DALE GENERATING SET DATASHEET
CNE 405-570 – 3 PHASE, 380-573 kVA

Features

- **Acoustic enclosures compliant with the Noise Directive of the EU 2000/14/EC**
- **Mechanical or electronic governors with CAN-bus communication**
- **Integral high capacity fuel tanks allow a minimum of 8 hours running time**
- **Bunded fuel tanks with leak protection in accordance with the DEFRA Pollution Prevention Guidelines PPG2**
- **Durable and efficient diesel engines giving fuel economy and low exhaust emissions**
- **Multi function digital generator controllers incorporating engine and alternator protections and digital metering. Simple to operate with advanced PCB layout for high reliability**
- **Standard product can be configured for multiple applications including standby to mains, prime power, parallel with other generating sets and the utility applications**
- **Product supported by Dale warranty**

Product Range

Model			CNE 405	CNE 455	CNE 495	CNE 530	CNE 570
Prime Power	*kVA*	*(PRP)*	380	414	450	500	515
Prime Power	*kW*	*(PRP)*	304	331	360	400	412
Emergency Standby Power	*kVA*	*(ESP)*	404	455	495	530	573
Emergency Standby Power	*kW*	*(ESP)*	323	364	396	424	458
Standby Amps @ 380V, 50Hz	*A*		614	691	752	805	871

Specifications - General

Engine Manufacturer		Cummins	Cummins	Cummins	Cummins	Cummins
Engine Model		QSX15G4	QSX15G4	QSX15G6	QSX15G8	QSX15G8
Gross Engine Power Output @ Rated RMP	*kWm* *Hp*	455 610	455 610	459 615	500 670	500 670
Aspiration Type*		TAC	TAC	TAC	TAC	TAC
Engine Capacity	*Litres*	15	15	15	15	15
Cylinders		6 in-line	6 in-line	6 in-line	6 in-line	6 in-line
Rated Engine Speed	*RPM*	1500	1500	1500	1500	1500
Governor		Electronic	Electronic	Electronic	Electronic	Electronic
Fuel Consumption *(Ltrs/Hr)*	*Full Load*	85.7	85.7	95.9	103	103
	75% Load	67	67	74.3	78.7	78.7
	50% Load	45.7	45.7	51.3	54.7	54.7

Specifications - Open

Weight *(Net)*	*Kilo Grams*	3192	3295	3295	3425	3575
Dimensions *(L x W x H)*	*Millimeters*	3450 x 1460 x 2240	3450 x 1460 x 2240	3450 x 1460 x 2240	3450 x 1460 x 2240	3450 x 1460 x 2240
Dimensions *(with base tank)*	*Millimeters*	5000 x 1450 x TBA	5000 x 1450 x TBA	5500 x 1750 x TBA	5500 x 1750 x TBA	5500 x 1750 x TBA
Fuel Capacity	*Litres*	1400	1400	1960	1960	1960
Autonomy	*Hours*	20	20	26	25	25

Specifications - Canopied

Weight *(Net)*	*Kilo Grams*	TBA	TBA	TBA	TBA	TBA
Dimensions *(L x W x H)*	*Millimeters*	5000 x 1460 x 2300	5000 x 1460 x 2300	5500 x 1750 x 2550	5500 x 1750 x 2550	5500 x 1750 x 2550
Fuel Capacity	*Litres*	1400	1400	1960	1960	1960
Autonomy	*Hours*	20	20	26	26	25
Noise Level	*dBA*	78 @ 7m	78 @ 7m	78 @ 7m	78 @ 7m	78 @ 7m

Prime: Continuous running at variable load for unlimited periods. A 10% overload is permissible for 1 hour in any 12 hour period. In accordance with ISO 8528, ISO3046, BS 5514.

Standby: Continuous running at variable load for the duration of the emergency. No overload permitted on these ratings. In accordance with ISO 3046, BS 5514.

*CAC – Turbo charged and charge air cooled
TAC – Turbo charged, after cooled
IC – Turbo charge and intercooled

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Standard Specifications

Engine	Cummins heavy duty industrial diesel engine 4 cycle, water cooled and turbo charged Mechanical engine governor (Electronic CNE90) Direct injection fuel system 12 Vdc starter and charge alternator Replaceable fuel filter, oil filter and dry element air filter Engine driven cooling radiator Lead acid starting batteries with rack and cables Flexible fuel connection hoses and manual sump oil drain valve Jacket water heater (optional) Operation manuals and circuit diagram documents
Alternator	Brushless single bearing, 4 pole Insulation class H Standard degree of protection IP21 Self exciting and self regulating Stator windings with 2/3 pitch for improved harmonics Impregnation with tropicalised epoxy varnish Solid state automatic voltage regulator
Baseplate	The complete generating set is mounted on a heavy duty fabricated steel base plate with engine and alternator mounting points Heavy duty lifting eyes are provided for easier installation of the generating set
Exhaust	Loose industrial exhaust silencer
Power outlet	3 Pole MCCB Mains powered battery charger

Dale 5210 Control System	Multi function digital control system The control system is designed to monitor the mains supply via the Dale Transfer Switch Automatic starting in the event of a mains failure Front panel programming of the module settings Remote communication via RS 232 or RS 485 "*modbus*" output Scrolling digital LCD display Event logging of shutdown alarms Stop / Reset / Auto / Manual / Test / Start
LCD Display Metering	Generator volts (Ph – Ph / Ph – N) Generator amps (L1, L2, L3) Generator frequency (Hz) Generator kVA Generator kW Generator power factor Engine oil pressure Engine temperature Engine speed Engine hours run Plant battery voltage
Alarms	Under / Over generator voltage Under / Over generator frequency Over Current Low oil pressure High engine temperature Under / Over speed Fail to start Fail to stop Emergency stop Charge fail Low / High battery voltage Can data fail – on Canbus engines only Can ECU fail – on Canbus engines only

Optional

Sound Attenuated Canopies	Weatherproof modular canopy assemblies Electrostatic polyester power paint system Engine exhaust system manufactured from aluminum plated steel Thermally insulated engine exhaust system Emergency stop push button on outside of the canopy Large doors giving access for maintenance Compliant with the European Union Noise Directive 2000/14/EC
Engine	Residential exhaust silencer Automatic fuel filling system from remote bulk tank
Alternator	Over sized alternator for motor starting and thyristor load applications
Control	Automatic transfer switches Earth fault protection Automatic synchronizing and load control

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