

HGD-2000 Compliance

Properly installed, the system is compliant with The National Electric Code (NEC) Section 480.9 (A) for ventilation of battery rooms. This is also the specified requirement for solar or wind generated power Battery Rooms. It is also compliant with The National Fire Protection Association, NFPA 2 Hydrogen Technology Code, which is more stringent. The minimum system consists of an Hydrogen Gas Detector, a Battery Room Forced Ventilator with Positive Airflow Shut Off, a remote firefighter's shutdown capability, a backflow damper, and a 2% monitored alarm. This unit complies with NEC 501.125. (B), 501.105 (1)-3 and is designed for use in Class 1 Div. 2 hydrogen containing classified areas.

The fan unit is compliant with the NFPA Standard on Clean Agent Fire Extinguishing Systems (2001) Section C2.8.2.7.7 and may be used as per Sections 5.3.4, 5.3.6, 7.7.2.4.8, A5.3.6, A8.7.2 and C2.4.3.4

The fan unit is compliant with the NFPA Standard 90A Section 4.2.3, 4.2.3.1, 4.2.3.1.2, 4.2.3.2.2, and 4.2.3.3

All the active component parts on the Fan Battery Room Exhaust Fan With Positive Airflow Shut Off System that are subject to testing are certified by the Underwriters' Laboratory as follows.

<u>Item</u>	<u>Description and Manufacturers Part # - UL number</u>
191200	FAN DC 254X89 48V 690CFM -Orion# OD254AP-48MB - UL E17049
311011	Wire, UL1430 #24 Brown
311019	Wire, UL1430 #24 White
311060	Wire, UL1430#18 Black
311066	Wire, UL1430 #18 Blue
311072	Wire, UL1430 #16 Red
311057	Wire, UL1430 #20 Violet
151259	Receptacle, Mplex, 9 pin – Molex # 538-19-09-1099 - UL E29179
150110	Pin & Socket Connectors 9 CIRCUIT HOUSING- Molex# 15-31-1096 - UL E29179
131005	CALRAD Magnetic Switch #40-660 - UL 634
131004	DELTRON TUBULAR FRAME Solenoid, 24V MED 16 X 2.000 – UL E57982 & E74443
130003	Power Relay, Compact PC Board, NAIS# JW1FSN-DC48V – UL E43028
130025	Power Relay Schreck RT 424048 - UL E214025
<u>Additional parts found only on the Hydrogen Gas Detector</u>	
130007	Power Relay, Compact PC Board, NAIS# JW1FSN-DC12V– UL E43028
140014	Flyback Transformer, Premier Magnetics # PNY-24004 – UL E162344
150058	Phoenix Contact # 1715734
13007	Potter Blumfield RTB14012F - UL E214025