

Model – Cummins - APS C11



Salient Features

Power:

- ✓ Prime Power @ 50Hz : 8kw/ 10kVA
- ✓ Stand By Power @ 50Hz : 50Hz : 8.8kw/ 11kVA

Features:

- ✓ D Engine (Cummins X1.3G2)
- ✓ Charge alternator 12V Governor: Mechanical
- ✓ Alternator (Stamford PI044E)
- ✓ Single bearing alternator IP 23, insulation class H/H
- ✓ Radiator 50 C (122 F) max
- ✓ Skid and vibration isolators
- ✓ Dry type air filter
- ✓ Main line circuit breaker
- ✓ 12V battery, rack and cable
- ✓ Industrial silencer
- ✓ User manual

Engine Options:

Engine & Radiator:

- ✓ Heat shield protection
- ✓ Oil drain extension
- ✓ Heavy duty oil filter
- ✓ Lube oil drain pump
- ✓ Radiator core guard
- ✓ Battery charger
- ✓ Block header

Fuel:

- ✓ 24 hour day tank
- ✓ Bulk fuel tank connections
- ✓ Water separator fuel filter

Alternator:

- ✓ Anti-Condensation Heater
- ✓ Enforced impregnation
- ✓ Oversized alternator

Exhaust:

- ✓ Residential silencer
- ✓ Flexible exhaust connection

Enclosure:

- ✓ EM-1,5
- ✓ 83dba @ 1m silent canopy

Control Panel:

- ✓ Paralleling System
- ✓ Co-Map
- ✓ Remote annunciator
- ✓ Key start panel

Literature:

- ✓ Parts
- ✓ Maintenance

Engine Data			
MANUFACTURER/MODEL	Cummins X1.3G2	COMPRESSION RATIO	18.5:1
CYLINDER ARRANGEMENT	2 inline	RATED RPM	1500Rpm
DISPLACEMENT	1.29L	GOVERNOR : TYPE	Mechanical
BORE AND STROKE	95 x 91mm	GBMEP	2124 KPA

Alternator Data			
MANUFACTURER / TYPE	Stamford PI044E	EXCITER TYPE	NO
NUMBER OF PHASE	3	INSULATION: CLASS, TEMPERATURE RISE	HH
POWER FACTOR COS PHI	0.8	VOLTAGE REGULATOR	+ / - 0.5%
ALTITUDE	1000	BEARING NUMBER	< 2% (AT NO LOAD)
OVER SPEED	RPM	COUPLING	BRUSHLESS
POLE: NUMBER	4	EFFICIENCIES @ 4/4 LOAD	FULL

Other Alternator Data			
CONTINUOUS NOMINAL RATING @ 40° C	10kVA	DIRECT AXIS TRANSIENT REACTANCE ATURATED (X'd)	18.5%
STANDBY RATING @ 27° C	11KVA	SHORT CIRCUIT TRANSIENT TIME CONSTANT (T'd)	18ms
EFFICIENCIES @ 4/4 LOAD	83.5%	DIRECT AXIS SUBTRANSIENT REACTANCE SATURATED (X'd)	13.3%
AIR FLOW	3.5 m3/S (7416.05cfm)	SUBTRANSIENT TIME CONSTANT (T'd)	12ms
SHORT CIRCUIT RATIO: 50 (Kcc)	0.78	QUADRA AXIS SUBTRANSIENT REACTANCE SATURATED (X'q)	72.7%
DIRECT AXIS SYNCHRO REACTANCE UNSATURATED (Xd)	206%	ZERO SEQUENCE REACTACE UNSATURATED (Xo)	6.4%
QUADRA AXIS SYNCHRO REACTANCE UNSATURATED (Xq)	68%	NEGATIVE SEQUENCE REACTANCE SATURATED (X2)	18.3%
OPEN CIRCUIT TIME CONSTANT: 50 (T'do)	0.78ms	ARMATURE TIME CONSTANT (Ta)	13ms

Exhaust System			
EXHAUST GAS FLOW	14.02L	EXHAUST TEMPERATURE	650 °C

Fuel System			
100% (OF THE PRIME POWER)	3.0 L/H	75% (OF THE PRIME POWER)	2.4 L/H
50% (OF THE PRIME POWER)	1.80 L/H		

Oil System	
Total oil capacity w/filters	0.79 Litres

Air Intake			
MAX. INTAKE RESTRICTION	COMBUSTION AIR FLOW: 108 m ³ /min	ENGINE AIR FLOW	COOLING AIR FLOW: 13.38 m ³ /min

Coolant System		
RADIATOR & ENGINE CAPACITY	MAX WATER TEMPERATURE	CONTACT APS TEAM SALES TEAM FOR FURTHER INFORMATION

Generator Ratings						
VOLTAGE	HZ	PHASE	P.F.	STANDBY AMPS	STAND BY RATINGS KW/KVA	PRIME RATINGS KW/KVA
415/240	50	3	1	16.5	8.8kW / 11kVA	8kW / 10kVA
220/110	50	3	1	16.5	8.8kW / 11kVA	8kW / 10kVA

RRP: Prime Power is available for an unlimited number of annual operating hours in variable load applications, in accordance with ISO 8528-1. A 10% overload capability is available for a period of 1 hour within 12hour period of operation, in accordance with ISO 3046-1.

