

Generator Gas Dryer II

Water, oil and other contaminants cause corrosion in critical areas of generators, resulting in diminished efficiency and increasing the likelihood of forced outages. Increased dew point levels also detract from generator efficiency by increasing windage losses. E/One's Generator Gas Dryer (GGD II) is a dual-chamber system that continuously dries and recirculates generator cooling gas – even when the generator is on turning gear, which is a critical time to maintain low dew point.



SPECIFICATIONS

OPERATING CHARACTERISTICS

Technology Principle	Molecular sieve as a drying medium
Typical Flow Rate	8 – 12 ACFM, Hydrogen
Typical H ₂ Consumption	90 ft ³ (2.5 meter ³) per regeneration for Mode 2 Regenex™

ELECTRICAL CHARACTERISTICS

Input Voltage	400/480 VAC Three Phase
Input Frequency	50/60 Hz
Input Power	3,000 Watts
Output, Relays	5A @ 250 VAC 5A @ 30 VDC 100 mA @ 125 VDC Dew Point High, NO and NC Trouble, NO and NC
Output, Signals	4-20 mA current output (self-powered) Inlet Dew Point Outlet Dew Point
Area Classification	Zone 2, Group IIB+H2

MECHANICAL CHARACTERISTICS

Ambient Temperature	32 F to 125 F (0 to 52 C)
Maximum Pressure	100 psi
Overall Dimensions	29.75" w x 83" h x 38" d
Inlet & Outlet Connections	3/4" ANSI Class 150 RF Flanges
Vent Connection	1/2" ANSI Class 150 RF Flanges

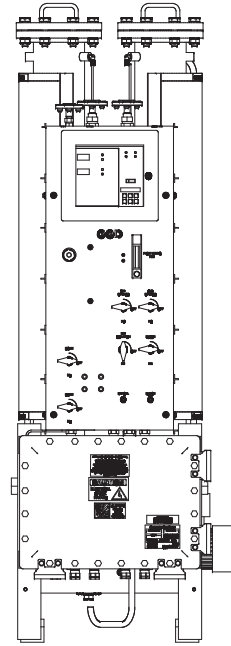
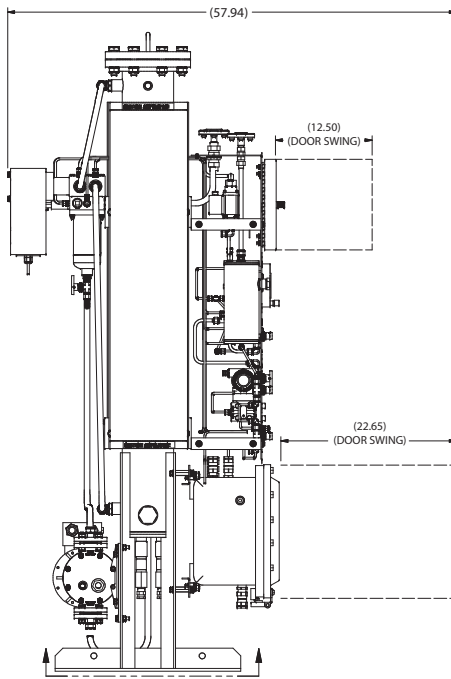
Column regeneration is automated and takes place based on programmable inlet and outlet dew point levels. The GGD II has a secondary, programmable time-based regeneration, allowing you to set maximum times between regeneration (from zero to 30 days).

Contact E/One to arrange a dew point site evaluation by our Field Service technicians. We'll sample your hydrogen cooling gas with NIST traceable portable dew point and hydrogen purity analyzers and then issue a report to site engineering regarding our findings.

