

SOUND PROOF
WATER COOLED

SERIES PSW₁₈₅₋₅₀₀

PSW185-500: Silent Power for public and industrial uses

Low noise emissions (conforming to directive 2000/14/EC, related to environmental noise emissions), conformity to gas emission laws and high security (lockable panels, fireproof canopy) make these sets ideal for any public (hospitals, supermarkets, restaurants) or industrial application.



Large autonomy

Extended fuel capacity means continuous performance.

Ease of handling

Easy transportation – less effort required to move the generator.

Security

Generators are safeguarded against unauthorised use and minimise the potential of accidental damage.

Silent

High efficiency in reducing noise to the minimum.

MODEL		pSW185	PSW200	PSW250	PSW300	PSW325	PSW375	PSW400	PSW450	PSW500
PRIME POWER	kVA/kWe	181/145	200/160	250/200	300/240	327/262	371/297	400/320	450/360	500/400
EMERGENCY POWER	kVA/kWe	205/164	210/168	263/210	315/252	350/280	407/326	420/336	473/378	525/420
ENGINE	VOLVO	TWD 710 G	TWD 740 GE	TAD 740 GE	TAD 1032 GE	TAD 1240 GE	TAD 1241 GE	TAD 1242 GE	TAD 1630 GE	TAD 1631 GE
AUTONOMY (75% LOAD)	h	11,9	10,7	9,1	12,6	12,1	10,7	9,8	12,4	11,1
SOUND POWER LEVEL	LWA	95	99	99	99	99	99	100	100	100
SOUND PRESSURE AT 7 M	dB(A)	70	74	74	74	74	74	75	75	75
DIMENSIONS (LxWxH)	mm	3500x1300x1950	3500x1300x1950	3500x1300x1950	4000x1600x2100	4000x1600x2100	4000x1600x2100	4000x1600x2100	5000x1800x2100	5000x1800x2100
WEIGHT	kg	2950	3365	3490	3950	4000	4300	4500	5250	5600

PRIME POWER (PRP) (ISO 8528) RATING: PERMISSIBLE POWER OUTPUT AT VARIABLE LOAD FOR AN UNLIMITED NUMBER OF HOURS. A 10% OVERLOAD CAPABILITY IS AVAILABLE

EMERGENCY POWER (LTP) (ISO 8528) RATING: STANDBY POWER AT VARIABLE LOAD. NO OVERLOAD CAPABILITY IS AVAILABLE

ALL MODELS COMPLY WITH TA LUFT-4000 REGULATION

PowerSources

... WHERE THE POWER COMES FROM ...

**SOUND PROOF
WATER COOLED**

SERIES PSW₁₈₅₋₅₀₀

Silent

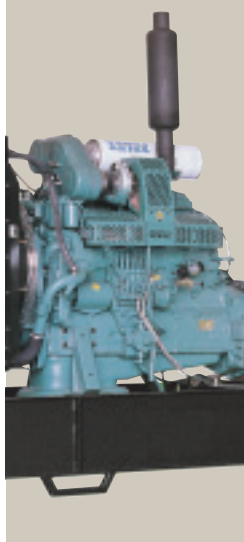
- Soundproof canopy built in high quality steel and sound attenuating material reduces noise emissions to a minimum.
- Highly efficient silencer (t) reduces noise emissions for sensitive locations operating.
- Anti-vibration isolators ensure a vibration free standing of the generating set
- Certification of approval in compliance with annex 8 of directive 2000/14/EC relating to environmental noise emission by equipment for outdoor use.



Facility of handling

- A central lifting bridge (t) allows the unit to be easily lifted by a crane.

Reliable and powerful



- Thanks to the electronic governor (optional for GSW185) Volvo Penta engines (t) have an improved capacity to be able to recover frequency after an abrupt load application
- Tropicalised alternator continuously maintaining very good insulation level. The impregnation with epoxi resins protects the alternator windings particular environmental conditions



Security

- The engine protection (stop solenoid) guarantees the shutdown of the machine when an engine failure occurs
- The exhaust gas emissions meet the most restrictive regulations
- Access doors are equipped with lockable handles (t)
- Soundproofing materials are highly fireproof

Easier use and maintenance

- Easily accesible service (t) and maintenance points through large doors contribute to the ease of service of the machine
- A sturdy oil drain pump is included



The producer reserves the right to introduce changes to models and features without prior notice. Models, version and associated products characteristics can vary according to the markets.

