

# VPC425UKS

Canopied



| ENGINE                | ALTERNATOR           | MODEL                   | POWER FACTOR        | EMISSIONS |
|-----------------------|----------------------|-------------------------|---------------------|-----------|
| Cummins<br>6ZTAA13-G3 | Stamford<br>S4L1D-F4 | VPC385UKS<br>(Canopied) | Factor $\Phi = 0.8$ | N/A       |
| 50Hz                  | 1500rpm              | 3-Phase                 |                     |           |

| RATINGS | PRIME POWER  | STANDBY POWER | RATED CURRENT | FUEL CONSUMPTION |
|---------|--------------|---------------|---------------|------------------|
| Voltage | PRP          | ESP           | Amps          | @100% load       |
| (V)     | kWe      kVA | kWe      kVA  | (A)           | L/h              |
| 400     | 312      390 | 340      425  | 563           | 76.5             |

## RATINGS

All three-phase generator sets are rated at 0.8 power factor.

All single-phase generator sets are rated at unity or 1.0 power factor.

## PRIME OUTPUT

This rating is applicable for supplying continuous electrical power at variable load.

There is no limitation to the annual hours of operation and this model can supply 10% overload power for 1 hour in 12 hours.

## STANDBY OUTPUT

This rating is applicable for supplying electrical power (at variable load) in the event of a utility power failure. No overload is permitted on these ratings.

The above ratings are in accordance with ISO8528-1 and ISO3046-1. Standard reference conditions: 25°C, 100m A.S.L., 30% relative humidity.



# ENGINE

## Cummins 6ZTAA13-G3

|                                     |  | Units                                |                                   |      |
|-------------------------------------|--|--------------------------------------|-----------------------------------|------|
| General performance                 | Frequency                                | Hz                                   | 50                                |      |
|                                     | Engine Speed                             | r/min                                | 1500                              |      |
|                                     | Number of cylinders / arrangement        |                                      | 6 cyl / vertical in-line          |      |
|                                     | Displacement                             | Litres                               | 8.9L                              |      |
|                                     | Aspiration                               |                                      | Turbocharged                      |      |
|                                     | Combustion system                        |                                      | Direct injection                  |      |
|                                     | Governor type                            |                                      | Electronic                        |      |
|                                     | Bore / stroke                            | mm                                   | 130 x 163                         |      |
|                                     | Starter Motor / charge Alternator (V dc) |                                      | 24 V DC                           |      |
|                                     | Engine power (gross)                     | kWm                                  | Prime: 340   Standby: 380         |      |
|                                     | Cooling system                           |                                      | Water cooled                      |      |
|                                     | Rotation                                 |                                      | Anti-clockwise viewed on flywheel |      |
|                                     | Fuel system                              | Fuel consumption at 110% prime power | Litres/hour                       | 84.1 |
|                                     |  | Fuel consumption at 100% prime power | Litres/hour                       | 76.5 |
| Fuel consumption at 75% prime power |  | Litres/hour                          | 57.23                             |      |
| Fuel consumption at 50% prime power |  | Litres/hour                          | 38.25                             |      |
| 12 hour fuel tank capacity          |  | Litres                               | 700                               |      |
| Air system                          | Air inlet                                |                                      | Mounted air filter                |      |
|                                     | Air filter type                          |                                      | Dry                               |      |
| Fuel and fuel system                | Electronically governed                  |                                      | YES                               |      |
|                                     | Rotary type pump                         |                                      | YES                               |      |
|                                     | Ecoplus fuel filter                      |                                      | YES                               |      |
| Oil system                          | Total oil system capacity                | Litres                               | 45.42                             |      |
|                                     | Maximum sump capacity                    | Litres                               | N/A                               |      |
|                                     | We sump with filler and dipstick         |                                      | YES                               |      |
|                                     | Spin-on oil filter                       |                                      | YES                               |      |
| Cooling system                      | Total system capacity                    |                                      |                                   |      |
|                                     | • With radiator                          | Litres                               | N/A                               |      |
|                                     | • Without radiator                       | Litres                               | N/A                               |      |
|                                     | Thermostat operation range               | °C                                   | Up to 40°C                        |      |
|                                     | Maximum top tank temperature             | °C                                   | N/A                               |      |
| Electric system                     | Electrical system voltage                | V                                    | 24                                |      |
|                                     | Battery                                  |                                      | Maintenance-free                  |      |
|                                     | Connecting cables                        |                                      | Included                          |      |
| Available options                   | Battery charger                          |                                      | Included                          |      |
|                                     | Battery isolator switch                  |                                      | Included                          |      |
|                                     | Engine water heater                      |                                      | Included                          |      |





