

Generators QAS 250 AML: Principal Data

1. Rated speed (rpm) 1.36 Rated frequency 50 Hz 1500 1.36 Rated frequency 60 Hz 1800 2. Generator service duty. PRP 3. Absolute inlet pressure (bar(a)) 1 4. Relative humidity % 6 30 5. Air inlet temperature (°C) 25 B Limitations 39 1. Maximum ambient temperature °C 50 2. Airliude capability m 4000 3. Relative arbunidity m 4000 3. Relative arbunidity m 4000 3. Relative arbunidity maximum % 85 4. Minimum starting temperature, with coldstart equipment °C -15 5. Minimum starting temperature, with coldstart equipment °C -15 6. Minimum starting temperature, with coldstart equipment °C -25 C Performance data 21 91 49 91 1. Rated active power (PRP) 3ph kW 136 1. Rated frequency 50 Hz 200 1. 200 1. Rated frequency 50 Hz 200 1. Rated frequency 60 Hz 300 1. Rated frequency 60 Hz 37 1. Rated frequency 60 Hz 48 1. Rated frequency 60 Hz 37 1. Rated frequency 60 Hz 48 1. Rated frequency 6	Α	Reference	ce conditions 1) 4)			QAS250 (50/60	Hz)
138 Rated frequency 50 Hz 1500	1.				(rpm)	•	,
2. Generator service duly		•			Hz	1500	
3 Absolute inlet pressure (bar(a)) 1		136	Rated frequency	60	Hz	1800	
## Relative humidity ## S Air rilet temperature ## C B Limitations 2 1. Maximum ambient temperature ## C Altitude capability ## Audion	2.	Generator	service duty			PRP	
## Relative humidity ## S Air rilet temperature ## C B Limitations 2 1. Maximum ambient temperature ## C Altitude capability ## Audion	3	Absolute in	let pressure		(bar(a))	1	
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### B Limitations ** 1. Maximum ambient temperature			•				
1. Maximum ambient temperature	٥.	7 til lillot tol	inperature		(0)	20	
2. Altitude capability mm 4000 3. Relative air humidity maximum %6 85 4. Minimum starting temperature **C 1-15 5. Minimum starting temperature **C 1-15 5. Minimum starting temperature **C 1-25 C Performance data ^{2) 3) 4) 5)} 1. Rated active power (PRP) 3ph kW 1.36 Rated frequency 50 Hz 200 1.36 Rated frequency 60 Hz 200 1.36 Rated frequency 60 Hz 200 1.38 Rated frequency 60 Hz 200 1.38 Rated frequency 60 Hz 250 1.38 Rated frequency 60 Hz 250 1.38 Rated frequency 60 Hz 400 1.38 Rated frequency 60 Hz 400 1.38 Rated frequency 60 Hz 400 1.36 Rated frequency 60 Hz 300,56 1.36 Rated frequency 50 Hz 300,56 1.36 Rated frequency 50 Hz 300,56 1.36 Rated frequency 60 Hz 75 1.36 Rated frequency 60 Hz 75 1.36 Rated frequency 60 Hz 75 1.37 Rated frequency 60 Hz 75 1.38 Rated frequency 60 Hz 75 1.39 Rated frequency 60 Hz 75 1.30 Rated frequency 60 Hz 75 1.30 Rated frequency 60 Hz 75 1.36 Rated frequency 50 Hz 57 1.36 Rated frequency 50 Hz 52 1.37 Rated frequency 50 Hz 52 1.38 Rated frequency 50 Hz 52 1.39 Rated frequency 50 Hz 52 1.30 Rated frequency 50 Hz 52 1.31 Rated frequency 50 Hz 52 1.32 Rated frequency 50 Hz 52 1.34 Rated frequency 50 Hz 52 1.35 Rated frequency 50 Hz 52 1.36 Rated frequency 50 Hz 52 1.37 Rated frequency 50 Hz 52 1.38 Rated frequency 50 Hz 52 1.39 Rated frequency 50 Hz 52 1.30 Rated frequency 50 Hz 52 1.31 Rated frequency 50 Hz 52 1.32 Rated frequency 50 Hz 52 1.34 Rated frequency 50 Hz 52 1.35 Rated frequency 50 Hz 52 1.36 Rated frequency 50 Hz 52 1.37 Rated frequency 50 Hz 52 1.38 Rated frequency 50 Hz 52 1.39 Rated frequency 50 Hz 62 1.30 Rated frequency 50 Hz 62 1.31 Rated frequency 50 Hz 62 1.32 Rated frequency 50 Hz 62 1.33 Rated frequency 50 Hz 62 1.34 Rated frequency 50 Hz 62 1.35 Rated frequency 50 Hz	В	Limitatio	ons ²⁾				
Relative air humidity maximum	1.	Maximum a	ambient temperature		°C	50	
4. Minimum starting temperature	2.	Altitude car	pability		m	4000	
5. Minimum starting temperature, with coldstart equipment?	3.	Relative air	humidity maximum		%	85	
5. Minimum starting temperature, with coldstart equipment?	4.	Minimum s	tarting temperature		°C	-15	
Rated active power (PRP) 3ph	5.					-25	
Rated active power (PRP) 3ph	_	Dorform	anno data ^{2) 3) 4) 5)}				
136	-				LAM		
136	'					000	
2 Rated power factor (lagging) 3phase							
