Generator Prime Power

Generating Set Model	380 - 415V 50Hz	
	kVA	kW
TPD25A	25	20
TPD35A	35	28
TPD55A	55	44
TPD42A	42	34
TPD65A	65	52
TPD55	55	44
TPD70	70	56
TPD80	80	64
TPD100	100	80
TPD125	125	100
TPD150	150	120
TPD200	200	160
TPD250	250	200
TPD300	300	240
TPD350	350	280
TPD400 [TPD450B]	400 [450]	320 [360]
TPD500	500	400

Prime Power Ratings

Prime power 100%, permissible average power output equal to or below 60%, no time limitation, plus 5% extra power for governing purposes.

Powered by

DEUTZ®

PANSAR

Pansar Company Sdn Bhd 196501000061 (50977M)
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PANSAR

TOP POWER GENERATING SET

MODEL: TPD25A - TPD500

Engine Characteristics

- Unit construction system with individual cylinders.
- Advanced injection and combustion system.
- Worldwide proven: Over 3.0 million engines in service.
- Only a few service points for the engine.
- Powerful and compact, low weight.

Benefits

- Space-saving and cost-effective installation thanks to integrated cooling system.
- Low maintenance requirements together with legendary durability.
- High quality combined with simple configuration.

The engine company. DEUTZ®

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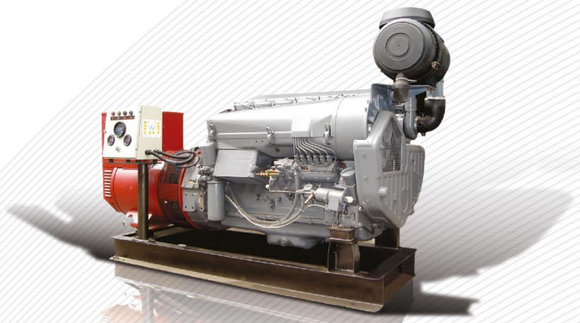
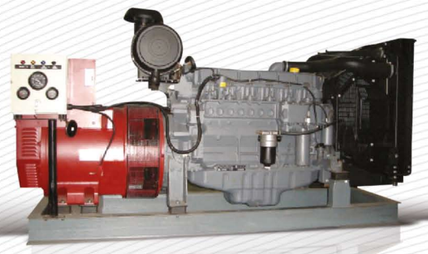
Technical Specifications