# ALTERNATOR

## Stamford S4L1D-F4

|              |                               | Units  |                                |             |
|--------------|-------------------------------|--------|--------------------------------|-------------|
| General data | Manufacturer / brand          |        | Stamford                       |             |
|              | Model                         |        | S4L1D-F4                       |             |
|              | Coupling / number of bearings |        | Flexible Disc / Single Bearing |             |
|              | Phase / poles                 |        | 3-Phase / 4-Pole               |             |
|              | Power factor                  |        | Cos $\Phi$ = 0.8               |             |
|              | AVR regulation                |        | YES                            |             |
|              | Voltage regulation            |        | $\pm 1$ %                      |             |
|              | Insulation class              |        | H                              |             |
|              | Drip proof                    |        | IP23                           |             |
|              | Excitation                    |        | Shunt                          |             |
|              | Altitude                      | m      |                                | $\leq 1000$ |
|              | Overspeed                     | min -1 |                                | 2250        |





# DSE CONTROLLER SUMMARY

## Deepsea (DSE) Controller

| Controller model / Deepsea DSE | DSE4520<br>(Optional)   | DSE6120<br>(Optional)  | DSE7310/20<br>(Optional)  | DSE8610/20<br>(Optional)  |
|--------------------------------|---|--|---|---|
| Controller photos              |  |  |  |  |
| Standard supply                | ●   | ○  | ○   | ○   |
| Viewable parameters            |   |  |   |   |
| Phase voltage                  | X   | 3  | 3   | 3   |
| Current                        | Instrumentation   | ●  | ●   | ●   |
| Frequency                      | ●   | ●  | ●   | ●   |
| Active power                   | ○   | ●  | ●   | ●   |
| Reactive power                 | ○   | ●  | ●   | ●   |
| Apparent power                 | X   | ●  | ●   | ●   |
| Power factor                   | ○   | ●  | ●   | ●   |
| Electric energy metering       | X   | ●  | ●   | ●   |
| Generator protection           |   |  |   |   |
| Abnormal voltage               | ●   | ●  | ●   | ●   |
| Overcurrent warning            | ○   | ●  | ●   | ●   |
| Overcurrent protection         | ●   | ●  | ●   | ●   |
| Over frequency protection      | ●   | ●  | ●   | ●   |
| Short circuit protection       | MCCB / ●  | MCCB / ●   | MCCB / ●  | MCCB / ●  |

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|--------------------------------|---|--|---|---|
| Controller photos              |  |  |  |  |
| <b>Engine figure</b>           |   |  |   |   |
| Oil pressure                   | ●   | ●  | ●   | ●   |
| Water temperature              | ●   | ●  | ●   | ●   |
| Fuel meter / fuel sensor       | ● / ○   | ● / ○  | ● / ○   | ● / ○   |
| Speed                          | ●   | ●  | ●   | ●   |
| Battery voltage                | ●   | ●  | ●   | ●   |
| Elapsed time                   | ●   | ●  | ●   | ●   |
| <b>Engine protection</b>       |   |  |   |   |
| Low oil pressure warning       | X   | ●  | ●   | ●   |
| Low oil pressure protection    | ●   | ●  | ●   | ●   |
| High temperature warning       | ○   | ●  | ●   | ●   |
| High temperature protection    | ●   | ●  | ●   | ●   |
| Overspeed warning              | X   | ●  | ●   | ●   |
| Overspeed protection           | ○   | ●  | ●   | ●   |
| Alternator charger             | ●   | ●  | ●   | ●   |
| <b>Functions</b>               |   |  |   |   |
| Remote start                   | ●   | ●  | ●   | ●   |
| AMF (Auto Main Failure)        | ●   | ●  | ●   | ●   |
| Programmable input             | ●   | ●  | ●   | ●   |
| Programmable output            | ●   | ●  | ●   | ●   |
| Expand module                  | X   | ○  | ○   | ○   |
| Communication function         | X   | X  | RS232 / 484   | RS232 / 485   |
| Communication port             | USB   | USB  | RS232 / 484   | RS232 / 485   |
| CAN                            | ●   | ○  | ●   | ●   |
| Service indicate               | ○   | ○  | ●   | ●   |
| Fault history                  | ●   | ●  | ●   | ●   |
| Gen-gen synchronising          | X   | X  | X   | ●   |
| Gen-mains synchronising (20)   | X   | X  | X   | ●   |

