



## KTA19-G3

### STANDARD SPECIFICATION DIESEL GENERATING SETS 20-2250 KVA

#### 1-OUTPUT RATINGS:

The generator set is normally supplied with 400 volt 3 phases 50 Hz, other frequency voltage available on request.

#### 2-ENGINE: PERKINS heavy duty diesel engine.

#### 3-GOVERNOR: All engine governors comply with ISO 3046.

**4-ELECTICAL SYSTEM:** 12 OR 24 volt with battery charging alternator, axial type start motor, high capacity maintenance free lead acid starting battery, back rack mounted on the generator set base frame, & heavy duty interconnecting cables with terminations.

**5-ALTERNATOR:** - SCREEN proofed & DRIP PROOF, self exciting self-regulated brushless alternator with fully inter connected damper windings, 12 wire reconnect able windings provide a wide range of 3 phases voltage

-THE INSULATION is class H. all windings are immersed are immersed in either a triple dip thermosetting moisture. Oil & acid resisting polyester varnish or varnish or vacuum pressure immersed with special polyester resin heavy coat of anti-tracking varnish for additional protection against moisture or condensation.

-ELECTRICAL DESIGN in Accordance with BS 5000, IEC-1, VDE 0530, DEMA MG 1.22

**AUTOMATIC VOLTAGE REGULATOR:** Fully sealed automatic voltage regulator maintains the voltage within limits of  $\pm 1\%$  with any power factor & between speed variations  $\pm 4.5\%$  with reference to the rated speed nominal adjustment is by means of trimmer incorporated in the AVR.

**RADIO INTERFERENCE:** comply with the specification VDE 0875 degree N.

**OVER LOAD:** the permissible over load are 300% for 20 seconds of 50% for 2 minutes & 10% for 1 hour every 6 hours of operation. -all alternator stators are wound to 2/3 pitch. this eliminates triple (3rd, 9th, 15th.....) harmonics on the voltage waveform & is found to be the optimum design for trouble free supply of non linear loads. The 2/3 pitch design avoided excessive neutral currents, sometimes seen with higher winding pitches this winding with the 2/3 pitch & carefully selected pole & tooth designs, ensures very low waveform distortion.

**6- MOUNTING ARRANGEMENT: COUPLING:** the engine & alternator are directly coupled by means of SAE flange so that there is no possibility of misalignment after prolonged use. the engine flywheel is flexibly coupled to the alternator came out to guarantee

#### GENERATING SET

GENSET MODEL	C500	SLIENT / 69dbA
GEN. SET POWER	500	KVA
PRODUCTION YEAR	2009	
VOL TAGE	230/400	VOLT
PHASES	3	PH
COS	0.8	
FREQUENCY	50	Hz
SPEED	1500	
SOUND PROOF	[69dB(A)@ 1m,65dB(A) @7 m ]	

#### ENGINE

MAKE	CUMMINS	
MODEL	KTA19-G3	
FULL CONSUMPTION(I/H)	54 93	
NUMBER OF CYLINDERS	6	
ALTERNATOR	MECCALTE	
ALTERNATOR	SINCRO	

no harmful vibration will occur in the assembly. ANTI VIBRATION MOUNTING PASD: antivibration pads are affixed between engine/ alternator feet & base frame thus ensuring complete & base frame thus ensuring complete & vibration isolation of the rotation assemblies & enabling the machine to be placed on & uneven surface without any detrimental effect.

**7-FUEL SYSTEM:** on all sets the base frame design incorporates an integral fuel tank with a capacity approx, 8 hours. The tank is supplied complete with contents indicator, fuel fill cap with breather, fuel feed & return lines to engine & drain plug.

**8-CONTROL SYSTEM:-STANDARD CONTROL PANEL** set mounted control panel in a steel enclosure with a hinged control panel in a steel enclosure with a hinged lockable door. THE CONTROL PANEL IS EQUIPPED AS FOLLOWS: -INSTRUMENTS: -volt meter - ampere meter - frequency meter - running hours meter - coolant temperature gauge - oil pressure gauge - CONTROL: - start/ stop key switch - voltmeter phase selector switch - Ampere meter selector switch - SHUTDOWN PROTECTION DEVICE WITH INDICATORS FOR - high engine temperature - low oil pressure -DC & AC WARNING - utilizing industrial type multi-pin connectors, thus permitting fast fault finding & simple retrofitting of alternative or remote control systems. CIRCUIT BREAKER: 3pole mounted circuit breaker mounted on incoming & outgoing cables.