

CONTROL SYSTEM	SELF EXCITED		
A.V.R.	SX440		SX421
VOLTAGE REGULATION	± 1.0 %	± 0.5 %	With 4% ENGINE GOVERNING
SUSTAINED SHORT CIRCUIT	WILL NOT SUSTAIN A SHORT CIRCUIT		

INSULATION SYSTEM	CLASS H
PROTECTION	IP22
RATED POWER FACTOR	0.8
STATOR WINDING	DOUBLE LAYER LAP
WINDING PITCH	TWO THIRDS
WINDING LEADS	12
STATOR WDG. RESISTANCE	0.0073 Ohms PER PHASE AT 22°C SERIES STAR CONNECTED
ROTOR WDG. RESISTANCE	1.37 Ohms at 22°C
EXCITER STATOR RESISTANCE	18 Ohms at 22°C
EXCITER ROTOR RESISTANCE	0.068 Ohms PER PHASE AT 22°C
R.F.I. SUPPRESSION	BS EN 61000-6-2 & BS EN 61000-6-4,VDE 0875G, VDE 0875N. refer to factory for others
WAVEFORM DISTORTION	NO LOAD < 1.5% NON-DISTORTING BALANCED LINEAR LOAD < 5.0%
MAXIMUM OVERSPEED	2250 Rev/Min
BEARING DRIVE END	BALL. 6317 (ISO)
BEARING NON-DRIVE END	BALL. 6314 (ISO)

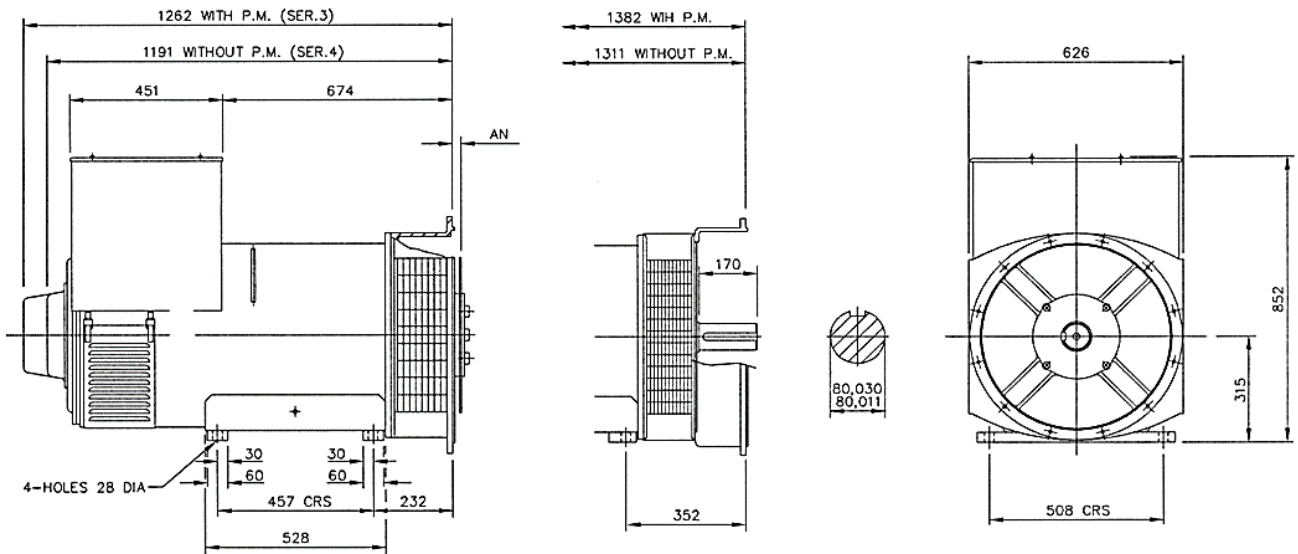
	1 BEARING	2 BEARING
WEIGHT COMP. GENERATOR	1160 kg	1160 kg
WEIGHT WOUND STATOR	535 kg	535 kg
WEIGHT WOUND ROTOR	463 kg	440 kg
WR <sup>2</sup> INERTIA	5.4292 kgm <sup>2</sup>	5.2304 kgm <sup>2</sup>
SHIPPING WEIGHTS in a crate	1230 kg	1230 kg
PACKING CRATE SIZE	131 x 70 x 101(cm)	131 x 70 x 101(cm)

	50 Hz				60 Hz			
TELEPHONE INTERFERENCE	THF<2%				TIF<50			
COOLING AIR	0.8 m <sup>3</sup> /sec 1700 cfm				0.99 m <sup>3</sup> /sec 2100 cfm			
VOLTAGE SERIES STAR	380/220	400/231	415/240	440/254	416/240	440/254	460/266	480/277
VOLTAGE PARALLEL STAR	190/110	200/115	208/120	220/127	208/120	220/127	230/133	240/138
VOLTAGE SERIES DELTA	220/110	230/115	240/120	254/127	240/120	254/127	266/133	277/138
KVA BASE RATING FOR REACTANCE VALUES	400	400	400	400	455	480	500	500
Xd DIR. AXIS SYNCHRONOUS	2.72	2.45	2.28	2.03	3.28	3.09	2.95	2.71
X'd DIR. AXIS TRANSIENT	0.18	0.16	0.15	0.13	0.18	0.17	0.16	0.15
X''d DIR. AXIS SUBTRANSIENT	0.13	0.12	0.11	0.10	0.13	0.12	0.12	0.11
Xq QUAD. AXIS REACTANCE	2.35	2.12	1.97	1.75	2.90	2.73	2.61	2.39
X''q QUAD. AXIS SUBTRANSIENT	0.31	0.28	0.26	0.23	0.43	0.41	0.39	0.35
XL LEAKAGE REACTANCE	0.06	0.05	0.05	0.04	0.07	0.07	0.06	0.06
X2 NEGATIVE SEQUENCE	0.23	0.20	0.19	0.17	0.29	0.27	0.26	0.24
X0 ZERO SEQUENCE	0.08	0.08	0.07	0.06	0.10	0.09	0.09	0.08

REACTANCES ARE SATURATED	VALUES ARE PER UNIT AT RATING AND VOLTAGE INDICATED
T'd TRANSIENT TIME CONST.	0.08s
T''d SUB-TRANSTIME CONST.	0.019s
T'do O.C. FIELD TIME CONST.	1.7s
Ta ARMATURE TIME CONST.	0.018s
SHORT CIRCUIT RATIO	1/Xd

## RATINGS

Class - Temp Rise		Cont. F - 105/40°C				Cont. H - 125/40°C				Standby - 150/40°C				Standby - 163/27°C			
50 Hz	Series Star (V)	380	400	415	440	380	400	415	440	380	400	415	440	380	400	415	440
	Parallel Star (V)	190	200	208	220	190	200	208	220	190	200	208	220	190	200	208	220
	Series Delta (V)	220	230	240	254	220	230	240	254	220	230	240	254	220	230	240	254
	kVA	370	370	370	370	400	400	400	400	415	430	430	430	425	450	440	440
	kW	296	296	296	296	320	320	320	320	332	344	344	344	340	360	352	352
	Efficiency (%)	93.5	93.8	93.9	94.0	93.2	93.4	93.6	93.8	92.9	93.0	93.2	93.5	92.8	92.8	93.1	93.4
	kW Input	317	316	315	315	343	343	342	341	357	370	369	368	366	388	378	377



## DIMENSIONS

Length (mm)	Width (mm)	Height (mm)
1300	626	852