



# The mobile QAS generator

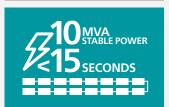
The QAS range is feature packed and comes with the ruggedness and reliability you demand from a generator. However, there are features that really set the QAS apart – we sum it up under the power of connectivity.

Firstly, QAS generators are built for multi-drop use and designed to be moved regularly. Whether that be a few metres or hundreds of miles, you can be assured of their easy, safe movement capabilities and guaranteed performance, even in the harshest conditions. This makes the QAS perfect for rental applications and heavy duty construction use.

These generators are also unrivalled when it comes to flexibility, thanks to their simple paralleling capability. We understand that your need for power can be ever changing. The modular design focusses on being able to connect multiple generators in the simplest way – making an installation that optimizes efficiency. The built-in Power Management System (PMS) enables the optimisation of fuel consumption and expands the generators' lifetime.

The QAS range provides complete power solutions, making this series the preferred choice for a wide range of applications throughout the world. Don't just invest in a power generator – Invest in a generator which has the power of connectivity!













<sup>\*</sup>Not all the standards or options are available in all the range, for further information contact to Atlas Copco support.







## **QAS** range



## 1. LOW OPERATIONAL COST AND SHORT SERVICE TIME:

- Decreased service downtime due to heavy duty fuel filtration system with water separator
- Extend engine life time because of Dual Stage Air Filtration with safety cartrige
- Oil drain pump
- Lockable external fuel filling point

## 2. DESIGN TO QUICK AND SAFE INSTALLATION

- Plug and play cable connection
- Pass through cable path, natural bend and strain relief
- Plexi cover for terminal board protection

#### 3. PUTTING YOU IN CONTROL

- Dual frequency > 40kVA
- Qc4004 + Qd0701 Optional Qc2103 for Automatic Mains Failure (AMF) applications
- Qc4003 Optional Qc4003 Advance paralleling applications controller
- Auxiliary winding and PMG options



<sup>\*</sup>Options available may change depending on model selected. Please consult with your local Atlas Copco customer centre.



## 4. INTEGRATED CONTROL AND POWER CUBICLE:

- Digital controller
- 4 Pole breaker
- Earth leakage protection
- Dedicated socket compartment
- Emergency stop



#### **5. HIGH PERFORMANCE:**

- High cooling performance radiator with ParCOOL for 100% prime power operation
- Sound attenuated and rugged galvanized steel enclosure



## 6. SAFE AND EFFICIENT TRANSPORT:

- Integrated lifting structure with single elevation point
- Sturdy multidrop base frame with integrated forklift pockets
- 110% self containment
- Transport bumpers



#### 7. EASY ACCESS AND SERVICE:

- 1-side serviceability through big access doors and panels
- Access to alternator (AVR and diode bridge)
- Full access to engine
- Direct radiator cleaning access
- External drain points access





