



ST/STC SERIES SINGLE-PHASE OR THREE-PHASE A.C.SYNCHRONOUS ALTERNATOR

This series generators are to be used in town, countryside, worksites, mountain and pasture as electric power source for lighting purpose, it can also be used as reserved power source for emergent case using. The generators are of drip-proof with rotary field type and adopt harmonic excitation system, easy operation and maintenance. The generators are three-phase, four-wire type, adopting star connection with neutral point. The rated line voltage is 400V, phase voltage 230V, frequency 50Hz. We can provide 60Hz and the other voltage's generator according to the customer's request. They can be coupled with a prime mover directly or through v-belt making right or reverse continuous rotation at the rated speed. When the rotation speed of prime mover change 3% or so and load varies in the range of 0~100% cos 0.8~1.0, the generators offer constant voltage, when sudden change (increase or decrease) of load, the generator will soon return to their normal working state, at the same time, without any starting device the generator can directly start an unloaded squirrel cage induction motor.

OPERATING CONDITIONS:

Under the following environment, The generator could be continuous and rated running:

Above sea level: Not exceed 1000m

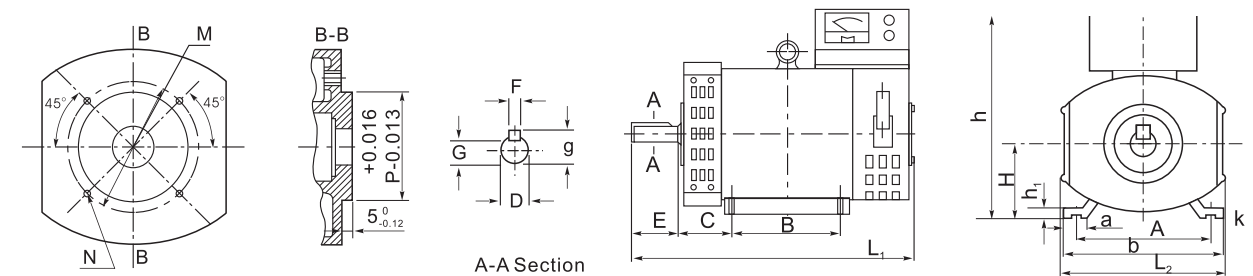
Cooling air temperature: 25~31°C (–15°C~40°C)

Relative air damping: not exceed 90%

PERFORMANCE CHART

Model	Output (KW)	Current(A)		Voltage(V)		Pole number	Power Factor	Speed (r.p.m.)
		Series Connection	Parallel Connection	Series Connection	Parallel Connection			
ST-2	2	8.7	17.4	230	115	4	1.0	1500
ST-3	3	13	26					
ST-5	5	21.8	43.5					
ST-7.5	7.5	32.6	65.2					
ST-10	10	43.5	87					
ST-12	12	52.2	104.4					
ST-15	15	65.3	130.4					
ST-20	20	87	174					

Model	Rated Output		Rated Current(A)	Pole number	Speed(r.p.m.)
	KW	KVA			
STC-3	3.0	3.8	5.4	4	1500
STC-5	5.0	6.3	9		
STC-7.5	7.5	9.4	13.5		
STC-10	10	12.5	18.1		
STC-12	12	15	21.7		
STC-15	15	18.8	27.1		
STC-20	20	25	36.1		
STC-24	24	30	43.3		
STC-30	30	37.5	54.1		
STC-40	40	50	72.2		
STC-50	50	62.5	90.2		



INSTALLATION AND OVERALL DIMENSION

Frame No.	Installing dimensions												External dimensions							Weight (kg)
	A	B	C	D	E	F	G	H	K	M	N	P	a	b	h1	h	L1	L2	g	
ST-2	216	178	89	32	80	10	27	132	12	—	—	—	34	250	18	385	480	270	35	65
ST-3	216	178	89	32	80	10	27	132	12	—	—	—	34	250	18	385	480	270	35	70
ST-5	254	254	108	38	80	10	33	160	15	—	—	—	50	310	25	440	580	325	41	120
ST-7.5	254	254	108	38	80	10	33	180	15	—	—	—	50	310	25	440	580	325	41	130
ST-10	279	203	121	42	110	12	37	180	15	265	4-M12	230	60	339	25	480	610	365	45	140
ST-12	279	203	121	42	110	12	37	180	15	265	4-M12	230	60	339	25	480	610	365	45	155
ST-15	318	228	133	48	110	14	42.5	200	19	300	4-M16	250	60	378	30	540	660	400	51.5	192
ST-20	318	228	133	48	110	14	42.5	200	19	300	4-M16	250	60	378	30	540	660	400	51.5	200
STC-3	216	178	89	32	80	10	26.8	132	12	—	—	—	34	250	18	400	480	270	34.8	70
STC-5	254	254	108	38	80	12	32.8	160	15	—	—	—	50	310	25	450	580	325	40.8	120
STC-7.5	254	254	108	38	80	12	32.8	160	15	—	—	—	50	310	25	450	580	325	40.8	130
STC-10	279	203	121	42	110	12	36.8	180	15	265	4-M12	230	60	339	25	490	610	365	44.8	140
STC-12	279	203	121	42	110	12	36.8	180	15	265	4-M12	230	60	339	25	490	610	365	44.8	155
STC-15	318	228	133	48	110	14	42.2	200	19	300	4-M16	250	60	378	30	500	660	400	51.2	192
STC-20	318	228	133	48	110	14	42.2	200	19	300	4-M16	250	60	378	30	500	660	400	51.2	202
STC-30	356	286	149	60	140	18	53	225	20	350	4-M16	300	65	421	32	650	770	452	64	257
STC-40	356	286	149	60	140	18	53	225	20	350	4-M16	300	65	421	32	650	770	452	64	290
STC-50	356	311	149	60	140	18	53	225	20	350	4-M16	300	65	421	32	650	810	452	64	344