ESP: The standby power rating is applicable for supplying emergency power in variable load applications in accordance with ISO 8528-1. Overload is not allowed

Model – Cummins - APS C17



Salient Features

Power:

- ✓ Prime Power @ 50Hz : 12kW / 15kVA
- ✓ Stand By Power @ 50Hz : 13.2kW / 17 kVA

Features:

- ✓ D Engine (Cummins X2.5G2)
- ✓ Charge alternator 12V Governor: Mechanical
- ✓ Alternator (Stamford PIO44D)
- ✓ Single bearing alternator IP 23, insulation class H/H
- ✓ Radiator 50 C (122 F) max
- ✓ Skid and vibration isolators
- ✓ Dry type air filter
- ✓ Main line circuit breaker
- ✓ 12V battery, rack and cable
- ✓ Industrial silencer
- ✓ User manual

Engine Options:

Engine & Radiator:

- ✓ Heat shield protection
- ✓ Oil drain extension
- ✓ Heavy duty oil filter
- ✓ Lube oil drain pump
- ✓ Radiator core guard
- ✓ Battery charger
- ✓ Block header

Fuel:

- ✓ 24 hour day tank
- ✓ Bulk fuel tank connections
- ✓ Water separator fuel filter

Alternator:

- ✓ Anti-Condensation Heater
- ✓ Enforced impregnation
- ✓ Oversized alternator

Exhaust:

- ✓ Residential silencer
- ✓ Flexible exhaust connection

Enclosure:

- ✓ EM-1,5
- ✓ 83dba @ 1m silent canopy

Control Panel:

- ✓ Paralleling System
- ✓ Co-Map
- ✓ Remote annunciator
- ✓ Key start panel

Literature:

- ✓ Parts
- ✓ Maintenance

Engine Data			
MANUFACTURER/MODEL	Cummins X2.5G2	COMPRESSION RATIO	18.5:1
CYLINDER ARRANGEMENT	3 inline	RATED RPM	1500Rpm
DISPLACEMENT	2.5 L	GOVERNOR : TYPE	Mechanical
BORE AND STROKE	91.44 x 127 mm	GBMEP	2124 KPA

Alternator Data			
MANUFACTURER / TYPE	Stamford PI044E	EXCITER TYPE	NO
NUMBER OF PHASE	3	INSULATION: CLASS, TEMPERATURE RISE	HH
POWER FACTOR COS PHI	0.8	VOLTAGE REGULATOR	+ / - 0.5%
ALTITUDE	1000	BEARING NUMBER	1 (AT NO LOAD)
OVER SPEED	RPM	COUPLING	DIRECT
POLE: NUMBER	4	EFFICIENCIES @ 4/4 LOAD	FULL

Other Alternator Data			
CONTINUOUS NOMINAL RATING @ 40° C	15 KVA	DIRECT AXIS TRANSIENT REACTANCE ATURATED (X'd)	18.5%
STANDBY RATING @ 27° C	16.5 KVA	SHORT CIRCUIT TRANSIENT TIME CONSTANT (T'd)	18ms
EFFICIENCIES @ 4/4 LOAD	83.5%	DIRECT AXIS SUBTRANSIENT REACTANCE SATURATED (X'd)	13.3%
AIR FLOW	3.5 m3/S (7416.05cfm)	SUBTRANSIENT TIME CONSTANT (T'd)	12ms
SHORT CIRCUIT RATIO: 50 (Kcc)	0.78	QUADRA AXIS SUBTRANSIENT REACTANCE SATURATED (X'q)	72.7%
DIRECT AXIS SYNCHRO REACTANCE UNSATURATED (Xd)	206%	ZERO SEQUENCE REACTACE UNSATURATED (Xo)	6.4%
QUADRA AXIS SYNCHRO REACTANCE UNSATURATED (Xq)	68%	NEGATIVE SEQUENCE REACTANCE SATURATED (X2)	18.3%

Exhaust System			
EXHAUST GAS FLOW	14.02L	EXHAUST TEMPERATURE	650 °C
OPEN CIRCUIT TIME CONSTANT: 50 (T'do)	0.78ms	ARMATURE TIME CONSTANT (Ta)	13ms

Fuel System			
100% (OF THE PRIME POWER)	3.4 L/H	75% (OF THE PRIME POWER)	2.6 L/H
50% (OF THE PRIME POWER)	2.1 L/H		

Oil System	
Total oil capacity w/filters	0.82 Litres

Air Intake			
MAX. INTAKE RESTRICTION	COMBUSTION AIR FLOW: 108 m ³ /min	ENGINE AIR FLOW	COOLING AIR FLOW: 14.50 m ³ /min

Coolant System		
RADIATOR & ENGINE CAPACITY	MAX WATER TEMPERATURE	TYPE OD COOLANT WATER

Generator Ratings						
VOLTAGE	HZ	PHASE	P.F.	STANDBY AMPS	STAND BY RATINGS KW/KVA	PRIME RATINGS KW/KVA
415/240	50	3	1	24.75	13.2kW / 16.5kVA	12kW / 15kVA
220/110	50	3	1	24.75	13.2kW / 16.5kVA	12kW / 15kVA

RRP: Prime Power is available for an unlimited number of annual operating hours in variable load applications, in accordance with ISO 8528-1. A 10% overload capability is available for a period of 1 hour within 12hour period of operation, in accordance with ISO 3046-1.

ESP: The standby power rating is applicable for supplying emergency power in variable load applications i accordance with ISO 8528-1. Overload is not allowed

Model – Cummins - APS C22



Salient Features

Power:

- ✓ Prime Power @ 50Hz : 16kW / 20kVA
- ✓ Stand By Power @ 50Hz : 17.6kW / 22kVA

Features:

- ✓ D Engine (Cummins X2.5G2)
- ✓ Charge alternator 12V Governor: Mechanical
- ✓ Alternator (Stamford PI144G)
- ✓ Single bearing alternator IP 23, insulation class H/H
- ✓ Radiator 50 C (122 F) max
- ✓ Skid and vibration isolators
- ✓ Dry type air filter
- ✓ Main line circuit breaker
- ✓ 12V battery, rack and cable
- ✓ Industrial silencer
- ✓ User manual

Engine Options:

Engine & Radiator:

- ✓ Heat shield protection
- ✓ Oil drain extension
- ✓ Heavy duty oil filter
- ✓ Lube oil drain pump
- ✓ Radiator core guard
- ✓ Battery charger
- ✓ Block header

Fuel:

- ✓ 24 hour day tank
- ✓ Bulk fuel tank connections
- ✓ Water separator fuel filter

Alternator:

- ✓ Anti-Condensation Heater
- ✓ Enforced impregnation
- ✓ Oversized alternator

Exhaust:

- ✓ Residential silencer
- ✓ Flexible exhaust connection

Enclosure:

- ✓ EM-1,5
- ✓ 83dba @ 1m silent canopy

Control Panel:

- ✓ Paralleling System
- ✓ Co-Map
- ✓ Remote annunciator
- ✓ Key start panel

Literature:

- ✓ Parts
- ✓ Maintenance

Engine Data			
MANUFACTURER/MODEL	Cummins X2.5G2	COMPRESSION RATIO	18.5:1
CYLINDER ARRANGEMENT	3 inline	RATED RPM	1500Rpm
DISPLACEMENT	2.5 L	GOVERNOR : TYPE	Mechanical
BORE AND STROKE	91.44 x 127 mm	GBMEP	2124 KPA

Alternator Data			
MANUFACTURER / TYPE	Stamford PI144G	EXCITER TYPE	NO
NUMBER OF PHASE	3	INSULATION: CLASS, TEMPERATURE RISE	HH

POWER FACTOR COS PHI	0.8	VOLTAGE REGULATOR	+ / - 0.5%
ALTITUDE	1000	BEARING NUMBER	1 (AT NO LOAD)
OVER SPEED	RPM	COUPLING	DIRECT
POLE: NUMBER	4	EFFICIENCIES @ 4/4 LOAD	FULL

Other Alternator Data

CONTINUOUS NOMINAL RATING @ 40° C	20 KVA	DIRECT AXIS TRANSIENT REACTANCE ATURATED (X'd)	18.5%
STANDBY RATING @ 27° C	22.0 KVA	SHORT CIRCUIT TRANSIENT TIME CONSTANT (T'd)	18ms
EFFICIENCIES @ 4/4 LOAD	83.5%	DIRECT AXIS SUBTRANSIENT REACTANCE SATURATED (X'd)	13.3%
AIR FLOW	3.5 m3/S (7416.05cfm)	SUBTRANSIENT TIME CONSTANT (T'd)	12ms
SHORT CIRCUIT RATIO: 50 (Kcc)	0.78	QUADRA AXIS SUBTRANSIENT REACTANCE SATURATED (X'q)	72.7%
DIRECT AXIS SYNCHRO REACTANCE UNSATURATED (Xd)	206%	ZERO SEQUENCE REACTACE UNSATURATED (Xo)	6.4%
QUADRA AXIS SYNCHRO REACTANCE UNSATURATED (Xq)	68%	NEGATIVE SEQUENCE REACTANCE SATURATED (X2)	18.3%
OPEN CIRCUIT TIME CONSTANT: 50 (T'do)	0.78ms	ARMATURE TIME CONSTANT (Ta)	13ms

Exhaust System

EXHAUST GAS FLOW	14.02L	EXHAUST TEMPERATURE	650 °C
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Fuel System

100% (OF THE PRIME POWER)	3.4 L/H	75% (OF THE PRIME POWER)	2.6 L/H
50% (OF THE PRIME POWER)	2.1 L/H		

Oil System	
Total oil capacity w/filters	0.82 Litres

Air Intake			
MAX. INTAKE RESTRICTION	COMBUSTION AIR FLOW: 108 m ³ /min	ENGINE AIR FLOW	COOLING AIR FLOW: 14.50 m ³ /min

Coolant System		
RADIATOR & ENGINE CAPACITY	MAX WATER TEMPERATURE	TYPE OD COOLANT WATER

Generator Ratings						
VOLTAGE	HZ	PHASE	P.F.	STANDBY AMPS	STAND BY RATINGS KW/KVA	PRIME RATINGS KW/KVA
415/240	50	3	1	33	17.6kW / 22kVA	16kW / 20kVA
220/110	50	3	1	33	17.6kW / 22kVA	16kW / 20kVA

RRP: Prime Power is available for an unlimited number of annual operating hours in variable load applications, in accordance with ISO 8528-1. A 10% overload capability is available for a period of 1 hour within 12hour period of operation, in accordance with ISO 3046-1.

ESP: The standby power rating is applicable for supplying emergency power in variable load applications i accordance with ISO 8528-1. Overload is not allowed

Model – Cummins - APS C33



Salient Features

Power:

- ✓ Prime Power @ 50Hz : 24kw/ 30kVA
- ✓ Stand By Power @ 50Hz : 26.4kw/ 33kVA

Features:

- ✓ D Engine (Cummins 4B3.9G2)
- ✓ Charge alternator 12V Governor: Mechanical
- ✓ Alternator (Stamford UCI224C)
- ✓ Single bearing alternator IP 23, insulation class H/H
- ✓ Radiator 50 C (122 F) max
- ✓ Skid and vibration isolators
- ✓ Dry type air filter
- ✓ Main line circuit breaker
- ✓ 12V battery, rack and cable
- ✓ Industrial silencer
- ✓ User manual

Engine Options:

Engine & Radiator:

- ✓ Heat shield protection
- ✓ Oil drain extension
- ✓ Heavy duty oil filter
- ✓ Lube oil drain pump
- ✓ Radiator core guard
- ✓ Battery charger
- ✓ Block header

Fuel:

- ✓ 24 hour day tank
- ✓ Bulk fuel tank connections
- ✓ Water separator fuel filter

Alternator:

- ✓ Anti-Condensation Heater
- ✓ Enforced impregnation
- ✓ Oversized alternator

Exhaust:

- ✓ Residential silencer
- ✓ Flexible exhaust connection

Enclosure:

- ✓ EM-1,5
- ✓ 83dba @ 1m silent canopy

Control Panel:

- ✓ Paralleling System
- ✓ Co-Map
- ✓ Remote annunciator
- ✓ Key start panel

Literature:

- ✓ Parts
- ✓ Maintenance

Engine Data			
MANUFACTURER/MODEL	Cummins 4B3.9G2	PISTON SPEED	Mechanical
CYLINDER ARRANGEMENT	4 inline	Max. standby power at rated RPM	26.4kW
DISPLACEMENT	3.9 L	Frequency regulation, steady state	+/- 2.5%
BORE AND STROKE	102.0 x 120 mm	BMEP	5.62bar (81psi)
COMPRESSION RATIO	16.5:1	Governor: type	Mechanical
RATED RPM	1500Rpm		

