

Generators QAS 40 KD**AML: Data**

	STD units	Note
Reference conditions ¹⁾		
1.Rated frequency	Hz	50
2.Rated speed	rpm	1500
3.Generator service duty	PRP	
4.Absolute inlet pressure	kPa	100
5.Relative air humidity	%	30
6.Air inlet temperature	°C	25
Limitations ²⁾		
1.Maximum ambient temperature	°C	50
2.Altitude capability	m	4000
3.Relative air humidity maximum	%	85
4.Minimum starting temperature unaided	°C	-18
5.Minimum starting temperature aided.....	°C	-25
		(a)
Performance data ^{2) 3) 5)}		
1.Rated active power (PRP) 3ph	kW	32.9
Rated active power (PRP) 1ph	kW	NA
2.Rated power factor (lagging) 3phase.....	cos f	0.80
Rated power factor (lagging) 1phase.....	cos f	NA
3.Rated PRP power 3ph	kVA	41.1
Rated PRP power 1ph	kVA	NA
4.Rated voltage 3ph. line to line.....	V	400
Rated voltage 3ph. line to line lower voltage.....	V	NA
Rated voltage 1ph.....	V	NA
5.Rated current 3ph.	A	59.3
Rated current 3ph lower voltage.....	A	NA
Rated current 1ph.	A	NA
6. Performance class (acc.ISO 8528-5:1993)		
Single step load acceptance (0-PRP)	kW	G2
	%	32.9
100	%	<5
7. Frequency droop	%	isochronous
8.Fuel consumption at no load (0%).....	kg/h	1.54
Fuel consumption at 50% load.....	kg/h	4.16
Fuel consumption at 75% load.....	kg/h	5.72
Fuel consumption at full load (100%).....	kg/h	7.53
9.Specific fuel consumption (at full load, 100%)	kg/kWh	0.230
10.Fuel autonomy at full load with standard tank	h	10.5
11.Fuel autonomy at full load with extended fuel tank	h	29.4
12.Max. oil consumption at full load	g/h	37.7
13.Maximum sound power level (LWA)		
measured according to 2000/14/EC OND.....	dB(A)	89
14. Capacity of fuel tank	l	92
15. Capacity of optional skid fuel tank	l	257.0
16. Single step load capability (0-PRP)	kW	(a)
	%	32.9
	100.0	
Application data		
1.Mode of operation		PRP
2.Site		land use
3.Operation		single
4.Start-up and control mode		manual/automatic
5.Start-up time		unspecified
6,Mobility/ Config. acc. to ISO 8528-1:1993.....		transportable/D
7.Mounting		mobile/E
8.Climatic exposure		fully resilient
9.Degree of protection		open air
10.Status of neutral (TT or TN).....		IP 54
Status of neutral (IT).....		earthed
		insulated
		(a)

Design data ⁴⁾

Alternator

1.Standard	IEC 34-1
2.Make	ISO 8528-3
3.Model	STAMFORD
4.Rated output, class H temp. rise	BCI184-J1
rating type acc. ISO 8528-3	42.5
5.Degree of protection	BR
6. Insulation - stator	23
- rotor	H
7.Number of wires	H
	12

Engine

1.Standard	ISO 3046
2.Make	ISO 8528-2
3.Model	KUBOTA
4.Rated net output	V3800DI-T
rating type acc. ISO 3046-7	38.0
production tolerance	ICXN
%	±5
5.Coolant	Coolant
6.Combustion system	direct injection
7.Aspiration	Turbo charged
8.Number of cylinders	4
9.Swept volume	3.8
10.Speed governing	electronic
11.Capacity of oil sump	13
12.Capacity of cooling system	7.5
13.Electrical system	12
14. Emission compliance.....	EU STAGE II

Power circuit

Circuit-breaker, 3ph.

1.Number of poles	4
2.Thermal release..... It.....	A
3.Magnetic release..... Im.....	A

(b)

Circuit-breaker, 3ph. lower voltage

1.Number of poles	NA
2.Thermal release..... It.....	NA
3.Magnetic release..... Im.....	NA

Fault current protection

1.Residual current release..... IDn.....	A	0.030-30
2.Insulation resistance	kOhm	10-100

(a)

Outlet sockets

domestic (1x) 2P+PE 16A 230V	(a)
CEE form (1x) 3P+N+PE 16A 400V	
CEE form (1x) 3P+N+PE 32A 400V	
CEE form (1x) 3P+N+PE 63A 400V	

Notes

- 1) Reference conditions for engine performance to ISO 3046-1
- 2) See derating diagram or consult the factory for other conditions
- 3) At reference conditions unless otherwise stated
- 4) Rating Definition (ISO 8528-1):

LTP Limited Time Power is the maximum electrical power which a generating set is capable of delivering (at PRP Prime Power is the maximum power available during a variable power sequence, which may be run for an

- 5) Specific mass fuel used: 0.86 kg/l

(a) optional equipment

(b) thermal release is higher at 25°C

DERATING FACTOR QAS40 (%)

height (m)	derating factor %										
	0	5	10	15	20	25	30	35	40	45	50
0	100	100	100	100	100	100	95	95	90	85	85
500	100	100	100	100	100	95	90	90	85	80	80
1000	100	100	100	100	95	90	85	85	80	80	75
1500	100	100	95	95	90	85	85	80	75	75	70
2000	95	95	90	90	85	80	80	75	75	70	65
2500	90	90	85	85	80	75	75	70	70	65	65
3000	90	85	85	80	75	75	70	70	65	65	60
3500	85	80	80	75	75	70	65	65	60	60	55

For use of generator outside these conditions, please contact Atlas Copco

