DRESSER Waukesha

275GL Series

275GL+ Models Provide Class-Leading Power & Emissions

- 4835 bhp - 16V275GL+
  3625 bhp - 12V275GL+
- 0.5 g/bhp-hr NOx
  1.8 g/bhp-hr CO
  0.7 g/bhp-hr NMHC

Now There's a Better Choice

Dresser Waukesha adds the 12V and 16V275GL+ to its 275GL series of high-horsepower engines for the gas compression market.

- 275GL+ meets 2010 EPA SI NSPS regulations for NOx, CO, and VOC without aftertreament
- Advantages in fuel flexibility and efficiency
- Superior altitude capability without derate
- Simplified design reduces packaging cost and time
- Proven ESM® engine control system optimizes engine performance and maximizes uptime

SPECIFICATIONS

	12V275GL	12V275GL+	16V275GL	16V275GL+
BHP (kWb)	3375 (2517)	3625 (2720)	4500 (3356)	4835 (3605)
BSFC (LHV) - Btu/bhp-hr (kJ/kWh)	6445 (9119)	6466 (9150)	6450 (9126)	6466 (9150)
NOx (g/bhp-hr)	1.5	0.5	1.9	0.5
CO (g/bhp-hr)	1.7	1.8	1.6	1.8
NMHC (g/bhp-hr)	0.8	0.7	0.5	0.7
Displacement - in^3 (L)	13048 (214)	13048 (214)	17398 (285)	17398 (285)
Starting System	150 psi (10.3 bar) - standard 90 psi (6.2 bar) - optional			

Values shown at 130°F (54°C) intercooler temperature at 1000 rpm and low fuel consumption setting for GL engines

Fuel Consumption based on ISO 3046/1 with tolerance of -0/+5%

Values subject to change

275GL Series Competitive Advantages

Best-in-Class Emissions

- 275GL+ achieves 0.5 g/bhp-hr NOx, 1.8 g/bhp-hr CO, and 0.7 g/bhp-hr NMHC
  - Meets EPA's 2010 Spark Ignited New Source Performance Standard (SI NSPS) for NOx, CO, and VOC without cost and complexity of aftertreament

Best-in-Class Power Output

- 16V275GL+ rated 4835 bhp (3605 kWb)
- 12V275GL+ rated 3625 bhp (2720 kWb)
  - 7% more power than previous versions

Best-in-Class Fuel Efficiency at 100°F (38°C)

- As much as a 2% fuel savings over the competition with the same NOx output
  - Lower fuel consumption and higher throughput

Best-in-Class Altitude Capability at 100°F (38°C)

- Full power at higher altitudes than the competition
  - 16V275GL+ maintains full power up to 3000 ft (914 m), 50% higher than competition
  - 16V275GL achieves full power up to 6000 ft (1829 m), for high-altitude applications

Best-in-Class Fuel Flexibility

- Maintains power and keeps running as fuel content varies
  - Runs on fuel with up to 1000 ppm H_2S without treatment

ESM® Engine Control System

- Communicates with customer panel via standard MODBUS protocol, reducing complexity and equipment cost
- Electronic Service Program (ESP) interface software and upgrades provided by Waukesha at no charge
- Unlimited ESP downloads and no annual maintenance fee

Fuel Flexibility – More Power On More Fuels

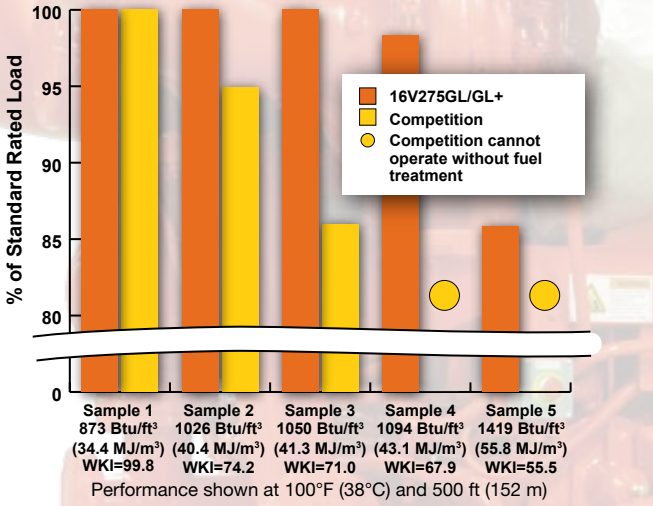
All field gases are not created equal and can change over time. Dresser Waukesha's 275GL Series operates at full power on a much wider range of fuels than the competition without the added cost and complexity of a fuel treatment skid.

The figure on the right illustrates the percentage of maximum rated load that both the 16V275GL/GL+ and the competition can run at when operating on 5 actual fuel samples.

