



# Electric Driven Hydrogen System PN 2G-E14504-H2-P-A200-B5075-VFD-ATEX

The hydrogen booster unit was designed to boost directly from a low pressure source to an outlet pressures up to 5075-psi (350 bar) for charging cylinders or alike.

The unit ensures full fills even if the hydrogen storage cylinders drop as low as 200-psi. The unit intensifies the hydrogen source by means of and electric motor that transfers mechanical energy through a shaft to the speed reducer and crankshaft mechanism to generate the reciprocating action. This mechanism is directly connected to a 2-stage gas boosting configuration. The gas sections are air cooled by an intergral cooling fan.

## **Controls Included:**

- Gas booster PN 2G-E14504-H2-P, 2-stage configuration with vents connected to a common port
- Automatic stop/start high limit control FACTORY preset @ 5075-psi (adjustable) when the hydrogen outlet pressure exceeds set point
- Automatic stop/start low limit control FACTORY pre-set
   200-psi (adjustable) when the hydrogen supply pressure drops below set point
- Manual start/stop control from remote control panel
- Inlet & outlet ports supplied with ¼" NPT (F)
- Outlet safety relief valve set @ 5200-psi (adjustable)
- Gas Inlet/Outlet Pressure Gauges dual scale
- Cooling fan rated at 176-cfm
- Hour Meter, 6-digits installed at remote control panel
- Gas inlet & outlet filters, 5-Micron
- Gas outlet on/off and bleed valves, needle type

# **Specifications:**

•	Dimensions: 37"L x 20"W x 11.5"H	
•	Weight: 155 Pounds	
•	Max. outlet pressure:5075-PSI	
•	Min. inlet pressure: 290-PSI	
•	Max. inlet pressure: 435-PSI	
•	Motor rating: 2-HP, 380-VAC, 3PH	
•	Operating Noice level: 63-dBA	

Operating speed (cpm): ...... (70-72) @ 50-hz

Warranty: ..... 1-year



#### NOTE:

Above illustration shows the Non-ATEX remote enclosure housing the VFD, relays, on/off switch, circuit breaker, potentiometr, and hour meter

### Performance:

Gas Inlet Pressure (PSI)	Discharge Flow Rate from booster	Flow Rate required Max	Frequency Reading from VFD
290	2.1-scfm	0.59-scfm (1NM3/h)	14-hz
		2.1-scfm (5NM3/h)	50-hz
435	3.2-scfm	0.59-scfm (1NM3/h)	9-hz
		2.9-scfm (5NM3/h)	45-hz



