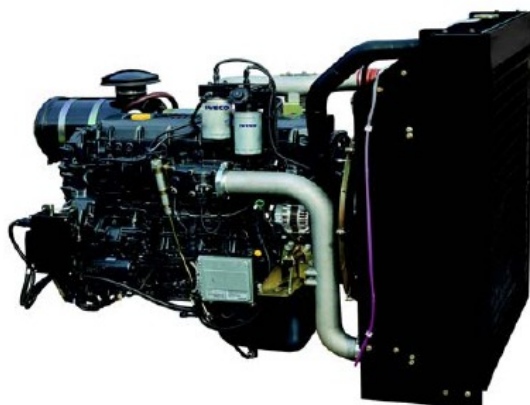


OPEN GENSETS WITH IVECO ENGINE



| | | | | |
|-----------------|------------------------|--------------------|-----------------------------|-----------------------------|
| 1500 RPM | 400/230 V 50 Hz | Type AI-200 | 200/160 Kva/KW (PRP) | 220/176 Kva/KW (LTP) |
|-----------------|------------------------|--------------------|-----------------------------|-----------------------------|

Engine: NEF 60TE2
Alternator: ECO38-1SN/4

Scope of Supply:

The engine and the alternator are mounted together forming a rigid monoblock, the shafts are connected by a flexible disc connection. The monoblock is mounted on a steel base frame via silent blocks. The base frame is including a fuel tank. Starting is electric and it includes a battery. The genset monitoring system consist of a control module.

GEN SET POWER

| Voltage | Hz | Phase | Cos Ø | PRP* Kva/KW | LTP** Kva/KW | Amp. |
|----------------|-----------|--------------|--------------|--------------------|---------------------|-------------|
| 415/240 | 50 | 3 | 0,8 | 200/160 | 220/176 | 306,4 |
| 400/230 | 50 | 3 | 0,8 | 200/160 | 220/176 | 317,9 |
| 380/220 | 50 | 3 | 0,8 | 200/160 | 220/176 | 334,7 |
| 240/120 | 50 | 3 | 0,8 | 200/160 | 220/176 | 529,9 |
| 230/115 | 50 | 3 | 0,8 | 200/160 | 220/176 | 552,9 |
| 220/110 | 50 | 3 | 0,8 | 200/160 | 220/176 | 578,0 |

PRP* Kva/KW:

Available electrical power (at a variable load) with a medium of 80% of the indicated maximum power. A 10% overload capability is available

LTP** Kva/KW:

Available electrical load (at a variable load) during a maximum of 500 hours per year. No overload capability is available.

Control Cubicle Alternatives

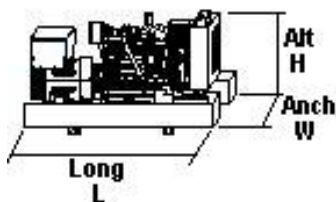
Manual/Remote Control Cubicle:: STANDARD MCP SAM 712 / OPTIONAL MCP DSE 5320

Automatic Control Cubicle: STANDARD ACP DSE 720 / OPTIONAL ACP DSE 5320

Options::

