

ALTERNATOR

APPLICATION AND STANDARDS

SUPER RELIABLE MACHINE, MAINLY LAND-USED AS PRIME OR STANDBY POWER

COMPLY WITH STANDARDS OF IEC60034,NEMA MG1-22,IS08528,CSA C22.2-100, VDE 0530, GB755

SPECIAL FEATURES

- OVERLOAD** : 15% OVERLOAD FOR 1 HOUR EVERY 12 HOURS
- WINDING PROTECTION** : VPI(VACUUM PRESSURE IMPREGNATION)+ **EPOXY RESIN**+ **ANTI-HARSH PAINTING**
- SUPER SILENCE** : FAN, MADE OF STEEL, ROTATING EVENLY
- VIBERATION** : MOST RIGID DYNAMIC-BALANCED ROTOR AND STRONGER BODY AND FEET
- EXCITATION** : THE AUXILIARY WINDING AND PMG IS OPTIONAL
- THERMAL OVERLOAD** : WINDING AND BEARING DETECTOR CAN BE EQUIPPED UPON CUSTOMER REQUEST
- BEARING** : BIGGER SIZE AND SEAL FOR LIFE
- TERMINAL BOX**: THREE OPTIONS: HIGH, LOW AND NONE (2mm-CABLE EXTENTION)
- DIODE**: ACCESS FROM NON-DRIVE END FOR EASY-MAINTENANCE
- AVR**: AS440 STANDARD, CAN BE UPGRADED TO R438 FOR 3-TIME SHORT CIRCUIT CAPABILITY



GENERAL FEATURES

WIRE WOUND AND CLASS H THERMAL INSULATION

IP23, STANDARD EQUIPPED, AND IP44, IP54 UPON CUSTOMER REQUEST

ROUND-SHAPE MACHINE BODY FOR BETTER CENTERLIZATION

SPACE HEATER: CAN BE EQUIPPED UPON REQUEST.

NAMEPLATE, MADE OF STEEL OR PLASTIC

SINOCOX LOGO STAMPED TO THE TOP COVER OF T-BOX

COMMON DATA

INSULATION	ALTITUDE	OVERSPEED	PROTECTION	LEADS	AVR	VOLTAGE REGULATION	TIF	THF
H	<=1000m	2250 rpm	IP23	12	SX460	± 1%	<1.5% NO LOAD	<50 <2%

RATING TABLE

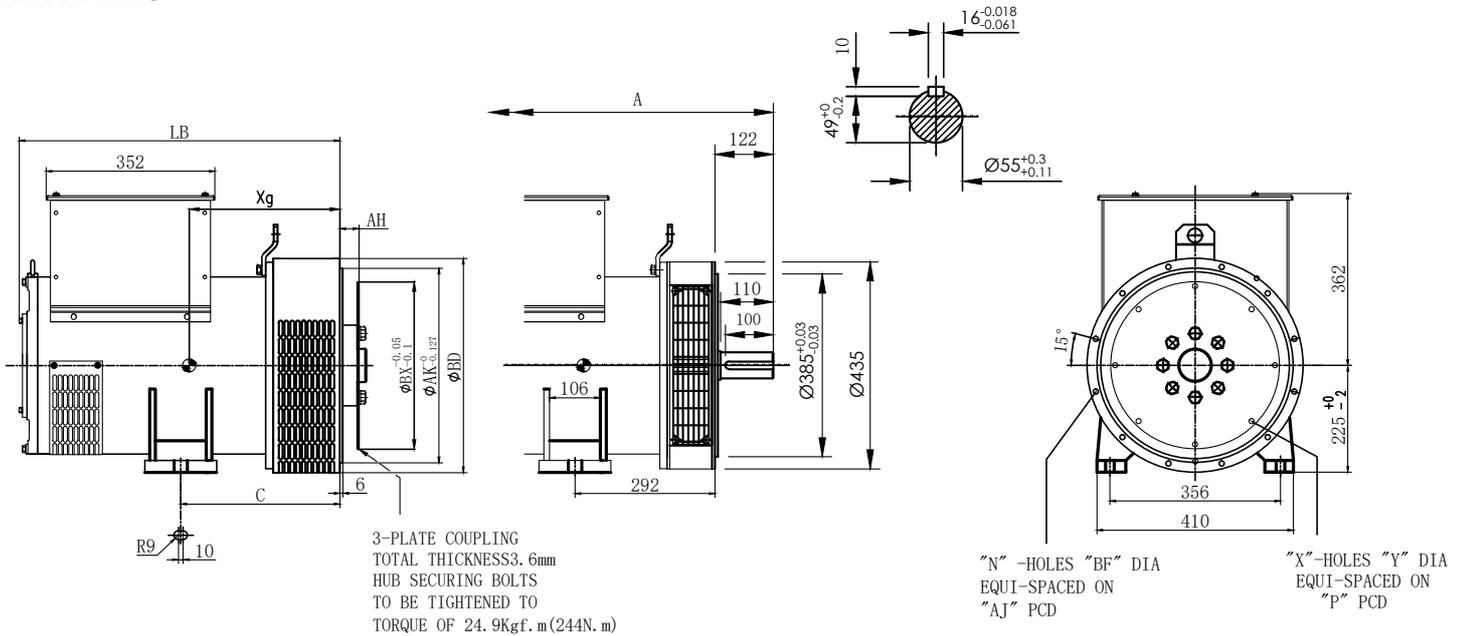
H CLASS	50Hz/1500RPM/PF 0.8											60Hz/1800RPM/PF 0.8													
	125°C/40°C PRIME POWER										163°C/27°C Standby	Effi.	125°C/40°C PRIME POWER										163°C/27°C Standby	Effi.	
TEMP.																									
Y	380	400	415	440	400	400	416	440	460	480	480	480	Y	190	200	208	220	200	200	208	220	230	240	240	240
△	220	230	240	254	230	230	240	254	266	277	277	277	△	220	230	240	254	230	230	240	254	266	277	277	277
RATING	kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW	%	kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW	%			
SMU225B	45.0	36.0	45.0	36.0	45.0	36.0	34.0	27.2	48.0	38.4	87.5	50.0	40.0	52.5	42.0	52.5	42.0	55.5	44.4	60.0	48.0	85.7			
SMU225C	50.0	40.0	50.0	40.0	50.0	40.0	37.8	30.2	55.1	44.1	88.3	60.0	48.0	62.5	50.0	62.5	50.0	65.0	52.0	71.3	57.0	87.4			
SMU225D	60.0	48.0	60.0	48.0	60.0	48.0	45.0	36.0	63.5	50.8	88.9	67.5	54.0	72.5	58.0	72.5	58.0	75.0	60.0	81.1	64.9	88.2			
SMU225E	75.0	60.0	75.0	60.0	75.0	60.0	55.0	44.0	83.0	66.4	89.9	85.0	68.0	89.0	71.2	89.0	71.2	95.0	76.0	103	82.4	89.6			
SMU225FS	80.0	64.0	80.0	64.0	80.0	64.0	62.0	49.6	87.5	70.0	90.2	89.5	71.6	93.5	74.8	93.5	74.8	99.5	79.6	108	86.0	90.0			
SMU225F	85.0	68.0	85.0	68.0	85.0	68.0	75.0	60.0	90.8	72.6	90.3	93.9	75.1	97.6	78.1	100	80.0	104	83.2	114	91.2	90.6			
SMU225G	90.0	72.0	90.0	72.0	90.0	72.0	81.3	65.0	95.8	76.6	90.3	98.9	79.1	103	82.1	105	83.9	109	87.2	119	95.2	91.0			