Rated apparent power (PRP) 3ph	2						(R)
136					\ // /	0.8	
136 Rated frequency 50 Hz 250	3					0.00	
Rated voltage 3ph. line to line V 136 Rated frequency 50 Hz 480							
136 Rated frequency 50 Hz 400 136 Rated frequency 60 Hz 480						250	
136 Rated frequency 50 Hz 360.8 136 Rated frequency 50 Hz 305.6 136 Rated frequency 50 Hz 57 136 Rated frequency 50 Hz 75 136 Rated frequency 60 Hz 114 136 Rated frequency 50 Hz 150 137 Rated frequency 50 Hz 150 138 Rated frequency 50 Hz 150 139 Rated frequency 50 Hz 150 130 Rated frequency 50 Hz 150 131 Rated frequency 50 Hz 3.7 136 Rated frequency 50 Hz 5.2 136 Rated frequency 50 Hz 5.2 136 Rated frequency 50 Hz 2.5 136 Rated frequency 50 Hz 2.7 137 Fuel Consumption at 50% Load kg/h 138 Rated frequency 50 Hz 34.8 139 Rated frequency 50 Hz 34.8 130 Rated frequency 50 Hz 34.8 131 Rated frequency 50 Hz 34.8 132 Rated frequency 50 Hz 44.2 133 Rated frequency 50 Hz 44.2 134 Rated frequency 50 Hz 44.2 135 Rated frequency 50 Hz 48.2 136 Rated frequency 50 Hz 0.219 137 Rated frequency 50 Hz 0.233 138 Rated frequency 50 Hz 8 139 Rated frequency 50 Hz 8 130 Rated frequency 50 Hz 8 131 Rated frequency 50 Hz 8 132 Rated frequency 50 Hz 8 133 Rated frequency 50 Hz 8 134 Rated frequency 50 Hz 8 135 Rated frequency 50 Hz 8 136 Rated frequency 50 Hz 8 137 Fuel autonomy at full load with standard tank h 136 Rated frequency 50 Hz 7 137 Fuel autonomy at full load with optional skid fueltank h 136 Rated frequency 50 Hz 60 Hz 7 137 Fuel autonomy at full load with optional skid fueltank h 130 Rated frequency 50 Hz 60 Hz 7 131 Fuel autonomy at full load with optional skid fueltank h	4	-			-		
Rated current 3ph.							
136	_					480	
136 Rated frequency 60 Hz 305.6	5						
Performance class (acci ISO 8528-5:1993) G2							
7 Single step load acceptance % 136 Rated frequency 50 Hz 57 136 Rated frequency 60 Hz 75 75 75 75 75 75 75 7	•		,		HZ		
136 Rated frequency 60 Hz 75 136 Rated frequency 60 Hz 75 136 Rated frequency 50 Hz 114 136 Rated frequency 60 Hz 150 136 Rated frequency 60 Hz 150 136 Rated frequency 50 Hz 3.7 136 Rated frequency 50 Hz 5.2 136 Rated frequency 50 Hz 5.2 136 Rated frequency 50 Hz 25.8 136 Rated frequency 60 Hz 27.1 136 Rated frequency 60 Hz 27.1 136 Rated frequency 60 Hz 27.1 136 Rated frequency 60 Hz 37.9 136 Rated frequency 50 Hz 34.8 136 Rated frequency 50 Hz 34.8 136 Rated frequency 50 Hz 37.9 137 Fuel Consumption at 75% Load kg/h 136 Rated frequency 50 Hz 34.8 136 Rated frequency 50 Hz 37.9 137 Fuel Consumption at 100% Load kg/h 136 Rated frequency 50 Hz 44.2 136 Rated frequency 50 Hz 48.2 136 Rated frequency 50 Hz 48.2 136 Rated frequency 50 Hz 0.219 136 Rated frequency 50 Hz 0.233 15 Fuel autonomy at full load with standard tank h 136 Rated frequency 50 Hz 8 136 Rated frequency 50 Hz 7 16 Fuel autonomy at full load with optional skid fueltank 7 7 17 18 Fuel autonomy at full load with optional skid fueltank 7 7 18 Fuel autonomy at full load with optional skid fueltank 7 7 19 Fuel autonomy at full load with optional skid fueltank 7 7 19 Fuel autonomy at full load with optional skid fueltank 7 7 19 Fuel autonomy at full load with optional skid fueltank 7 7 19 Fuel autonomy at full load with optional skid fueltank 7 7 10 Fuel autonomy at full load with optional skid fueltank 7 7 10 Fuel autonomy at full load with optional skid fueltank 7 7					0.4	G2	
136	/						
Single step load acceptance							
136						/5	
136 Rated frequency 60 Hz 150 isochronous	8					//	
Frequency droop (lower than % fisochronous) Isochronous							
Fuel Consumption at 0% Load kg/h 136	•				Hz		