Alternator Data			
MANUFACTURER / TYPE	Stamford PI144G	EXCITER TYPE	NO
NUMBER OF PHASE	3	INSULATION: CLASS, TEMPERATURE RISE	HH
POWER FACTOR COS PHI	0.8	VOLTAGE REGULATOR	+ / - 0.5%
ALTITUDE	1000	BEARING NUMBER	1 (AT NO LOAD)
OVER SPEED	RPM	COUPLING	DIRECT
POLE: NUMBER	4	EFFICIENCIES @ 4/4 LOAD	FULL

Other Alternator Data			
CONTINUOUS NOMINAL RATING @ 40° C	30 KVA	DIRECT AXIS TRANSIENT REACTANCE ATURATED (X'd)	18.5%
STANDBY RATING @ 27° C	33.0 KVA	SHORT CIRCUIT TRANSIENT TIME CONSTANT (T'd)	18ms
EFFICIENCIES @ 4/4 LOAD	83.5%	DIRECT AXIS SUBTRANSIENT REACTANCE SATURATED (X'd)	13.3%
AIR FLOW	3.5 m3/S (7416.05cfm)	SUBTRANSIENT TIME CONSTANT (T'd)	12ms
SHORT CIRCUIT RATIO: 50 (Kcc)	0.78	QUADRA AXIS SUBTRANSIENT REACTANCE SATURATED (X'q)	72.7%
DIRECT AXIS SYNCHRO REACTANCE UNSATURATED (Xd)	206%	ZERO SEQUENCE REACTACE UNSATURATED (Xo)	6.4%
QUADRA AXIS SYNCHRO REACTANCE UNSATURATED (Xq)	68%	NEGATIVE SEQUENCE REACTANCE SATURATED (X2)	18.3%
OPEN CIRCUIT TIME CONSTANT: 50 (T'do)	0.78ms	ARMATURE TIME CONSTANT (Ta)	13ms
NO LOAD EXCITATION CURRENT (io)	A	TRANSIENT DIP (4/4 CHARGE) - PF : 1.8AR	%
FULL LOAD EXCITATION VOLTAGE (uc)	A	NO LOAD LOSSES	N/A
RECOVERY TIME (DELTA U = 20% TRANSITOIRE)	ms	HEAT REJECTION	kW
MOTOR START (DELTA = 20% PERM. OR 50% TRANS.)	kVA		

Exhaust System			
EXHAUST GAS FLOW	23.60 L	EXHAUST TEMPERATURE	490° C

Fuel System			
110% (OF THE PRIME POWER)	7.7 L/H	100% (OF THE PRIME POWER)	6.7 L/H
75% (OF THE PRIME POWER)	5.0 L/H	50% (OF THE PRIME POWER)	3.4 L/H

Oil System			
Total oil capacity w/filters	29dm ³	Oil consumption 100% load	<0.3g/kwh
Oil Pressure low idle	0.7bar	Oil capacity carter	3.6L (1.0 gal)
Oil Pressure rated RPM	3-6 bar		

Air Intake			
MAX. INTAKE RESTRICTION	COMBUSTION AIR FLOW: 310mm CE (12in.WG)	ENGINE AIR FLOW	COOLING AIR FLOW: 9.9L/s (21cfm)

Coolant System			
Radiator & engine capacity	20dm ³	Fan air flow	4.3m ³ /s (848cfm)
Max water temperature	83-95°C	Available restriction on air flow	22mm CE
Outlet water temperature	93°C (199°F)	Type of coolant	Gen cool
Fan power	5kW	Thermostat	76.5-90°C

EMISSIONS			
HC	30 mg/Nm ³	Nox	960 mg/Nm ³
CO	250 mg/Nm ³	PM	120 mg/Nm ³

Generator Ratings						
VOLTAGE	HZ	PHASE	P.F.	STANDBY AMPS	STAND BY RATINGS KW/KVA	PRIME RATINGS KW/KVA
415/240	50	3	1	49.5	26.4/33	24/30
220/110	50	3	1	49.5	26.4/33	24/30

RRP: Prime Power is available for an unlimited number of annual operating hours in variable load applications, in accordance with ISO 8528-1. A 10% overload capability is available for a period of 1 hour within 12hour period of operation, in accordance with ISO 3046-1.

ESP: The standby power rating is applicable for supplying emergency power in variable load applications i accordance with ISO 8528-1. Overload is not allowed

Model – Cummins - APS C38



Salient Features

Power:

- ✓ Prime Power @ 50Hz : 28kw/ 35kVA
- ✓ Stand By Power @ 50Hz : 30.8kw/ 38kVA

Features:

- ✓ D Engine (Cummins 4B3.9G2)
- ✓ Charge alternator 12V Governor: Mechanical
- ✓ Alternator (Stamford UCI224C)
- ✓ Single bearing alternator IP 23, insulation class H/H
- ✓ Radiator 50 C (122 F) max
- ✓ Skid and vibration isolators
- ✓ Dry type air filter
- ✓ Main line circuit breaker
- ✓ 12V battery, rack and cable
- ✓ Industrial silencer
- ✓ User manual

Engine Options:

Engine & Radiator:

- ✓ Heat shield protection
- ✓ Oil drain extension
- ✓ Heavy duty oil filter
- ✓ Lube oil drain pump
- ✓ Radiator core guard
- ✓ Battery charger
- ✓ Block header

Fuel:

- ✓ 24 hour day tank
- ✓ Bulk fuel tank connections
- ✓ Water separator fuel filter

Alternator:

- ✓ Anti-Condensation Heater
- ✓ Enforced impregnation
- ✓ Oversized alternator

Exhaust:

- ✓ Residential silencer
- ✓ Flexible exhaust connection

Enclosure:

- ✓ EM-1,5
- ✓ 83dba @ 1m silent canopy

Control Panel:

- ✓ Paralleling System
- ✓ Co-Map
- ✓ Remote annunciator
- ✓ Key start panel

Literature:

- ✓ Parts
- ✓ Maintenance

Engine Data			
MANUFACTURER/MODEL	Cummins 4B3.9G2	PISTON SPEED	7.7 MS
CYLINDER ARRANGEMENT	4 inline	Max. standby power at rated RPM	30.80 KW
DISPLACEMENT	3.9 L	Frequency regulation, steady state	+/- 2.5%
BORE AND STROKE	102.0 x 120 mm	BMEP	5.62bar (81psi)
COMPRESSION RATIO	16.5:1	Governor: type	Mechanical
RATED RPM	1500Rpm		

Alternator Data			
MANUFACTURER / TYPE	Stamford UCI224C	EXCITER TYPE	NO
NUMBER OF PHASE	3	INSULATION: CLASS, TEMPERATURE RISE	HH
POWER FACTOR COS PHI	0.8	VOLTAGE REGULATOR	+ / - 0.5%
ALTITUDE	1000	BEARING NUMBER	1 (AT NO LOAD)
OVER SPEED	RPM	COUPLING	DIRECT
POLE: NUMBER	4	RECOVERY TIME (20% VOLT DIP) MS	MS

Other Alternator Data			
CONTINUOUS NOMINAL RATING @ 40° C	35 KVA	DIRECT AXIS TRANSIENT REACTANCE ATURATED (X'd)	18.5%
STANDBY RATING @ 27° C	38.50 KVA	SHORT CIRCUIT TRANSIENT TIME CONSTANT (T'd)	18ms
EFFICIENCIES @ 4/4 LOAD	83.5%	DIRECT AXIS SUBTRANSIENT REACTANCE SATURATED (X'd)	13.3%
AIR FLOW	3.5 m3/S (7416.05cfm)	SUBTRANSIENT TIME CONSTANT (T'd)	12ms
SHORT CIRCUIT RATIO: 50 (Kcc)	0.78	QUADRA AXIS SUBTRANSIENT REACTANCE SATURATED (X'q)	72.7%
DIRECT AXIS SYNCHRO REACTANCE UNSATURATED (Xd)	206%	ZERO SEQUENCE REACTACE UNSATURATED (Xo)	6.4%
QUADRA AXIS SYNCHRO REACTANCE UNSATURATED (Xq)	68%	NEGATIVE SEQUENCE REACTANCE SATURATED (X2)	18.3%
OPEN CIRCUIT TIME CONSTANT: 50 (T'do)	0.78ms	ARMATURE TIME CONSTANT (Ta)	13ms
NO LOAD EXCITATION CURRENT (io)	A	TRANSIENT DIP (4/4 CHARGE) - PF : 1.8AR	%
FULL LOAD EXCITATION VOLTAGE (uc)	A	NO LOAD LOSSES	N/A
RECOVERY TIME (DELTA U = 20% TRANSITOIRE)	ms	HEAT REJECTION	kW
MOTOR START (DELTA = 20% PERM. OR 50% TRANS.)	kVA		

Exhaust System

EXHAUST GAS FLOW	23.60 L	EXHAUST TEMPERATURE	490° C
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Fuel System

110% (OF THE PRIME POWER)	10.3 L/H	100% (OF THE PRIME POWER)	9.3 L/H
75% (OF THE PRIME POWER)	6.9 L/H	50% (OF THE PRIME POWER)	4.7 L/H

Oil System

Total oil capacity w/filters	29dm ³	Oil consumption 100% load	<0.3g/kwh
Oil Pressure low idle	0.7bar	Oil capacity carter	3.6L (1.0 gal)
Oil Pressure rated RPM	3-6 bar		

Air Intake

MAX. INTAKE RESTRICTION	COMBUSTION AIR FLOW: 310mm CE (12in. WG)	ENGINE AIR FLOW	COOLING AIR FLOW: 9.9L/s (21cfm)
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Coolant System

Radiator & engine capacity	20dm ³	Fan air flow	4.3m ³ /s (848cfm)
Max water temperature	83-95°C	Available restriction on air flow	22mm CE
Outlet water temperature	93°C (199°F)	Type of coolant	Gen cool
Fan power	5kW	Thermostat	76.5-90°C

EMISSIONS			
HC	30 mg/Nm3	Nox	960 mg/Nm3
CO	250 mg/Nm3	PM	120 mg/Nm3

Generator Ratings						
VOLTAGE	HZ	PHASE	P.F.	STANDBY AMPS	STAND BY RATINGS KW/KVA	PRIME RATINGS KW/KVA
415/240	50	3	1	57.75	30.8/38.5	28/35
220/110	50	3	1	57.75	30.8/38.5	28/35

RRP: Prime Power is available for an unlimited number of annual operating hours in variable load applications, in accordance with ISO 8528-1. A 10% overload capability is available for a period of 1 hour within 12hour period of operation, in accordance with ISO 3046-1.

ESP: The standby power rating is applicable for supplying emergency power in variable load applications in accordance with ISO 8528-1. Overload is not allowed

Model – Cummins - APS C44



Salient Features

Power:

- ✓ Prime Power @ 50Hz : 32kw/ 40kVA
- ✓ Stand By Power @ 50Hz : 35.2kw/ 44kVA

Features:

- ✓ D Engine (Cummins 4B3.9G2)
- ✓ Charge alternator 12V Governor: Mechanical
- ✓ Alternator (Stamford UCI224D)
- ✓ Single bearing alternator IP 23, insulation class H/H
- ✓ Radiator 50 C (122 F) max
- ✓ Skid and vibration isolators
- ✓ Dry type air filter
- ✓ Main line circuit breaker
- ✓ 12V battery, rack and cable
- ✓ Industrial silencer
- ✓ User manual

Engine Options:

Engine & Radiator:

- ✓ Heat shield protection
- ✓ Oil drain extension
- ✓ Heavy duty oil filter
- ✓ Lube oil drain pump
- ✓ Radiator core guard
- ✓ Battery charger
- ✓ Block header

Fuel:

- ✓ 24 hour day tank
- ✓ Bulk fuel tank connections
- ✓ Water separator fuel filter

Alternator:

- ✓ Anti-Condensation Heater
- ✓ Enforced impregnation
- ✓ Oversized alternator

Exhaust:

- ✓ Residential silencer
- ✓ Flexible exhaust connection

Enclosure:

- ✓ EM-1,5
- ✓ 83dba @ 1m silent canopy

Control Panel:

- ✓ Paralleling System
- ✓ Co-Map
- ✓ Remote annunciator
- ✓ Key start panel

Literature:

- ✓ Parts
- ✓ Maintenance

Engine Data			
MANUFACTURER/MODEL	Cummins 4B3.9G2	PISTON SPEED	7.7 MS
CYLINDER ARRANGEMENT	4 inline	Max. standby power at rated RPM	35.20 KW
DISPLACEMENT	3.9 L	Frequency regulation, steady state	+/- 2.5%
BORE AND STROKE	102.0 x 120 mm	BMEP	5.62bar (81psi)
COMPRESSION RATIO	16.5:1	Governor: type	Mechanical
RATED RPM	1500Rpm		

Alternator Data			
MANUFACTURER / TYPE	Stamford UCI224D	EXCITER TYPE	NO
NUMBER OF PHASE	3	INSULATION: CLASS, TEMPERATURE RISE	HH
POWER FACTOR COS PHI	0.8	VOLTAGE REGULATOR	+ / - 0.5%
ALTITUDE	1000	BEARING NUMBER	1 (AT NO LOAD)
OVER SPEED	RPM	COUPLING	DIRECT
POLE: NUMBER	4	RECOVERY TIME (20% VOLT DIP) MS	MS

Other Alternator Data			
CONTINUOUS NOMINAL RATING @ 40° C	40 KVA	DIRECT AXIS TRANSIENT REACTANCE ATURATED (X'd)	18.5%
STANDBY RATING @ 27° C	44.0 KVA	SHORT CIRCUIT TRANSIENT TIME CONSTANT (T'd)	18ms
EFFICIENCIES @ 4/4 LOAD	83.5%	DIRECT AXIS SUBTRANSIENT REACTANCE SATURATED (X'd)	13.3%
AIR FLOW	3.5 m3/S (7416.05cfm)	SUBTRANSIENT TIME CONSTANT (T'd)	12ms
SHORT CIRCUIT RATIO: 50 (Kcc)	0.78	QUADRA AXIS SUBTRANSIENT REACTANCE SATURATED (X'q)	72.7%
DIRECT AXIS SYNCHRO REACTANCE UNSATURATED (Xd)	206%	ZERO SEQUENCE REACTACE UNSATURATED (Xo)	6.4%
QUADRA AXIS SYNCHRO REACTANCE UNSATURATED (Xq)	68%	NEGATIVE SEQUENCE REACTANCE SATURATED (X2)	18.3%
OPEN CIRCUIT TIME CONSTANT: 50 (T'do)	0.78ms	ARMATURE TIME CONSTANT (Ta)	13ms
NO LOAD EXCITATION CURRENT (io)	A	TRANSIENT DIP (4/4 CHARGE) - PF : 1.8AR	%
FULL LOAD EXCITATION VOLTAGE (uc)	A	NO LOAD LOSSES	N/A
RECOVERY TIME (DELTA U = 20% TRANSITOIRE)	ms	HEAT REJECTION	kW
MOTOR START (DELTA = 20% PERM. OR 50% TRANS.)	kVA		

Exhaust System

EXHAUST GAS FLOW	23.60 L	EXHAUST TEMPERATURE	490° C
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Fuel System

110% (OF THE PRIME POWER)	10.3 L/H	100% (OF THE PRIME POWER)	9.3 L/H
75% (OF THE PRIME POWER)	6.9 L/H	50% (OF THE PRIME POWER)	4.7 L/H

Oil System

Total oil capacity w/filters	29dm ³	Oil consumption 100% load	<0.3g/kwh
Oil Pressure low idle	0.7bar	Oil capacity carter	3.6L (1.0 gal)
Oil Pressure rated RPM	3-6 bar		

Air Intake

MAX. INTAKE RESTRICTION	COMBUSTION AIR FLOW: 310mm CE (12in. WG)	ENGINE AIR FLOW	COOLING AIR FLOW: 9.9L/s (21cfm)
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Coolant System

Radiator & engine capacity	20dm ³	Fan air flow	4.3m ³ /s (848cfm)
Max water temperature	83-95°C	Available restriction on air flow	22mm CE
Outlet water temperature	93°C (199°F)	Type of coolant	Gen cool
Fan power	5kW	Thermostat	76.5-90°C

EMISSIONS			
HC	30 mg/Nm3	Nox	960 mg/Nm3
CO	250 mg/Nm3	PM	120 mg/Nm3

Generator Ratings						
VOLTAGE	HZ	PHASE	P.F.	STANDBY AMPS	STAND BY RATINGS KW/KVA	PRIME RATINGS KW/KVA
415/240	50	3	1	66	35.2/44	32/40
220/110	50	3	1	66	35.2/44	32/40

RRP: Prime Power is available for an unlimited number of annual operating hours in variable load applications, in accordance with ISO 8528-1. A 10% overload capability is available for a period of 1 hour within 12hour period of operation, in accordance with ISO 3046-1.

ESP: The standby power rating is applicable for supplying emergency power in variable load applications in accordance with ISO 8528-1. Overload is not allowed

Model – Cummins - APS C55



Salient Features

Power:

- ✓ Prime Power @ 50Hz : 40kw/ 50kVA
- ✓ Stand By Power @ 50Hz : 44kw/ 55kVA

Features:

- ✓ Engine (Cummins 4BTA3.9G1)
- ✓ Charge alternator 12V Governor: Mechanical
- ✓ Alternator (Stamford UCI224F)
- ✓ Single bearing alternator IP 23, insulation class H/H
- ✓ Radiator 50 C (122 F) max
- ✓ Skid and vibration isolators
- ✓ Dry type air filter
- ✓ Main line circuit breaker
- ✓ 12V battery, rack and cable
- ✓ Industrial silencer
- ✓ User manual

Engine Options:

Engine & Radiator:

- ✓ Heat shield protection
- ✓ Oil drain extension
- ✓ Heavy duty oil filter
- ✓ Lube oil drain pump
- ✓ Radiator core guard
- ✓ Battery charger
- ✓ Block header

