



MINE SERIES
DIESEL GENERATORS

At Blue Diamond Machinery, we have created an out of the box turn-key mining and construction generator, our generators are built to meet the harshest conditions in Australia

Powered with Cummins engines and Stamford alternators to offer you the best local support, backed with a 3 year - 1,500hour warranty.

Our range of generators meet all mine site and construction requirements, without the need of upgrade or installation of aftermarket parts.

Optional Upgrades include:

❖ **Synchronization:**
Allows the client to run numerous generators in parallel, to achieve a larger power supply with the efficiency of lower fuel cost and servicing intervals.

❖ **Auto Oil Feed Systems:**
This feature involves the installation of an auxiliary oil tank and automatic feeding FW Murphy Gauge, the gauge will ensure the lube oil level in the engine is kept to its specified level.

This will allow the client to leave the generator in remote locations with confidence that it will not suffer from oil starvation in-between servicing intervals.

❖ **ComAp 4G Monitoring:**
Remote monitoring of assets and equipment is a must have nowadays and ComAp are a leading provider of this service, offering complete remote access to your generator from your PC or mobile phone.

This allows the client to check fuel levels, run hours, service intervals, power consumption and supply. It also allows dedicated technicians to diagnose faults and make changes to your generator remotely, saving dedicated site call outs.

❖ **Outlet Configurations:**
At Blue Diamond Machinery, we can install outlets to meet the clients' needs and have access to all leading brands.



Cummins powered and rated @ 60°



Fitted with ComAp controller



Built to meet all ISO & AS Standards



Fitted with isolators & Jump Start Terminal



Fitted with 3 way fuel system for extended run times



Blue Diamond Machinery Mine Series Diesel Generator Range 80kVA to 300kVA

Fixed Speed Generators




Genset Model	PRIME Power		STANDBY Power		Ph/PF	Freq	Voltage	Engine		Alternator		Fuel Consumption (L/h)			
	kVA	kW	kVA	kW				Brand	Model	Brand	Model	@110% load	@100% load	@75% load	@50% load
GEN80CT-MINE	80	64	90	72	3/0.80	50HZ	415	CUMMINS	QSB5-G3	Stamford	UCI 224G	27.5	25	18.75	12.5
GEN100CT-MINE	100	80	110	88	3/0.80	50HZ	415	CUMMINS	QSB5-G5	Stamford	UCI 274C	27.5	25	18.75	12.5
GEN150CT-MINE	150	120	165	132	3/0.80	50HZ	415	CUMMINS	QSB7-G3	Stamford	UCI 274F	41.8	38	28.5	19
GEN200CT-MINE	200	160	220	176	3/0.80	50HZ	415	CUMMINS	QSB7-G5	Stamford	UCI 274H	49.5	45	33.75	22.5
GEN250CT-MINE	250	200	275	220	3/0.80	50HZ	415	CUMMINS	QSL9-G3	Stamford	S4L1D-C4	20.35	18.5	13.88	9.25
GEN300CT-MINE	300	240	330	264	3/0.80	50HZ	415	CUMMINS	QSL9-G5	Stamford	S4L1S-D4	69.3	63	47.25	31.5

Genset Model	Dimension	Dry Weight	Bunded Fuel Tank	Radiator	Oil	Wet Weight
GEN80CT-MINE	3200*1276(Rain eave)*1722 (Filler cap)	2493kg	260L	32.5L	30L	2792kg
GEN100CT-MINE	3200*1276(Rain eave)*1722 (Filler cap)	2520kg	260L	32.5L	30L	2819kg
GEN150CT-MINE	3600*1369(Rain eave)*1970 (Filler cap)	3148kg	450L	22L	30L	3581kg
GEN200CT-MINE	3600*1369(Rain eave)*1970 (Filler cap)	3218kg	450L	22L	30L	3651kg
GEN250CT-MINE	4200*1572(Rain eave)*2345 (Filler cap)	4440kg	570L	45L	23.7L	5010kg
GEN300CT-MINE	4200*1572(Rain eave)*2345 (Filler cap)	4530kg	570L	45L	23.7L	5100kg



GEN100CT-MINE - Engine model QSB5-G5

General Information	
Rated Prime Power (kVA)	100
Rated Prime Power (kW)	80.0
Rated Standby Power (kVA)	110
Rated Standby Power (kW)	88.0
Rated Frequency (HZ)	50HZ
Rated Speed (RPM)	1500RPM
Rated Voltage (V)	415
PF	0.8
Control System	Digital
Engine Model	QSB5-G5
Alternator Model	UCI 274C
Dimensions & Weight	
	Base fuel tank: 12h bunded fuel tank; Dimension to Ref.: 3200*1150*1850 (mm) ;

Note: Specifications and illustrations are subject to revision without notice.

