

兰州电机有限责任公司



TZH系列三相  
交流同步发电机  
SYNCHRONOUS  
ALTERNATOR SERIES TZH

## 概 况

TZH系列发电机性能良好, 坚固耐用, 使用可靠维护简便, 质量优越, 荣获国家颁发的银质质量奖, 畅销国内外。

TZH系列发电机通常与柴油机配套组成柴油发电机组或移动电站, 用作一般用途的电源, 也可以用作备用或应急电源。



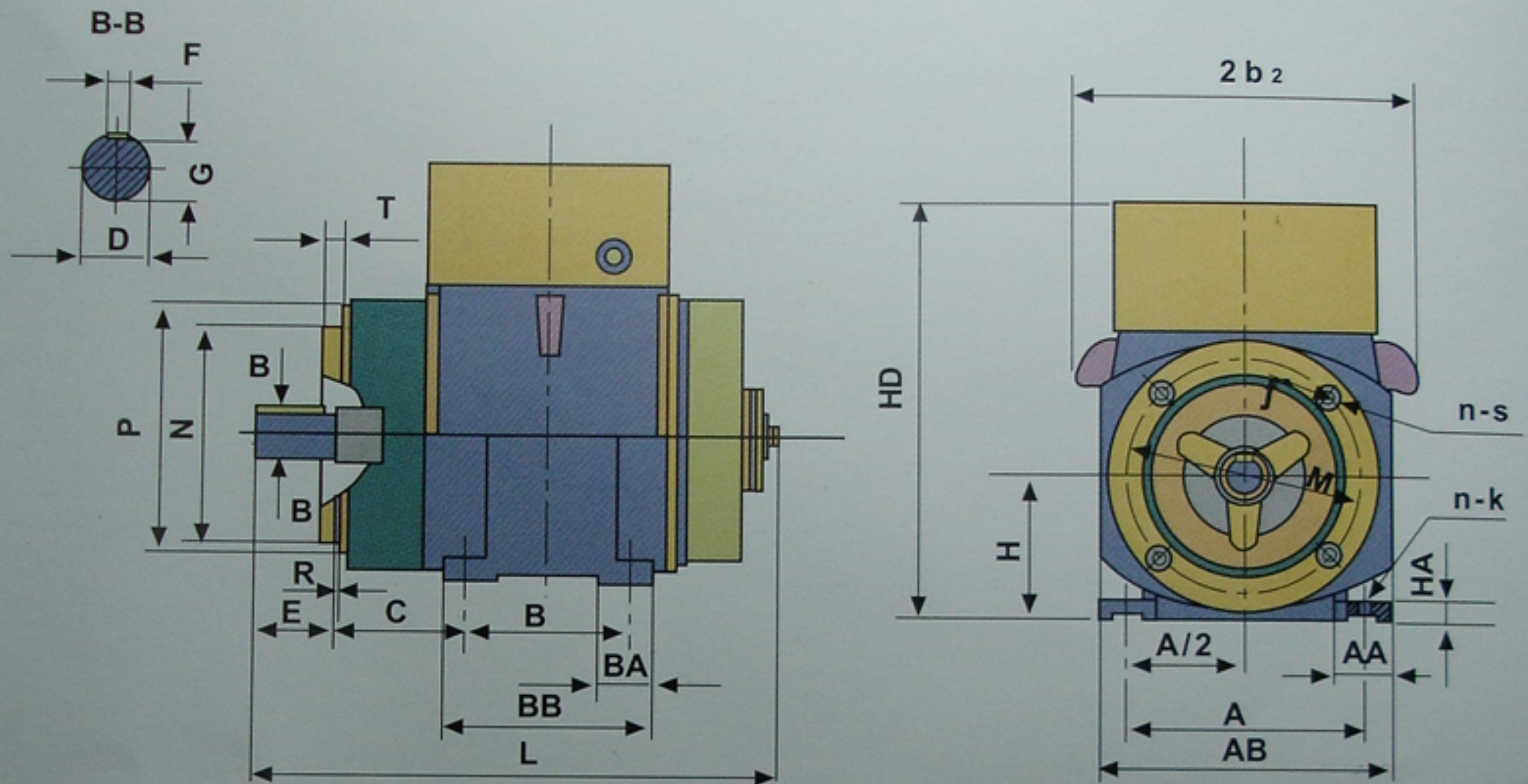
The TZH generators sell well at home and abroad, and have honorably won the National Silver Medal for their excellent technology and superior quality. The TZH generators generally coupled with diesel engines to form diesel-generating sets or mobile electro-generating units, can be used as general purpose power source and as stand-by or emergency power units as well.