REACTANCE-TIME CONSTANT(s) H CLASS

SMU225 B/C/D/E/FS/F/G

50Hz @ 400V		SMU225B	SMU225C	SMU225D	SMU225E	SMU225FS	SMU225F	SMU225G
Xd	Direct axis synchro. reactance unsaturated	2.48	2.46	2.49	2.12	2.19	2.19	2.19
X'd	Direct axis transient reactance saturated	0.17	0.18	0.18	0.18	0.18	0.18	0.18
X''d	Direct axis sub transient reactance saturated	0.11	0.11	0.12	0.12	0.12	0.12	0.12
Xq	Quadra. Axis synchro. reactance unsaturated	1.15	1.14	1.15	0.98	1.02	1.02	1.02
X''q	Quadra. Axis sub transient reactance saturated	0.12	0.11	0.12	0.11	0.12	0.12	0.12
X2	Negative sequence reactance unsaturated	0.11	0.11	0.12	0.11	0.12	0.12	0.12
Xo	Zero sequence reactance unsaturated	0.07	0.07	0.08	0.08	0.09	0.09	0.09
T'd	Short-Circuit transient time constant	0.025s	0.026s	0.027s	0.03s	0.03s	0.03s	0.03s
T''d	Sub transient time constant	0.006s	0.007s	0.007s	0.008s	0.009s	0.009s	0.009s
T'do	Open circuit time constant	0.065s	0.7s	0.71s	0.74s	0.75s	0.75s	0.75s
Ta	Armature time constant	0.005s	0.0055s	0.006s	0.0065s	0.007s	0.007s	0.007s
Kcc	Short circuit ratio	0.403	0.407	0.402	0.472	0.457	0.457	0.457

OUTLINE DRAWING STANDARD T-BOX, ASK FACTORY FOR HIGH BOX AND NONE BOX PRINTS



DATA TABLE - DOUBLE BEARING

Dimension (mm)	Double BRG	Weight		Packing
		Net(kg)	Gross(kg)	L x W x H (mm)
Model	A			
SMU225B	660	249	282	1100x680x690
SMU225C	660	265	298	1100x680x690
SMU225D	750	289	322	1100x680x690
SMU225E	750	325	358	1100x680x690
SMU225FS	810	351	384	1100x680x690
SMU225F	810	361	394	1100x680x690
SMU225G	810	376	409	1100x680x690

SAE AVAILABILITY

SAE#	8	10	11.5	14
4	x	x		
3		x	x	
2			x	
1			x	x

DATA TABLE - SINGLE BEARING

Dimension (mm)	SAE 1			SAE 2/3/4			Weight		Packing
	LB	Xg		LB	Xg		Net(kg)	Gross(kg)	L x W x H (mm)
Model									
SMU225B	592	296		578	284		224	257	1100x680x690
SMU225C	592	306		578	294		240	273	1100x680x690
SMU225D	682	321		668	309		264	297	1100x680x690
SMU225E	682	331		668	319		300	333	1100x680x690
SMU225FS	742	354		728	342		326	359	1100x680x690
SMU225F	742	354		728	342		336	369	1100x680x690
SMU225G	742	363		728	348		351	384	1100x680x690

Flange (mm)							Disc(mm)					
SAE#	BD	AK	AJ	BF	N	C	SAE#	BX	P	X	Y	AH
SAE 4	451	361.95	381	11	12	332.5	14	466.72	438.15	8	13.5	25.4
SAE 3	451	409.58	428.62	11	12	332.5	11.5	352.42	333.38	8	11	39.6
SAE 2	490	447.68	466.72	11	12	332.5	10	314.32	295.28	8	11	53.8
SAE 1	553	511.18	530.22	14	12	346.8	8	263.52	244.48	6	11	62