Generator Set		TPD25A	TPD35A	TPD55A	TPD42A	TPD65A	TPD55	TPD70	TPD80	TPD100	TPD125	TPD150	TPD200	TPD250	TPD300	TPD350	TPD400	TPD500
Model																	(TPD450B)	
Prime Power	(kVA)	25	35	55	42	65	55	70	80	100	125	150	200	250	300	350	400 (450)	500
	(kW)	20	28	44	34	52	44	56	64	80	100	120	160	200	240	280	320 (360)	400
Engine																		
Maker		DEUTZ	DEUTZ	DEUTZ	DEUTZ	DEUTZ	DEUTZ	DEUTZ	DEUTZ	DEUTZ	DEUTZ	DEUTZ	DEUTZ	DEUTZ	DEUTZ	DEUTZ	DEUTZ	DEUTZ
Model		F3L912	F4L912	F6L912	F4L914	F6L914	BF4M2012	BF4M2012C	BF4M1013EC	BF4M1013EC	BF4M1013FC	BF6M1013EC	BF6M1013FC	TCD2013L64V	BF6M1015C	BF6M1015CP	BF8M1015C	BF8M1015CP
Type		3 Cyl.	4 Cyl.	6 Cyl.	4 Cyl.	6 Cyl.	4 Cyl.	4 Cyl.	4 Cyl.	4 Cyl.	4 Cyl.	6 Cyl.	6 Cyl.	6 Cyl.	6 Cyl. V	6 Cyl. V	8 Cyl. V	8 Cyl. V
		Air-Cooled, Natural Aspirated					Radiator, Water-Cooled, Turbocharged						Radiator, Water-Cooled, Turbocharged					
Displacement	(L)	2.83	3.77	5.65	4.31	6.47	4.04		4.76				7.15		11.9		15.9	
Bore / Stroke	(mm)	100 / 120			102 / 132		101 / 126				108 / 130				132 / 145			
Compression Ratio		1:20			1:20.6		1:19				1:18.1	1:17.5		1:17	1:16.5			
Engine Speed	(rpm)	1500					1500					1500	1500					
Prime Power at Flywheel	(kW)	27.5	37	55	43.0	65.0	52	66.1	96.1	96.1	124	138.1	178.6	238.4	301.2	327.3	391.3	433.9
BMEP	(bar)	7.8	7.9	7.8	8.0	8.0	10.3	13.1	17.1	17.1	21.7	15.5	20.0	28	20.2	22.0	19.7	21.9
Piston Speed	(m/s)	6.0			6.6		6.3		6.5		6.5		6.5		7.26			
Specific Fuel Consumption	50%	233 [3.9L/h]	232 [5.2L/h]	233 [7.8L/h]	203 [5.3L/h]	198 [7.8L/h]	229 [7.4L/h]	205 [8.7L/h]	212 [13.1L/h]	212 [13.1L/h]	210 [15.7L/h]	202 [17.7L/h]	226 [24.5 L/h]	229 [28.7L/h]	203 [38.2L/h]	208 [42.0L/h]	203 [48.8L/h]	210 [56.4L/h]
	(g/kWh) 75%	214 [5.4L/h]	214 [7.2L/h]	214 [10.8L/h]	192 [7.5L/h]	186 [11.0L/h]	221 [10.7L/h]	199 [12.7L/h]	211 [19.3L/h]	211 [19.3L/h]	203 [23.5L/h]	199 [26.1L/h]	222 [36.5L/h]	213 [39.9L/h]	203 [57.5L/h]	208 [63.1L/h]	203 [73.3L/h]	211 [84.9L/h]
	100%	216 [7.2L/h]	217 [9.7L/h]	216 [14.5L/h]	192 [10.0L/h]	187 [14.7L/h]	229 [14.2L/h]	200 [17.0L/h]	214 [25.8L/h]	214 [25.8L/h]	204 [32.2L/h]	198 [34.6L/h]	226 [49.5L/h]	200 [51.0L/h]	208 [78.5L/h]	216 [87.5L/h]	207 [99.6L/h]	221 [118.7L/h]
Governor		Bosch, Mechanical			Motorpal, Mechanical		Heinzmann, Mechanical				EMR Electronic	Heinzmann	EMR Electronic					
Speed droop (Static)		5.0 - 6.0%					4.0 - 5.0%				0 - 3.0%	4.0 - 5.0%	0 - 3.0%					
Control Quality		G2, in accordance to ISO8582					G2, in accordance to ISO8582					G2		G3	G2, in accordance to ISO8582			
Max Step Load Acceptance, 1st Step		100%					-	-	-	-	-	70%	-	-	65%	60%	65%	60%
Coolant Volume	(L)	-	-	-	-	-	15.9	17.9	19.7	19.7	19.7	23.1	27.3	27	95.0	98.0	102	116
Cooling Flow Rate	(m^3/h)	1565	1810	2610	1810	2610	5400	4680	6100	6100	9000	10800	11160	16200	20952	24120	24120	33120
Combustion Air Flow	(m^3/h)	108	144	216	174	262	216	268	365.3	365.3	482.1	607	749	909	1340	1386	2092	1848
Oil Sump Capacity	(L)	9	11	13.5	11	13.5	8.5			11		20		24	34	34	45	45
Lube Oil Specification		API Service Grade CD					API Service Grade CD						API Service Grade CF					
Exhaust Temp. at 25°C Ambient	(°C)	460	455	460	510	560	566	540	560	560	530	480	560	530	545	545	510	560
Exhaust Gas Flow Rate	(m^3/h)	256	336	509	476	715	245	318	1102	1102	1389	1602	2189	2547	3640	3990	4765	5377
Battery	(AH)	12V, 110					12V, 110				12V, 143					24V, 143		
Sound Pressure 1 metre Away	(dBA)	90	91	93	92.5	92.7	93	95.5	97	97	101	102	98	97.6	101	101	105	105
Alternator		**MECC ALTE**					**MECC ALTE**						**MECC ALTE**					
Maker		ECP28-2L/4	ECP32-2S/4	ECP32-2L/4	ECP32-1L/4	ECP32-3L/4	ECP32-2L/4	ECP32-3L/4	ECP34-1S/4	ECP34-2S/4	ECP34-1L/4	ECP34-2L/4	ECO38-2SN/4	ECO38-1LN/4	ECO38-2LN/4	ECO38-3LN/4	ECO40-1S/4 (ECO40-2S/4)	ECO40-3S/4
Rating		380-415 Volt, 50Hz, 4-Pole					380 - 415 Volt, 50Hz, 4-Pole						380 - 415 Volt, 50Hz, 4-Pole					
Insulation Class		Class H					Class H						Class H					
Drip Proof		IP21					IP21						IP21					
Overspeed	(rpm)	2250					2250						2250					
Excitation		SHUNT					SHUNT						SHUNT					
Air Flow	(m^3/min)	5.3	11.8				11.8		19.3				32				54	
Overload Capacity	(%)	1 hour in 6 hours period at 110% rated load					1 hour in 6 hours period at 110% rated load						1 hour in 6 hours period at 110% rated load					
Sustained short-circuit Current		300%, 20 Sec					300%, 20 Sec						300%, 20 Sec					
Waveform IEC=THF		< 2 %					< 3 %						< 3 %					
Efficiency At 0.8pf	(%)	88.1	87.9	89.9	88.8	90.4	89.9	90.4	91.2	91.9	92.4	92.9	92.4	93.1	93.4	93.2	93.2 (93.4)	93.6
TPD Dimensions (mm)	L	1314	1630	1820	1630	1840	1800Lx700Wx1120H (Open)		1970Lx720Wx1240H (Open)		2120 4110	2350 4370	2500 4600	2650 4750	3000 4750	3000 4750	3300 6010	3300 6010
	W	700	700	700	700	700	2850Lx1200Wx1800H (Canopy)		4110Lx1100Wx2150H (Canopy)		870 1100	900 1300	1150 1400	1150 1600	1400 1650	1400 1650	1400 2030	1400 2030
	H	910	1060	1020	1060	1020					1410 2150	1410 2350	1700 2400	1700 2400	2000 2900	2000 2900	2220 2950	2220 2950
											(Open) (Canopy)	(Open) (Canopy)	(Open) (Canopy)	(Open) (Canopy)	(Open) (Canopy)	(Open) (Canopy)	(Open) (Canopy)	(Open) (Canopy)
Dry Weight	(Kg)	660	760	950	780	970	1100 (Open) / 2000 (Canopy)		1350(Open) / 2200 (Canopy)		1400 2300	1500 2600	1600 2750	1800 2950	2500 4500	2550 4600	3100 6200	3100 6200

Fuel calorific value is based on 42700 kJ/kg + 5 %, density 0.835 kg/dm^3, temperature 280 K.
Sound power values measured in accordance with ISO 6798.
The heat quantities are valid for the dimensioning of the cooling system. They are given for the engine with the highest fuel consumption.
All data are provided for informational purposes only and are subject to amendment.