

SOUND PROOF
WATER COOLED

SERIES PSW₇₅₋₅₀₅

GSW75-505: Suitable for specific applications

These generators are designed for stand-by applications, and fulfil the demand for “silent” power. Sturdy and reliable, like all PowerSources machines, the “silent” power is guaranteed by full conformity to directive 2000/14/EC, related to environmental noise emissions.



Reliability

Engine and alternator ensure a constant, high quality power supply for the most demanding applications.

Economic

A long life time and very little maintenance mean very low operation costs.

Easier to use

New design gives easy access for maintenance and repair work.

Safety

Generating sets designed with safety in mind – our commitment to personal protection.

MODEL		PSW75	PSW105	PSW135	PSW160	PSW230	PSW315	PSW380	PSW430	PSW505
PRIME POWER	kVA/kWe	70/56	102/82	136/109	157/126	230/184	313/251	376/301	427/341	500/400
EMERGENCY POWER	kVA/kWe	73/58	108/86	143/114	165/132	254/203	347/278	407/326	471/376	525/420
ENGINE	DEUTZ	BF4M 1012 EC	BF4M 1013 EC	BF6M 1013 E	BF6M 1013 EC	BF6M 1015	BF6M 1015 C	BF6M 1015 CP	BF6M 1015 C	BF6M 1015 CP
AUTONOMY (75% LOAD)	h	13,2	10,1	10,3	9,1	16,9	13,5	9,3	12,6	10,6
SOUND POWER LEVEL	LWA	98	99	99	99	99	99	99	100	100
SOUND PRESSURE AT 7 M	dB(A)	73	74	74	74	74	74	74	75	75
DIMENSIONS (LxWxH)	mm	2700x1000x1450	2970x1100x1450	3500x1100x1450	3500x1100x1450	4000x1800x2150	4000x1800x2150	4000x1800x2150	4000x2000x2150	4000x2000x2150
WEIGHT	kg	1470	1800	2120	2300	3600	3800	4000	5400	5500

PRIME POWER (PRP) (ISO 3046) RATING: PERMISSIBLE POWER OUTPUT WITH NO TIME LIMITATION, PLUS 5% EXTRA POWER FOR GOVERNING PURPOSES

EMERGENCY POWER (LTP) (ISO 3046) RATING: MAXIMUM POWER WHICH CAN BE DELIVERED FOR UP TO 500 HOURS PER YEAR OF WHICH A MAXIMUM OF 300 HOURS IS CONTINUOUS RUNNING

ALL MODELS COMPLY WITH TA LUFT-4000 REGULATION

PowerSources

... WHERE THE POWER COMES FROM ...

**SOUND PROOF
WATER COOLED**

SERIES PSW₇₅₋₅₀₅

Facility of handling

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



Economic

- The brushless construction of the generator assures a long service life
- Engines with long maintenance intervals and low fuel consumption (t)

Silent

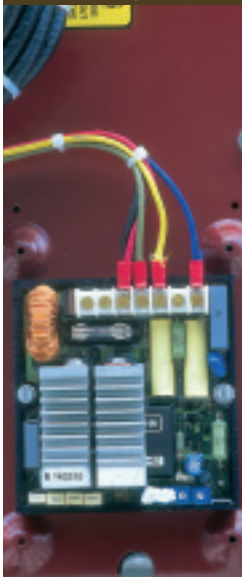
- Soundproof canopy built in high quality steel and sound attenuating material reduces noise emissions to a minimum.
- Highly efficient silencer reduces noise emissions for sensitive locations operating.
- Anti-vibration isolators ensure vibration free operation.
- Certification of approval in compliance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



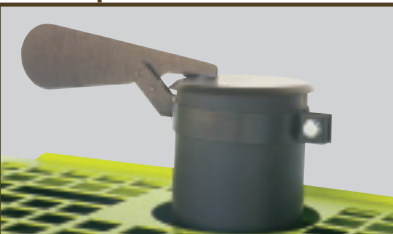
Safety

- All metal parts are connected to an external grounding point. Fault currents are connected to the ground for your safety
- Visible and accessible emergency shutdown switch protects against incorrect use of the generator
- Control and power access are protected by a lockable front door (t)

Reliability



- Deutz engines extremely high load acceptance capacity ensures instant electricity supply
- They respond quickly to load fluctuations. In addition, the application will not suffer from frequency deviations
- Highly efficient alternators
- Constant supply guaranteed by the electronic voltage regulator (t) under any generator operating condition
- Rated capacity battery for immediate engine start.



Security

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

Easier use

- A sturdy manual oil drain pump is included
- Front panels are completely detachable. Easy access (t) for radiator cleaning and alternator service
- Engine service points are accessible from one side through large doors.



