

CLEANSPACE™ EX POWER UNIT PAF-0060

DATA SHEET

PRODUCT CODE: PAF-0060

PRODUCT NAME: CleanSpace™ EX Power Unit



Description

The CleanSpace EX Power Unit is an intrinsically safe battery-powered, positive pressure air-purifying respirator (PAPR). The CleanSpace EX is suitable for use in certain ignitable or potentially explosive atmospheres where there is a risk of explosion.

It is suitable for particulate and gas applications. The CleanSpace EX respirator can be used with CleanSpace Half Masks (PAF-0033, PAF-1010, PAF-0027) and CleanSpace Full Face Masks (PAF-1014). The Power Unit is compatible with the full range of standard CleanSpace Particulate (P3) and Combined Gas filters and pre-filters.

IMPORTANT: The CleanSpace Full Face Mask is not intrinsically safe approved. Check the site requirements for Intrinsically Safe approvals.

Approvals

Standards

AS/NZS1716: 2012
CE Mark EN12942: 1998 +A2: 2008 TM3 (Europe)
IEC 60079-0:2011
IEC 60079-11:2011
EN 60079-0:2012
EN 60079-11:2012

Classification

PAPR-P3 (provides P2 with Half Mask)
Ex ia I Ma
Ex ib IIB T4 Gb
I M1 Ex ia I Ma ☒
II 2 G Ex ib IIB T4 Gb ☒



Features

- Intrinsically safe
- Light weight and comfortable
- High visibility yellow casing for easy recognition
- AirSensit System™ for mask pressure control and breath responsive airflow
- One-button system and standby and auto-start/stop mode for quick don/doffing
- Easy to use support harness
- Altitude compensated filter blocked detection
- Long operating time: up to 8 hours and quick battery recharging: < 2hours
- Easy and accurate flow capability check

Specifications and materials

- Filter blocked status
- Battery charge level
- Low battery
- Manufacturers minimum design flow: 120L/min

Specifications

- Peak airflow: Up to 220 l/min
- Weight: 540g
- Lithium-ion polymer battery
- Operating time: up to 8 hours
- Battery recharging: less than 2 hours
- Operation temperature range: -10°C to +45°C
- Charging temperature range: 0°C to 35°C
- Storage condition: -10°C to +35°C, 30% to 50% RH
- AC Adaptor charger: Input 100 – 240V, 50 to 60Hz, output 14.7Vdc ±5%, 24W

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Suitable Applications for Intrinsically Safe approved sites	<ul style="list-style-type: none"> Underground mining requiring "Very High" equipment protection level (Ma) and level "ia" ignition protection to Methane, where constant risk of presence exists. Propane and Ethylene gas environment requiring "High" equipment protection Level (Gb) and level "ib" ignition protection, where the presence of such gases is likely to occur (Zone 1).
Suitable Applications (other)	Welding, Woodworking, Manufacturing, Smelting, Construction, Recycling Plants, Emergency Services, Mining, Agriculture, Processing Plants, Grinding.
Limitations	CleanSpace is an air filtering, fan assisted positive pressure mask and is designed to be worn in environments where there is sufficient oxygen to breathe safely. Do not use the CleanSpace in IDLH atmospheres, to protect against gases/vapours that cannot be filtered, or in Oxygen enriched or deficient atmospheres.

The CleanSpace EX Powered Respirator has the following approvals listed. Below is an outline of the explanations and recommended applications for the Intrinsically Safe approvals.

Approval	Standard	Classification
AS/NZS Respirator Standard	AS/NZS1716: 2012	PAPR-P2 (Half Face), PAPR P3 (when used with a Full Face Mask)
EN / CE Respirator Standard	EN12942: 1998+A2:2008	TM3
IECEx Standards	IEC 60079-0:2011 IEC 60079-11:2011	Ex ia I Ma Ex ib IIB T4 Gb
ATEX / EN Ex Standards	EN 60079-0:2012 EN 60079-11:2012	Ex I M1 Ex ia I Ma Ex II 2 G Ex ib IIB T4 Gb
IECEx Quality Assurance	IEC 80079-34:2011	
ATEX Quality Assurance	Annex IV of Directive 94/9/EC (ATEX)	
EMC Standard	CISPR 11: 2010 EN 61000-6-2	Group 1 Class B Industrial Limit
ISO Quality Standard	ISO9001	

Suitable Ex Applications:

- Underground mining requiring "Very High" equipment protection level (Ma) and level "ia" ignition protection to Methane, where constant risk of presence exists.
- Propane and Ethylene gas environment requiring "High" equipment protection Level (Gb) and level "ib" ignition protection, where the presence of such gases is likely to occur but not constantly present (Zone1).

IECEx Definitions:

- Ignition protection level, ia – for very high protection, ib – for high protection.
- Gas Group, I for methane; II for other gases, where IIA for propane, IIB for Ethylene, IIC for hydrogen; III for dust.
- Equipment protection level for underground mining, Ma for very high protection, Mb for high protection.
- Temperature class, T4 for 135°C, T3 for 200°C.
- Equipment protection level for other gases, Ga – very high protection, Gb – high protection.

ATEX definitions:

- Equipment Group, I for Underground, II for above ground.
- Equipment Category (Protection level), M for underground, M1: Very high protection, M2 for high protection; 1, 2 & 3 for above ground, 1 for very high protection, 2 for high protection, 3 for normal protection. Gas or dust: G for gas, D for dust.