

# Ingersoll Rand®

Natural Gas Compression  
Packages for NGV Refueling





---

## Natural Gas Compressors

### NGV Refueling

For over twenty-five years, Ingersoll-Rand has been the leader in gas compression for the NGV market. These rugged, pre-packaged modular compressor systems are available in sizes ranging from 28 scfm up to 116 scfm. Designed for heavy use, IR's gas compressors provide the quality and performance that are ideal for most NGV applications and users.

Applications include school bus and municipal fleets, forklift applications, utilities, and public refueling. This package design works well in time-fill, buffer-fill, or fast-fill applications.

### Fleet Refueling

- Heavy-duty cast-iron construction for continuous-duty.
- Ratings meet wide range of fleet refueling requirements.
- Can be used in time-fill and fast-fill refueling applications.
- Efficient design offers great benefits at the lowest cost.
- Proven to be dependable, safe, and easy to operate.
- Manufactured in the U.S.A.

**Ingersoll-Rand modular compression packages are designed for:**

- Safety
- Reliability
- Serviceability







For more information on Hydrocarbon Recovery, please contact Ingersoll-Rand's CNG Distributor.

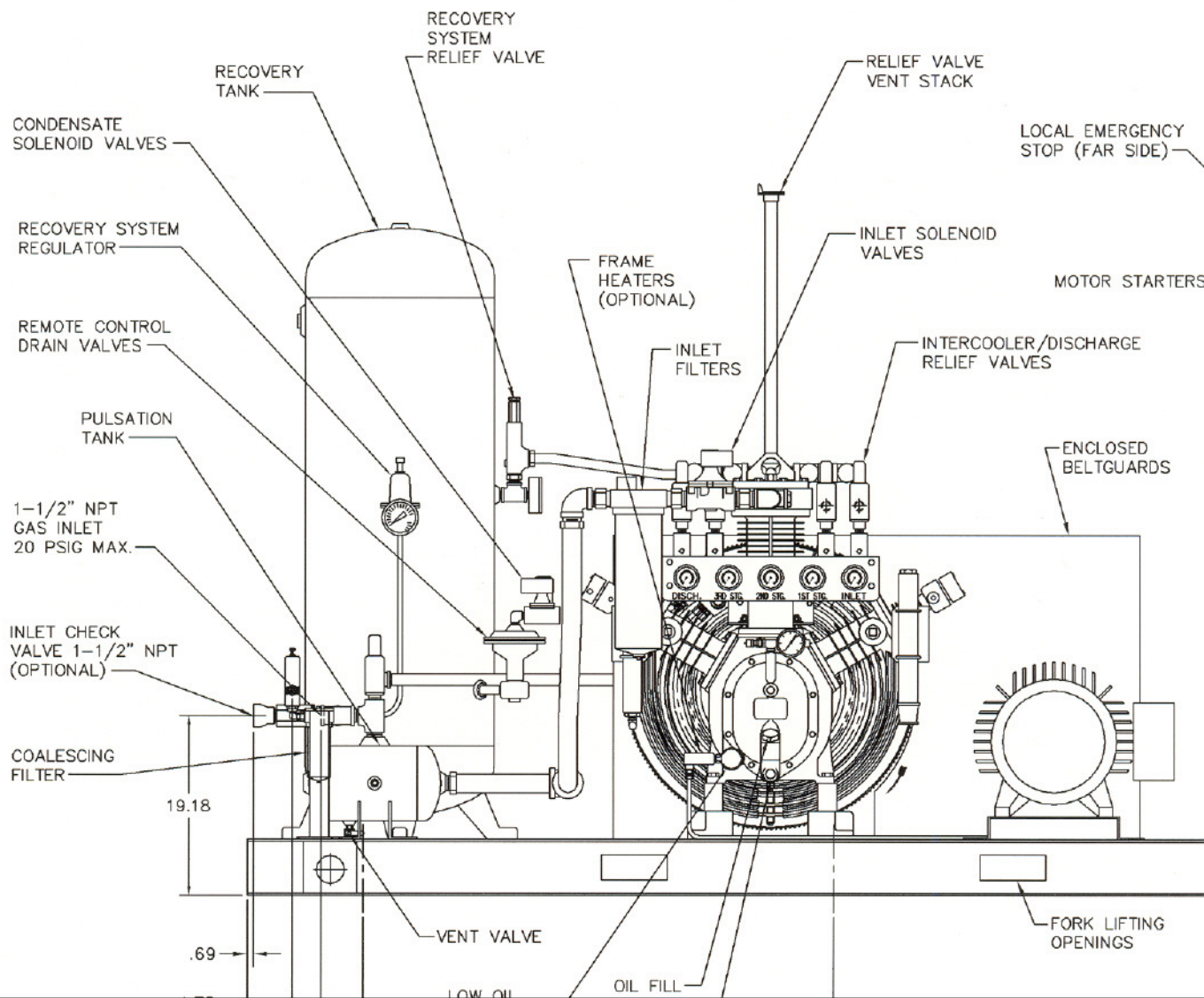
### **Hydrocarbon Recovery**

This design can also be used in gas transmission pipeline applications for hydrocarbon recovery. Off gases from dehydration systems are collected, treated, and re-pressurized for placement back in the pipeline. The results are zero emissions—clean, simple and very effective.

