Generator Gas

NHC20 / QSK60 G-DRIVE GAS

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Model

Model reference	GN1375GASCSK, GN1300GASCSK, GN1300GCWCSK
Model size and rating	1300 kW/1375 kVA, 1300 kW, 1375 kW
Bill of Material reference number	611014 A, 611009 A, 611009 B, 611009 C, 611009 F, 611017 B, 611018 A, 611002 A, 611002 B, 611002 C, 611002 D, 611002 F, 611002 G

Manufacturer

Model Reference	NHC20/QSK60 Gas G-Drive	NHC20/QSK60 Gas G-Drive

Performance Data

Maximum Ambient Before Derate (JW) - Installed with 2 x Ø800mm fans and motor W-DF160LJX-P (Plant Nos Up to XCES049)	°C (°F)	27.0	(80.6)	17.6	(63.68)
Maximum Ambient Before Derate (JW) - Installed with 2 x Ø900mm fans and motor W-DF160LJX-P (Plant Nos XCES050 - 078)	°C (°F)	33.0	(91.4)	0.0	(0.0)
Maximum Ambient Before Derate (JW) - Installed with 2 x Ø900mm fans and motor W-DF160LRX-P (Plant Nos XCES079 Onwards (50Hz) and XCES112 Onwards (60Hz)	°C (°F)	33.0	(91.4)	27.6	(81.68)
		All figures quoted are based on a high temperature engine coolant outlet temperature of 90ºC			

Electrical (ISO 8528-1) *

Continuous Power (COP)	kW (kVA)	1120.0	(1400)	1300.0	(1625)
Single Step Load Application		30%		30%	
Engine JW Cooling Configuration		50Hz		60Hz	
Electrical output to de-rate to achieve 35ºC - Installed with 2 x Ø800mm fans and motor W-DF160LJX-P	kW (kVA)	923.0	(1153.75)	864.0	(1080)
Electrical output to de-rate to achieve 35ºC - Installed with 2 x Ø900mm fans and motor W-DF160LRX-P	kW (kVA)	1071.0	(1338.75)	1073.0	(1341.25)
Electrical output to de-rate to achieve 35ºC - Installed with 2 x Ø900mm fans and	kW (kVA)	1071.0	(1338.75)	0.0	(0.0)

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Gas Energy Input - LHV (ISO 3046-1)

100% kW	kW (kW)	3130.0	(3130)	3959.0	(3959)
90% kW	kW (kW)	2850.0	(2850)	3602.0	(3602)
75% kW	kW (kW)	2417.0	(2417)	3064.0	(3064)
50% kW	kW (kW)	1717.0	(1717)	2164.0	(2164)

Alternator

Class F Temp Rise (105°C) Three Phase	kW (kVA)	1156.0	(1445)	1352.0	(1690)
Ends Out		6		6	
Make & Type		CGT PE734E / Leroy Somer LSA 50.2 VL10		CGT PE734E / Leroy Somer LSA 50.2 VL10	
Regulation		±0.5		±0.5	

Circuit Breaker

Make & Model		Merlin Gerin NW25		Merlin Gerin NW25	
Number of Poles		4		4	
Rating	Amp (Amp)	2500.0	(2500)	2500.0	(2500)
Trip Unit Type		Micrologic 5.0		Micrologic 5.0	
Overload Protection Range		1000 - 2500 Amps (Adjustable by selector)		1000 - 2500 Amps (Adjustable by selector)	
Short Circuit Protection Range		1500 - 25000 Amps (Adjustable by selector)		1500 - 25000 Amps (Adjustable by selector)	

Load Terminals

Type		Busbar M12		Busbar M12	

Engine

Make & Type		Cummins QSK60 Gas		Cummins QSK60 Gas	
Cylinders & Form		V16 60 deg		V16 60 deg	
Aspiration		Turbocharged & Low Temperature Aftercooled		Turbocharged & Low Temperature Aftercooled	
Governor Make & Type		Cummins MCM700		Cummins MCM700	
Governor Type		Electronic		Electronic	

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Steady State Frequency	±1 (±0.5Hz) %	±1 (±0.5Hz) %
Battery Voltage	24 Volts	24 Volts

Engine Gas Supply Pressures

Minimum Pressure @ 50 LHV (MJ/kg)	180 Mbar	240 Mbar
Maximum Pressure	500 Mbar	500 Mbar
Over Pressure Shutdown Threshold	482 Mbar	482 Mbar
Under Pressure Shutdown Threshold	35 Mbar	35 Mbar
MP Gas Train Supply Pressure Range	2 - 6 Bar	2 - 6 Bar
Minimum Methane Index	61	78

Exhaust Emissions

Specific Load	100% Load ± 2%	100% Load ± 2%
CH4 - Methane	1330 mg/nm3	1496 mg/nm3
NOx - Oxides of Nitrogen	489 mg/nm3 for 1.0g/hp-hr NOx Cal	473 mg/nm3 for 1.0g/hp-hr NOx Cal
CO - Carbon Monoxide	676 mg/nm3	485 mg/nm3

Exhaust Silencer

Make & Type	Universal Silencers	Universal Silencers
Certificate Number	M-10408 (per Nelson Burgess)	M-10408 (per Nelson Burgess)
Silencer Back Pressure	6.35 (0.25") mm (ins) Hg	6.35 (0.25") mm (ins) Hg

Noise

Sound Power - EEC	110 dBA	110 dBA
Sound Pressure at 1m/3ft	87 dBA	90 dBA
Sound Pressure at 7m/21ft	80 dBA	84 dBA
Sound Pressure at 15m/49ft	73 dBA	77 dBA

Other Capacities and Dimensions

Lube Oil Capacity - Total	L (US gal)	380.0	(100.32)	380.0	(100.32)
Coolant Capacity (JW)	L (US gal)	480.0	(126.72)	480.0	(126.72)
Coolant Capacity (LTA)	L (US gal)	200.0	(52.8)	200.0	(52.8)
Weight (single container)	kg (lb)	20650.0	(45525.403)	20650.0	(45525.403)
With Pre-Filled Gas Ancillary Module	kg (lb)	26840.0	(59172.001)	26840.0	(59172.001)

(GAM)

With Dry Gas Ancillary Module (GAM)	kg (lb)	26420.0	(58246.06)	26420.0	(58246.06)

Physical Characteristics

Length	6.06 m	19.88 ft
Width	2.44 m	8.01 ft
Height	2.6 m	8.53 ft
Gross Weight	20650 kg	45525.45 lbs
Net Weight	20650 kg	45525.45 lbs
Gross Fuel	0 lit	0 US gal
Net Fuel	0 lit	0 US gal