

Generator Set Specifications

Maximum Rating	680 kVA
Minimum Rating	680 kVA
Emissions/Fuel Strategy	Low Fuel Consumption
Voltage	380 to 415 Volts
Frequency	50 Hz
Speed	1500 rpm
Duty Cycle	Standby, Prime

Engine Specifications

Engine Model	3412C TA, V-12, 4-Stroke Water-Cooled Diesel
Bore	5.4 in
Stroke	6 in
Displacement	1648.86 in ³
Compression Ratio	13:01
Aspiration	Turbocharged, Air to Air Aftercooled
Fuel System	Pump and Lines
Governor Type	ADEM™ A5

Generator Set Dimensions

Length - Maximum	162.4 in
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Width - Minimum	75 in
Width - Maximum	78.3 in
Height - Maximum	75 in
Dry Weight - Genset (minimum)	12039 lb
Dry Weight - Genset (maximum)	13030 lb

3412C | 750kVA Standard Equipment

Air Inlet System

Air cleaner, single element canister type with service indicator

Control Panel

GCCP Control panel

Over/under voltage (27 / 59)

Environmental sealed front face

Generator phase sequence

Communications

Digital I/O module

Features include:

2 Programmable relay outputs (Form C)

Compatible with the following optional modules:

Customer data link (Modbus RTU)

4 programmable relay outputs (Form A)

Amps (per phase & average)

kVA (per phase, average & percent)

Text alarm/event descriptions

Low coolant level

Generator temperature monitoring module

Run/auto/ stop/control

Overspeed

Serial annunciator module data link

Emergency stop pushbutton

Frequency (Hz)

RPM

6 programmable digital inputs

Oil pressure (psi, kPa or bar)

Engine cycle crank

Operating hours

Local annunciator

coolant temperature

kW-hr (total)

Programmable protective relaying functions:

kW (per phase, average & percent)

Low oil pressure

Reverse power (kW) (32)

Remote Serial annunciator

DC volts

Power factor (per phase & average)

Remote CAN annunciator

24 Volt DC operation

Accessory module data link

Failure to start (overcrank)

Over/under frequency (81 o/u)

kVAr (per phase, average & percent)

Warning/shutdown with common LED indication of shutdowns for:

Low coolant temperature

2 Programmable digital outputs

Reverse reactive power (kVAr) (32RV)

Emergency stop

Digital indication for:

High coolant temperature

Speed adjust

Voltage adjust

Volts (L-L & L-N)

Overcurrent (50 / 51)

Cooling System

Fan and belt guards

Coolant drain line with valve, piped to edge of base

Caterpillar extended life coolant

Coolant level shutdown

Radiator with guard (Sized for 50 degrees C)

Exhaust System

Stainless steel exhaust flex with ANSI style outlet flange, gasket, bolts and mating weld flange, shipped loose

Fuel System

Flexible fuel lines terminated on base

Fuel priming pump

Primary and Secondary fuel filters

Water separator

Generator And Attachments

3-phase sensing

SR4B self excited

Class H insulation
2:1 Volts/Hz
Reactive droop
VR6 voltage regulator
Busbar termination
Class F temperature rise
12 Leads

Governing System

Cat electronic governor

Lube System

Oil drain line with valve, piped to edge of base
Lubricating oil
Oil filter
Fumes disposal, piped to front of radiator

Mounting System

Base, formed steel with linear vibration isolators between base and engine-generator

Starting / Charging System

Battery with rack, cables
45 amp Charging alternator
24 volt starting motor
Fuel shutoff solenoid

3412C | 750kVA Optional Equipment

Air Inlet System

Open element air cleaners
Heavy duty air cleaners
Dual element air cleaners

Circuit Breakers

1600 Amp, 3 pole, Non-UL, 100% rated, 24 volt DC shunt trip
1250, 1600 Amp, 3 pole, IEC 100% rated, 24 volt DC shunt trip

Control Panel

First local annunciators
Local discrete I/O package
Generator temperature monitoring package
Ground fault relay
Remote custom annunciator
GCCP Control panel

Generator running VFC
GCCP Control panel
Vandal proof panel door
Common alarm/shutdown relay

Cooling System

Jacket water heaters
Radiator duct flange

European Certifications

Eurasian Conformity (EAC) mark

Exhaust System

Elbow kit
Manifold and turbocharger guards
Through wall installation kit
Mufflers

Generator And Attachments

Digital voltage regulator
Oversize and premium generators
Space heater
Permanent magnet excitation (PMG)

Lube System

Manual sump pump

Mounting System

Fuel tank base (1200 ltr)

Special Tests / Reports

PGS Test report @ 1.0 power factor
PGS Test report @ 0.8 power factor

Starting / Charging

Heavy duty starting system
Battery chargers
Battery disconnect switch
Oversize batteries

Governing System

Electronic load share