度 Environment Temperature	-40℃~+40℃
	相对湿度 Relative Humidity	<100% (+25℃)
31	保护功能 Protection Function	
	交流输出过、欠压保护 AC Output Over-voltage or Under-voltage	
	交流输出过、欠频保护 AC Output Over- frequency or Under- frequency	
	交流输出缺相保护 AC Output phase loss protection	
	交流过载（短路）保护 AC Output Overload (Short circuit) protection	
	直流输出过、欠压保护 DC Output Over-voltage or Under-voltage	
	内部过热等保护 Internal Overheating And So On	
	水温高保护 Water Temperature Is High	
	柴油机机油压力低保护 Diesel Engine Oil Pressure Low	
	柴油机燃油位低保护 Diesel engine fuel level low protection	
	柴油机超转速保护 Diesel engine overspeed protection	
32	紧急停止按钮：设置手动紧急停机按钮 Emergency stop button: set manual emergency stop button	
	工作噪声 Working Noise	<85dB (A) 7m
33	显示 Display	OLED屏 (OLED screen)
34	显示精度 Display Accuracy	±1%FS (FS:满量程 FS:full range)
35	控制显示系统Control display system	OLED数字显示屏：显示发动机和发电机参数、油位、输出电压、电流、频率、运行参数和状态，及输出控制、启动开关、故障灯、电气系统保护、故障信号显示、存储和故障历史查询。累计工作时间小时。 OLED digital display screen: displays engine and generator parameters, oil level, output voltage, current, frequency, operating parameters and status, as well as output control, start switch, fault light, electrical system protection, fault signal display, storage, and fault history query. Accumulated working hours hours.
36	额定转速 Rated Speed	1846(rpm)
37	冷却方式 Cooling	水冷+风冷 (Water+Air)
38	底盘 Chassis Choose	拖曳式 (Towed)
		充气轮胎。 两轴拖车，旋转牵引杆（前轴），驻车制动器。 Inflatable tires.

		Two axle trailer, rotating tow bar (front axle), parking brake.
39	柴油发动机Diesel Engine	东风康明斯 (Cummins)
	型号Model	6BTA5.9-G2
	额定功率Rated power	120kW
	转速The rated speed	1846r/min
	类型Style	6缸四冲程 6cylinders, array, four stroke
	进气方式Air inlet	增压, 中冷turbocharged, Intercooled
	耗油率Specific fuel consumption	$\leq 215\text{g/kW} \cdot \text{h}$
	排量Displacement	5.9L
	启动方式Starting way	24V电起动 24V electric start
	发动机类型Engine type	柴油Diesel
40	发电机Generator	中频发电机Intermediate frequency generator
	中频发电机输出115V/400Hz交流电; 再通过降压整流模块输出一路28.5V直流电 Intermediate frequency generator outputs 115V/400Hz AC; Then output a circuit of 28.5V DC through the step-down rectifier module.	
	型号Model	TFZPW
	额定功率Rated power	90KVA 400Hz AC
	转速The rated speed	1846r/min
	额定功率因素($\cos\Phi$) Rated Power Factor	0.8(lag)
	输出形式Output form	三相四线Three-phase four-wire
	连接方式Connection method	自冷单轴承Self cooling single bearing
41	控制方式Control mode	无刷、自励同步 Brushless, Self-excited synchronization
	外形尺寸(长×宽×高) (mm) Dimension (L×W×H)	$\leq 3100 \times 2000 \times 1900$
	颜色Color	白色车体 White car body
	总质量(kg) Total Mass	≤ 3000
	最高车速 (Km/h) Max. speed	15~20km/h
45	输出电缆配置The output cable	
	1根28.5VDC输出电缆 (10m), 电缆 $120\text{mm}^2 \times 2$, 插头型号PJ-500T; 1根115VAC输出电缆 (10m), 电缆 $70\text{mm}^2 \times 4$, 插头型号PJ-500TB。 One 28.5VDC output cable (10m long), cable $120\text{mm}^2 \times 2$, plug model PJ-500T; One 115VAC output cables (10m long), cable $70\text{mm}^2 \times 4$, plug model PJ-500TB.	

46	其他配置 Other configurations
	电缆箱Cable box
	柴油发动机进气加热、冬季燃油系统加热 Diesel engine intake heating, winter fuel system heating
	顶部旋转闪烁警示灯（橙色）Top rotating flashing warning light (Orange)
	2公斤灭火器及灭火器安装支架-1个。 2kg fire extinguisher and fire extinguisher installation bracket -1 piece.
	备件：保险丝-1套 ， 按钮、指示灯-1套。 Spare parts: Fuses -1 set, Buttons and Indicator lights -1 set.