ALTERNATOR SPECIFICATIONS

GENERAL DATAS	Manufacturer / Type	LEROY SOMER LSA512S55
	Number of phase	3
	Power factor (Cos Phi)	0.8
	Altitude	< 1000 m
	Overspeed	2250 rpm
	Pole : number	4
	Exciter type	AREP
	Insulation : class, temperature rise	H / H
	Voltage regulator	R449
	Sustained short circuit current	6 AC
	Total harmonics (TGH/THC)	< 4 %
	Wave form : NEMA = TIF – TGH/THC	< 50
	Wave form : CEI = FHT – TGH/THC	< 2 %
	Bearing : number	1
	Coupling	Direct
	Voltage regulation 0 to 100% load	+/- 1%
	Recovery time (20% Volt dip) ms	< 700 ms
	SkVA with 90% of nominal sustained voltage (at 0.4PF)	N/A
OTHER DATAS	Continuous nominal rating @ 40°C	1860 kVA
	Standby rating @ 27°C	1980 kVA
	Efficiencies @ 4/4 load	95.6 %
	Air flow	2.5m3/s [5297.18cfm]
	Short circuit ratio;50 (Kcc)	0.33
	Direct axis synchro reactance unsaturated (Xd)	374 %
	Quadra axis synchro reactance unsaturated (Xq)	224 %
	Open circuit time constant;50 (T'do)	2700 ms
	Direct axis transient reactance saturated (X'd)	33.4 %
	Short circuit transient time constant (T'd)	240 ms
	Direct axis subtransient reactance saturated (X''d)	14.8 %
	Subtransient time constant (T''d)	22 ms
	Quadra axis subtransient reactance saturated (X''q)	18.4 %
	Zero sequence reactance unsaturated (Xo)	3.5 %
	Negative sequence reactance saturated (X2)	16.6 %
	Armature time constant (Ta)	39 ms
	No load excitation current (io)	1.5 A
	Full load excitation current (ic)	N/A
	Full load excitation voltage (uc)	63 V
	Recovery time (Delta U = 20% transitoire)	< 700 ms
	Motor start (Delta = 20% perm. Or 50% trans.)	3600 kVA
	Transient dip (4/4 charge) – PF : 1.8 AR	12 %
	No load losses	16kW [16.00Kw]
	Heat rejection	64.7 kW