

CONTROL SYSTEM	SELF EXCITED			
A.V.R.	SX460		SX440	SX421
VOLTAGE REGULATION	± 1.5 %	± 1.0 %	± 0.5 %	With 4% ENGINE GOVERNING
SUSTAINED SHORT CIRCUIT	SERIES 4 CONTROL DOES NOT SUSTAIN A SHORT CIRCUIT CURRENT			

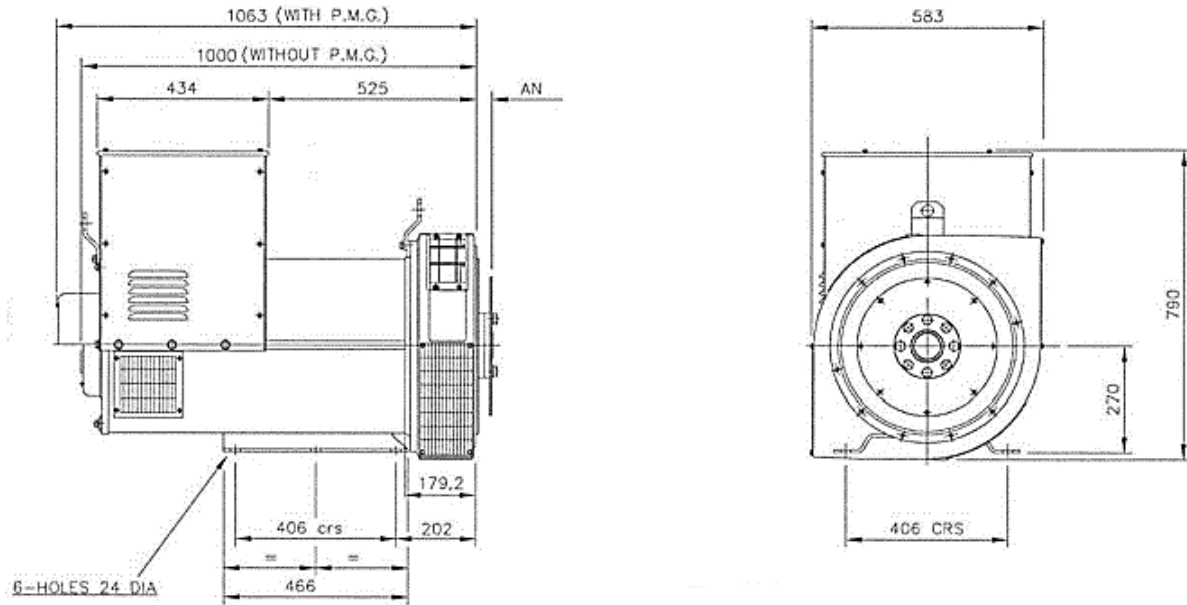
INSULATION SYSTEM	CLASS H
PROTECTION	IP22
RATED POWER FACTOR	0.8
STATOR WINDING	DOUBLE LAYER CONCENTRIC
WINDING PITCH	TWO THIRDS
WINDING LEADS	12
STATOR WDG. RESISTANCE	0.0126 Ohms PER PHASE AT 22°C SERIES STAR CONNECTED
ROTOR WDG. RESISTANCE	2.08 Ohms at 22°C
R.F.I. SUPPRESSION	BS EN 61000-6-2 & BS 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 NON-DRIVE END	BALL. 6310-2RS (ISO)
WEIGHT COMP. GENERATOR	727 kg
WEIGHT WOUND STATOR	304 kg
WEIGHT WOUND ROTOR	272.6 kg
WR ² INERTIA	2.3934 kgm ²
SHIPPING WEIGHTS in a crate	740 kg
PACKING CRATE SIZE	113 x 61 x 96 (cm)

	50 Hz				60 Hz			
TELEPHONE INTERFERENCE	THF<2%				TIF<50			
COOLING AIR	0.58 m ³ /sec 1230 cfm				0.69 m ³ /sec 1463 cfm			
VOLTAGE SERIES STAR (Y)	380/220	400/231	415/240	440/254	416/240	440/254	460/266	480/277
VOLTAGE PARALLEL STAR (Y)	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	250	250	250	n/a	291	299	312.5	312.5
X _d DIR. AXIS SYNCHRONOUS	2.825	2.550	2.369	-	3.161	2.903	2.776	2.550
X' _d DIR. AXIS TRANSIENT	0.132	0.119	0.111	-	0.148	0.136	0.130	0.119
X'' _d DIR. AXIS SUBTRANSIENT	0.086	0.078	0.072	-	0.097	0.089	0.085	0.078
X _q QUAD. AXIS REACTANCE	1.263	1.140	1.059	-	1.413	1.298	1.241	1.140
X'' _q QUAD. AXIS SUBTRANSIENT	0.152	0.137	0.127	-	0.170	0.156	0.149	0.137
XL LEAKAGE REACTANCE	0.066	0.060	0.056	-	0.074	0.068	0.065	0.060
X ₂ NEGATIVE SEQUENCE	0.120	0.108	0.100	-	0.134	0.123	0.118	0.108
X ₀ ZERO SEQUENCE	0.022	0.020	0.019	-	0.025	0.023	0.022	0.020

REACTANCES ARE SATURATED	VALUES ARE PER UNIT AT RATING AND VOLTAGE INDICATED
T' _d TRANSIENT TIME CONST.	0.049 s
T'' _d SUB-TRANSTIME CONST.	0.02 s
T' _{do} O.C. FIELD TIME CONST.	1.27 s
T _α ARMATURE TIME CONST.	0.018 s
SHORT CIRCUIT RATIO	1/X _d

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	229	229	229	N/A	250	250	250	N/A	265	265	265	N/A	275.0	275.0	275.0	N/A
	kW	183.2	183.2	183.2	N/A	200	200	200	N/A	212.0	212.0	212.0	N/A	220	220	220.0	N/A
	Efficiency (%)	92.8	93.0	93.1	N/A	92.5	92.7	92.8	N/A	92.2	92.4	92.6	N/A	92.0	92.2	92.4	N/A
	kW Input	197.4	197.0	196.8	N/A	216.2	215.7	215.5	N/A	229.9	229.4	228.9	N/A	239.1	238.6	238.1	N/A



DIMENSIONS

Length (mm)	Width (mm)	Height (mm)
1100	583	790