

**SCANGEN SG80 (50Hz)**
**Engine Specifications : 420 DSG - D4 41**
**Engine -  
General Data**


|  |              |                            |
|--|--------------|----------------------------|
| Piston displacement                              | lit          | 4.4                        |
| Number of cylinder and configuration             |              | 4 In Line                  |
| Bore x Stroke                                    | mm           | 108 X 120                  |
| Fuel Injection System                            |              | Diesel<br>Direct Injection |
| Lube Oil Capacity                                | grade<br>lit | 15W-40, CF Grade<br>10     |
| Coolant Capacity<br>(including radiator & pipes) |              | 17                         |
| Starting System                                  | V            | 12V Electric               |
| Charging Generator                               | V, A         | 12V 65A                    |
| Fuel   |              | Diesel fuel                |
| Engine cooling system                            |              | Water                      |
| Compression ratio                                |              | 16.5:1                     |



| Engine -<br>Specifications :                            |                      |             | 50Hz, 1500rpm |         |
|---|----------------------|-------------|---------------|---------|
|   |                      |             | Prime         | Standby |
| Gross power   |                      | kWm         | 75            | 83      |
| Specific fuel Consumption                               | full load            | g/kWh       | 209           | 209     |
| Heat rejection  | to cooling water     | kW          | 39            | 43      |
|   | to exhaust gas       |             | 55            | 61      |
|   | to radiation         |             | 7             | 8       |
| Air consumption<br>- max. pressure loss, (dirty filter) |                      | m3/min      | 4.7           | 5.2     |
|   |                      | mmWc        | 500           |         |
| Exhaust flow<br>- max. back pressure                    |                      | kg/min      | 5.53          | 6.1     |
|   |                      | mmWc        | 500           |         |
| Coolant pump flow                                       |                      | lit/min     | 70            |         |
| Coolant fan   | type                 |             | Pusher        |         |
|   | diameter             | mm          | 508           |         |
|   | power                | kW          | 2.5           |         |
|   | speed ratio          | crank : fan | 1.53 : 1      |         |
|   | free air flow        | m3/s        | 4.6           |         |
|   | max pressure reserve | mmWC        | 20            |         |
| Charger air cooling                                     | air-on Temperature   | °C          | 45            |         |
| Charge air cooling                                      |                      |             | Turbocharged  |         |

**Alternator / Genset -  
Specifications :**

|                    |       |  |
|--------------------|-------|--|
| Insulation         | Class | H                                      |
| Excitation         |       | brushless, rotating exciter (with AVR) |
| Number of poles    |       | 4                                      |
| Power factor       |       | 0.8 (lagging)                          |
| Voltage regulation | %     | within 1.0                             |
| Phase and wire     |       | 3-phase, 4-wire                        |

**RATING DEFINITIONS**

**PRIME POWER** : These ratings are applicable for supplying continuous electrical power (at variable load) in lieu of commercially purchased power. There is no limitation to the annual hours of operation and this model can supply 10% overload power for 1 hour in 12 hours. Average 75% load factor.

**STANDBY POWER** : These ratings are applicable for supplying continuous electrical power (at variable load) in the event of a utility power failure. No overload is permitted on these ratings. Maximum 85% load factor is peak continuous rated (as defined in ISO-8528-3) at 27°C

**NOTE \*** : "Air-on" refers to the real temperature of cooling air that reaches the cooling system