136 Rated frequency 50 Hz 3.7 136 Rated frequency 60 Hz 5.2 11 Fuel Consumption at 50% Load kg/h 136 Rated frequency 50 Hz 25.8 136 Rated frequency 60 Hz 27.1 12 Fuel Consumption at 75% Load kg/h 136 Rated frequency 50 Hz 34.8 136 Rated frequency 60 Hz 37.9 13 Fuel Consumption at 100% Load kg/h 136 Rated frequency 50 Hz 44.2 136 Rated frequency 60 Hz 48.2 14 Specific fuel consumption kg/kWh 136 Rated frequency 50 Hz 0.219 136 Rated frequency 60 Hz 0.233 15 Fuel autonomy at full load with standard tank h 136 Rated frequency 50 Hz 8 136 Rated frequency 50 Hz 8 136 Rated frequency 60 Hz 7 16 Fuel autonomy at full load with optional skid fueltank 7 136 Rated frequency 50 Hz 3 136 Rated frequency 50 Hz 7						isochronous	
136 Rated frequency 50 Hz 5.2	10				•		
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136 Rated frequency 50 Hz 25.8 136 Rated frequency 60 Hz 27.1 12 Fuel Consumption at 75% Load kg/h 136 Rated frequency 50 Hz 34.8 136 Rated frequency 60 Hz 37.9 13 Fuel Consumption at 100% Load kg/h 136 Rated frequency 50 Hz 44.2 136 Rated frequency 60 Hz 48.2 14 Specific fuel consumption kg/kWh 136 Rated frequency 50 Hz 0.219 136 Rated frequency 60 Hz 0.233 15 Fuel autonomy at full load with standard tank h 136 Rated frequency 50 Hz 8 136 Rated frequency 50 Hz 8 136 Rated frequency 60 Hz 7 16 Fuel autonomy at full load with optional skid fueltank 7 16 Fuel autonomy at full load with optional skid fueltank 7 136 Rated frequency 50 Hz 26						5.2	
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136 Rated frequency 60 Hz 37.9 137 Fuel Consumption at 100% Load kg/h 136 Rated frequency 50 Hz 44.2 136 Rated frequency 60 Hz 48.2 14 Specific fuel consumption kg/kWh 136 Rated frequency 50 Hz 0.219 136 Rated frequency 60 Hz 0.233 15 Fuel autonomy at full load with standard tank h 136 Rated frequency 50 Hz 8 136 Rated frequency 60 Hz 7 136 Rated frequency 60 Hz 7 136 Rated frequency 60 Hz 7 136 Rated frequency 50 Hz 26 137 Rated frequency 50 Hz 26 138 Rated frequency 50 Hz 26 139 Rated frequency 50 Hz 26 130 Rated frequency 50 Hz 26 130 Rated frequency 50 Hz 26 131 Rated frequency 50 Hz 26 132 Rated frequency 50 Hz 26 133 Rated frequency 50 Hz 26 134 Rated frequency 50 Hz 26 135 Rated frequency 50 Hz 26 136 Rated frequency 50 Hz 26 137 Rated frequency 50 Hz 26 138 Rated frequency 50 Hz 26 139 Rated frequency 50 Hz 26 130 Rated frequency 70 Hz 70 H	12				•		
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136 Rated frequency 50 Hz 44.2 136 Rated frequency 60 Hz 48.2 14 Specific fuel consumption kg/kWh 136 Rated frequency 50 Hz 0.219 136 Rated frequency 60 Hz 0.233 15 Fuel autonomy at full load with standard tank h 136 Rated frequency 50 Hz 8 136 Rated frequency 60 Hz 7 16 Fuel autonomy at full load with optional skid fueltank n n 136 Rated frequency 50 Hz 26	40					37.9	
136 Rated frequency 60 Hz 48.2	13				•	44.0	
14 Specific fuel consumption kg/kWh 136 Rated frequency 50 Hz 0.219 136 Rated frequency 60 Hz 0.233 15 Fuel autonomy at full load with standard tank h 136 136 Rated frequency 50 Hz 8 136 Rated frequency 60 Hz 7 16 Fuel autonomy at full load with optional skid fueltank 7) h 136 Rated frequency 50 Hz 26							
136 Rated frequency 50 Hz 0.219 136 Rated frequency 60 Hz 0.233 15 Fuel autonomy at full load with standard tank h 136 Rated frequency 50 Hz 8 136 Rated frequency 60 Hz 7 16 Fuel autonomy at full load with optional skid fueltank 7 h 136 Rated frequency 50 Hz 26 136 Rated frequency 50 Hz 26	14					48.2	
136 Rated frequency 60 Hz 0.233 15 Fuel autonomy at full load with standard tank h 136 Rated frequency 50 Hz 8 136 Rated frequency 60 Hz 7 16 Fuel autonomy at full load with optional skid fueltank 7 h 136 Rated frequency 50 Hz 26 136 Rated frequency 50 Hz 26	14	-	-			0.040	
15 Fuel autonomy at full load with standard tank							
136 Rated frequency 50 Hz 8 136 Rated frequency 60 Hz 7 16 Fuel autonomy at full load with optional skid fueltank 136 N h 136 Rated frequency 50 Hz 26	45					0.233	
136 Rated frequency 60 Hz 7 16 Fuel autonomy at full load with optional skid fueltank 7 h 136 Rated frequency 50 Hz 26	15						
16 Fuel autonomy at full load with optional skid fueltank 71							
136 Rated frequency 50 Hz 26	10					7	
	16						
Rated frequency 60 Hz 24							
		136	Kated frequency	60	HZ	24	

