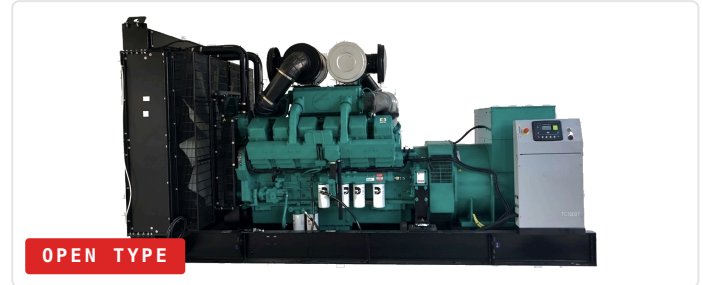


- DIESEL GENERATING SET

- POWERED BY CUMMINS KTA38-GA  
**INDUSTRIAL STANDBY & PRIME  
POWER SOLUTION**

# TC800T 800 KVA



STANDBY (ESP)

**800**

kVA // 640 kW

PRIME (PRP)

**725**

kVA // 580 kW

VOLTAGE // 3 $\phi$

**400v**

1155 A @ 50 Hz

NOISE @ 7M

**≤ 88 ± 2**

dB(A) // Silent @ 1m

## ELECTRICAL SPECIFICATIONS

01 //  
ELECTRICAL

Model	<b>TC800T</b>
Frequency	<b>50 Hz</b>
Phases / Wires	<b>3 Phase, 4 Wire</b>
Voltage	<b>400 / 230 V</b>
Rated Current	<b>1155 A</b>
Rated Speed	<b>1500 r/min</b>
Power Factor (cos $\phi$ )	<b>0.8</b>
Fuel Consumption @ 100%	<b>167 L/h</b>
Engine	<b>Cummins KTA38-GA</b>
Alternator	<b>Stamford S5L1D-H41</b>
Control Module	<b>DSE 7320 MKII</b>

## WEIGHT & DIMENSIONS

02 //  
PHYSICAL

### - OPEN TYPE

L 4325 ×  
W 2060 ×  
H 2208 mm

**7214** KG

### - SILENT TYPE

L 6058 ×  
W 2438 ×  
H 2591 mm

**10392** KG

**STANDARDS** GB/T 2820-2009 // ISO 8528 // CE //  
CNAS // IAF

### - STANDARD INCLUDED

Engine, alternator, cooling system, base frame (excl. fuel tank), shock absorber, air intake, control box with mains floating charge, plastic fan blades.

### - OPTIONAL ADD-ONS

Base frame with fuel tank, water jacket heater, fuel water separator, fuel heater, level sensors, switch box, auto-fueling system, battery frame, anti-condensation heater.

### - ACCESSORIES BUNDLED

Silencer, bellow, exhaust silencing system accessories (matching engine), battery, starting cord assembly, gen-set documentation, tools matched to engine.

- SECTION 01 // DIESEL ENGINE -

ENG.

MANUFACTURER: CUMMINS // 12-CYLINDER 60° V // TURBOCHARGED & AFTER-COOLED

POWER PLANT

4-STROKE DIESEL

# CUMMINS KTA38-GA

711 KW @ 1500 RPM

## ENGINE CORE

01 //  
POWER PLANT

Manufacturer	<b>CUMMINS</b>
Model	<b>KTA38-GA</b>
Engine Speed (rated)	<b>1500 RPM</b>
Cylinder / Arrangement	<b>12 / 60° V</b>
Displacement	<b>38.0 L</b>
Bore × Stroke	<b>159 × 159 mm</b>
Compression Ratio	<b>14.5 : 1</b>
Max Standby Power @ Rated	<b>711 kW</b>
Frequency Regulation	<b>≤ 1 %</b>
Governor Type	<b>Electronic</b>
Aspiration / Cooling	<b>Turbo &amp; After-cooled</b>

## FUEL / OIL / AIR

02 //  
CONSUMABLES

Fuel Consumption @ 100% PRP	<b>167 L / h</b>
Total Oil Capacity w/ Filters	<b>135 L</b>
Engine Air Flow	<b>873 L/s</b>
Exhaust Gas Flow	<b>2341 L/s</b>
Exhaust Temperature	<b>543 °C</b>
Max Back Pressure	<b>10 kPa</b>
Radiator & Engine Capacity	<b>204.4 L</b>
Max Water Temperature	<b>105 °C</b>
Thermostat Range	<b>82 - 93 °C</b>
Starter Voltage	<b>24 V DC</b>
Injection Type	<b>P/T Pump</b>

### - KEY ENGINE ADVANTAGES

- ▶ **Cummins KTA38 platform:** proven heavy-duty engine for industrial standby and prime power.
- ▶ Alloy-steel block and forged connecting rods for exceptional durability under sustained load.
- ▶ High combustion efficiency and optimised fuel consumption, engineered for continuous running.
- ▶ P/T pump injection technology — robust, complete combustion across load profiles.
- ▶ Globally available Cummins service parts and authorised service network.
- ▶ Turbocharged & after-cooled — high power density at altitude and elevated ambient.

