

CONTROL SYSTEM SER.4	SELF EXCITED
A.V.R.	SX440
VOLTAGE REGULATION	±1.0 %
SUSTAINED SHORT CIRCUIT	SELF EXCITED MACHINES DO NOT SUSTAIN A SHORT CIRCUIT CURRENT

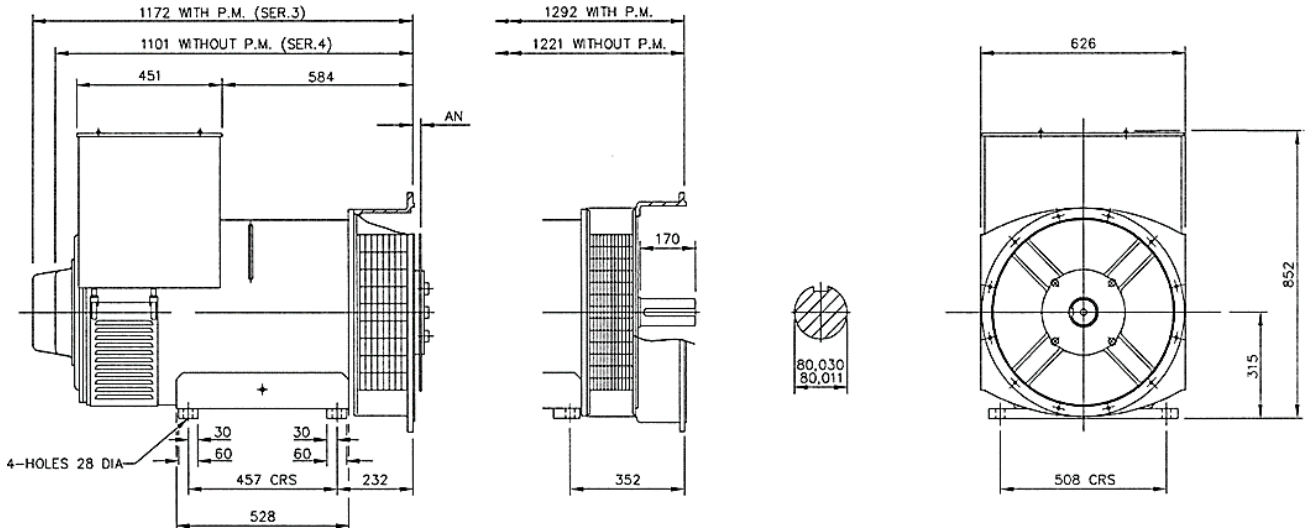
INSULATION SYSTEM	BS EN 60034-1 CLASSH
PROTECTION	BS EN 60034-5 IP22
RATED POWER FACTOR	0.8
STATOR WINDING	DOUBLE LAYER CONCENTRIC
WINDING PITCH	TWO THIRDS
WINDING LEADS	12
R.F.I. SUPPRESSION	BS EN 61000-6-2 & BS EN 61000-6-4,VDE 0875G, VDE 0875N. refer to factory for others
WAVEFORM DISTORTION	NO LOAD < 1.5% NON-DISTORTING BALANCED LINEAR LOAD < 5.0%
MAXIMUM OVERSPEED	2250 Rev/Min
BEARING NON-DRIVE END	BALL. 6314-2RS (ISO)
Operating temperature	-30°C ~ 50°C
Storage temperature	-40°C ~ 60°C
Maximum allowable Altitude (m)	1500
Relative Humidity(0I-70I)	95%

	50 Hz				60 Hz			
TELEPHONE INTERFERENCE	THF<2%				TIF<50			
COOLING AIR	0.8 m3/sec 1700 cfm				0.99 m3/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 EACTANCE VALUES	325	325	325	325	372	390	410	410
Xd DIR. AXIS SYNCHRONOUS	3.01	2.71	2.52	2.24	3.47	3.26	3.12	2.87
X'd DIR. AXIS TRANSIENT	0.20	0.18	0.17	0.15	0.21	0.20	0.19	0.17
X''d DIR. AXIS SUBTRANSIENT	0.14	0.13	0.12	0.11	0.15	0.14	0.13	0.12
Xq QUAD. AXIS REACTANCE	2.58	2.33	2.16	1.92	2.92	2.74	2.63	2.41
X''q QUAD. AXIS SUBTRANSIENT	0.36	0.32	0.30	0.27	0.41	0.38	0.37	0.34
XL LEAKAGE REACTANCE	0.07	0.06	0.06	0.05	0.08	0.08	0.07	0.07
X2 NEGATIVE SEQUENCE	0.24	0.22	0.20	0.18	0.28	0.26	0.25	0.23
X0 ZERO SEQUENCE	0.10	0.09	0.08	0.07	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
Tα 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	295	295	295	295	325	325	325	325	345	345	345	345	355	375	355	355
	kW	236	236	236	236	260	260	260	280	276	276	276	276	284	300	284	284
	Efficiency (%)	93.5	93.6	94.1	94.4	93.5	93.4	93.7	93.8	92.7	93.6	93.4	93.6	92.7	92.7	93.5	93.6
	kW Input	254	253	252	252	280	279	279	279	300	300	300	296	308	325	306	305



DIMENSIONS

Length (mm)	Width (mm)	Height (mm)
1210	626	852