Please see the price list

TECHNICAL DATA

| Engine | | Alternator | |
|--------------------------------------|-------------------|--|-------------|
| Engine type: | NEF 60TE2 | Alternator Type: | ECO38-2SN/4 |
| Eng. Power kW COP: | - | Nº of poles: | 4 |
| Eng. Power kW PRP: | 175 | Eff. At 3/4 %: | 92,9 |
| Eng. Power kW LTP: | 193 | Eff. At 4/4 %: | 92,7 |
| Nº Cylinders: | 6 | Alt. rating PRP kVA III Kw II: | 200 |
| Displacement cm3: | 5900 | Alt. rating LTP kVA III kW II: | 220 |
| Bore/stroke (mm/mm): | 102 X 120 | Output Power PRP kVA III kW II: | 200 |
| Compression ratio: | 17,5 | Output Power LTP kVA III kW II: | 220 |
| Cooling: | WATER | Current Amp PRP: | 291 |
| Injection: | DIRECT | Current Amp LTP: | 321 |
| Aspiration: | TURBO/INTERCOOLER | Standard Circuit Breaker (Amp): | 325 |
| Standard governor: | ELECTRONIC | Xd (%): | 200 |
| Governing control quality: | G3 | X'd (%): | 11 |
| Speed droop mech gov. (%): | 0 | X: | 5,9 |
| Exhaust gases temperature (°C): | 581 | Nº of wires: | 12 |
| Exhaust gases flow (m3/h): | 2071 | Insulation: | H |
| Max Exh. Back pres. (mbar): | 50 | Regulator AVR: | UVR6 |
| Coolant capacity (lit.): | 44 | Protection: | IP21 |
| Cooling air flow (m3/h): | 21960 | DIMENSIONS | |
| Max allow. Intake dep. (mbar): | 50 | Height: | 1550 mm |
| Combustion air flow (m3/h): | 638 | Width: | 1020 mm |
| Oil cap. (Litres): | 17 | Length: | 2360 mm |
| Oil cons. (kg/hr or % of fuel cons): | 0,10% | Weight: | 1608 kgs |
| Min oil press warning (bar): | 2 | Tank: | 255 lit |
| Fuel cons. 25% lit/h: | 11 |  | |
| Fuel cons. 50% lit/h: | 20,5 | | |
| Fuel cons. 75% lit/h: | 33,8 | | |
| Fuel cons. 100% lit/h: | 42,5 | | |
| Electric system VDC: | 12V | | |
| Type: | Neg to ground. | | |
| Battery (Ah): | 180 | | |
| Starting motor (kW): | 3 | | |
| Flywheel Housing: | SAE3/11 | | |

Technical information available in download section.:

| Engine technical data | Alternator Technical data | Gen Set Drawing | Instalation drawing | Control cubicle descr. |
|-----------------------|---------------------------|-----------------|------------------------|------------------------|
| Engine manual | Alternator Manual | Gen Set Manual | Gen Set Condensed Man. | Controler manual |

Control Cubicles



MANUAL -REMOTE START CONTROL MODULE: MCP SAM 712

SAM 712 CONTROLLER

- Manual or Automatic remote start controller, Selector switch for Off, Man and Auto with key. Complete engine protection functions with alarms visualised via LEDs in the front. The controller is set up via 6 DIP switches in the rear of the case.
- Standard circuit breaker.and diferencial relay.



AUTOMATIC CONTROL MODULE : ACP DSE 720

DSE 720 CONTROLLER

- The Model 720 is a Manual or Automatic Start Control Module. The module is used to manually or automatically start and monitor a generator set.
- Operation of the module is via pushbutton controls with STOP/RESET, MANUAL, TEST, AUTO and START
- Communication via interface or cable via PC.Selected timers and alarms can be altered by the customer from the front panel. Alterations to the system are made using the 810 interface and a PC. This interface also provides real time diagnostic facilities. It is also possible to monitor and control the system via PC up to 100metres (111 yards) from the controller.
- Standard IV poles circuit breaker (until 85 Kva).



AUTOMATIC/MANUAL CONTROL MODULE: ACP-MCP DSE 5320

DSE 5320 CONTROLLER

- The Model 5320 is an Automatic Mains Failure Control Module. The module is used to monitor a mains supply and automatically start a standby generator set..
- Operation of the module is via pushbutton controls with STOP/RESET, MANUAL, TEST, AUTO and START
- The controller has a J 1939 CANBus interface for connection to modern engine ECU's. This enables engine protection and instrumentation without requiring additional sensors. Engine diagnostic information removes the need for both service equipment and cryptic diagnostic
- Comprehensive remote communication via RS232 port connecting via modem or PC.It is also possible to monitor and control the system via PC up to 100metres (111 yards) from the controller
- Standard IV poles circuit breaker (until 85 Kva.)