– SECTION 02 // AC ALTERNATOR –

ALT.  
 MANUFACTURER: CUMMINS GENERATOR TECHNOLOGIES // BRUSHLESS PMG // IP23 CLASS H

# STAMFORD S5L1D-H41

3-PHASE AC  
**BRUSHLESS PMG**

IP23 / CLASS H

## CORE CONFIGURATION

01 // BUILD

Manufacturer	<b>STAMFORD</b>
Type	<b>S5L1D-H41</b>
Number of Phases	<b>3</b>
Power Factor (cos φ)	<b>0.8</b>
Pole Count	<b>4</b>
Bearing	<b>1 (Single)</b>
Coupling	<b>Direct (Flexible Disc)</b>
Exciter Type	<b>Brushless PMG</b>

## ELECTRICAL / PROTECTION

02 // PROTECTION

Insulation Class / Temp Rise	<b>H / H</b>
Degree of Protection	<b>IP 23</b>
AVR Model	<b>MX321</b>
Altitude Rating	<b>≤ 1000 m</b>
Winding Pitch	<b>2 / 3</b>
Winding Leads	<b>6 / 12</b>
Voltage Regulation	<b>± 1.0 %</b>
Overspeed Capability	<b>2250 r/min (1 min)</b>

### – STAMFORD ALTERNATOR QUALITY PROGRAM

- ▶ Wire-wound (random-wound) stator technology — industry benchmark for all gen-set configurations.
- ▶ Brushless excitation with PMG-fed AVR — maintenance-free, high-reliability voltage control.
- ▶ IP21, IP22, IP23 and IP44 enclosure protection options available.
- ▶ Ideal for marine/offshore, UPS, telecoms, construction and continuous/standby power.
- ▶ Manufactured under ISO 9001 and ISO 14001 certified environments.
- ▶ Licensed service network across Southeast Asia for parts and warranty support.

**STANDARDS** GB755 // BS5000 Part 3 // VDE 0530 // NEMA MG1-22 // IEC-34 // CSA C22-100 // AS1359

- SECTION 03 // CONTROL MODULE -

CTRL.

AUTO START & AUTO MAINS FAILURE (AMF) CONTROL MODULE // IP65 // ETHERNET-READY

AMF + AUTO START

GEN-SET CONTROLLER

IP65 / 250-EVENT LOG

# DEESEA DSE 7320 MKII

## PHYSICAL SPECS

01 // DIMENSIONS

Overall Size	<b>240 × 181 × 42 mm</b>
Overall (imperial)	<b>9.4" × 7.1" × 1.6"</b>
Panel Cutout	<b>220 × 160 mm</b>
Panel Cutout (imperial)	<b>8.7" × 6.3"</b>
Weight	<b>400 g</b>
Ingress Protection	<b>IP65 (with gasket)</b>
Display	<b>132 × 64 px • 4-line LCD</b>
Inputs / Outputs	<b>9 / 8 Configurable</b>
Event Log	<b>250 Events</b>
Operating Temperature	<b>-30 to +70 °C</b>

## MKII ENHANCEMENTS

02 // UPGRADES

Processing Power	<b>Upgraded CPU</b>
USB Host Port	<b>Type-A (Firmware)</b>
USB Device Port	<b>Type-B (PC Config)</b>
Front Editing	<b>PIN Protected</b>
Config Suite	<b>v2 Compatible</b>
Tier 4 CAN Support	<b>Enhanced</b>
Backward Mounting	<b>Identical Cutout</b>
Languages	<b>Multi-lingual</b>
DSENet® Expansion	<b>Supported</b>
Real-Time Clock	<b>Battery Backed-up</b>

### - CORE FEATURES

- 4-Line back-lit LCD text display
- Five-key menu navigation
- Front panel editing with PIN protection
- Customisable status screens & power save
- Up to 3 remote display units
- Tier 4 CAN engine support
- CAN & Magnetic Pick-up sensing
- Integral PLC editor

### - PROTECTION & MONITORING

- kW & kVAR protection
- Reverse power (kW & kVAR) protection
- Unbalanced load protection
- Independent earth fault trip
- Charge alternator failure alarm
- Fuel usage monitor & low-fuel alarms
- LED and LCD alarm indication
- 3 configurable maintenance alarms

### - LOAD & POWER CONTROL

- Automatic load transfer (AMF)
- Load shedding & dummy load outputs
- Power monitoring (kWh, kVAR, kVAh)
- Manual speed control (CAN engines)
- Manual fuel pump control
- Engine exerciser schedule
- Idle control for starting & stopping
- Multiple date/time scheduler

### - CONNECTIVITY & SOFTWARE

- USB host + device connectivity
- RS232 & RS485 communications
- Configurable Gencomm pages
- Remote SCADA monitoring via PC software
- Advanced SMS messaging (start/stop via SMS)
- Ethernet via DSE860/865 modules
- Licence-free DSE Config Suite PC software
- DSENet® expansion compatible