CERTIFICATION

Production sites according to ISO 9001 directions



SERVICE

After sales service world wide.
12 months warranty.
All the gensets are completely tested before dispatch.

PowerSources

... WHERE THE POWER COMES FROM ...

		VOLVO PENTA								
		WATER COOLED								
		PSW185	PSW200	PSW250	PSW300	PSW325	PSW375	PSW400	PSW450	PSW500
GEN SET										
Prime power [PRP]	kVA/kWe	181/145	200/160	250/200	300/240	327/262	371/297	400/320	450/360	500/400
Emergency power [LTP]	kVA/kWe	205/164	210/168	263/210	315/252	350/280	407/326	420/336	473/378	525/420
Frequency	Hz	50	50	50	50	50	50	50	50	50
Three Phases Voltage	V	400/230	400/230	400/230	400/230	400/230	400/230	400/230	400/230	400/230
Power Factor	Cos phi	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
ENGINE										
Brand		VOLVO	VOLVO	VOLVO	VOLVO	VOLVO	VOLVO	VOLVO	VOLVO	VOLVO
Model		TWD 710 G	TWD 740 GE	TAD 740 GE	TAD1032GE	TAD1240GE	TAD1241GE	TAD 1242 GE	TAD 1630 GE	TAD 1631 GE
Prime power	kWm	158	178	217	262	283	323	352	395	435
Speed	rpm	1500	1500	1500	1500	1500	1500	1500	1500	1500
Intake		TURBO-W/A	TURBO-W/A	TURBO-A/A	TURBO-A/A	TURBO-A/A	TURBO-A/A	TURBO-A/A	TURBO-A/A	TURBO-A/A
Cooling		WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
Injection		DIRECT	DIRECT	DIRECT	DIRECT	DIRECT	DIRECT	DIRECT	DIRECT	DIRECT
Cylinders		6 LINE	6 LINE	6 LINE	6 LINE	6 LINE	6 LINE	6 LINE	6 LINE	6 LINE
Displacement	cm3	6730	7280	7280	9,6	12130	12130	12130	16120	16120
Bore/Stroke	mm	105/130	107/135	107/135	120/140	131/150	131/150	131/150	144/165	144/165
Compression ratio		14.5:1	17.2:1	17.2:1	17:1	18.5:1	17.5:1	17.5:1	15:1	15:1
Standard governor		MECH	GAC	GAC	GAC	EDC III	EDC III	EDC III	GAC	GAC
Governing control quality (1)		G2	G3	G3	G3	G3	G3	G3	G3	G3
Exhaust gases temperature (2)	°C	565	525	525	510	480	490	490	490	550
Exhaust gases flow	m³/h	1692	1860	2352	2760	3174	3480	3480	4902	5418
Max. exhaust back pressure	mbar	50	100	100	50	100	100	100	50	50
Cooling air flow	m³/h	9720	10980	10980	16020	14760	16740	29520	25560	26100
Max. allowed intake dep.	mbar	50	50	50	50	50	50	50	50	50
Combustion air flow	m³/h	600	696	882	1074	1284	1410	1410	1920	1908
LUBRICATION SYSTEM										
Oil consumption	l/h	0,17	0,03	0,04	0,05	0,10	0,11	0,12	0,11	0,12
Lubricating oil capacity (3)	l	29	29	29	36	35	35	35	64	64
Minimum oil pressure	bar	0,7	0,7	0,7	0,7	0,7	0,7	0,7	0,7	0,7
FUEL CONSUMPTION										
75% load	l/h	29,48	32,58	38,36	47,74	49,78	56,24	61,29	71,24	79,62
100% load	l/h	39,31	43,02	51,67	65,55	66,71	76,14	82,97	98,28	108,23
ELECTRIC SYSTEM										
Voltage	V	24	24	24	24	24	24	24	24	24
Type		NEG. TO GND.								
Battery (ACP)	Ah	2X145	2X145	2X145	2X145	2X145	2X145	2X145	2X145	2X145
Starting motor	kW	5.4	5.4	5.4	6.6	6	6	6	7.5	7.5
ALTERNATOR										
Brand		MECC ALTE	MECC ALTE	MECC ALTE	MECC ALTE	MECC ALTE	MECC ALTE	MECC ALTE	MECC ALTE	MECC ALTE
Model		ECO 37 2S	ECO 37 2S	ECO 37 1L	ECO 37 2L	ECO 37 3L	ECO 40 1S	ECO 40 1S	ECO 40 2S	ECO 40 3S
N° of poles		4	4	4	4	4	4	4	4	4
Efficiency at 3/4	%	92	92	92,8	93	92,8	92,5	92,5	92,6	92,7
Power at 40° C	kVA/kWe	200/160	200/160	250/200	300/240	340/272	400/320	400/320	450/360	500/400
N° of wires		12	12	12	12	12		12	12	12
Insulation		CLASS H	CLASS H	CLASS H	CLASS H	CLASS H	CLASS H	CLASS H	CLASS H	CLASS H
Protection		IP 21	IP 21	IP 21	IP 21	IP 21	IP 21	IP 21	IP 21	IP 21
Regulation		ELECTRONIC (±1,5% WITH ANY POWER FACTOR AND SPEED VARIATIONS BETWEEN -5% AND +30%)								