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



CONFORMS
TO THE EUROPEAN
SAFETY RULES

SERVICE

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

		YANMAR		DEUTZ									
		WATER COOLED		WATER COOLED									
		PSW15	PSW20	PSW60	PSW75	PSW105	PSW135	PSW160	PSW230	PSW315	PSW380	PSW430	PSW505
GEN SET													
Prime power [PRP]	kVA/kWe	13.5/10.8	18.0/14.4	56/45	70/56	102/82	136/109	157/126	230/184	313/251	376/301	427/341	500/400
Emergency power [LTP]	kVA/kWe	15.0/12.0	20.0/16.0	60/48	73/58	108/86	143/114	165/132	254/203	347/278	407/326	471/376	525/420
Frequency	Hz	50	50	50	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	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	0.8	0.8	0.8
ENGINE													
Brand		YANMAR		DEUTZ									
Model		3TNE 88ACG	4TNE 88ACG	BF4M 1012 E	BF4M 1012 EC	BF4M 1013 EC	BF6M 1013 E	BF6M 1013 EC	BF6M 1015	BF6M1015C	BF6M1015 CP	BF8M1015 C	BF8M1015 CP
Prime power	kWm	12,3	16,4	50,9	62,8	90,6	117,8	137,8	199,3	271,2	327,3	369,3	437,3
Speed	rpm	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Intake		NATURAL		TURBO		TURBO-INTERCOOLER		TURBO		T-INTERCOOLER		TURBO-INTERCOOLER	
Cooling		WATER											
Injection		DIRECT											
Cylinders		3 LINE	4 LINE	4 LINE	4 LINE	4 LINE	6 LINE	6 LINE	V-6	V-6	V-6	V-8	V-8
Displacement	cm³	1642	2190	3192	3192	4764	7146	7146	11906	11906	11906	15874	15874
Bore/Stroke	mm	88/90	88/91	94/115	94/115	108/130	108/130	108/130	132/145	132/145	132/145	132/145	132/145
Compression ratio		18.0:1	18.0:1	17.5:1	17.5:1	17.5:1	17.5:1	17.5:1	17:1	17:1	17:1	17:1	17:1
Standard governor		MECHANICAL							EMR	EMR	EMR	EMR	EMR
Governing control quality (1)		G2	G2	G2	G2	G2	G2	G2	G3	G3	G3	G3	G3
Exhaust gases temperature (2)	°C	450	460	530	515	560	537	463	530	450	505	455	505
Exhaust gases flow	m³/h	-	-	481	575	946	1242	1655	2795	3465	3750	4642	5079
Max. exhaust back pressure	mbar	-	-	30	30	30	30	30	50	50	50	50	50
Cooling air flow	m³/h	-	-	7560	6840	7920	10080	14400	19800	20952	24120	24120	32940
Max. allowed intake dep.	mbar	196	196	20	20	20	20	20	50	50	50	50	50
Combustion air flow	m³/h	2	2.7	177	213	351	460	614	970	1360	1462	1822	1958
LUBRICATION SYSTEM													
Oil consumption (% of fuel cons.)	%	-	-	MAX. 0.3 %									
Lubricating oil capacity (3)	l	7,2	8,6	9,5	9,5	13	20	20	34	34	34	45	45
Minimum oil pressure	bar	2,9	2,9	3	3	2	2	2	3	3	3	3	3
FUEL CONSUMPTION													
75% load	l/h	2,61	3,49	9,8	11,4	16,3	21,3	24,3	40,2	50,4	59,9	67,2	80,5
100% load	l/h	3,48	4,64	13,1	15,2	21,6	28,6	32,3	54,6	68,6	80,6	91,9	111,1
ELECTRIC SYSTEM													
Voltage	V	12	12	12	12	12	12	12	24	24	24	24	24
Type		NEG. TO GND.											
Battery (ACP)	Ah	45	45	95	95	145	145	145	2X145	2X145	2X145	2X145	2X145
Starting motor	kW	0,4	0,4	3.1	3.1	3.1	3.1	3.1	5.4	5.4	5.4	5,4	5.4
ALTERNATOR													
Brand		MECC ALTE											
Model		ECO 28 1S	ECO 28 1L	ECO 32 2L	ECO 32 3L	ECO 34 2S	ECO 34 2L	ECO 37 1S	ECO 37 1L	ECO 37 3L	ECO 40 1S	ECO 40 2S	ECO 40 3S
Nº of poles		4	4	4	4	4	4	4	4	4	4	4	4
Efficiency at 3/4	%	84	84,7	89	89,1	90.4	92.3	91,5	92.8	92.8	92,5	92,6	92,7
Power at 40° C	kVA/kWe	16/13	20/16	60/48	70/56	105/84	150/120	170/136	250/200	340/272	400/320	450/360	500/400
Nº of wires		12	12	12	12	12	12	12	12	12	12	12	12
Insulation		CLASS H											
Protection		IP23	IP23	IP 21	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) full load and 25°C

(3) sump, including filters

For other voltages, please request to factory

		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