## **QAS range** Technical data









| Tated frequency (1)  Note of the property (1 |  |          |               | ,           |                   |              | -            |             |                               |
|--|--|----------|---------------|-------------|-------------------|--------------|--------------|-------------|-------------------------------|
| Activity    | Electrical data  |          | QAS 14        | QAS 20      | QAS 30            | QAS 40       | QAS 60       | QAS 80      | QAS 100                       |
| Prime power (PRP)  | Rated frequency (1)  | Hz       | 50            | 50   60     | 50   60           | 50           | 50   60      | 50   60     | 50   60                       |
| Stated standby power (ESP)   | Rated voltage (2)  | V        | 400           | 400   480   | 400   480         | 400          | 400   480    | 400   480   | 400   480                     |
| A  | Prime power (PRP)  |          | 14,1 / 11,3   |             |                   | 40 / 32      |              |             | 100 / 80  <br>114 / 91        |
| A  | Rated standby power (ESP)  |          | 15,5 / 12,4   |             |                   | 44 / 35      |              |             | 110 / 88<br>125 / 100         |
| Per    | Power factor cos φ   |          | 0,8           | 0,8         | 0,8               | 0,8          | 0,8          | 0,8         | 0,8                           |
| Per    | Rated current (PRP)  | А        | 20,4          | 29   30     | 43   44           | 58           | 87   81      | 115   112   | 150   137                     |
| Per  | Single step load acceptance (G2) acc. ISO-<br>8528/5                     | %        | 100           | 100         | 100               | 77           | 85   95      | 90   100    | 80   85                       |
| Time   Lank capacity (Standard / optional on a submorning fuel tank (apacity (Standard / optional one) autonomy fuel tank)   1   | Operating temperature (min/max)  | °C       | -25 / 50      | -25 / 50    | -25 / 50          | -25 / 50     | -25 / 50     | -25 / 50    | -25 / 50                      |
| 13   | Fuel consumption   |          |               |             |                   |              |              |             |                               |
| Septe   Sept   | Fuel tank capacity (Standard / optional<br>long autonomy fuel tank)      | I        | 115           | 115         | 92 / 282          | 92 / 282     | 149 / 298    | 250 / 592   | 250 / 592                     |
| Engine    Model  | Fuel consumption at 100% PRP load  | I/h      | 3,7           | 4,9   5,3   | 7   8             | 9,5          | 14   17      | 19   22,8   | 23   26,7                     |
| Node    Node   | Fuel autonomy at full load (Standard / optional long autonomy fuel tank) | h        | 30,5          | 23,5   21,5 |                   | 9,7 / 27     |              |             | 10 / 23,7  <br>8,6 / 20,4     |
| D1703M-R   E486  | Engine   |          |               |             |                   |              |              |             |                               |
| Natural aspiration   Natural   | Model  |          | D1703M-       |             | V3300-IDI-        | V3800-DI-T-  |              | 1104D -     | PERKINS<br>1104D -<br>E44TAG2 |
| Natural aspired   Natural as   | Speed  | rpm      | 1500          | 1500   1800 | 1500   1800       | 1500         | 1500   1800  | 1500   1800 | 1500   1800                   |
| Aspiration   Natural aspired   Aspired aspired   Aspired   Aspired   Aspired aspired   Aspired aspired   Aspired   Aspired   Aspired     | Rated net power (with fan)   | kWm      | 13,2          | 18,8   22,1 | 27   30,7         | 38           | 56,3   60    | 71,2   82   | 88,6   100                    |
| Section   Electronic   Electr   | Aspiration   |          |               |             |                   | and          | and          | and         |                               |
| Parcool   Parc   | Speed control  |          | Electronic    | Electronic  | Electronic        | Electronic   |              | Electronic  | Electronic                    |