Engine Specifications

Engine	
Engine Model	QSB5-G5
Manufacturer	CUMMINS
Place of Origin	USA
Emission	SIIIA/T3/China T3
Cylinder Arrangement	Vertical inline
Number of Cylinders	4
Cycle	4 stroke
Aspiration	Turbocharged
Bore x Stroke (mm)	107 x 124 (mm)
Displacement (L)	4.5 L
Speed Governor	ECU
Switchable	Y
Engine Gross Prime Power (kW)	89.0
Engine Gross Max. Power (kW)	103
Lube-oil Capability (L)	12.2 L
Fuel Consumption@110% load (L/h)	27.5
Fuel Consumption@100% load (L/h)	25
Fuel Consumption@75% load (L/h)	18.75
Fuel Consumption@50% load (L/h)	12.5
Starter Motor/ Charger Alternator (Vdc)	24 Vdc

Engine Accessories	
QSB5-G5	50°C Cu Radiator
Manual oil pump	HTG1009
Crankshaft breathing box	Yes
Fuel-water separator (Engine origin)	Yes

Alternator Specifications

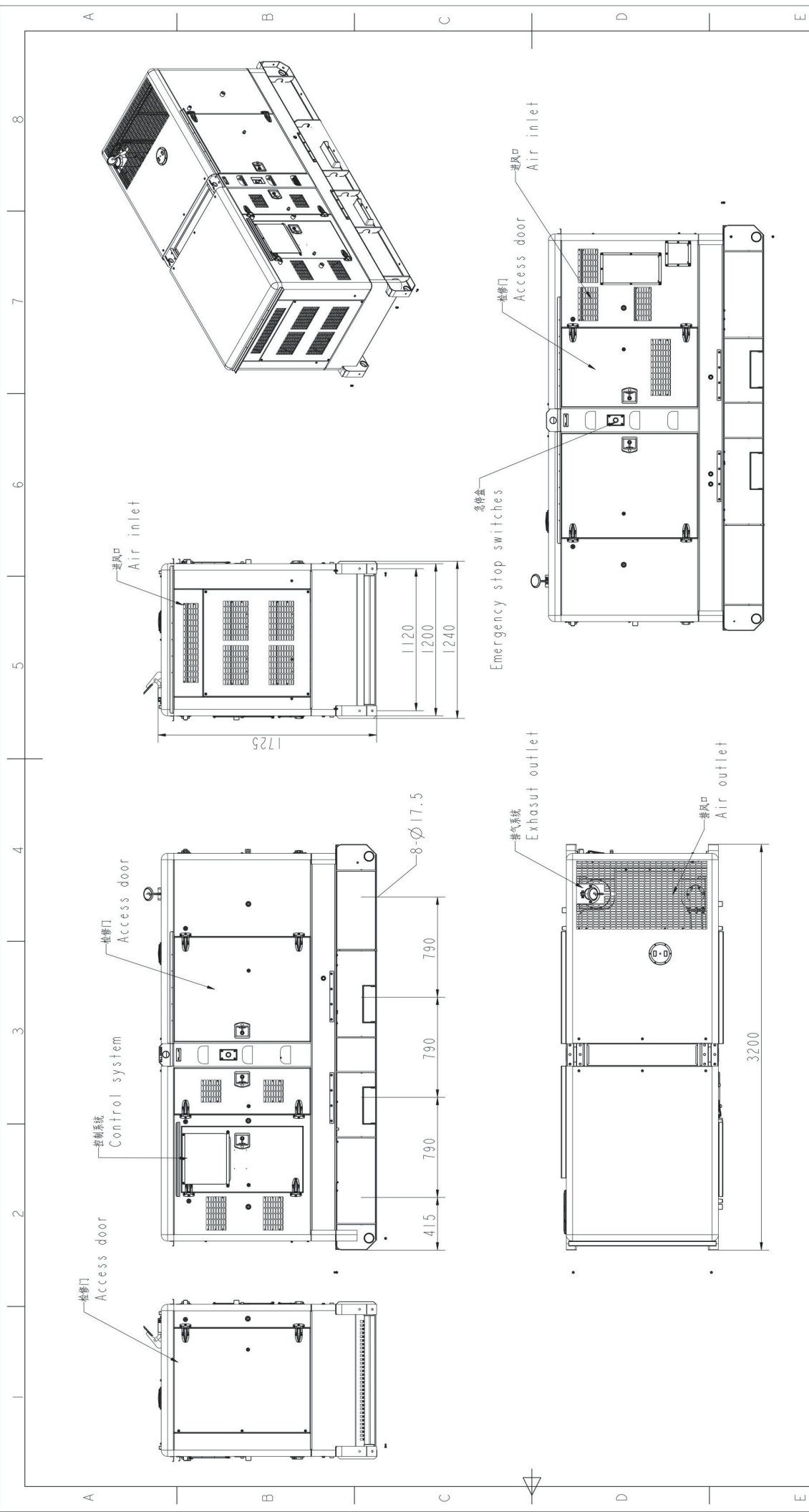
Alternator	
Alternator Model	UCI 274C
Manufacturer	Stamford
Rated Output Power (kVA)	100
Alternator Type	Brushless
Phase	3
Poles	4
Exit Leads	12
Rated Voltage (V)	415
Rated Speed (RPM)	1500RPM
IP Protection Class	IP 23
Insulation Grade	H
Winding Pitch	2/3
Bearing	single
Coupling	Flexible disc


