



**POWERING  
GROWTH WITH  
RELIABLE  
TECHNOLOGY.**



**RUGGED  
DEPENDABLE  
RESPONSIVE**



500 kVA to 2500 kVA

Powered by  
 **Perkins®**

**SUPERNOVA**  
G E N S E T S

Power Up  
An ISO 9001 : 2008 Certified Company



Supernova Engineers Ltd. has been producing generator sets for more than 25 years now. We manufacture diesel gensets ranging from 7.5 to 2500 kVA offering standard, AMF and synchronized types of D.G. sets. Each of these sets is type approved by the National Aerospace Laboratory, Bengaluru and also meets the required CPCB emission norms (Govt. of India).

In the year 1987, Supernova established its first plant at Rajpur near Ahmedabad. By the year 1992, we were able to install around 5000 gensets. We went a step further and tied up with international giants like AB Volvo Penta, Sweden and Perkins Engines, U.K. in the year 1995 and 2009 respectively. This partnership helped bring world-class technology to Indian shores.

As a company that has been constantly investing in the latest technology, we have recently installed 'Trupunch 2020' machines from Trumpf - a high volume automated punching machine capable of producing sheet metal parts automatically. Supernova energy division has recently installed a Wind Turbine Generator which is targeted to generate power @ 14,50,000 kwe / annum.

Supernova's next plant was established at Silvassa (UT). We made sure that utmost care was taken in producing high quality gensets by recruiting the best possible personnel for administering the manufacturing process. Supernova's combined production capacity of both the plants has reached to more than 16,000 - 17,000 gensets / annum. By now, Supernova's Rajpur plant has become one of the largest genset manufacturing plants in India with an industrial land area of 2,15,000 sq. ft. and a built-up-shop floor area of 1,00,000 sq. ft.

Supernova gensets are known for high quality. The maintenance cost is low with optimal fuel economy and these gensets offer superior service at all times. Supernova has always laid emphasis on top of the class service. And this is evident, given its unmatched 24x7, 365 days a year after sales support offices spread across India. Apart from this, Supernova offers annual maintenance contract during the warranty period and even after its expiry.

## SUPERNOVA PERKINS DIESEL POWER SERIES

RADIATOR COOLED PRIME POWER 1500 RPM(50 Hz)				
GENSET MODEL	ENGINE MODEL	3 Ph. 415 V, 0.8 PF		
		BHP	kVA	kWe
SP500	2506C-E15TAG2	605	500	400
SP750	4006-23TAG2A	882	750	600
SP800	4006-23TAG3A	945	800	640
SP 1010	4008 TAG2A	1206	1010	808
SP 1250	4012-46TAG0A	1497	1250	1000
SP 1375	4012-46TAG1A	1597	1375	1100
SP 1500	4012-46TAG2A	1756	1500	1200
SP 1700	4012-46TAG3A	2006	1700	1360
*SP 1850	4016-61TRG1	2208	1850	1480
*SP 2000	4016-61TRG2	2377	2000	1600
SP 2250	4016-61TRG3	2647	2250	1800

RADIATOR COOLED STAND BY POWER 1500 RPM(50 Hz)				
GENSET MODEL	ENGINE MODEL	3 Ph. 415 V, 0.8 PF		
		BHP	kVA	kWe
SP800(S)	4006-23TAG2A	967	800	640
SP880(S)	4006-23TAG3A	1054	880	704
SP 1100(S)	4008 TAG2A	1290	1100	880
SP 1375(S)	4012-46TAG0A	1638	1375	1100
SP 1500(S)	4012-46TAG1A	1750	1500	1200
SP 1650(S)	4012-46TAG2A	1926	1650	1320
SP 1890(S)	4012-46TAG3A	2198	1890	1512
SP 2000(S)	4016-61TRG1	2377	2000	1600
SP 2250(S)	4016-61TRG2	2659	2250	1800
SP 2500(S)	4016-61TRG3	2925	2500	2000

Above Models are also available in Heat Exchanger Cooled System.  
Also available in "TAG" version.

## SUPERNOVA PERKINS GAS POWER SERIES

RADIATOR COOLED 1500 RPM(50 Hz)				
GENSET MODEL	ENGINE MODEL	Base Load (3 Ph. 415 V, 1 PF)		
		BHP	kVA	kWe
SP 307(G)	4006-23TRS1†	432	307	307
SP 375(G)	4006-23TRS2†	527	375	375
SP 425(G)	4008-30TRS1†	600	425	425
SP 500(G)	4008-30TRS2†	706	500	500

RADIATOR COOLED 1500 RPM(50 Hz)				
GENSET MODEL	ENGINE MODEL	Base Load (3 Ph. 415 V, 1 PF)		
		BHP	kVA	kWe
SP 607 (G)	4012TESI†	848	607	607
SP 815 (G)	4016TESI†	1129	815	815
SP 1010 (G)	4016-E61TRS	1396	1008	1008

Available on application † Gross power.