| Alternator  Model  | Number of cylinders  |          | 3             | 4           | 4                 | 4            | 4            | 4           | 4                             |
| LEROY   SOMER   SOMER   SOMER   SOMER   LSA 42.3    | Coolant  |          | Parcool       | Parcool     | Parcool           | Parcool      | Parcool      | Parcool     | Parcool                       |
| LEROY SOMER TAL 040 D  | Swept volume   | I        | 1,7           | 2,4         | 3,3               | 3,8          | 4,4          | 4,4         | 4,4                           |
| SOMER   SOME   | Alternator   |          |               |             |                   |              |              |             |                               |
| Degree of protection / Insulation class  | Model  |          | SOMER         | SOMER       | SOMER<br>LSA 42.3 | SOMER        | SOMER        | SOMER       |                               |
| Excitation type / AVR model AREP / R180 AREP / R180 SHUNT / R220 SHUNT / R220 AREP / R180 SHUNT / R220 Noise level  Sound power level (LwA) dB(A) 87 88   92 90   93 91 89   93 91   95 91   9 | Rated Output (ESP 27°C)  | kVA      | 16            | 22   27,5   | 35   42,4         | 45           | 66   79,5    | 88   110    | 110   131                     |
| Noise level  Sound power level (LwA)   | Degree of protection / Insulation class                                  |          | IP 23 / H     | IP 23 / H   | IP 23 / H         | IP 23 / H    | IP 23 / H    | IP 23 / H   | IP 23 / H                     |
| Sound power level (LwA) dB(A) 87 88   92 90   93 91 89   93 91   95 91   95 Sound pressure level (LpA) at 7m dB(A) 59 60   64 62   65 63 61   65 63   67 63    | Excitation type / AVR model  |          | AREP / R180   | AREP / R180 |                   | SHUNT / R220 | SHUNT / R220 | AREP / R180 | SHUNT / R25                   |
| Dimensions and weight (standard   with optional long autonomy fuel tank)         Autonomy fuel tank   | Noise level  |          |               |             |                   |              |              |             |                               |
| Dimensions and weight (standard   with optional long autonomy fuel tank)  Length mm 1780 1780 2100 2100 2260 2850 2850  Width mm 870 870 950 950 1050 1100 1100  Height mm 1200 1200 1200 1200 1200 1430 1620 1620   | Sound power level (LwA)  | dB(A)    | 87            | 88   92     | 90   93           | 91           | 89   93      | 91   95     | 91   95                       |
| Length mm 1780 1780 2100 2100 2260 2850 2850 Width mm 870 870 950 950 1050 1100 1100 Height mm 1200 1200 1200 1200 1430 1620 1620 Weight (dry ( ) wot)   kg 651 / 750 696 / 705 917 / 996 962 / 104 1305 / 1433 1767 / 1982 1777 / 198   | Sound pressure level (LpA) at 7m   | dB(A)    | 59            | 60   64     | 62   65           | 63           | 61   65      | 63   67     | 63   67                       |
| Width         mm         870         870         950         950         1050         1100         1100           Height         mm         1200         1200         1200         1200         1430         1620         1620           Weight (dpv / yet)         kg         651 / 750         696 / 705         917 / 996         962 / 104         1305 / 1433         1767 / 1982         1777 / 1982   | Dimensions and weight (standar   | d   with | n optional lo | ong autonor | ny fuel tar       | ık)          |              |             |                               |
| Height mm 1200 1200 1200 1200 1430 1620 1620   | Length   | mm       | 1780          | 1780        | 2100              | 2100         | 2260         | 2850        | 2850                          |
| Voight (dry / yyot) kg 651 / 750 696 / 705 917 / 996   962 / 104   1305 / 1433   1767 / 1982   1777 / 198  | Width  | mm       | 870           | 870         | 950               | 950          | 1050         | 1100        | 1100                          |
|  | Height   | mm       | 1200          | 1200        | 1200              | 1200         | 1430         | 1620        | 1620                          |
|  | Weight (dry / wet)   | kg       | 651 / 750     | 696 / 795   |                   |              |              |             | 1777 / 1992<br>1857 / 236     |