The figure shows:

- The 16V275GL/GL+ operates at the same or higher percentage of rated load than the competition in all 5 samples
- Even when operating on fuels with similar heating values, the competition's performance can vary greatly while the 16V275GL/GL+ performs at full rated load (Samples 2 and 3 show the competition's derate of 5 and 14 percent respectively)
- The 16V275GL/GL+ operates with minimal derate on fuels where the competitor's engine cannot run at all without fuel treatment (Samples 4 and 5)

The 275GL Series' fuel flexibility advantage allows it to operate at a higher percentage of rated power output, even if the on-site fuel quality varies over time.



Performance shown at 100°F (38°C) and 500 ft (152 m)

Fuel Composition					
Constituents	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5
Methane	92.90	83.67	83.31	87.38	63.47
Ethane	0.52	5.31	3.94	4.74	11.07
Propane	0.24	3.63	3.83	2.54	11.82
Iso-Butane	0.12	0.96	1.24	1.19	2.67
Normal Butane	0.12	1.12	1.47	1.67	5.57
Iso-Pentane	0.05	0.37	0.46	0.82	1.81
Normal Pentane	0.05	0.25	0.51	0.49	1.60
Hexane	0.04	0.16	0.42	0.26	0.14
Heptane	0.01	0	0	0.29	0
Nitrogen	2.41	1.84	0	0.13	1.31
Oxygen	0	0	0	0.49	0
Carbon Dioxide	3.64	2.68	4.82	0	0.54
TOTAL FUEL	100	100	100	100	100

Comparisons based upon publically available data published by the competition.

275GL Series Enhancements & Packaging Improvements

Control System

1 ESM Control System
- Factory calibrated and tested
- Eliminates need for customer-supplied engine control logic
- Minimal on-site calibration required
- One-touch start capability increases uptime

Lube Oil System

2 Oil Cooler
- Compact, plate type
- Minimizes package footprint

3 Oil Filter
- Spin-on disposable filter elements
- Oil containment pan
- Easy to service

4 Centrifugal Oil Filtration
- Extends oil service interval by providing secondary filtration

5 Pre-Lube Pump
- Industry standard mounting flange for optional or customer supplied pump motor
- Integrates with ESM to provide proper pre-lube prior to engine start

Cooling System

6 Integrated Thermostats & Bypass Jacket Water Piping

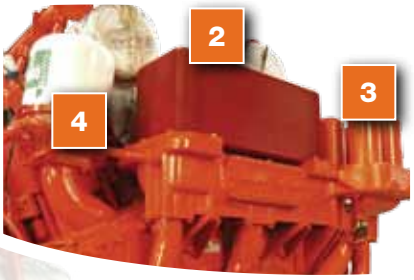
7 Integrated Thermostats & Bypass Auxiliary Water Piping

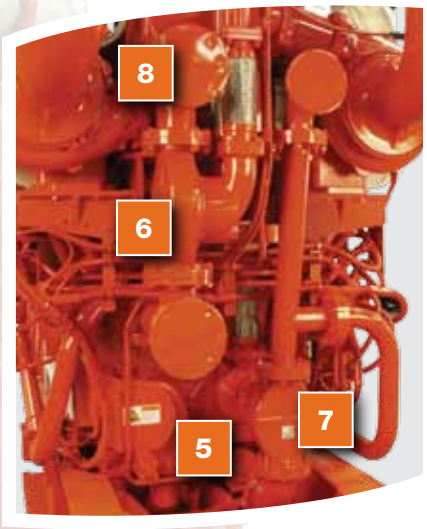
8 Resized Cooling Pump Outputs
- Sized for common cooling circuit requirements
- Eliminates the need for onsite flow adjustment

Control System

9 Wiring Trays
- CSA approved wire harnesses
- Quick disconnects on the ignition coils and thermocouples for easy removal and servicing

10 HMI Panel (275GL+ Only)
- Standard on 275GL+ engines
- Provides digital readout of NOx emissions, O_2 levels, and other engine operating parameters
- Eliminates guesswork and limits onsite calibration
- Simple “set and forget” operation





16V275GL Shown

What is the “+” in the 275GL+?

“+” Means More Of What You Want—
And Less Of What You Don’t.

Competitive Advantages Include:

- Lowest emissions; meets 2010 SI NSPS for NOx, CO, and VOC without aftertreament
- Highest power output
- 2% better fuel efficiency
- Superior fuel flexibility
- Greater altitude capability without derate

Dresser Inc.
Dresser Waukesha
1101 West St. Paul Avenue
Waukesha, WI 53188-4999
T. 262 547 3311
F. 262 549 2795

Bulletin 1426 04/10

DRESSER Waukesha

www.dresser.com/waukesha