Suffix (G) denotes Gas Power Genset

Gas powered engine ratings are obtained using natural Gas – LHV (low heat value) 34.71 MJ/m<sup>3</sup> (930Btu/ft<sup>3</sup>).

Technical details of gas Gensets will be supplied on request.

### RATING GUIDELINES

**PRIME POWER** rating corresponds to ISO standard power for continuous operation. It is applicable for supplying electrical power at variable load for an unlimited number of hours instead of commercially purchased power. A 10% overload capability is available with this rating.

**STANDBY POWER** rating corresponds to ISO fuel stop power. It is applicable for supplying standby electrical power at variable load in areas with well-established electrical networks, in the event of power failure. No overload capability is available with this rating.

### POWER STANDARDS

Engine Performance corresponds to ISO 3046, BS 5514, SAE J1349 and DIN 6271. The technical data applies to an engine operating on a fuel with a calorific value of 42.7 MJ/Kg (18360 BTU/lb) and a density of 0.84 Kg/liter (7.01 lb/US gal). Engine speed governing is in accordance with ISO 3046/IV, Class A1 and ISO 8532 Class G2. Power output is guaranteed with 0 to +2% at rated ambient conditions.





## TECHNICAL DATA

GENSET MODEL	SP500*	SP750 / SP800(S)*	SP800 / SP880(S)*	SP1010 / SP1100(S)
Engine Model	2506C-E15TAG2	4006-23TAG2A	4006-23TAG3A	4008 TAG2A
Type	4 Stroke Water Cooled 1500 RPM Diesel Engine			
No.of Cylinder & Arrangement	6 Vertical In-Line			8 Vertical In-Line
Governor	Mechanically Actuated Electronically control Unit		ELECTRONIC	
Fuel System	DIRECT INJECTION SYSTEM WITH UNIT INJECTORS			
Bore x Stroke (mm x mm)	137 X 171		160 X 190	
Compression Ratio	16.1 : 1		13.6 : 1	
Starting	24 V DC Electric			
Lead Acid type Battery	2 Nos. 180 AH			
Fuel day tank capacity(Ltrs)	900			990
Approx.coolant capacity incl.Radiator(Ltrs)	58	105		149
Lub Oil Capacity incl. Oil Filters (Ltrs)	62	113.5		165.6
Lub.Oil Specification	API CG4 15W/40			
Recommended fuel specification	ASTM.D975 No.2-D or BS2869 Class A2 OR BSEN 590			
Approx. DG set dimensions(LxWxH) in mm	4000 X 1100 X 2000		4000x1690x2160	
Approx. DG set dimensions(LxWxH) (With Acoustic Enclosure) in mm	5600x2200x3025		6900x2600x3750	
Approx. Dry weight (Genset only) in Kgs	6500	7000	7200	7800

\*Mandatory to supply with Acoustic Enclosure as per CPCB Norms.

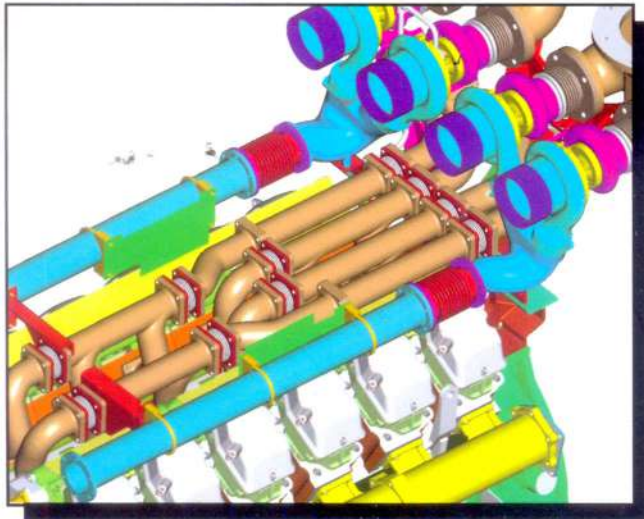
GENSET MODEL	SP1250 / SP1375(S)	SP1375 / SP1500(S)	SP1500 / SP1650(S)	SP1700 / SP1890(S)	SP1850 / SP2000(S)	SP2000 / SP2250(S)	SP2250 / SP2500(S)
Engine Model	4012-46TAG0A	4012-46TAG1A	4012-46TAG2A	4012-46TAG3A	4016-61TRG1	4016-61TRG2	4016-61TRG3
Type	4 Stroke Water Cooled 1500 RPM Diesel Engine						
No.of Cylinder & Arrangement	12 V			16 V			
Governor	ELECTRONIC						
Fuel System	DIRECT INJECTION SYSTEM WITH UNIT INJECTORS						
Bore x Stroke (mm x mm)	160 x 190						
Compression Ratio	13.6:1						
Starting	24 V DC Electric						
Lead Acid type Battery	4 Nos. 180 AH						
Fuel day tank capacity(Ltrs)	990						
Approx.coolant capacity incl.Radiator(Ltrs)	210	198		207		316	
Lub Oil Capacity incl. Oil Filters (Ltrs)	177	177.6		237.2			
Lub.Oil Specification	API CH4 15W/40						
Recommended fuel specification	ASTM.D975 No.2-D or BS2869 Class A1, A2						
Approx. DG set dimensions(LxWxH) in mm	5400x2200x2650				5800x3000x3400		
Approx. DG set dimensions(LxWxH) (With Acoustic Enclosure) in mm	9112x3000x3258				9460x3300x3900		
Approx. Dry weight (Genset only) in Kgs	10000	10100	10300	10900	11850	12300	12500

