

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	0.055 Ohms PER PHASE AT 22°C SERIES STAR CONNECTED
ROTOR WDG. RESISTANCE	0.94 Ohms at 22°C
EXCITER STATOR RESISTANCE	20 Ohms at 22°C
EXCITER ROTOR RESISTANCE	0.078 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. 6312-2RS (ISO)
BEARING NON-DRIVE END	BALL. 6309-2RS (ISO)

	1 BEARING	2 BEARING
WEIGHT COMP. GENERATOR	383 kg	400 kg
WEIGHT WOUND STATOR	139 kg	139 kg
WEIGHT WOUND ROTOR	126.75 kg	118.38 kg
WR <sup>2</sup> INERTIA	0.7136 kgm <sup>2</sup>	0.6818 kgm <sup>2</sup>
SHIPPING WEIGHTS in a crate	404 kg	420 kg
PACKING CRATE SIZE	93 x 52 x 64(cm)	93 x 52 x 64(cm)

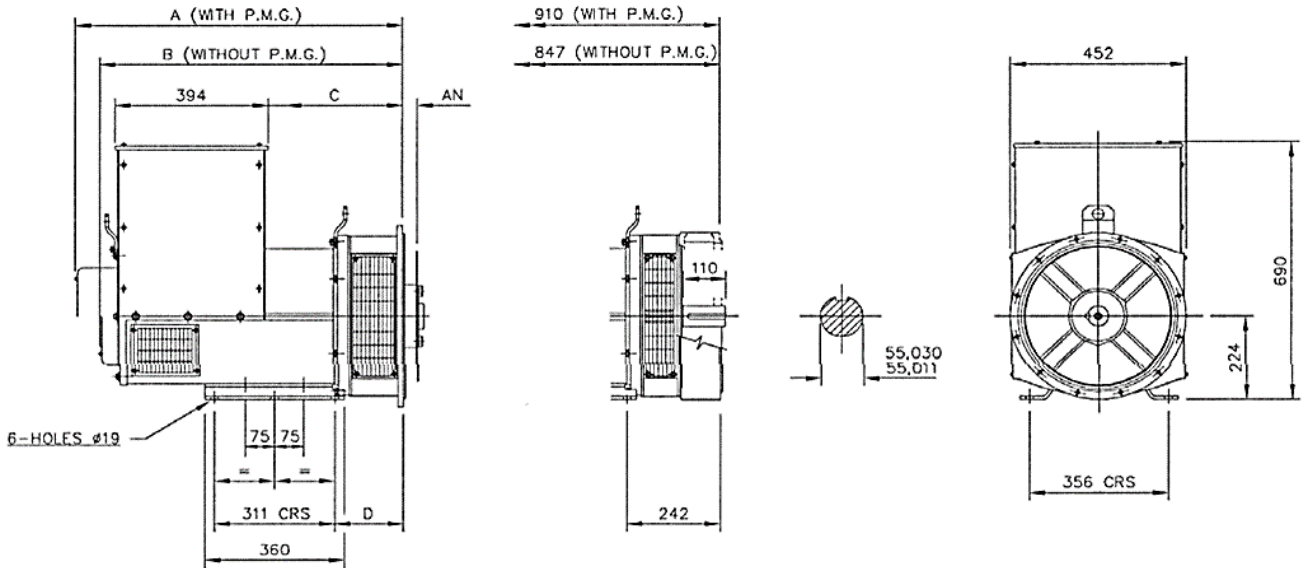
	50 Hz	60 Hz
TELEPHONE INTERFERENCE	THF<2%	TIF<50
COOLING AIR	0.216 m <sup>3</sup> /sec 458 cfm	0.281 m <sup>3</sup> /sec 595 cfm

	380/220	400/231	415/240	440/254	416/240	440/254	460/266	480/277
VOLTAGE SERIES STAR								
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	85	85	85	79	93.8	97.5	100	103.8
X <sub>d</sub> DIR. AXIS SYNCHRONOUS	2.43	2.20	2.04	1.69	2.66	2.47	2.32	2.21
X' <sub>d</sub> DIR. AXIS TRANSIENT	0.19	0.17	0.16	0.13	0.20	0.19	0.17	0.17
X'' <sub>d</sub> DIR. AXIS SUBTRANSIENT	0.13	0.12	0.11	0.09	0.14	0.13	0.12	0.12
X <sub>q</sub> QUAD. AXIS REACTANCE	1.12	1.01	0.94	0.78	1.22	1.13	1.06	1.01
X'' <sub>q</sub> QUAD. AXIS SUBTRANSIENT	0.17	0.15	0.14	0.12	0.15	0.14	0.13	0.12
X <sub>L</sub> LEAKAGE REACTANCE	0.07	0.06	0.06	0.05	0.08	0.07	0.07	0.07
X <sub>2</sub> NEGATIVE SEQUENCE	0.16	0.14	0.13	0.11	0.15	0.14	0.13	0.12
X <sub>0</sub> ZERO SEQUENCE	0.11	0.10	0.09	0.07	0.11	0.10	0.10	0.09

REACTANCES ARE SATURATED	VALUES ARE PER UNIT AT RATING AND VOLTAGE INDICATED
T' <sub>d</sub> TRANSIENT TIME CONST.	0.03 s
T'' <sub>d</sub> SUB-TRANSTIME CONST.	0.008 s
T' <sub>do</sub> O.C. FIELD TIME CONST.	0.75 s
T <sub>α</sub> ARMATURE TIME CONST.	0.007 s
SHORT CIRCUIT RATIO	1/X <sub>d</sub>

**RATING**

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	75.0	75.0	75.0	67.4	85.0	85.0	85.0	75.0	87.5	87.5	87.5	76.9	90.8	90.8	90.8	80.1
	kW	60.0	60.0	60.0	53.9	68.0	68.0	68.0	60.0	70.0	70.0	70.0	61.5	72.6	72.6	72.6	64.1
	Efficiency (%)	90.3	90.6	90.7	91.0	89.8	90.2	90.4	90.8	89.7	90.1	90.3	90.7	89.6	89.9	90.1	90.6
	kW Input	66.4	66.2	66.2	62.4	75.7	75.4	75.2	69.6	78.0	77.7	77.5	71.4	81.1	80.8	80.6	74.5



**DIMENSIONS**

Length (mm)	Width (mm)	Height (mm)
885	452	690