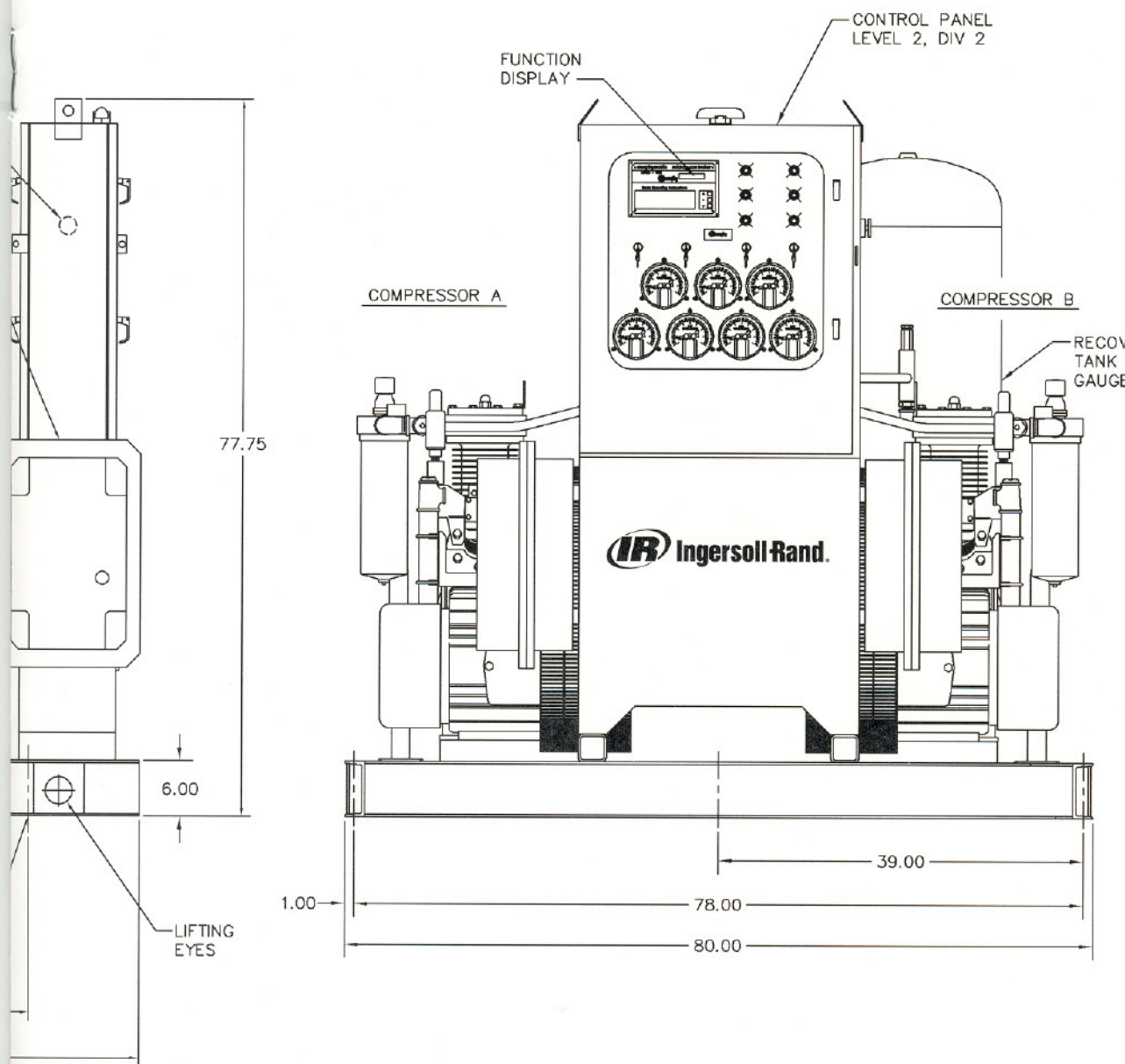
### **More Than Parts. Solutions.**

Whether you need a valve, lubricant, piston rings, or oil seal, each genuine Ingersoll-Rand part is manufactured to match the original design specification of the compressor. IR provides the replacement parts and service so your NGV refueling system is on-line when you need it.

