



TST CO.

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PRODUCT SPECIFICATIONS FOR 3412C (50 HZ)

GENERATOR SET SPECIFICATIONS

| | |
|--------------------------------|----------------------|
| Minimum Rating | 680 kVA |
| Maximum Rating | 900 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 | TA |
| Fuel System | Pump and Lines |
| Governor Type | ADEM™ A5 |

GENERATOR SET DIMENSIONS

| | |
|-------------------------|----------|
| Length - Maximum | 162.4 in |
| 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 (50 HZ) STANDARD EQUIPMENT

AIR INLET SYSTEM

Air cleaner, single element canister type with service indicator

CONTROL PANEL

EMCP 4.2B

Customer data link (Modbus RTU)

2 programmable relay outputs (Form C)

Features:

Voltage adjust

Failure to start (overcrank)

Volts (L-L & L-N)

Reverse power (kW) (32)

Accessory module data link

Over / under voltage (27 / 59)

Speed adjust

Low coolant temperature

Oil pressure (psi, kPa or bar)

Environmental sealed front face

Generator temperature monitoring module

DC volts

Serial annunciator module data link

Reverse reactive power (kVAr) (32RV)

Amps (per phase & average)

High coolant temperature

24-volt DC operation

Communications

Power Factor (per phase & average)

Compatible with the following optional modules:

Low coolant level

Text alarm / event descriptions

Digital I/O module

6 programmable digital inputs

Low oil pressure

Remote Serial annunciator

Engine cycle crank

Local annunciator

Digital indication for:

Over / under Frequency (81 o/u)

Generator phase sequence

Emergency stop

kVAr (per phase, average & percent)

Run / Auto / Stop Control

Operating hours

kVA (per phase, average & percent)

Warning / shutdown with common LED indication of shutdowns for:

Emergency stop pushbutton

Frequency (Hz)

coolant temperature

Overspeed

4 programmable relay outputs (Form A)

kW-hr (total)

2 programmable digital outputs

Remote CAN annunciator

Overcurrent (50 / 51)

kW (per phase, average & percent)

RPM

Programmable protective relaying functions:

COOLING SYSTEM

Radiator with guard (Sized for 50 degrees C)

Coolant level shutdown

Coolant drain line with valve, piped to edge of base

Fan and belt guards

Caterpillar Extended Life Coolant

EXHAUST SYSTEM

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

FUEL SYSTEM

Primary and secondary fuel filters

Fuel priming pump

Flexible fuel lines terminated on base

Water separator

GENERATOR AND ATTACHMENTS

2:1 Volts/Hz

Bus bar termination

3-phase sensing

Class H insulation

Reactive droop

VR6 Voltage Regulator

SR4B self excited

12 lead

Class F temperature rise

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

45 amp charging alternator

Battery with rack, cables

Fuel shutoff solenoid

24 volt starting motor

3412C (50 HZ) OPTIONAL EQUIPMENT

AIR INLET SYSTEM

Heavy duty air cleaners

Dual element air cleaners

Open 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

Generator temperature monitoring package

EMCP 4.4

First local annunciators

Vandal proof panel door

Remote custom annunciators

EMCP 4.3

Local discrete I/O package

Common alarm / shutdown relay

Ground fault relay

Generator running VFC

COOLING SYSTEM

Radiator duct flange

Jacket water heaters

EUROPEAN CERTIFICATIONS

Eurasian conformity (EAC) mark

EXHAUST SYSTEM

Through wall installation kit

Mufflers

Manifold and turbocharger guard

Elbow kit

GENERATOR AND ATTACHMENTS

Permanent magnet excitation

Space heater

Digital voltage regulator

Oversize and premium generators

LUBE SYSTEM

Manual sump pump

MOUNTING SYSTEM

Fuel tank base (1200 ltr)

SPECIAL TESTS / REPORTS

PGS test report @ 0.8 power factor

PGS test report @ 1.0 power factor

STARTING / CHARGING

Oversize batteries

Battery chargers

Battery disconnect switch

Heavy-duty starting system

GOVERNING SYSTEM

Electronic load share