17	Maximum oil consumption at full load	l/h	
	136 Rated frequency	50 Hz	0.05
	136 Rated frequency	60 Hz	0.05
18	Maximum sound power level (Lw) complies with 2000/14/EC (dB(A))		
	136 Rated frequency	50 Hz	97
	136 Rated frequency	60 Hz	99
19	Capacity of standard fueltank		413
20	Capacity of optional skid fueltank 7)	i	1380
21	Single step load capability		
	136 Rated frequency	50 Hz	100
	136 Rated frequency	60 Hz	100
22	Single step load capability		100
	136 Rated frequency	50 Hz	200
	136 Rated frequency	60 Hz	200
	Nated frequency	00 112	200
Ε	Application data		
			DDD
1	Mode of operation		PRP
2	Site		land use
3	Operation		single/parallel
4	Start-up and control mode		manual/auto
5	Start-up time		unspecified
6	Mobility/Config acc.ISO 8528-1:1993(transportable)		D
7	Mounting		fully resilient
8	Climatic exposure		open air
9	Status of neutral (TT or TN)		earthed
10	Status of neutral (IT) 7		Insulated
5 6 7 8 9 10 11 12 13 14 15 16 17 18	Design data Engine Standard Make Model Rated net output 136 Rated frequency 136 Rated frequency Rating type (acc. ISO3046-7) Coolant Combustion system Aspiration. Charged air cooling system Number of cylinders Swept volume Speed governing Governer type. Capacity of oil sump: - Initial fill Capacity of cooling system Electrical system Emission compliance Maximum permissible load factor of PRP during 24h per	kW 50 Hz 60 Hz (I)	ISO 3046/ISO 8528-2 Volvo TAD754 GE 217 219 ICXN coolant direct injection turbocharged intercooled 6 7.15 electronic EMS2 34 34 24 EU STAGE III 70
ı	Design data Alternator		
1.	Standard		IEC 34-1/ISO 8528-3
2.			LEROY SOMER
3.			LSA 46.2 L6
4.			20/1 10.2 20
٦.	136 Rated frequency	50 Hz	250
	136 Rated frequency	60 Hz	300
5	Rating type (acc. ISO 8528-3)		"BR" 125/40°C
6	Degree of protection (IP index acc. NF EN 60-529		23
	Insulation class - stator		23 H
7			
8	Insulation class - rotor		H 12
9	Number of wires		12

