

TECHKNOL POWER GENERATION

**VOLVO
PENTA**



Volvo
Generating
Set Range

General Description

This **TPG** range of Volvo generating sets has been born out of a new emergence by Volvo to provide the already accepted and well-known quality diesel engine with a wider and more global acceptance and a greater variety of applications. **TPG** have put together a comprehensive range of Volvo powered product combining the reliability and high performance of the water-cooled diesel range. The outputs available on this range span the key areas in the power generation requirement today on a global scale and **TPG** enhance the Volvo quality and reliability with their own professionally finished product.

Engine

Turbo-charged, water-cooled, multi-cylinder injection Volvo diesel engine with mechanical fixed speed governing (electronic governing is optional – standard as indicated overleaf). All engines supplied with replaceable elements for oil, fuel and air-filter assemblies. An initial fill of high-quality, multi-grade engine oil is included together with a sump oil drain line fitted with an on/off valve.

Alternator

TPG utilise the modern technology of brushless self-exciting and self-regulating alternators. Typically, the alternators are built in accordance with BS 5000, VDE 0530, IEC 34, and NEMA regulations. We offer alternators to meet the full classification range and we adopt a technically preferred close-coupled arrangement.

Key Start Control Panel

A vibration-isolated sheet-steel panel mounted on the genset contains the following instrumentation:

- AC ammeters
- AC voltmeter and selector switch
- Oil pressure/engine temperature/battery-charge gauges.
- Frequency meter
- Hours-run counter
- Deep Sea Electronics start/run/stop key switch module with LED indication for battery charge and indication with shutdown for low oil pressure, high engine temperature and overspeed.
- Fuses, terminations, relays and transformers as appropriate
- Suitably rated moulded-case triple-pole circuit breaker.
- See Item 6 overleaf for digital control panels.

Fuel Tank

All sets up to and including TAD1641GE have a daily-service diesel tank, constructed from welded steel plate, integral with the baseframe and fitted with fill, vent, feed and return lines and a contents gauge. For larger sets this arrangement is optional, and free-standing bulk fuel storage tanks can be supplied if required.

Finish & Quality Control

Manufacturers' instruction manuals for both engine and alternator, wiring diagrams, heavy-duty compressed rubber anti-vibration mounts and an industrial exhaust silencer with a one-metre flexible connector accompany each generator set on despatch.

All sets are spray-painted with a quality high-gloss finish, using enamel paint with rust inhibitors to a heavy industrial specification. The base plate is finished in black gloss. Consideration will be given to match clients' own colour scheme.

All **TPG** sets are custom-built in our own factory. Prior to despatch each machine is subjected to rigorous and comprehensive factory inspection procedures and tested under full load. Test certificates will be supplied on request.

Typical Optional Extras

- Automatic mains failure control systems
- Synchronising and load sharing
- Remote monitoring systems
- Acoustic/weather-protection enclosures
- ISO containerised sets
- Mobile trailer units
- CE Approval and Certification



POWER  **TECH**



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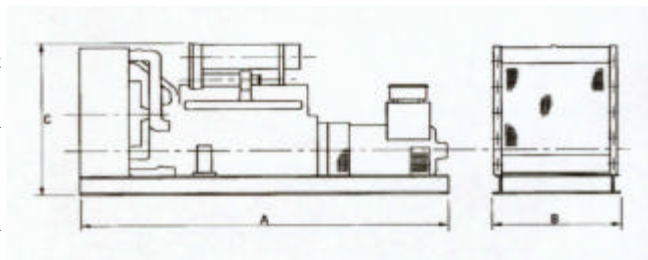
Generating Sets - Volvo Engine Range

GENSET - 50 Hz at 1500 RPM					ENGINE DETAILS							APPROXIMATE DIMENSIONS				
Model	PRIME		STANDBY		Model	Type	No. of Cyls.	Arrange. of Cyls.	Cubic Capacity	Fuel Cons.	Length (A)	Width (B)	Height (C)	Gross Weight	Packed Volume	
	kVA	kW	kVA	kW												Itrs

TPV85	85	68	95	76	TD520GE	Turbo	4	Inline	4.76	19.7	1800	690	1480	900	3.30
TPV100	100	80	110	88	TAD531GE	Turbo	4	Inline	4.76	23.1	1900	800	1480	1130	3.30
TPV130	130	104	145	116	TAD532GE	Turbo	6	Inline	7.15	29.4	2200	875	1650	1995	4.96
TPV150	152	122	165	132	TAD731GE	Turbo	6	Inline	7.15	32.8	2200	875	1650	1995	4.96
TPV180	180	144	205	164	TAD732GE	Turbo	6	Inline	6.73	40.3	2500	875	1485	1650	4.70
TPV200	200	160	230	184	TAD733GE	Turbo	6	Inline	7.28	44.7	2600	875	1650	1995	4.96
TPV275	275	220	300	240	TAD940GE	Turbo	6	Inline	9.36	64.3	3130	1000	1695	2645	7.07
TPV325	325	260	350	280	TAD941GE	Turbo	6	Inline	9.36	68.8	3200	1000	1695	2680	7.07
TPV350	350	280	385	308	TAD1240GE	Turbo	6	Inline	12.13	78.3	3260	1095	1750	3095	8.43
TPV375	375	300	410	328	TAD1241GE	Turbo	6	Inline	12.13	78.3	3260	1095	1750	3095	8.43
TPV400	400	320	450	360	TAD1242GE	Turbo	6	Inline	12.13	86.0	3200	1200	1850	3230	9.06
TPV450	450	360	500	400	TAD1640GE	Turbo	6	Inline	16.12	90.1	3505	1095	1835	3500	9.65
TPV500	500	400	560	448	TAD1641GE	Turbo	6	Inline	16.12	101.1	3505	1250	1835	3550	11.01
TPV575	575	460	630	504	TAD1642GE	Turbo	6	Inline	16.12	118.1	3600	1250	1835	3700	11.25
TPV630	630	504	700	560	TWD1643GE	Turbo	6	Inline	16.12	196.0	3600	1250	1835	3700	11.00