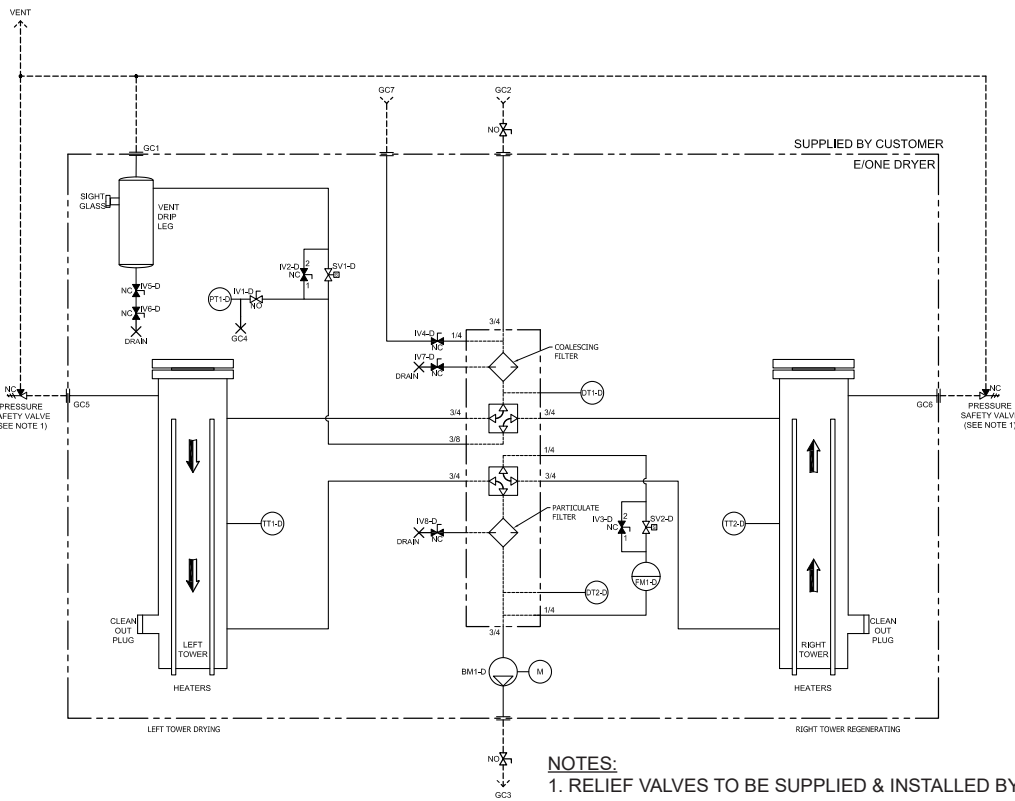
FEATURES AND BENEFITS

- Increased generator efficiency and reduced downtime
- Comprehensive water and contaminant removal
- Microprocessor controlled
- Designed for hazardous location operation
- Self-monitored drying process
- Standard electrical actuator
- Compact design great for retrofits (29.75" w X 83" h X 38" d)

OUTLINE



P&ID



PROCESS CONNECTION TABLE	
CONN	DESCRIPTION
GC1	VENT
GC2	WET GAS INLET
GC3	DRY GAS OUTLET
GC4	PT1 CALIBRATION
GC5	PSV CONNECTION
GC6	PSV CONNECTION
GC7	DRYER PURGE INLET

KEY	
ITEM	DESCRIPTION
PT1-D	PRESSURE TRANSMITTER
FM1-D	FLOWMETER
DT1-D	DEW POINT TRANSMITTER (IN)
DT2-D	DEW POINT TRANSMITTER (OUT)
BM1-D	BLOWER ASSEMBLY W/ MOTOR
TT1-D	DUPLEX RTD PROBE (LEFT)
TT2-D	DUPLEX RTD PROBE (RIGHT)
SV1-D	SOLENOID VALVE (VENT)
SV2-D	SOLENOID VALVE (FILL)

NOTES:

1. RELIEF VALVES TO BE SUPPLIED & INSTALLED BY USER PER ASME UG-125. MAX SETTING TO BE 150 PSI.
2. P&ID MODE SHOWN AS LEFT TOWER DRYING & RIGHT TOWER REGENERATING.
3. REFERENCE OUTLINE STAND ALONE DRYER DRAWING DD0300PXXXXX

CUSTOMER CONNECTIONS



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