Note: Continuous developments in the product entitles us to change technical specifications, dimensions, scope of work etc.

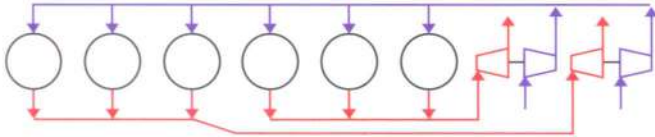
## PERKINS ADVANTAGES

- Excellent power to weight ratio.
- Low operating cost & maintenance cost.
- Low gaseous emissions for clearer operation.
- Compact size for easier transportation and installation.
- Commonality of components over the entire range of engines.
- Designed to provide excellent service access for ease of maintenance.
- High block loading capability due to split exhaust and air intake system.
- Control of piston temperature by an advanced gallery jet cooling system.
- Six cylinders in-line engine for 750 & 800 kVA, eight cylinders in-line for 1010 kVA, twelve cylinders V engine from 1250 to 1700 kVA D.G. set application.





### SPLIT EXHAUST MANIFOLD SYSTEM (SEMS):



### Advance Engine Technology Featuring:

- Split exhaust manifold system (SEMS) to facilitate highest block loading capacity.
- Service interval - 500 hours.
- Separate filtered jet cooling system.
- Lowest fuel consumption across the entire load pattern.
- Maintain less number of cylinders for 750, 800, 1010 & 1700 kVA D.G set.
- **SOS technology** available for high oil change interval and better engine life.



### Unit Injection System:

- Ultra fine fuel atomisation, hence control rapid combustion.
- Eliminates the need for external high pressure fuel pipes.
- Fuel quantity control.
- Negligible carbon deposit, less wear and tear and longer engine life.

### Our Prominent Clientele :

Adani Wilmar	Fortune Landmark	MRF Ltd.	Reserve Bank of India	Ultratech Cement
Aircel	Gammon India	Moser Baer	Ruchi Soya	Uttam Steel
Airtel	Grand Bhagwati	Ministry of Defence	Rupa Construction	Vodafone
Axa Business	Grand Sarovar	New Diamond Era	Scope Complex	Wockhardt
Bank of Baroda	HSBC	NBCC	Sibelco	(n) Code Solutions (Div. of GNFC)
Brabourne Stadium	Havmor Icecreams	NDMC	SIMPOLO Ceramics	Reliance Spinning – Nepal
BHEL	Indo-Pak Border	Ness Technologies	Sintex	Little Star Equipments, Sharjah
Bhushan Steel	Indus Tower	NSK-ABC Bearing	Standard Chartered Bank	Brown & Co. Ltd, Sri Lanka
BSNL	Iscon Malls	ONGC	Sterling Hospitals	Topaz Multithread, Republic De Guinea
Cochin Minerals Ltd.	Institute of Plasma Research	Parliament House	Sterlite Industries	Vinay Holdings, Hong Kong
CPWD	IOCL	PMO-South Block	Suzlon	Mount Meru Products, Tanzania
Crown Plaza	J.B. Chemicals	Punj Lloyd	Tata Teleservices	Medical Technologies, Uzbekistan
Deen Dayal Upadhyay Hospital	Kumar Properties	Reliance Communications	Tech Mahindra	Regency Garments, Bangladesh
Electrotherm	L&T MHI Turbine	Reliance Industries	Torrent Pharma	Green Technology, Sri Lanka
Escorts Heart Institute	L&T (ECC) & L&T (Info-City)	Reliance Petroleum	TNTPO	Radisson Hotel, Nepal
Feromatik Milacron	MTS	Reliance Infrastructure		Sinjar Arabia
				Arti Strips, Nepal

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 **SUPERNOVA**  
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