



EcoGen Series

PSA Nitrogen Generators



ENGINEERING YOUR SUCCESS.

EcoGen Series

Industrial Air Filtration



Introduction

With modular design and energy saving technology at its core the **EcoGen** PSA nitrogen gas generator requires less compressed air to generate more nitrogen at economical budget.

Together with substantially lower servicing costs, reduced downtime and a longer working life, it add up to the most cost-efficient nitrogen supply available; significantly more affordable than traditional sources, and it delivers huge savings over the lifetime of the generator.

With over 30 years experience in the market, and over 50,000 gas generators installed globally, Parker is the first choice for innovative and reliable gas generation technology.



Product Specification

- Purity maximum upto 99.99%
- Modular aluminum construction
- Corrosion free
- Universal voltage 100-240V AC - 50/60Hz - 1ph
- Compact in size

Benefits

- Produce as per Demand
- Avoid Cylinder Availability Issues
- Avoid Logistics and Management Problem
- Faster Payback period within 1 Year
- Eliminate safety risk associated with handling high pressure cylinders
- Avoid unused gas in the cylinder



Operating Principle

Drying Cycle : Purified (Moisture and oil free) air from the compressed air system, Passing through one of the aluminum tower filled with Carbon Molecular Sieves. The CMS selectively adsorbs oxygen, allowing nitrogen to pass through at the desired purity level.

Regeneration Cycle : During regeneration cycle, the sudden depressurization brings out oxygen molecules strapped in the CMS pores to the surface of the beads. Small portion of Nitrogen from the drying tower is passes over the CMS through the regeneration orifice. This results in complete regeneration of Carbon Molecular Sieves.



Features

- The automatic cycling of the adsorption and desorption between the two beds enables the continuous production of Nitrogen.
- Detailed design of process parameters followed by extensive validation has resulted in consistent performance in EcoGen Series.
- All Aluminum construction ensures life long corrosion free environment.
- All the joints are modularly designed with non-welded gasketed technology.
- Highly reliable Microprocessor based controller with LCD display of generator operations.
- The controller has been designed to suit universal voltage.



Installation Support

- Parker generators are designed in a way that it works 24x7 on site without any trouble.
- All the components used in our generators are highly reliable, tested and validated.
- Optional safety precautions can be addressed (Stand by gas supply mode automated in case of any failure due to Purity, Power failure etc.) to give uninterrupted gas supply.
- However trained service personal will attend the service calls for breakdown as well as preventive maintenance.
- Necessary documents will be provided and training will be given to the users to handle minor breakdowns.



Rated Capacity at various Purity Level

Nitrogen Purity %		99.99		99.9		99.5		99		98		97		95		Inlet Air Requirement
Oxygen Level %		0.01		0.1		0.5		1		2		3		5		
Model	Part No	Nm3/Hr	LPM	Nm3/Hr	LPM	Nm3/Hr	LPM	Nm3/Hr	LPM	Nm3/Hr	LPM	Nm3/Hr	LPM	Nm3/Hr	LPM	Nm3/Hr
EcoGen - P 10	PIAG05	0.56	9.30	1.22	20.30	1.80	30.00	2.16	36.00	2.52	42.00	2.88	48.00	3.60	60.00	5.80
EcoGen - P 20	PIAG072	0.81	13.50	1.77	29.50	2.60	43.30	3.12	52.00	3.64	60.70	4.16	69.30	5.20	86.70	8.30
EcoGen - P 30	PIAG144	1.62	27.00	3.54	59.00	5.20	86.70	6.24	104.00	7.28	121.30	8.32	138.70	10.40	173.30	16.50
EcoGen - P 40	PIAG216	2.43	40.50	5.30	88.30	7.80	130.00	9.36	156.00	10.92	182.00	12.48	208.00	15.60	260.00	25.00
EcoGen - P 50	PIAG288	3.24	54.00	7.07	117.80	10.40	173.30	12.48	208.00	14.56	242.70	16.64	277.30	20.80	346.70	33.30
Oxygen Sensor Kit	PIOS001	To suit all models as optional														

Brand	Part No	Capacity In M3/Hr @ 99.5%	Pressure	Inlet Conditions	Purity Range in %	End Connection BSP	Dimensions (MM) H X W X D
EcoGen - P 10	PIAG05	1.8	7 Bar	ISO 8573.1-1.4.1	95 to 99.99	1/2"	1166x418x243
EcoGen - P 20	PIAG072	2.6				1/2"	1491x421x243
EcoGen - P 30	PIAG144	5.2				1/2"	1492x421x386
EcoGen - P 40	PIAG216	7.8				1/2"	1492x421x529
EcoGen - P 50	PIAG288	10.4				1/2"	1492x421x672

Treatment Products from Parker

Refrigeration Dryer

- Highly Efficient refrigeration air dryer for pretreatment of compressed air
- Dew point as per ISO 8573 class 5
- Eco friendly refrigerant (R134a, R407c)

High Efficient Coalescing filters

- Specially constructed for reduced air flow velocity
- Reduced pressure loss
- Increased dirt holding capacity
- Improved efficiency.
- Includes a 12-month air quality guarantee

Microprocessor based controller with Digital Display - Optional

- LCD Display
- Failure alarm system
- Purity
- Pressure

Air and Nitrogen Tank

- Compressed air and oxygen tanks are designed as per IS 2825
- Anti-corrosive paint for better life
- Optional : SS Tank
- Pressure Safety valve, Pressure gauges and draining system for automatic and manual

Compressed Air Specification

- Air quality requirement is as per ISO 8573.1 - 1.5.1
- Inlet temperature : + 5 Deg C to 40 deg C
- Operating Pressure : 7 bar(g) to 9 bar(g)
- Electrical requirement : 100 to 230 V, 50/60 HZ, Single phase

Contact Us:-



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