

CONTROL SYSTEM	SELF EXCITED		
A.V.R.	SX460		AS440
VOLTAGE REGULATION	± 1.0 %	± 1.0 %	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 CONCENTRIC		
WINDING PITCH	TWO THIRDS		
WINDING LEADS	12		
STATOR WDG. RESISTANCE	0.024 Ohms PER PHASE AT 22°C SERIES STAR CONNECTED		
ROTOR WDG. RESISTANCE	1.52 Ohms at 22°C		
EXCITER STATOR RESISTANCE	20 Ohms at 22°C		
EXCITER ROTOR RESISTANCE	0.091 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. 6315-2RS (ISO)		
BEARING NON-DRIVE END	BALL. 6310-2RS (ISO)		

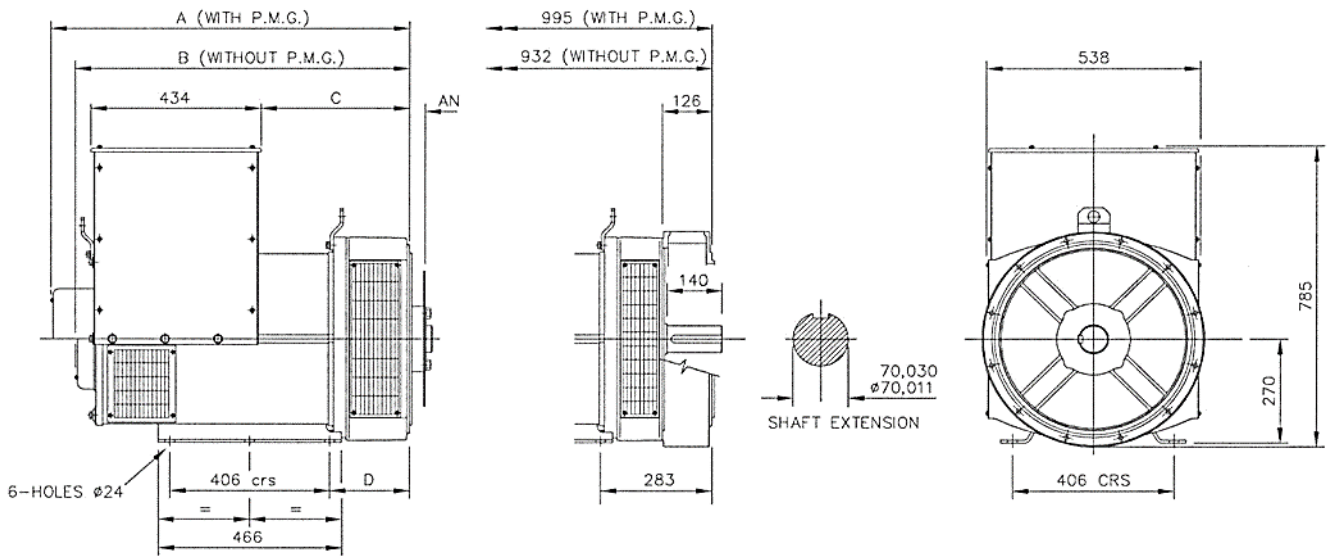
	1 BEARING	2 BEARING
WEIGHT COMP. GENERATOR	530 kg	545 kg
WEIGHT WOUND STATOR	200 kg	200 kg
WEIGHT WOUND ROTOR	188.67 kg	177.71 kg
WR <sup>2</sup> INERTIA	1.555 kgm <sup>2</sup>	1.5044 kgm <sup>2</sup>
SHIPPING WEIGHTS in a crate	563 kg	577 kg
PACKING CRATE SIZE	96 x 61 x 92(cm)	96 x 61 x 92(cm)

	50 Hz				60 Hz			
TELEPHONE INTERFERENCE	THF<2%				TIF<50			
COOLING AIR	0.514 m <sup>3</sup> /sec 1090 cfm				0.617 m <sup>3</sup> /sec 1308 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	160	160	160	N/A	181.3	190	190	206.3
X <sub>d</sub> DIR. AXIS SYNCHRONOUS	2.24	2.02	1.88	-	2.53	2.37	2.17	2.16
X' <sub>d</sub> DIR. AXIS TRANSIENT	0.19	0.17	0.16	-	0.21	0.20	0.18	0.18
X'' <sub>d</sub> DIR. AXIS SUBTRANSIENT	0.13	0.12	0.11	-	0.14	0.13	0.12	0.12
X <sub>q</sub> QUAD. AXIS REACTANCE	1.38	1.25	1.16	-	1.53	1.43	1.31	1.31
X'' <sub>q</sub> QUAD. AXIS SUBTRANSIENT	0.17	0.15	0.14	-	0.20	0.19	0.17	0.17
XL LEAKAGE REACTANCE	0.07	0.06	0.06	-	0.09	0.08	0.08	0.08
X <sub>2</sub> NEGATIVE SEQUENCE	0.14	0.13	0.12	-	0.16	0.15	0.14	0.14
X <sub>0</sub> ZERO SEQUENCE	0.08	0.08	0.07	-	0.10	0.09	0.09	0.09

REACTANCES ARE SATURATED		VALUES ARE PER UNIT AT RATING AND VOLTAGE INDICATED	
T' <sub>d</sub> TRANSIENT TIME CONST.		0.035 s	
T'' <sub>d</sub> SUB-TRANSTIME CONST.		0.011 s	
T' <sub>d0</sub> O.C. FIELD TIME CONST.		0.9 s	
T <sub>a</sub> ARMATURE TIME CONST.		0.009 s	
SHORT CIRCUIT RATIO		1/X <sub>d</sub>	

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	130	130	130	N/A	140	140	140	N/A	165	165	165	N/A	154	154	154	N/A
	kW	116.0	116	116	N/A	128	128	128	N/A	136	136	136	N/A	140	140	140	N/A
	Efficiency (%)	92.3	92.6	92.8	N/A	92	92.3	92.5	N/A	91.7	92.1	92.3	N/A	91.6	92.0	92.2	N/A
	kW Input	109	109	109	N/A	117	117	117	N/A	138	138	138	N/A	129	129	129	N/A



DIMENSIONS		
Length (mm)	Width (mm)	Height (mm)
916	538	785