

Technical Specifications ADG C, 50Hz, COM0

			ADG 28 C	ADG 32 C	ADG 42 C	ADG 62 C	ADG 72 C	ADG 102 C	ADG 132 C	ADG 152 C
Power data										
Speed	1/ min		1500	1500	1500	1500	1500	1500	1500	1500
Frequency	Hz		50	50	50	50	50	50	50	50
Variable continuous power PRP	kVA		28	32	42	62	72	102	132	146
Emergency power LTP	kVA		30.8	35.2	46.2	68.2	79.2	112.2	145.2	160.6
Power factor			0.8							
Voltage	V		400/ 231	400/ 231	400/ 231	400/ 231	400/ 231	400/ 231	400/ 231	400/ 231
Current	A		40	46	61	89	104	147	191	219
Load acceptance	Step 1	Load in %	100	100	100	68	100	66	54	52
	Step 2	Load in %	-	-	-	100	-	100	90	86
	Step 3	Load in %	-	-	-	-	-	-	100	100
Engine										
Type			F3L 912	F3L 914	F4L 914	BF4L 914	F6L 914	BF6L 914	BF6L 914 C	BF6L 914 C
Power	kW		27.5	32.5	43	59	65	92	119	126
Configuration			Cylinder Diesel		Cylinder Diesel		Cylinder Diesel			
Aspiration			naturally aspirated	naturally aspirated	naturally aspirated	turbocharged	naturally aspirated	turbocharged	turbocharged/	turbocharged/
Displacement	l		2.83	3.24	4.31	4.31	6.47	6.47	6.47	6.47
Bore	mm		100	102	102	102	102	102	102	102
Stroke	mm		120	132	132	132	132	132	132	132
Rated speed	1/ min		1500	1500	1500	1500	1500	1500	1500	1500
Piston speed	m/s		6.0	6.6	6.6	6.6	6.6	6.6	6.6	6.6
Compression ratio			20.0	20.6	20.6	18.0	20.6	18.0	18.0	18.0
Governor type			mechanical							
Governing standards			G2	G2	G2	G1	G1	G1	G1	G1
Speed droop (static)	%		5 - 6	5 - 6	5 - 6	5 - 6	5 - 6	5 - 6	5 - 6	5 - 6
Oil capacity (sump)	l		9	9	11	11	13.5	16	16	16
Starting voltage	V		12	12	12	12	12	12	12	12
Starter	kW		3	3	3	3	3	3	3	3
Alternator										
Manufacturer			Marelli	Marelli	Marelli	Marelli	Marelli	Marelli	Marelli	Marelli
Type			MJB 160 MA 4	MJB 160 MB 4	MJB 200 SA 4	MJB 200 MA 4	MJB 200 MB 4	MJB 225 MA 4	MJB 225 LA 4	MJB 250 MA 4
No. of poles			4	4	4	4	4	4	4	4
Design			B2 - SAE / IM B34	B2 - SAE / IM B34	B2 - SAE / IM B34	B2 - SAE / IM B34	B2 - SAE / IM B34	B2 - SAE / IM B34	B2 - SAE / IM B34	B2 - SAE / IM B34
Stator			2/3 pitch	2/3 pitch	2/3 pitch	2/3 pitch	2/3 pitch	2/3 pitch	2/3 pitch	2/3 pitch
Rotor			Single bearing, flexible	Single bearing, flexible	Single bearing, flexible	Single bearing, flexible	Single bearing, flexible	Single bearing, flexible	Single bearing, flexible	Single bearing, flexible
Mechanical protection			IP 23							
Insulation class			H							
Efficiency @ cos phi 0,8 (400V)	100 % load	%	88.2	88.3	88.5	90.1	90.5	91.8	92.2	92.9
	75 % load	%	89.6	89.8	89.8	91.2	91.4	92.4	92.6	93.2
	50 % load	%	90.4	90.6	90.5	91.7	91.7	92.6	92.7	93.1
Efficiency @ cos phi 0,8 (415V)	100 % load	%	87.7	87.9	88.5	90.1	90.4	91.7	91.8	92.8
	75 % load	%	89.1	89.3	89.7	91.0	91.1	92.3	92.4	93.1
	50 % load	%	89.9	89.9	90.4	91.5	91.4	92.5	92.6	93.0
Efficiency @ cos phi 1,0 (400V)	100 % load	%	90.5	90.6	90.8	92.1	92.4	93.5	93.8	94.4
	75 % load	%	91.6	91.8	91.9	93.0	93.2	93.9	94.1	94.6
	50 % load	%	92.3	92.5	92.4	93.4	93.4	94.1	94.2	94.5
Efficiency @ cos phi 1,0 (415V)	100 % load	%	90.2	90.3	90.7	92.1	92.3	93.4	93.4	94.3
	75 % load	%	91.3	91.5	91.8	92.9	92.9	93.8	94.0	94.5
	50 % load	%	91.9	92.0	92.3	93.2	93.1	94.1	94.1	94.5
Exciter type			Brushless, self exciting	Brushless, self exciting	Brushless, self exciting	Brushless, self exciting	Brushless, self exciting	Brushless, self exciting	Brushless, self exciting	Brushless, self exciting
Phase rotation			CW	CW	CW	CW	CW	CW	CW	CW
Alternator cooling			IC 01	IC 01	IC 01	IC 01	IC 01	IC 01	IC 01	IC 01
AC waveform total harmonic distortion			<2%	<2%	<2%	<2%	<2%	<2%	<2%	<2%
Telephone harmonic factor (THF)			<2%	<2%	<2%	<2%	<2%	<2%	<2%	<2%
Voltage control	+/-		+/- 1%	+/- 1%	+/- 0.5%	+/- 0.5%	+/- 0.5%	+/- 0.5%	+/- 0.5%	+/- 0.5%
Cooling air volume			0,11 m ³ /s	0,11 m ³ /s	0,21 m ³ /s	0,21 m ³ /s	0,21 m ³ /s	0,31 m ³ /s	0,31 m ³ /s	0,42 m ³ /s
Fuel system										