Fuel:

- ✓ 24 hour day tank
- ✓ Bulk fuel tank connections
- ✓ Water separator fuel filter

Alternator:

- ✓ Anti-Condensation Heater
- ✓ Enforced impregnation
- ✓ Oversized alternator

Exhaust:

- ✓ Residential silencer
- ✓ Flexible exhaust connection

Enclosure:

- ✓ EM-1,5
- ✓ 83dba @ 1m silent canopy

Control Panel:

- ✓ Paralleling System
- ✓ Co-Map
- ✓ Remote annunciator
- ✓ Key start panel

Literature:

- ✓ Parts
- ✓ Maintenance

Engine Data			
MANUFACTURER/MODEL	Cummins 4BTA3.9G1	PISTON SPEED	7.7 MS
CYLINDER ARRANGEMENT	4 inline	Max. standby power at rated RPM	35.20 KW
DISPLACEMENT	3.9 L	Frequency regulation, steady state	+/- 2.5%
BORE AND STROKE	102.0 x 120 mm	BMEP	5.62bar (81psi)
COMPRESSION RATIO	16.5:1	Governor: type	Mechanical
RATED RPM	1500Rpm		

Alternator Data			
MANUFACTURER / TYPE	Stamford UCI224F	EXCITER TYPE	NO
NUMBER OF PHASE	3	INSULATION: CLASS, TEMPERATURE RISE	HH

POWER FACTOR COS PHI	0.8	VOLTAGE REGULATOR	+ / - 0.5%
ALTITUDE	1000	BEARING NUMBER	1 (AT NO LOAD)
OVER SPEED	RPM	COUPLING	DIRECT
POLE: NUMBER	4	RECOVERY TIME (20% VOLT DIP) MS	MS

Other Alternator Data			
CONTINUOUS NOMINAL RATING @ 40° C	50 KVA	DIRECT AXIS TRANSIENT REACTANCE ATURATED (X'd)	18.5%
STANDBY RATING @ 27° C	55 KVA	SHORT CIRCUIT TRANSIENT TIME CONSTANT (T'd)	18ms
EFFICIENCIES @ 4/4 LOAD	83.5%	DIRECT AXIS SUBTRANSIENT REACTANCE SATURATED (X'd)	13.3%
AIR FLOW	3.5 m3/S (7416.05cfm)	SUBTRANSIENT TIME CONSTANT (T'd)	12ms
SHORT CIRCUIT RATIO: 50 (Kcc)	0.78	QUADRA AXIS SUBTRANSIENT REACTANCE SATURATED (X'q)	72.7%
DIRECT AXIS SYNCHRO REACTANCE UNSATURATED (Xd)	206%	ZERO SEQUENCE REACTACE UNSATURATED (Xo)	6.4%
QUADRA AXIS SYNCHRO REACTANCE UNSATURATED (Xq)	68%	NEGATIVE SEQUENCE REACTANCE SATURATED (X2)	18.3%
OPEN CIRCUIT TIME CONSTANT: 50 (T'do)	0.78ms	ARMATURE TIME CONSTANT (Ta)	13ms
NO LOAD EXCITATION CURRENT (io)	A	TRANSIENT DIP (4/4 CHARGE) - PF : 1.8AR	%
FULL LOAD EXCITATION VOLTAGE (uc)	A	NO LOAD LOSSES	N/A
RECOVERY TIME (DELTA U = 20% TRANSITOIRE)	ms	HEAT REJECTION	kW
MOTOR START (DELTA = 20% PERM. OR 50% TRANS.)	kVA		

Exhaust System			
EXHAUST GAS FLOW	23.60 L	EXHAUST TEMPERATURE	490° C

Fuel System			
110% (OF THE PRIME POWER)	16 L/H	100% (OF THE PRIME POWER)	15 L/H
75% (OF THE PRIME POWER)	11 L/H	50% (OF THE PRIME POWER)	8 L/H

Oil System			
Total oil capacity w/filters	29dm ³	Oil consumption 100% load	<0.3g/kwh
Oil Pressure low idle	0.7bar	Oil capacity carter	3.6L (1.0 gal)
Oil Pressure rated RPM	3-6 bar		

Thermal Balance			
Heat rejection to exhaust	7kW (398 Btu/ mn)	Heat rejection to coolant	8kw (455 Btu/ mn)
Radiated heat to ambient	0.5kW (28 Btu/ mn)		

Air Intake			
MAX. INTAKE RESTRICTION	COMBUSTION AIR FLOW: 310mm CE (12in.WG)	ENGINE AIR FLOW	COOLING AIR FLOW: 9.9L/s (21cfm)

Coolant System			
Radiator & engine capacity	20dm ³	Fan air flow	4.3m ³ /s (848cfm)
Max water temperature	83-95°C	Available restriction on air flow	22mm CE
Outlet water temperature	93°C (199°F)	Type of coolant	Gen cool
Fan power	5kW	Thermostat	76.5-90°C

EMISSIONS			
HC	30 mg/Nm3	Nox	960 mg/Nm3
CO	250 mg/Nm3	PM	120 mg/Nm3

Generator Ratings						
VOLTAGE	HZ	PHASE	P.F.	STANDBY AMPS	STAND BY RATINGS KW/KVA	PRIME RATINGS KW/KVA
415/240	50	3	1	82.5	44/ 55	40/50
220/110	50	3	1	82.5	44/ 55	40/50

RRP: Prime Power is available for an unlimited number of annual operating hours in variable load applications, in accordance with ISO 8528-1. A 10% overload capability is available for a period of 1 hour within 12hour period of operation, in accordance with ISO 3046-1.