外形及安装尺寸图

Overall and Mounting dimensions of THZ Generator



型号 Type	机座号 Frame size	极数 Poles	外形及安装尺寸										
			H	A	A/2	B	C	D	E	F	G	n <sub>1</sub> -k	N
TZH-12	180S	4	180 <sup>0</sup> <sub>-0.5</sub>	279 ± 1.05	139.5 ± 0.75	203 ± 1.05	121 ± 3.0	42 <sup>+0.018</sup> <sub>-0.002</sub>	110 ± 0.43	12 <sup>0</sup> <sub>-0.043</sub>	37 <sup>0</sup> <sub>-0.2</sub>	4-φ15 <sup>+0.43</sup> <sub>0</sub>	230 <sup>+0.018</sup> <sub>-0.013</sub>
TZH-16	180M	4	180 <sup>0</sup> <sub>-0.5</sub>	279 ± 1.05	139.5 ± 0.75	241 ± 1.05	121 ± 3.0	42 <sup>+0.018</sup> <sub>-0.002</sub>	110 ± 0.43	12 <sup>0</sup> <sub>-0.043</sub>	37 <sup>0</sup> <sub>-0.2</sub>	4-φ15 <sup>+0.43</sup> <sub>0</sub>	230 <sup>+0.018</sup> <sub>-0.013</sub>
TZH-20	200S	4	200 <sup>0</sup> <sub>-0.5</sub>	318 ± 1.05	159 ± 0.75	228 ± 1.05	133 ± 3.0	48 <sup>+0.018</sup> <sub>-0.002</sub>	110 ± 0.43	14 <sup>0</sup> <sub>-0.043</sub>	42.5 <sup>0</sup> <sub>-0.2</sub>	4-φ19 <sup>+0.52</sup> <sub>0</sub>	250 <sup>+0.018</sup> <sub>-0.013</sub>
TZH-24	200M	4	200 <sup>0</sup> <sub>-0.5</sub>	318 ± 1.05	159 ± 0.75	267 ± 1.05	133 ± 3.0	48 <sup>+0.018</sup> <sub>-0.002</sub>	110 ± 0.43	14 <sup>0</sup> <sub>-0.043</sub>	42.5 <sup>0</sup> <sub>-0.2</sub>	4-φ19 <sup>+0.52</sup> <sub>0</sub>	250 <sup>+0.018</sup> <sub>-0.013</sub>
TZH-30	225S	4	225 <sup>0</sup> <sub>-0.5</sub>	356 ± 1.05	178 ± 0.75	286 ± 1.05	149 ± 4.0	60 <sup>+0.030</sup> <sub>-0.011</sub>	140 ± 0.50	18 <sup>0</sup> <sub>-0.043</sub>	53 <sup>0</sup> <sub>-0.2</sub>	4-φ19 <sup>+0.52</sup> <sub>0</sub>	300 <sup>+0.018</sup> <sub>-0.016</sub>
TZH-40	225M	4	225 <sup>0</sup> <sub>-0.5</sub>	356 ± 1.05	178 ± 0.75	311 ± 1.05	149 ± 4.0	60 <sup>+0.030</sup> <sub>-0.011</sub>	140 ± 0.50	18 <sup>0</sup> <sub>-0.043</sub>	53 <sup>0</sup> <sub>-0.2</sub>	4-φ19 <sup>+0.52</sup> <sub>0</sub>	300 <sup>+0.018</sup> <sub>-0.016</sub>
TZH-50	225L	4	225 <sup>0</sup> <sub>-0.5</sub>	356 ± 1.05	178 ± 0.75	356 ± 1.05	149 ± 4.0	60 <sup>+0.030</sup> <sub>-0.011</sub>	140 ± 0.50	18 <sup>0</sup> <sub>-0.043</sub>	53 <sup>0</sup> <sub>-0.2</sub>	4-φ19 <sup>+0.52</sup> <sub>0</sub>	300 <sup>+0.018</sup> <sub>-0.016</sub>