<sup>(1)</sup> Other voltages available, please consult. \* Standard tank is already long autonomy









| Electrical data  |             | QAS 150                             | QAS 200                             | QAS 250                             | QAS 325                               | QAS 400                               | QAS 500                               | QAS 650                            |
|--|-------------|-------------------------------------|-------------------------------------|-------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|------------------------------------|
| Rated frequency (1)  | Hz          | 50   60                             | 50   60                             | 50   60                             | 50   60                               | 50   60                               | 50   60                               | 50   60                            |
| Rated voltage (2)  | V           | 400   480                           | 400   480                           | 400   480                           | 400   480                             | 400   480                             | 400   480                             | 400   480                          |
| Prime power (PRP)  | kVA /<br>kW | 150 / 120  <br>171 / 137            | 200 / 160  <br>225 / 180            | 250 / 200  <br>255 / 204            | 325 / 260  <br>345 / 276              | 405 / 324  <br>418 / 334              | 500 / 400  <br>587 / 470              | 653 / 522  <br>685 / 548           |
| Rated standby power (ESP)  | kVA /<br>kW | 165 / 132  <br>188 / 150            | 220 / 176  <br>248 / 198            | 275 / 220  <br>280 / 224            | 341 / 273  <br>380 / 304              | 441 / 353  <br>457 / 366              | 550 / 440  <br>645 / 516              | 716 / 573  <br>752 / 602           |
| Power factor cos φ   |             | 0,8                                 | 0,8                                 | 0,8                                 | 0,8                                   | 0,8                                   | 0,8                                   | 0,8                                |
| Rated current (PRP)  | Α           | 216   206                           | 288   270                           | 360   307                           | 469   415                             | 584   502                             | 722   706                             | 942   824                          |
| Single step load acceptance (G2) acc. ISO-8528/5                         | %           | 60   75                             | 80   95                             | 57   75                             | 60   70                               | 60   70                               | 62   68                               | 53   64                            |
| Operating temperature (min/max)  | °C          | -25 / 50                            | -25 / 50                            | -25 / 50                            | -25 / 50                              | -25 / 50                              | -25 / 50                              | -25 / 50                           |
| Fuel consumption   |             |                                     |                                     |                                     |                                       |                                       |                                       |                                    |
| Fuel tank capacity (Standard / optional long autonomy fuel tank)         | 1           | 360 / 980                           | 496 / 1470                          | 469 / 1470                          | 640 / 1775                            | 640 / 1775                            | 970                                   | 860                                |
| Fuel consumption at 100% PRP load  | I/h         | 30,6   39                           | 41,4   49                           | 51,4   56                           | 68   71                               | 83   87                               | 102,6   118,6                         | 124,4   137                        |
| Fuel autonomy at full load (Standard / optional long autonomy fuel tank) | h           | 10,3 / 27,2  <br>8 / 21,3           | 10 / 33  <br>8,5 / 28               | 8 / 27  <br>8,4 / 24,6              | 9 / 24  <br>8 / 23                    | 8 / 21  <br>7 / 20                    | 8,8   7,7                             | 7,3   6,6                          |
| Engine   |             |                                     |                                     |                                     |                                       |                                       |                                       |                                    |
| Model  |             | VOLVO TAD<br>751 GE / TAD<br>731 GE | VOLVO TAD<br>753 GE / TAD<br>733 GE | VOLVO TAD<br>754 GE / TAD<br>734 GE | VOLVO TAD<br>1351 GE / TAD<br>1341 GE | VOLVO TAD<br>1355 GE / TAD<br>1344 GE | VOLVO TAD<br>1651 GE /<br>TAD 1641 GE | VOLVO TWD<br>1644 GE               |
| Speed  | rpm         | 1500   1800                         | 1500   1800                         | 1500   1800                         | 1500   1800                           | 1500   1800                           | 1500   1800                           | 1500   1800                        |
| Rated net power (with fan)   | kWm         | 132   149                           | 173   194                           | 217   219                           | 279   294                             | 344   355                             | 430   494                             | 554   582                          |
| Aspiration   |             | Turbocharged<br>and<br>intercooled  | Turbocharged<br>and<br>intercooled  | Turbocharged<br>and<br>intercooled  | Turbocharged<br>and<br>intercooled    | Turbocharged<br>and<br>intercooled    | Turbocharged<br>and<br>intercooled    | Turbocharged<br>and<br>intercooled |
| Speed control  |             | Electronic<br>EMS 2                 | Electronic<br>EMS 2                 | Electronic<br>EMS 2                 | Electronic<br>EMS 2                   | Electronic EMS 2                      | Electronic<br>EMS 2                   | Electronic EMS<br>2.3              |
| Number of cylinders  |             | 6                                   | 6                                   | 6                                   | 6                                     | 6                                     | 6                                     | 6                                  |
| Coolant  |             | Parcool                             | Parcool                             | Parcool                             | Parcool                               | Parcool                               | Parcool                               | Parcool                            |
| Swept volume   | 1           | 7,15                                | 7,15                                | 7,15                                | 12,8                                  | 12,8                                  | 16,12                                 | 16,12                              |
| Alternator   |             |                                     |                                     |                                     |                                       |                                       |                                       |                                    |
| Model  |             | LEROY<br>SOMER<br>LSA 44.3 L10      | LEROY<br>SOMER<br>LSA 44.3 VL14     | LEROY<br>SOMER<br>LSA 46.3 S5       | LEROY<br>SOMER<br>LSA 46.3 L10        | LEROY<br>SOMER<br>LSA 47.2 S4         | LEROY<br>SOMER<br>LSA 47.2 M7         | LEROY<br>OMER<br>LSA 47.3 L10      |
| Rated Output (ESP 27°C)  | kVA         | 150   188                           | 220   275                           | 275   344                           | 358   447                             | 450   550                             | 570   680                             | 745   875                          |
| Degree of protection / Insulation class                                  |             | IP 23 / H                             | IP 23 / H                             | IP 23 / H                             | IP 23 / H                          |
| Excitation type / AVR model  |             | SHUNT /<br>R250                     | SHUNT /<br>R250                     | SHUNT/<br>R250                      | SHUNT /<br>R250                       | SHUNT /<br>R250                       | PMG /<br>D350                         | PMG /<br>D350                      |
| Noise level  | IB(4)       | 05100                               | 07100                               | 07100                               | 07.100                                | 001400                                | 07.1400                               | 400   404                          |
| Sound power level (LwA)  | dB(A)       | 96   99                             | 97   99                             | 97   99                             | 97   99                               | 98   100                              | 97   100                              | 100   104                          |
| Sound pressure level (LpA) at 7m   | dB(A)       | 68   71                             | 69   71                             | 69   71                             | 69   71                               | 70   72                               | 69   72                               | 72   76                            |
| Dimensions and weight (standar   | d   with    | optional lo                         | ng autonor                          | ny fuel tanl                        | ()                                    |                                       |                                       |                                    |
| Length   | mm          | 3380                                | 3770                                | 3770                                | 4020                                  | 4020                                  | 4800                                  | 4800                               |
| Width  | mm          | 1180                                | 1200                                | 1200                                | 1390                                  | 1390                                  | 1550                                  | 1550                               |
| Height   | mm          | 1700                                | 1880                                | 1880                                | 2020                                  | 2020                                  | 2290                                  | 2290                               |
| Weight (dry / wet)   | kg          | 2300 / 2610  <br>2517 / 3360        | 2889 / 3292  <br>3129 / 4393        | 2999 /3402  <br>3239 / 4503         | 4185 / 4735  <br>4395 / 5884          | 4485 / 5035  <br>4695 / 6184          | 5594 / 6426                           | 5941 / 6830                        |