Alternator Accessories	
PMG + MX341 AVR	Yes

Main Accessories Specifications

Base Frame Assembly		Qty.
Base Fuel Tank	12h Bunded Base Fuel Tank	1
Battery	80AH/24V Battery	1
Battery Isolate Switch	Padlock Box	1
Battery Isolate Switch	Single Pole Starter Isolate Switch	1
Battery Isolate Switch	Double Poles Isolate Switch	1
Lugs	AU Certified Lifting Point 2t B	2
Fuel Pipes & Valves	Three-way Valve	2
Fuel Level Gauge	Mechanical Fuel Level Gauge	1
Fuel Level Gauge	Electronic Fuel Level Sensor	1
Air Inlet System		Qty.
Air Inlet Filter	Dual-element air filter with indicator	1
Canopy Assembly		Qty.
Rock Wool & Mesh Plate	Rock wool with mesh plate	1
Canopy	Canopy	1
Door Lock	304 stainless steel door lock	1

Hinge	304 stainless steel hinge	1
Switchgear		Qty.
ABB MCCB	ABB MCCB 4P 160A	1
Australian Electrical Standard	MEN & SAA Cables	1
Leakage Relay & Zero Sequence	ABB Toroid TR4	1
Leakage Relay & Zero Sequence	ABB ELR RD3-48	1
Control Panel Assembly		Qty.
Smartgen Floating charger	MPMC BAC06	1
Comap Controller	IL4 AMF25	1
Smoke Exhaust System Assembly		Qty.
Fiberglass Insulation	High temperature electronic glass fiber insulation (100mm wide)	1
Smoke Exhaust Pipes	Shockproof joint (304ss.)	1
Residential Grade Silencer	Residential Grade Silencer	2



MCS100S-1-SRAU	3相/50Hz	OSB5-G5	UC1274C(永磁)	SSM-NS160F-NT-MRS-15	2519	850	3200*1240*1725
机组总长 Gen set type	相数/频率 Phase/Frequency	发动机 Engine	发电机 Alternator	控制系统 Control system	干重(kg) Dry weight	油箱容量(L) Fuel consumption	外形尺寸(mm) Formal dimension
	±1mm	日期 Date	姓名 Name	材料 Material	型号 Model	产品名称 Product Name	
	X<2000mm	项目 Item	姓名 Name	重量 Weight	品名 Name	静音型柴油发电机组 Silent type diesel generator set	
	X<2000mm	设计 Designer	姓名 Name	比例 Proportion	图号 Drg. No	1001120077	
X>2000mm	校对 Proofread	姓名 Name	版本 Edition	页码 Sheet	第 2 页 共 2 页		
X°	审核 Checked	批准 Approved					