TZH-64	250M	4	250 <sup>0</sup> <sub>-0.5</sub>	406 ± 1.40	203 ± 1.0	349 ± 1.40	168 ± 4.0	70 <sup>+0.030</sup> <sub>-0.011</sub>	140 ± 0.50	20 <sup>0</sup> <sub>-0.052</sub>	62.5 <sup>0</sup> <sub>-0.2</sub>	4-φ24 <sup>+0.52</sup> <sub>0</sub>	350 <sup>+0.018</sup> <sub>-0.016</sub>
TZH-75	250L	4	250 <sup>0</sup> <sub>-0.5</sub>	406 ± 1.40	203 ± 1.0	406 ± 1.40	168 ± 4.0	70 <sup>+0.030</sup> <sub>-0.011</sub>	140 ± 0.50	20 <sup>0</sup> <sub>-0.052</sub>	62.5 <sup>0</sup> <sub>-0.2</sub>	4-φ24 <sup>+0.52</sup> <sub>0</sub>	350 <sup>+0.018</sup> <sub>-0.016</sub>
TZH-90	280S	4	280 <sup>0</sup> <sub>-1.0</sub>	457 ± 1.40	228.5 ± 1.0	368 ± 1.40	190 ± 4.0	80 <sup>+0.030</sup> <sub>-0.011</sub>	170 ± 0.50	22 <sup>0</sup> <sub>-0.052</sub>	71 <sup>0</sup> <sub>-0.2</sub>	4-φ24 <sup>+0.52</sup> <sub>0</sub>	350 <sup>+0.018</sup> <sub>-0.016</sub>
TZH-120	280L	4	280 <sup>0</sup> <sub>-1.0</sub>	457 ± 1.40	228.5 ± 1.0	457 ± 1.40	190 ± 4.0	80 <sup>+0.030</sup> <sub>-0.011</sub>	170 ± 0.50	22 <sup>0</sup> <sub>-0.052</sub>	71 <sup>0</sup> <sub>-0.2</sub>	4-φ24 <sup>+0.52</sup> <sub>0</sub>	350 <sup>+0.018</sup> <sub>-0.016</sub>
TZH-150	355S	4	355 <sup>0</sup> <sub>-1.0</sub>	610 ± 1.40	305 ± 1.0	500 ± 1.40	254 ± 4.0	90 <sup>+0.035</sup> <sub>-0.013</sub>	170 ± 0.50	25 <sup>0</sup> <sub>-0.052</sub>	81 <sup>0</sup> <sub>-0.2</sub>	4-φ28 <sup>+0.52</sup> <sub>0</sub>	550 <sup>+0.022</sup> <sub>-0.021</sub>
TZH-200	355S	4	355 <sup>0</sup> <sub>-1.0</sub>	610 ± 1.40	305 ± 1.0	500 ± 1.40	254 ± 4.0	90 <sup>+0.035</sup> <sub>-0.013</sub>	170 ± 0.50	25 <sup>0</sup> <sub>-0.052</sub>	81 <sup>0</sup> <sub>-0.2</sub>	4-φ28 <sup>+0.52</sup> <sub>0</sub>	550 <sup>+0.022</sup> <sub>-0.021</sub>
TZH-250	355M	4	355 <sup>0</sup> <sub>-1.0</sub>	610 ± 1.40	305 ± 1.0	560 ± 1.40	254 ± 4.0	90 <sup>+0.035</sup> <sub>-0.013</sub>	170 ± 0.50	25 <sup>0</sup> <sub>-0.052</sub>	81 <sup>0</sup> <sub>-0.2</sub>	4-φ28 <sup>+0.52</sup> <sub>0</sub>	550 <sup>+0.022</sup> <sub>-0.021</sub>



