

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

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	0.0037 Ohms PER PHASE AT 22°C SERIES STAR CONNECTED
ROTOR WDG. RESISTANCE	2.16 Ohms 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. 6220 (ISO)
BEARING NON-DRIVE END	BALL. 6314 (ISO)

	1 BEARING	2 BEARING
WEIGHT COMP. GENERATOR	1685 kg	1694 kg
WEIGHT WOUND STATOR	805 kg	805 kg
WEIGHT WOUND ROTOR	684 kg	655 kg
WR <sup>2</sup> INERTIA	10.033 kgm <sup>2</sup>	7.7289 kgm <sup>2</sup>
SHIPPING WEIGHTS in a crate	1775 kg	1780kg
PACKING CRATE SIZE	146 x 79 x 113(cm)	146 x 79 x 113(cm)

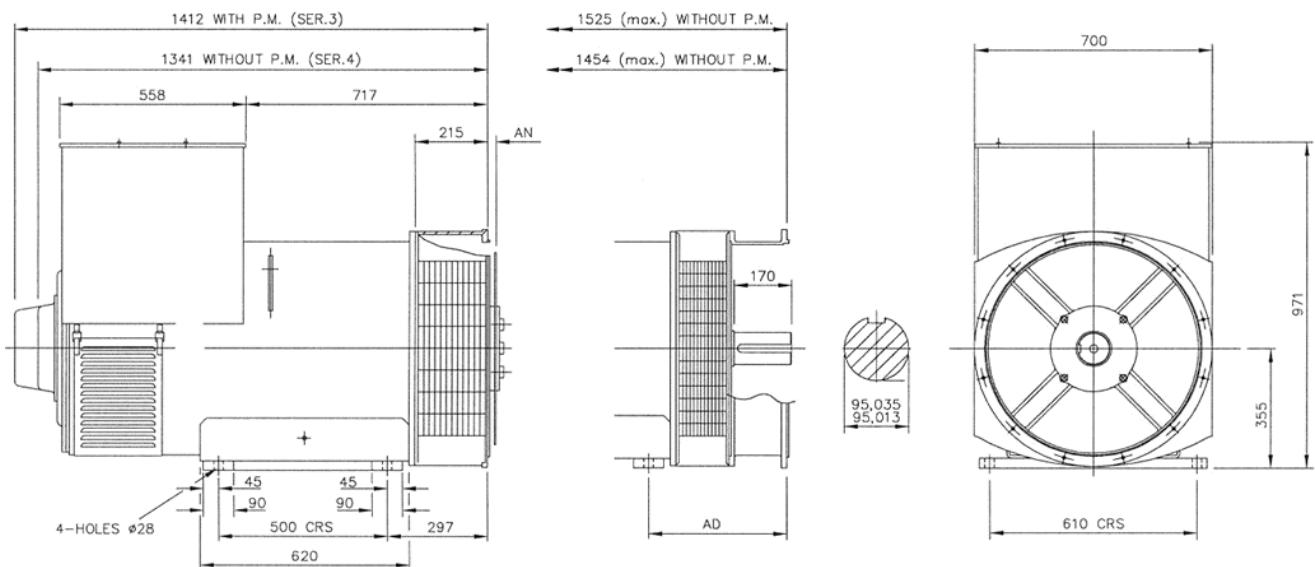
	50 Hz				60 Hz			
TELEPHONE INTERFERENCE	THF<2%				TIF<50			
COOLING AIR	1.035 m <sup>3</sup> /sec 2202 cfm				1.312 m <sup>3</sup> /sec 2780 cfm			
VOLTAGE SERIES STAR	380/220	400/231	415/240	440/254	416/240	440/254	460/266	480/277
VOLTAGE PARALLEL STAR	190/110	200/115	208/120	220/127	208/120	220/127	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	670	670	670	650	738	775	800	825

Xd DIR. AXIS SYNCHRONOUS	2.90	2.62	2.43	2.10	3.33	3.13	2.95	2.80
X'd DIR. AXIS TRANSIENT	0.16	0.14	0.13	0.11	0.16	0.15	0.14	0.13
X''d DIR. AXIS SUBTRANSIENT	0.11	0.10	0.09	0.08	0.11	0.10	0.10	0.09
Xq QUAD. AXIS REACTANCE	2.42	2.19	2.03	1.75	2.66	2.50	2.36	2.23
X''q QUAD. AXIS SUBTRANSIENT	0.25	0.23	0.21	0.18	0.31	0.29	0.27	0.26
XL LEAKAGE REACTANCE	0.05	0.04	0.04	0.03	0.05	0.05	0.04	0.04
X2 NEGATIVE SEQUENCE	0.18	0.16	0.15	0.13	0.21	0.20	0.19	0.18
X0 ZERO SEQUENCE	0.08	0.08	0.07	0.06	0.09	0.08	0.08	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.	0.012s
T'do O.C. FIELD TIME CONST.	2.5s
Tα ARMATURE TIME CONST.	0.019s
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	620	620	620	600	670	670	670	650	710	710	710	690	738	738	738	715	
kW	496	496	496	480	536	536	536	520	568	568	568	552	590	590	590	572	
Efficiency (%)	95.0	95.2	95.3	95.4	94.8	95.0	95.1	95.3	94.6	94.8	94.9	95.1	94.4	94.6	94.8	95.1	
kW Input	522	521	520	503	565	564	564	546	600	599	599	580	625	624	623	601	



## DIMENSIONS

Length (mm)	Width (mm)	Height (mm)
1427	700	971