ADDITIONAL INFORMATION

- All ratings are in accordance with ISO 8528-1 and ISO 3046, BS 5514 and DIN 6271 conditions
- All ratings are based on nominal 400/230V, 3ph, 50Hz
- Ratings are based on Volvo supplied test data under NTP ambient conditions
- Fuel consumption figures are based on 100% prime ratings in accordance with Volvo published data
- kVA figures are based on a power factor of 0.8
- The above engines fitted with an electronic management system will be supplied with a digital control panel only
- All sets up to and including TAD1641GE have a daily-service diesel tank constructed from welded steel plate, integral with the base frame and fitted with fill, vent, feed and return lines and a contents gauge. For larger sets this arrangement is optional and freestanding bulk fuel storage tanks can be supplied if required.



The information given in this leaflet is correct at the time of printing to the best of our knowledge. It is to be used as a general guideline.

TPG reserve the right to amend details and specifications without notice in line with our policy of continuous product development.



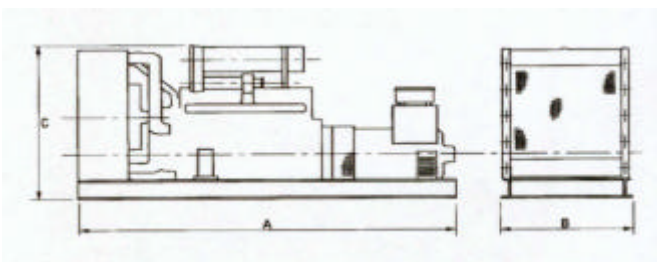
Generating Sets - Volvo Engine Range

GENSET - 60 Hz at 1800 RPM					ENGINE DETAILS						APPROXIMATE DIMENSIONS				
Model	PRIME		STANDBY		Model	Type	No. of	Arrange.	Cubic	Fuel	Length	Width	Height	Gross	Packed
	kVA	kW	kVA	kW		Nat/asp or Turbo	Cyls.	of Cyls. Inline/Vee	Capacity ltrs	Cons. ltrs/h	(A) mm	(B) mm	(C) mm	Weight Kg	Volume m3

TPV85	90	72	95	76	TD520GE	Turbo	4	Inline	4.76	20.9	1800	690	1480	900	3.30
TPV100	105	84	115	92	TAD531GE	Turbo	4	Inline	4.76	24.6	1900	800	1480	1130	3.30
TPV130	130	104	145	116	TAD532GE	Turbo	6	Inline	7.15	31.0	2200	875	1650	1995	4.96
TPV150	160	128	175	140	TAD731GE	Turbo	6	Inline	7.15	36.0	2200	875	1650	1995	4.96
TPV175	205	164	225	180	TAD732GE	Turbo	6	Inline	6.73	45.4	2500	875	1485	1650	4.70
TPV200	225	180	250	200	TAD733GE	Turbo	6	Inline	7.28	50.5	2600	875	1650	1995	4.96
TPV250	250	200	275	220	TAD734GE	Turbo	6	Inline	9.36	71.5	3130	1000	1695	2645	7.07
TPV285	285	228	310	248	TAD940GE	Turbo	6	Inline	9.36	71.5	3130	1000	1695	2680	7.07
TPV345	345	276	380	304	TAD941GE	Turbo	6	Inline	9.36	71.5	3130	1000	1695	2680	7.07
TPV375	400	320	445	356	TAD1241GE	Turbo	6	Inline	12.13	86.3	3260	1095	1750	3095	8.43
TPV400	455	364	500	400	TAD1242GE	Turbo	6	Inline	12.13	99.6	3200	1200	1850	3230	9.06
TPV450	510	408	565	452	TAD1640GE	Turbo	6	Inline	16.12	102.6	3505	1095	1835	3500	9.65
TPV550	575	460	625	500	TAD1641GE	Turbo	6	Inline	16.12	115.4	3505	1250	1835	3550	11.01
TPV575	625	500	690	552	TAD1642GE	Turbo	6	Inline	16.12	130.4	3600	1250	1835	3700	11.25
TPV685	685	548	750	600	TWD1643GE	Turbo	7	Inline	16.12	130.4	3600	1250	1835	3700	11.25

ADDITIONAL INFORMATION

- 1 All ratings are in accordance with ISO 8528-1 and ISO 3046, BS 5514 and DIN 6271 conditions
- 2 All ratings are based on nominal 440/220V, 3ph, 60Hz
- 3 Ratings are based on Volvo supplied test data under NTP ambient conditions
- 4 Fuel consumption figures are based on 100% prime ratings in accordance with Volvo published data
- 5 kVA figures are based on a power factor of 0.8
- 6 The above engines fitted with an electronic management system will be supplied with a digital control panel only
- 7 All sets up to and including TAD1641GE have a daily-service diesel tank constructed from welded steel plate, integral with the base frame and fitted with fill, vent, feed and return lines and a contents gauge. For larger sets this arrangement is optional and freestanding bulk fuel storage tanks can be supplied if required.



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