## 发电机的特点 FEATURS

静止励磁

Static Excitation

高度可靠

High Reliability

维护简便

Convenient Maintenance

自动恒压:

Self-excited, Constant Voltage

电压调整率  $\leq \pm 3\%$  (不可控励磁)

Voltage regulation

电压调整率  $\leq \pm 1\%$  (可控励磁)

For uncontrollable, within the limits of  $\pm 3\%$  and, controllable,  $\pm 1\%$

电压波形畸变率小

The less distortion factor of the wave of line voltage

动能性能优越

Excellent Dynamic Characteristics

能直接起动较大容量的异步电动机

This power source can directly start the induction motor with large output

寿命长久

Long working Life

外型美观

Reasonable Price

价格合理

注: 对于IMB3安装型式, 取消表中的M、N、P、n-s、T和R尺寸和公差。

Note: Annul M,N,P,n-s, T & R dimensions and tolerances in table 2 for IMB3.

Overall and mounting dimensions (mm)

M	P	$\alpha$	T	R	n-s	L	$2b_2$	HD	BB	BA	AA	AB	HA
265	300	$45^\circ$	4	$0 \pm 2$	4-M12	670	400	560	243	55	66	345	26
265	300	$45^\circ$	4	$0 \pm 2$	4-M12	720	400	560	281	55	66	345	26
300	350	$45^\circ$	5	$0 \pm 3$	4-M16	740	480	620	288	70	72	390	28
300	350	$45^\circ$	5	$0 \pm 3$	4-M16	760	480	620	327	70	72	390	28
350	400	$45^\circ$	5	$0 \pm 3$	4-M16	805	530	660	346	90	80	436	26
350	400	$45^\circ$	5	$0 \pm 3$	4-M16	855	530	660	371	90	80	436	26
350	400	$45^\circ$	5	$0 \pm 3$	4-M16	900	530	660	416	90	80	436	26
400	450	$22.5^\circ$	5	$0 \pm 4$	8-M16	950	590	800	418	87.5	84	490	28
400	450	$22.5^\circ$	5	$0 \pm 4$	8-M16	990	590	800	475	87.5	84	490	28
400	450	$22.5^\circ$	5	$0 \pm 4$	8-M16	1060	660	860	438	135	100	560	35
400	450	$22.5^\circ$	5	$0 \pm 4$	8-M16	1250	660	860	527	135	100	560	35
600	660	$22.5^\circ$	6	$0 \pm 4$	8-M20	1250	860	1020	600	137	100	710	40
600	660	$22.5^\circ$	6	$0 \pm 4$	8-M20	1250	860	1020	600	137	100	710	40
600	660	$22.5^\circ$	6	$0 \pm 4$	8-M20	1360	860	1020	660	137	100	710	40

型號 Type	機座號 Frame size	額定容量		額定電流 (安) Rated cur. (A)	額定轉速 (轉/分) Rated speed (r/min)	效率 (%) Eff. (%)	重量 (公斤) Weight (kg)	原動機拖 動最小馬力 (匹) Min. dr. power (HP)	飛輪力矩 (公斤-米 <sup>2</sup> ) GD <sup>2</sup> (kg-m <sup>2</sup> )	直接起動昇速率 最大功時 Max. accel. rate mot. dir. str. rate (%)
		千伏安	千瓦							
		Rated cap.		Rated cur. (A)	Rated speed (r/min)	Eff. (%)	Weight (kg)	Min. dr. power (HP)	GD <sup>2</sup> (kg-m <sup>2</sup> )	Max. accel. rate mot. dir. str. rate (%)
		kVA	kW							
TZH-12	180S	15	12	21.7	1500	84.5	210	19	1.15	5
TZH-16	180M	20	16	28.9	1500	85.3	215	25.1	1.41	5
TZH-20	200S	25	20	36.1	1500	86.0	270	31.2	2.26	5
TZH-24	200M	30	24	43.3	1500	87.0	300	37	2.40	5
TZH-30	225S	37.5	30	54.1	1500	88.0	370	45.7	3.38	5
TZH-40	225M	50	40	72.2	1500	89.0	450	60.3	4.36	5
TZH-50	225L	62.5	50	90.2	1500	89.5	490	74.9	4.97	30
TZH-64	250M	80	64	115	1500	90.5	600	94.8	8.08	30
TZH-75	250L	93.8	75	135	1500	90.8	670	110.7	9.75	30
TZH-90	280S	113	90	162	1500	91.0	850	132.6	11.7	55
TZH-120	280L	150	120	217	1500	91.5	1020	176	15.4	55
TZH-150	355S	188	150	271	1500	92.0	1450	219	26.2	75
TZH-200	355S	250	200	361	1500	92.3	1620	290	34.8	75
TZH-250	355M	313	250	451	1500	92.5	1800	362	46.5	95

圖 2：外形及安裝尺寸圖

Figure 2: Overall and Mounting Dimensions of TZH Generator

