# Generators QAS 30 KD
# AML: Data

| | | STD units | Note |
|---|---|---|---|
| **Reference conditions** [1] | | | |
| 1.Rated frequency | Hz | 50 | |
| 2.Rated speed | rpm | 1500 | (a) |
| 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 | 24.1 | |
| 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 | 30.2 | |
| 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 | 43.6 | |
| Rated current 3ph lower voltage | A | NA | |
| Rated current 1ph. | A | NA | (a) |
| 6. Performance class (acc.ISO 8528-5:1993) | | G2 | |
| Single step load acceptance (0-PRP) | kW | 24.1 | |
| | % | 100 | |
| 7. Frequency droop | % | <5 | |
| | | isochronous | (a) |
| 8.Fuel consumption at no load (0%) | kg/h | 1.5 | |
| Fuel consumption at 50% load | kg/h | 3.5 | |
| Fuel consumption at 75% load | kg/h | 4.7 | |
| Fuel consumption at full load (100%) | kg/h | 6.0 | |
| 9.Specific fuel consumption (at full load, 100%) | kg/kWh | 0.251 | |
| 10.Fuel autonomy at full load with standard tank | h | 13.1 | |
| 11.Fuel autonomy at full load with extended fuel tank | h | 36.6 | (a) |
| 12.Max. oil consumption at full load | g/h | 30.2 | |
| 13.Maximum sound power level (LWA) measured according to 2000/14/EC OND | dB(A) | 91 | |
| 14. Capacity of fuel tank | l | 92 | |
| 15. Capacity of optional skid fuel tank | l | 257.0 | (a) |
| 16. Single step load capability (0-PRP) | kW | 24.1 | |
| | % | 100 | |
| **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 | |
| | | mobile/E | (a) |
| 7.Mounting | | fully resilient | |
| 8.Climatic exposure | | open air | |
| 9.Degree of protection | | IP 54 | |
| 10.Status of neutral (TT or TN) | | earthed | |
| Status of neutral (IT) | | insulated | (a) |

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## Design data [4)]

### Alternator

| | | | |
|---|---|---|---|
| 1.Standard | | IEC 34-1<br>ISO 8528-3 | |
| 2.Make | | STAMFORD | |
| 3.Model | | BCI184-G1 | |
| 4.Rated output,class H temp. rise | kVA | 31.3 | |
| rating type acc. ISO 8528-3 | | BR | |
| 5.Degree of protection | IP | 23 | |
| 6. Insulation - stator | class | H | |
| - rotor | class | H | |
| 7.Number of wires | | 12 | |

### Engine

| | | | |
|---|---|---|---|
| 1.Standard | | ISO 3046<br>ISO 8528-2 | |
| 2.Make | | KUBOTA | |
| 3.Model | | V3300DI | |
| 4.Rated net output | kW | 28.0 | |
| rating type acc. ISO 3046-7 | | ICXN | |
| production tolerance | % | ±5 | |
| 5.Coolant | | Coolant | |
| 6.Combustion system | | direct injection | |
| 7.Aspiration | | natural aspirated | |
| 8.Number of cylinders | | 4 | |
| 9.Swept volume | l | 3.3 | |
| 10.Speed governing | | electronic | |
| 11.Capacity of oil sump | l | 13 | |
| 12.Capacity of cooling system | l | 7.5 | |
| 13.Electrical system | Vdc | 12 | |
| 14.Emission compliance | | EU STAGE II | |

## Power circuit

### Circuit-breaker, 3ph.

| | | | | |
|---|---|---|---|---|
| 1.Number of poles | | | 4 | |
| 2.Thermal release | It | A | 50 | (b) |
| 3.Magnetic release | Im | A | 3..5xIn | |

### Circuit-breaker, 3ph. lower voltage

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

### Fault current protection

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

### Outlet sockets

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

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**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 variable load), in
   - PRP Prime Power is the maximum power available during a variable power sequence, which may be run for an unlimited number
5) Specific mass fuel used: 0.86 kg/l

(a) optional equipment
(b) thermal release is higher at 25°C

**DERATING FACTOR QAS 30 (%)**

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

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

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