(1) according to ISO8528

(2) prime power (after turbine)

(3) including filters

For other voltages, please request to factory

OPTIONS

SERIES WATER COOLED

	YANMAR	DEUTZ							VOLVO				
	WATER COOLED												
	PSW 15-20	PSW 60	PSW 75	PSW 105-135	PSW 160	PSW 230-315	PSW 380	PSW 430-505	PSW 185	PSW 200-250	PSW 300-325	PSW 375-400	PSW 450-500
GEN SET													
Battery isolation switch	X	X	X	X	X	X	X	X	X	X	X	X	X
Galvanized skid base frame with integrated drip tray and fork lift channels (only soundproof versions)	X	X	-	-	-	-	-	-	-	-	-	-	-
Leak proof tray (only for soundproof versions)	-	-	X	X	X	X	X	X	X	X	X	X	X
Site trailer (only for soundproof versions)	X	X	X	X	X	-	-	-	X	X	-	-	-
Road trailer-rigid bar (only for soundproof versions)	X	X	X	X	X	-	-	-	X	X	-	-	-
Sockets kit (only soundproof versions)	X	X	X	X	X	X	X	X	X	X	X	X	X
Rental kit (battery switch, socket panel according to size, Fuel filter with water separator and drain, earth rod with cable and three way fuel valve for connection to external tank)	X	X	-	-	-	-	-	-	-	-	-	-	-
ENGINE													
Engine electronic governor	-	X	X	X	X	S	S	S	X	S	S	S	S
Coolant pre-heating system (for automatic start)	X	X	X	X	X	X	X	X	X	X	X	X	X
Low temperature engine starting kit	-	X	X	X	X	X	X	X	X	X	X	X	X
Oil pressure indicator	S	X	X	X	X	S	S	S	S	S	S	S	S
Manual oil drain pump (standard on soundproof versions)	S	X	X	X	X	X	X	X	S	S	S	S	S
Residential silencer (standard on soundproof versions)	S	X	X	X	X	X	X	X	X	X	X	X	X
FUEL SYSTEM													
Extended fuel tank capacity	-	X	X	X	X	X	X	-	X	X	X	X	-
Automatic fuel transfer pump	X	X	X	X	X	X	X	X	X	X	X	X	X
ALTERNATOR (MECC ALTE)													
IP 23 protected alternator	S	X	X	X	X	X	X	X	X	X	X	X	X
Tropicalized alternator	X	X	X	S	S	S	S	S	S	S	S	S	S
Anti-condensation heater	X	X	X	X	X	X	X	X	X	X	X	X	X
Alternator parallel kit (with mains)	X	X	X	X	X	X	X	X	X	X	X	X	X
Alternator parallel kit (with other alternator)	X	X	X	X	X	X	S	S	X	X	X	S	S
Stamford alternator variant	X	X	X	X	X	X	X	X	X	X	X	X	X
OTHER OPTIONS													
Manual Control Panel with analogue instrumentation	UNDER DEVELOPMENT DURING 2003												
Single phase version	X	X	X	X	X	-	-	-	-	-	-	-	-
Load Transfer Switch Panel (LTS) for ACP versions	X	X	X	X	X	X	X	X	X	X	X	X	X
Remote start by external signal	X	X	X	X	X	X	X	X	X	X	X	X	X
Free voltage terminals for remote indications (max 3)	X	X	X	X	X	X	X	X	X	X	X	X	X
Connection kit for communication via Modem / GSM (only for automatic versions)	X	X	X	X	X	X	X	X	X	X	X	X	X
Timer (programmable clock)	X	X	X	X	X	X	X	X	X	X	X	X	X

S : Standard
X : Optional
- : Not available