ESP: The standby power rating is applicable for supplying emergency power in variable load applications i accordance with ISO 8528-1. Overload is not allowed

Model – Cummins - APS C66



Salient Features

Power:

- ✓ Prime Power @ 50Hz : 58kw/ 72kVA
- ✓ Stand By Power @ 50Hz : 66kw/79kVA

Features:

- ✓ Engine (Cummins 4BTA3.9G1)
- ✓ Charge alternator 12V Governor: Mechanical
- ✓ Alternator (Stamford UCI274C)
- ✓ Single bearing alternator IP 23, insulation class H/H
- ✓ Radiator 50 C (122 F) max
- ✓ Skid and vibration isolators
- ✓ Dry type air filter
- ✓ Main line circuit breaker
- ✓ 12V battery, rack and cable
- ✓ Industrial silencer
- ✓ User manual

Engine Options:

Engine & Radiator:

- ✓ Heat shield protection
- ✓ Oil drain extension
- ✓ Heavy duty oil filter
- ✓ Lube oil drain pump
- ✓ Radiator core guard
- ✓ Battery charger
- ✓ Block header

Fuel:

- ✓ 24 hour day tank
- ✓ Bulk fuel tank connections
- ✓ Water separator fuel filter

Alternator:

- ✓ Anti-Condensation Heater
- ✓ Enforced impregnation
- ✓ Oversized alternator

Exhaust:

- ✓ Residential silencer
- ✓ Flexible exhaust connection

Enclosure:

- ✓ EM-1,5
- ✓ 83dba @ 1m silent canopy

Control Panel:

- ✓ Paralleling System
- ✓ Co-Map
- ✓ Remote annunciator
- ✓ Key start panel

Literature:

- ✓ Parts
- ✓ Maintenance

Engine Data			
MANUFACTURER/MODEL	Cummins 4BTA3.9G1	PISTON SPEED	7.7 MS
CYLINDER ARRANGEMENT	4 inline	Max. standby power at rated RPM	63 KW
DISPLACEMENT	3.9 L	Frequency regulation, steady state	+/- 2.5%
BORE AND STROKE	102.0 x 120 mm	BMEP	5.62bar (81psi)
COMPRESSION RATIO	16.5:1	Governor: type	Mechanical
RATED RPM	1500Rpm		

Alternator Data			
MANUFACTURER / TYPE	Stamford UCI224F	EXCITER TYPE	NO
NUMBER OF PHASE	3	INSULATION: CLASS, TEMPERATURE RISE	HH

POWER FACTOR COS PHI	0.8	VOLTAGE REGULATOR	+ / - 0.5%
ALTITUDE	1000	BEARING NUMBER	1 (AT NO LOAD)
OVER SPEED	RPM	COUPLING	DIRECT
POLE: NUMBER	4	RECOVERY TIME (20% VOLT DIP) MS	MS

Other Alternator Data			
CONTINUOUS NOMINAL RATING @ 40° C	72 KVA	DIRECT AXIS TRANSIENT REACTANCE ATURATED (X'd)	18.5%
STANDBY RATING @ 27° C	79 KVA	SHORT CIRCUIT TRANSIENT TIME CONSTANT (T'd)	18ms
EFFICIENCIES @ 4/4 LOAD	83.5%	DIRECT AXIS SUBTRANSIENT REACTANCE SATURATED (X'd)	13.3%
AIR FLOW	3.5 m3/S (7416.05cfm)	SUBTRANSIENT TIME CONSTANT (T'd)	12ms
SHORT CIRCUIT RATIO: 50 (Kcc)	0.78	QUADRA AXIS SUBTRANSIENT REACTANCE SATURATED (X'q)	72.7%
DIRECT AXIS SYNCHRO REACTANCE UNSATURATED (Xd)	206%	ZERO SEQUENCE REACTACE UNSATURATED (Xo)	6.4%
QUADRA AXIS SYNCHRO REACTANCE UNSATURATED (Xq)	68%	NEGATIVE SEQUENCE REACTANCE SATURATED (X2)	18.3%
OPEN CIRCUIT TIME CONSTANT: 50 (T'do)	0.78ms	ARMATURE TIME CONSTANT (Ta)	13ms
NO LOAD EXCITATION CURRENT (io)	A	TRANSIENT DIP (4/4 CHARGE) - PF : 1.8AR	%
FULL LOAD EXCITATION VOLTAGE (uc)	A	NO LOAD LOSSES	N/A
RECOVERY TIME (DELTA U = 20% TRANSITOIRE)	ms	HEAT REJECTION	kW
MOTOR START (DELTA = 20% PERM. OR 50% TRANS.)	kVA		

Exhaust System			
EXHAUST GAS FLOW	23.60 L	EXHAUST TEMPERATURE	490° C

Fuel System			
110% (OF THE PRIME POWER)	16 L/H	100% (OF THE PRIME POWER)	15 L/H
75% (OF THE PRIME POWER)	11 L/H	50% (OF THE PRIME POWER)	8 L/H

Oil System			
Total oil capacity w/filters	29dm ³	Oil consumption 100% load	<0.3g/kwh
Oil Pressure low idle	0.7bar	Oil capacity carter	3.6L (1.0 gal)
Oil Pressure rated RPM	3-6 bar		

Thermal Balance			
Heat rejection to exhaust	7kW (398 Btu/ mn)	Heat rejection to coolant	8kw (455 Btu/ mn)
Radiated heat to ambient	0.5kW (28 Btu/ mn)		

Air Intake			
MAX. INTAKE RESTRICTION	COMBUSTION AIR FLOW: 310mm CE (12in.WG)	ENGINE AIR FLOW	COOLING AIR FLOW: 9.9L/s (21cfm)

Coolant System			
Radiator & engine capacity	20dm ³	Fan air flow	4.3m ³ /s (848cfm)
Max water temperature	83-95°C	Available restriction on air flow	22mm CE
Outlet water temperature	93°C (199°F)	Type of coolant	Gen cool
Fan power	5kW	Thermostat	76.5-90°C

EMISSIONS			
HC	30 mg/Nm3	Nox	960 mg/Nm3
CO	250 mg/Nm3	PM	120 mg/Nm3

Generator Ratings						
VOLTAGE	HZ	PHASE	P.F.	STANDBY AMPS	STAND BY RATINGS KW/KVA	PRIME RATINGS KW/KVA
415/240	50	3	1	119	63/ 79	58/72
220/110	50	3	1	119	63/ 79	58/72

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ESP: The standby power rating is applicable for supplying emergency power in variable load applications in accordance with ISO 8528-1. Overload is not allowed