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Fuel tank capacity	l	180	180	180	180	300	300	300	300
Max suction head of fuel feed pump	m	1.5	1	1	1	1	1	1	1
Fuel consumption	100 % load	6.5	7.1	9.3	13.9	15.8	22.1	28.8	31.8
	75 % load	5.0	5.4	7.1	10.4	11.7	16.4	21.7	23.7
	50 % load	3.6	4.0	5.2	7.2	8.4	11.4	15.4	16.4
	25 % load	2.5	2.8	3.7	4.6	4.8	6.9	9.1	9.7
Fuel consumption	100 % load	215.0	205.0	205.0	211.0	207.0	208.0	210.0	211.0
	75 % load	218.0	209.0	208.0	210.0	205.0	205.0	211.0	210.0
	50 % load	238.0	230.0	230.0	220.0	220.0	213.0	225.0	218.0
	25 % load	320.0	320.0	325.0	280.0	250.0	260.0	365.0	259.0
Autonomy at full load	h	27.7	25.4	19.4	12.9	19.0	13.6	10.4	9.4
Air									
Combustion air	m ³ /h	108	131	174	215	262	374	453	453
Max. intake depression (Swwitch setting)	mbar	20	20	20	20	20	20	20	20
Air cleaner type		Dry replaceable	Dry replaceable	Dry replaceable	Dry replaceable	Dry replaceable	Dry replaceable	Dry replaceable	Dry replaceable
Exhaust									
Max. exhaust gas temperature	°C	485	500	510	560	560	570	540	540
Max. exhaust back pressure	mbar	30	30	30	30	30	30	30	30
Exhaust gas flow (at above temperature)	m ³ /h	264	358	476	610	715	1005	1223	1223
Cooling system									
Fan power consumption	kW	0.5	0.5	0.5	0.9	0.7	1.1	1.6	1.6
Cooling air flow	m ³ /h	1565	1565	1810	2010	2610	3655	4475	4475
Air pressure loss	mbar	10	10	10	10	10	10	10	10
Heat dissipation (convection)	kW	23.0	24.5	31.2	35.4	48.1	76.0	88.6	88.6
Battery									
Capacity	Ah	88Ah	88Ah	88Ah	88Ah	100Ah	100Ah	100Ah	100Ah
Noise (at 75% load)									
sound power	L _{WA} dB(A)	91	91	93	92	95	95	95	95
sound pressure level (1m)	L _{PA in} dB(A)	74	74	76	75	77	77	78	78
sound pressure level (7m)	L _{PA in} dB(A)	62	62	64	63	66	66	66	66
Dimensions (Sound Proof)									
Length	mm	1760	1760	1980	1980	2480	2480	2480	2480
Width	mm	1110	1110	1110	1110	1110	1110	1110	1110
Height	mm	1738	1738	1742	1742	1823	1823	1823	1823
Weight	kg	1050	1060	1190	1255	1535	1710	1750	1825
Dimensions (open Frame)									
Length	mm	1760	1760	1980	1980	2480	2480	2480	2480
Width	mm	1110	1110	1110	1110	1110	1110	1110	1110
Height	mm	1630	1630	1630	1630	1770	1770	1770	1770
Weight	kg	810	820	915	975	1275	1450	1490	1600