# Optimize your power solutions



When you need temporary power, a single generator is not always the most efficient solution. Does the application load vary? Do any of the gensets in your fleet need higher power? A Modular Power Plant (or paralleling multiple generators) is the efficient solution if you answered yes to any of the these questions.

We have developed a unique Power Management System (PMS). The PMS manages the number of generators running in parallel with load demand, starting and stopping units in line with increases or decreases in load. In this way, the load on each generator remains at a level that optimizes fuel consumption.

It also eliminates the need for generators to run with low load levels, which can cause engine damage and shorten the life expectancy of the equipment.

#### Just one example:

The deployment of a **1MVA** generator as a prime power source, taking the load demand patterns of a typical industrial application as a guide, could mean **up to 1677 liters** of fuel consumed each day. That compares with approximately 1558 liters of fuel if three QAS 325 in the PMS were doing the same job. In this case, even considering the Ad-Blue cost, an estimated **annual saving of more than** €30.000 makes for a compelling case, not to mention **85 tons of CO2 saved** over the course of a year.



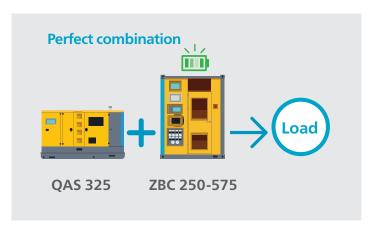
Note: this data is simulated. It's based on a typical industrial daily load diagram.



Sustainability is becoming a major concern in many machine-driven industries, as regulations regarding noise and emissions grow stricter. There is a need for a technological solution that provides reliable power in silent operation, while reducing fuel consumption and CO2 emissions. Energy Storage Systems (ESS) are transforming power supply as we know it, and Atlas Copco is leading the transition towards more sustainable operations.

Energy Storage Systems are ideally suited to noisesensitive environments, such as events or metropolitan construction sites, telecoms or rental applications, and large units can work in parallel to become the 'brain' of a microgrid. Energy storage solutions featuring long-life, low-maintenance and high-density Lithium-ion batteries working in hybrid mode with power generators increase the solution's efficiency, especially when dealing with low loads and peaks in energy demand.

Using an Energy Storage System with a generator in hybrid mode enables you to use a smaller-sized generator, downsizing the solution, saving money on hardware, extending the generator's working life, optimizing performance levels and increasing the level of sustainability on site.





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### **Product portfolio**

#### **GENERATORS**

#### PORTABLE 1,6–12 kVA



SPECIALIZED 9-660\* kVA



VERSATILE 9–1250\* kVA



LARGE POWER 800–1450 kVA



\*Multiple configurations available to produce power for any size application

#### **DEWATERING PUMPS**

#### ELECTRIC SUBMERSIBLE

250-16.200 l/min





#### **SURFACE PUMPS**

833-23.300 l/min



#### **ENERGY STORAGE SYSTEMS**

ZENERGIZE 45-500\* kVA





Diesel and electric options available

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**ELECTRIC** 





#### **ONLINE SOLUTIONS**

#### SHOP ONLINE PARTS ONLINE

Spare parts for power equipment. We handle your orders 24 hours a day.



#### POWER CONNECT

Scan the QR code on your machine, and go to the QR Connect Portal to find all the information about your machine.

#### LIGHT THE POWER: YOUR SIZING TOOL

A useful calculator to help you choose the best solution for your power and light needs.



#### **FLEETLINK**

Intelligent telematics is a system that helps optimize fleet usage and reduce maintenance, ultimately saving time and cutting operating costs.

#### PUMP SIZING CALCULATOR

With a few inputs, this pump sizing calculator will help you to compare dewatering submersible models and find the right one for you.

#### VISIT THE POWER ISLAND

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