Unplugged CNG

REDUCED ELECTRICAL POWER REQUIREMENT
Natural gas powered engine generates all required power for compression eliminating dependency on power grid.

ULTRA-HIGH RELIABILITY
Proven platform combined with advanced remote monitoring options ensures the gas keeps flowing.

CLEANER FUELS
Non-lubricated compressors produce cleaner CNG which reduces maintenance, cost of operation, and extends vehicle engine life.

Clean Energy Compression’s compressors are the most versatile natural gas compressors on the market today. Fully integrated CNG fueling systems are designed, manufactured, packaged, and tested by Clean Energy Compression’s in-house engineering and production teams, using standard models and custom equipment designs.
UnpluggedCNG Compressors are Available Using a Variety of Cylinder Configurations

UnpluggedCNG compressors are available using a variety of cylinder configurations and inlet pressures. Multiple compressor systems, using two or three modular compressor packages that can be integrated together on site, offer higher flow rates and system redundancy.

FEATURES & BENEFITS

- Non-lubricated cylinders, pistons, and valves for clean discharge gas (5ppm or less)
- Reduced electrical power requirements due to natural gas combustion engine
- Compressor layout designed for easy service
- Electrical control (PLC/MCC panel with alarm status indicators for unattended operation)
- Self-lubricating Teflin and/or PEEK composite piston rings and rod packings
- High efficiency gas-to-air heat exchanger for inter-stage and discharge gas cooling
- Lower fugitive emissions due to air actuation of control valves
- Natural Gas Combustion Engine used as prime mover
- Increased up time due to reduced dependence on local grid power
- Reliable product designs that have been tried and tested
- Modular design to allow configurability on site, and redeployment possibilities for temporary sites
- Wide range of models to suit a variety of site requirements
- Simplified ordering process from list of pre-engineered compressor models
- Quicker delivery of standard equipment models
TECHNICAL

CONFIGURATION  MODULAR SINGLE
STAGES OF COMPRESSION  2-5
SKID FOOTPRINT (CONTACT AREA BETWEEN SKID & CONCRETE)  13’6” L X 8’ W
ENCLOSURE DIMENSIONS  15’6” L X 8’ W X 7’9” H (4.7M L X 2.4M W X 2.4M H)
WEIGHT  APPROXIMATELY 22,000 LBS (10,000 KGS)
NOISE LEVEL  85DBA @3M (OPTIONAL LOW NOISE PACKAGE)
GAS LINE CONNECTIONS  INLET  2” (5CM) NPS & 3” (7.6CM) NPS
                      DISCHARGE  ¾” (2CM), 1” (2.5CM) TUBE CONNECTIONS
SKID ELECTRICAL CLASSIFICATION  C1D2
MCC PANEL ELECTRICAL CLASSIFICATION  NON-HAZARDOUS
MCC PANEL LOCATION  OFF-SKID
MAIN MOTOR POWER  300HP (224 KW) STANDARD/ 200HP (149KW) OPTIONAL
HIGH VOLTAGE ELECTRICAL SUPPLY  50Hz COUNTRIES  50HZ | 380 VAC
                      60Hz COUNTRIES  60HZ | 575 VAC | 480 VAC | 440 VAC | 380 VAC
PRIORITY PANELS  SINGLE LINE DIVERTER & 3 LINE PRIORITY PANEL
CODE COMPLIANCE  ANSI, ASME, NFPA, UL, CSA
DISCHARGE PRESSURE  310BAR (4500PSIG)  250BAR (3626PSI)
STANDARD FLOW RANGE  SCFM 72-1985  74-1472
                      DGE/H 30-828  31-614
                      NM/H 116-3190  119-2365
                      SM/H 122-3366  125-2496
INLET PRESSURE RANGE  0.3-69BARG (5-1000PSIG)  0.7-48BARG (10-696PSIG)
FLOW RATE REFERENCE  SCFM @ 14.7PSIA, 60 F  SM3/H @ 101.3KPA, 15.6 C
ELEVATION RANGE  0-2000M (0-6600 FT)
AMBIENT RANGE  STANDARD  -20°F ~ 113 F  -29°C ~ 45°C
                     COLD WEATHER PACKAGE  -40°F ~ 113 F  -40°C ~ 45°C

- Environmental dependencies
- Vertical air discharge louvre. Sound measurement results are considered approximate and specific to the Clean Energy Compression factory measurement location as they may vary due to acoustic variables at the final installation site. Clean Energy Compression is not responsible for sound measurement results at the installation site and any specific sound abatement requirements are the responsibility of the client.
- Metric conversions given for reference only.
- Not all codes will be applicable for all projects, refer to Clean Energy Compression for additional details on design codes.
- Gauge pressure at 0m elevation [1.01325 Bar].
- At 70°F Inlet Gas, 80°F ambient gas temperature conditions.
PROJECT MANAGEMENT
Clean Energy Compression has a dedicated Program Management office that oversees projects in all phases; including initiation, planning execution, monitoring, control, and completion. All projects include a project charter, stakeholder register, responsibility assigned matrices, and project schedule.

MANUFACTURING
A global leader in manufacturing CNG fueling systems, Clean Energy Compression meets all ISO 9001:2008 Quality Management System Safety and Environmental protocols. Clean Energy Compression offers complete CNG fueling systems that are tested in house with Natural Gas and don’t leave the factory until they are 100% certified field-ready.

SERVICE
All Clean Energy Compression projects are supported by a global service network. Customer Care representatives closely monitor performance of units in the field in real-time 24/7. A global network of parts and service providers are available for first-class support on all products.