K Electrical Power circuit

1	Circuit-breaker 3ph: Number of poles		4
2	Circuit-breaker 3ph: Thermal release (It) 6)	(A)	400
3	Circuit-breaker 3ph: Magnetic release	(lm)	3,5 x ln
4	Fault current protection, residual current release, Idn	(A)	0,03-30

R REJECTION LIMITS

O REMARKS

1 A Reference conditions for engine performance to ISO 3046-1

2 B;C See derating diagram in the graph section or consult the factory for other conditions

3 C At reference conditions unless otherwise stated.

4 A;C;G25 Rating Definition (ISO 8528-1): LTP: limited Time Power is the maximum electrical

power which a generating set is capable of delivering (at variable load), in the event of a utility power failure (for up to 500 hours per year of which a maximum of 300 hours is continuous running). No overload is permitted on these ratings. The alternator is peak continuous rated (as defined in ISO8528-3) at 25°C.

PRP: Prime Power is the maximum power available during a variable power sequence, which may be run for an unlimited number of hours per year, between stated maintenance intervals and under the stated ambient conditions. A 10% overload is permitted for 1 hour in 12 hours. The permissible average power output during a 24h period shall not exceed the stated load factor as indicated on the AML.

5 C Specific mass fuel used: 0.86 kg/l

6 K24;K27 Thermal release is higher at 25°C.

7 B115;C20 2;C205;E1

1;E12;K14 Optional equipment

P Graph

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		R

derating factor %			_	_		tempei	rature (°C)					
		0	5	10	15	20	25	30	35	40	45	50
	0	100	100	100	100	100	100	100	100	100	85	75
	500	100	100	100	100	100	100	100	100	100	85	75
(m)	1000	100	100	100	100	100	100	100	100	100	85	75
	1500	95	95	95	95	95	95	95	95	90	85	75
height	2000	90	90	90	90	90	90	90	90	85	80	75
28	2500	85	85	85	85	85	85	85	85	80	NA	NA
	3000	80	80	80	80	80	80	80	80	75	NA	NA
	3500	75	75	75	75	75	75	75	NA	NA	NA	NA
	4000	70	70	70	70	70	70	70	NA	NA	NA	NA