**REMARK:** ● Standard supply ○ Available as optional X Not available

# ENCLOSURE / CANOPY

Sound-attenuated or open option

*"Ensures a quieter life with our sound attenuation system"*

## FEATURE

**Extremely rugged and highly corrosion resistant construction**

Unique appearance with high sound absorbing and thermal properties

8-12 hours built-in fuel tank integrated into the skid-mounted base

Excellent design and craftsmanship

Full weatherproof enclosure, suitable for operations in harsh conditions

Thermo-acoustic installation which can withstand fire, high temperature and severe conditions

Residential exhaust muffler manufactured from galvanised steel

High quality polyester powder paint

Designed on modular principles with interchangeable components permitting on-site repairs

**Easy commissioning and maintenance**

Control panel viewing window with lockable access door for quick, safe and easy monitoring

Side doors allowing 180° opening for easy accessibility

Lifting point for easy mobility

Lube oil drain and radiator drain

Internally mounted exhaust silences constructed to withstand rough conditions

**Security & safety**

Earth leakage protection

Secure and lockable access doors for fuel fill and battery

Fully guarded cooling fan and battery charging alternator

Emergency stop push button mounted on the enclosure exterior for urgent and safe shutdown

Efficient management of cooling air to avoid high water temperature

**Transportability**

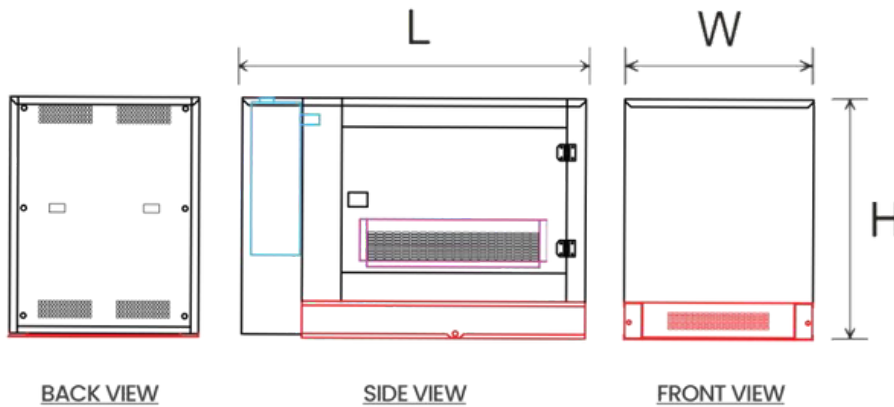
Top access lifting points for crane lifting

Fork lift pockets for easy moveability



# OVERALL DIMENSIONS, WEIGHT & NOISE

| Frame type | Dimensions<br>(L x W x H) mm | Weight<br>kg | Base tank @ 100% load |        | Noise level<br>dBA(A) at 7m |
|------------|------------------------------|--------------|-----------------------|--------|-----------------------------|
|            |                              |              | Hours                 | Litres |                             |
| Canopied   | 4200 x 1600 x 2300           | TBC          | 8                     | 700    | 70.5                        |
| Open       |                              |              |                       |        |                             |



## AUTOMATIC TRANSFER SWITCH

### A.T.S - 4 Poles

We offer as an optional accessory, not only a changeover switch but also an integrated mains detection and switch system for your 24 hour power protection. The system enables automatic start-up and operation of the generating set in the event of a mains power failure, overvoltage or loss of a mains automatic retransfer once it comes back.

#### System advantages

Automatically transfer and re-transfer load from main power to gen-power without operator intervention (both automatic and manual)

ATS Controller (AMF function)

Available from 32 - 4000A

Available in standard, bypass isolation and service-entrance configurations

Configurable in open, closed and programmed transition operating modes

Designed to interface seamlessly with all AMF generators and switchgear

Drip proof IP42 enclosure

Easy installation: wall-mounted and floor standing



## WARRANTY COVERAGE

Generators used with commercial utility source: One (1) year or 1000 hours (whichever occurs first) from date of shipment from the factory or registered start-up date.