**Insist on genuine Ingersoll-Rand parts and service—the right solution for your NGV refueling compressor package.**







---

## Simplex and Duplex Compressor Packages

Each self-contained compressor package includes the following carefully-matched components which are pre-piped, pre-wired, tested, and proven for reliable natural gas compression.

### Compressor

One (simplex) or two (duplex) air-cooled Ingersoll-Rand natural gas compressors rated for specific refueling requirements. Each multi-stage compressor is complete with cooling fan, interstage intercoolers and aftercoolers, ASME relief valves, and separators.

### Electric Motor Drive

One (simplex) or two (duplex) 1800 rpm, totally enclosed, explosion-proof, electric motors, rated 230/460 volt, 3 phase, 60 Hz. Each is complete with V-belt drive, belt tightener, full-voltage motor starter and totally enclosed metal belt guard with antistatic belts. Alternative electrical configurations are available upon request.

### Inlet (Suction) System

Threaded inlet gas connection complete with inlet check valve, pulsation tank, coalescing filter and solenoid valves. Duplex models have individual manual isolation valves.

### Automatic Condensate Drain System

Regularly dumps liquids collected by separators into the gas recovery tank at user-selected intervals.

### Gas Recovery System

Closed loop vent recovery system with ASME tank, ASME relief valve, pressure gauge and manual drain valve.

### Safety Controls

Electric shutdown controls for the following:

- Low/high inlet (suction) pressure
- High discharge pressure
- Discharge control pressure
- High fourth stage discharge temperature
- Excessive motor starts
- Low crankcase oil level
- Main motor/starter overload
- Emergency shutdown switch (ESD)

### Discharge System

Priority (back pressure) valve and coalescing filter with stainless steel discharge tubing.

### Control Panel with PLC

Frank W. Murphy CNG Level II controls, rated NEC Class 1, Group D. Div. 2, for automatic start/stop operation. Control panel includes the following:

- Switch gauges
- LCD annunciator panel (system status display) including first-out alarm
- Individual hour meters
- Keyed off/auto switch displayed in a weather-tight panel
- Alternating lead/lag control for duplex units only

Additional features are available. Consult your Ingersoll-Rand representative with your specific requirements.

### Design Standards

Module design complies with NFPA 52 Standard for CNG Vehicular Fuel Systems. All electrical devices comply with NFPA 70 National Electrical Code and are NEC rated Class 1, Group D. Div. 2.

### Testing

Compressor cylinders are hydrostatically tested to 1.5 times working pressure. Compressor block tests include immersion leak and functional air testing.

### Shipment

The module is shipped fully assembled on a rigid structural steel baseplate provided with lifting slots and eyes. Modules are ready to install with simple electrical connections and interconnections for gas inlet and discharge.



## Performance Data

### MODEL 05H25NG

990 RPM

|            | Inlet Pressure | Flow Capacity | Discharge Pressure |
|------------|----------------|---------------|--------------------|
| SX Simplex | 5 psig         | 28 scfm       | 5,000 psig         |
| DX Duplex  | 5 psig         | 56 scfm       | 5,000 psig         |

### MODEL 20H40NG

990 RPM

|            | Inlet Pressure | Flow Capacity | Discharge Pressure |
|------------|----------------|---------------|--------------------|
| SX Simplex | 20 psig        | 28 scfm       | 5,000 psig         |
| DX Duplex  | 20 psig        | 116 scfm      | 5,000 psig         |

### DIMENSIONS (inches)

### WEIGHT (lbs.)

|               | Simplex   | Duplex    | Simplex | Duplex |
|---------------|-----------|-----------|---------|--------|
| Model 05H25NG | 30x62x69  | 113x80x75 | 2750    | 4875   |
| Model 20H40NG | 107x62x69 | 124x80x78 | 3100    | 5650   |



# Innovation

Online Solutions: [www.air.irco.com](http://www.air.irco.com)

The compressors described in this brochure are designed specifically for CNG Compressors.  
Ingersoll-Rand air compressors are not designed, intended or approved for breathing air. Compressed air should not be used for breathing air applications unless treated in accordance with all applicable codes and regulations.

Nothing contained in this brochure is intended to extend any warranty or representation, expressed or implied, regarding the products described herein. Any such warranties or other terms and conditions of sale shall be in accordance with Ingersoll-Rand's standard terms and conditions of sale for such products which are available upon request.

Product improvement is a continuing goal at Ingersoll-Rand. Designs and specifications are subject to change without notice or obligation.



**Ingersoll-Rand Company**

Air Solutions  
P.O. Box 1803  
800-B Beaty St.  
Davidson, NC 28036