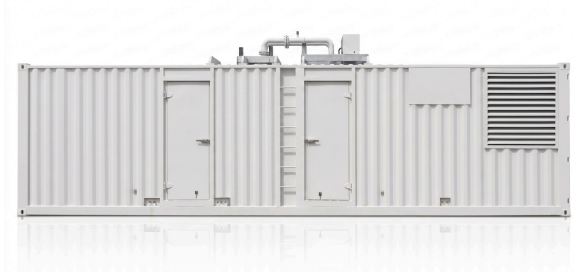
– DIESEL GENERATING SET

TC1375T 1375 KVA

– POWERED BY CUMMINS KTA50-G3

INDUSTRIAL STANDBY & PRIME POWER SOLUTION



SILENT TYPE

OPEN TYPE

STANDBY (ESP)	PRIME (PRP)	VOLTAGE // 3Φ	NOISE @ 7M
1375 kVA // 1100 kW	**1250** kVA // 1000 kW	**400**V 1985 A @ 50 Hz	**≤ 88 ± 2** dB(A) // Silent

ELECTRICAL SPECIFICATIONS

01 // ELECTRICAL

Model	**TC1375T**
Frequency	**50 Hz**
Phases / Wires	**3 Phase, 4 Wire**
Voltage	**400 / 230 V**
Rated Current	**1985 A**
Rated Speed	**1500 r/min**
Power Factor (cos φ)	**0.8**
Fuel Consumption @ 100%	**278 L/h**
Engine	**CUMMINS KTA50-G3**
Alternator	**STAMFORD PI734D2**
Control Module	**DSE 7320 MKII**

WEIGHT & DIMENSIONS

02 // PHYSICAL

– OPEN TYPE

L **5200** ×
W **1950** ×
H **2450** mm

10800 KG

Tank: 1000 L

– SILENT TYPE

L **6500** ×
W **2300** ×
H **2800** mm

12200 KG

Tank: 1000 L

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 // 16-CYLINDER VEE // TURBOCHARGED & AFTERCOOLED

CUMMINS KTA50-G3

POWER PLANT
4-STROKE DIESEL

1100 KW @ 1500 RPM

ENGINE CORE

01 // POWER PLANT

Manufacturer	CUMMINS
Model	KTA50-G3
Engine Speed (rated)	1500 RPM
Cylinder / Arrangement	16 / V (Vee)
Displacement	50.3 L
Bore × Stroke	159 × 159 mm
Compression Ratio	13.9 : 1
Max Standby Power	1100 kW
Frequency Regulation	≤ 1 %
Governor Type	Electronic (EFC)
Aspiration / Cooling	Turbocharged & Aftercooled

FUEL / OIL / AIR

02 // CONSUMABLES

Fuel Consumption @ 100% PRP	278 L / h
Fuel Consumption @ 75% PRP	208 L / h
Fuel Consumption @ 50% PRP	138 L / h
Fuel Consumption @ 25% PRP	75 L / h
Total Oil Capacity w/ Filters	177 L
Engine Air Flow	6500 L/s
Exhaust Gas Flow	16000 L/s
Exhaust Temperature	510 °C
Max Back Pressure	7.5 kPa
Radiator & Engine Capacity	243 L
Max Water Temperature	99 °C

— KEY ENGINE ADVANTAGES

- **CUMMINS engines:** advanced design, reliable performance and durable continuous operation.
- High combustion efficiency and low fuel consumption, engineered for continuous running.
- Globally available CUMMINS service parts and authorised service network.
- Alloy-steel block and connecting rods for high durability under load.
- Modular electronic injection technology — precise control and complete combustion.
- Proven platform operating across industrial, data-centre and utility applications.

— SECTION 02 // AC ALTERNATOR —

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

3-PHASE AC
BRUSHLESS SHUNT
IP23 / CLASS H

STAMFORD
PI734D2

CORE CONFIGURATION
01 // BUILD

Manufacturer	STAMFORD
Type	PI734D2
Number of Phases	3
Power Factor (cos φ)	0.8
Pole Count	4
Bearing	1 (Single)
Coupling	Direct
Exciter Type	Brushless SHUNT / PMG

ELECTRICAL / PROTECTION
02 // PROTECTION

Insulation Class / Temp Rise	H / H
Degree of Protection	IP 23
AVR Model	MX341
Altitude Rating	≤ 1000 m
Winding Pitch	2/3
Winding Leads	6 / 12
Voltage Regulation	± 1.0 %
Overspeed Capability	2250 r/min (1 min)

— STAMFORD ALTERNATOR QUALITY PROGRAM

- Utilising wire-wound (random-wound) technology — industry benchmark for all gen-set configurations.
- IP21, IP22, IP23 and IP44 enclosure protection options available.
- Manufactured under ISO 9001 and ISO 14001 certified environments.
- Brushless excitation with AVR — maintenance-free, high-reliability voltage control.
- Ideal for marine/offshore, UPS, telecoms, construction and continuous/standby power.
- 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

DEEPSEA
DSE 7320 MKII

PHYSICAL SPECS

01 // DIMENSIONS

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

MKII ENHANCEMENTS

02 // UPGRADES

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

— 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

— 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

— LOAD & POWER CONTROL

- Automatic load transfer (AMF)
- Load shedding & dummy load outputs
- Power monitoring (kWh, kVAr, kVAh)
- Manual speed control (CAN engines)
- Engine exerciser schedule
- Idle control for starting & stopping

— 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