TECHNICAL DATASHEET

CleanAIR®

www.clean-air.cz

CleanAIR® Chemical 2F Ex

Powered air purifying respirator

* the picture is illustrational only and may vary depending on additional equipment

Description

The battery-powered air-purifying respirator (PAPR) device specially designed for potentially explosive atmospheres.

Application

Chemical 2F Ex provides protection against particulates and a wide range of gas contaminants even in potentially explosive atmospheres.

DA-079_-_51E000_-_Chemical_2F_Ex_-_EN

MALINA - Safety s.r.o.
Luční 11, 466 01 Jablonec n. Nisou, Czech Republic
Tel.: +420 483 356 600, Email.: export@malina-safety.cz
Web.: www.malina-safety.cz / www.clean-air.cz

Revision.: 2021_12_16
Output.: 2021_12_16

TECHNICAL DATASHEET

CleanAIR® Chemical 2F Ex

Powered air purifying respirator

Technical specification

Product code	51 E0 00		
Flow rate	Airflow [lpm]	Mode	Filter category
	160 / 185 / 210 / 235	Hood EN 12941	Particle
	160 / 185 / 210		Light combined (class 1)
	160		Heavy combined (class 2)
Battery	Standard battery		
Voltage	14,4 V		
Capacity	2,6 Ah		
Charging time	< 3 hours		
Operation time*	< 10 hour*		
Battery lifespan	up to 500 charging cycles		
Battery charger	Microprocessor controlled, fully automatic Input: 100 - 240 V (50/60 Hz) Output: 18 V (max. 1 500 mA) Available plugs: EUR, UK and AUS		
Weight	1 000 g (incl. standard battery, excl. filters)		
Dimensions	235 mm / 126 mm / 65 mm		
Noisiness	< 70 dB		
Materials	Unit: high performance polyamide Belt: textile part - polyester/nylon/rubber foam plastic part - polyamide		
Motor	Ball-beared brushless motor		
Input / Output (threads)	Filter thread - RD40x1/7" - 2x Airflow output thread - CA40x1/7" - 1x		
Belt	Comfort padded belt Ex version		
Waist size:	up to 1 500 mm		
Standard	EN 12941		
Protection class / NPF**	TH3 / 500		
ATEX clasification	II 3 G IIB T4 Gc II 3 D IIIC 135°C Dc		
Ingress protection	IP64: When switched ON (without any further requirements) IP65: When switched ON (set of spark arresters and pre-filter holders - 50 01 12) IP68: When switched OFF (with plugged inputs and output - 51 00 46)		
Display	TFT display (262k colours, 160x160 px) (showing actual working mode, airflow, filter condition and battery status)		
Storage conditions	– 10°C to + 55°C, humidity 20 - 95 % Rh		
Operating conditions	– 20°C to + 40°C, humidity 20 - 95 % Rh		

* with new P3 filters and fully charged battery / ** depends on used headtop

TECHNICAL DATASHEET

CleanAIR® Chemical 2F Ex

Powered air purifying respirator

Product sets / variations

51 E0 00FC	Powered air purifying respirator CleanAIR® Chemical 2F Ex, QuickLOCK® light flexi hose, exchangeable battery, charger (EURO - plug), comfort padded belt Ex-version, flow indicator
51 E0 00FD	Powered air purifying respirator CleanAIR® Chemical 2F Ex, QuickLOCK® light flexi hose, exchangeable battery, charger (EURO - plug), PVC belt, flow indicator

* Add U or AUS to the end of product code for ordering charger with UK or AUS plug

Compatible filters

Product code:	Product name	P-white	A-brown	AX-brown	B-grey	E-yellow	K-green	Hg-red	Ozone (10 ppm)	EN 14387	EN 143	EN 12941	EN 12942	EN 148-1 (RD40x1/7")	Note:
Combined filters, thread RD40*1/7"															
50 03 57	A1P3	✓	✓									✓	✓	✓	-
50 01 57	A2P3	✓	✓							✓		✓	✓	✓	-
50 01 62	B2P3	✓			✓				✓	✓		✓	✓	✓	-
50 01 60	K2P3	✓					✓		✓	✓		✓	✓	✓	-
50 01 67	A2B2P3	✓	✓		✓				✓	✓		✓	✓	✓	-
50 01 64	A2B2E2P3	✓	✓		✓	✓			✓	✓		✓	✓	✓	-
50 03 64	A1B1E1P3	✓	✓		✓	✓						✓	✓	✓	-
50 01 68	A2B2E2K2P3	✓	✓		✓	✓	✓		✓	✓		✓	✓	✓	-
50 01 65X	NBC - A2B2E2K2P3	✓	✓		✓	✓	✓			✓		✓	✓	✓	NBC filter
50 01 66	A2B2E2K2HgP3	✓	✓		✓	✓	✓	✓	✓	✓		✓	✓	✓	max. 50 hours
50 02 57	A2P - ZERO	✓	✓							✓		✓	✓	✓	two-thread filter
50 02 66	A2B2E2K2HgP - ZERO	✓	✓		✓	✓	✓	✓	✓	✓		✓	✓	✓	two-thread filter
50 02 68	A2B2E2K2P - ZERO	✓	✓		✓	✓	✓		✓	✓		✓	✓	✓	two-thread filter
Particle filters, thread RD40*1/7"															
50 00 48	P3	✓									✓	✓	✓	✓	-
50 02 49	ZERO	✓									✓	✓	✓	✓	two-thread filter
50 40 48	P3 lite	✓									✓	✓	✓	✓	-
50 42 49	ZERO lite	✓									✓	✓	✓	✓	two-thread filter

TECHNICAL DATASHEET

CleanAIR® Chemical 2F Ex

Powered air purifying respirator

Compatible headtops

72 01 01	Short hood CA-1 Lite	TH3
72 02 01	Long hood CA-2 Lite	TH3
72 10 02	Chem-proof protective hood CA-10	TH3
72 10 02G	Chem-proof protective hood CA-10, grey	TH3
72 03 00 01	Protective face shield UniMask, grey	TH3
72 03 00.02	Protective face shield UniMask, blue	TH3
72 03 00.03	Protective face shield UniMask, orange	TH3
72 03 00.04	Protective face shield UniMask, red	TH3
72 03 00.08	Protective face shield UniMask, neoprene	TH3
70 41 00	Safety helmet CA-40 with grinding visor	TH3

Spare parts and accessories

51 00 10	Battery Li-Ion 14,4 V / 2,6 Ah
51 00 51	Decontaminable belt PVC - 2F/3F
51 00 52	Decontaminable harness PVC - 2F
71 E0 92	Comfort padded belt Ex version
71 00 60	Light flexi hose QuickLOCK™ - CA40x1/7"
71 00 86	Rubber hose QuickLOCK™ - CA40x1/7"
51 00 30EUR	Charger for CleanAIR® Chemical 2F (EURO - plug)
51 00 30UK	Charger for CleanAIR® Chemical 2F (UK - plug)
51 00 30AUS	Charger for CleanAIR® Chemical 2F (AUS - plug)
51 00 46	Set of plugs (2x external thread, 1x internal thread) for decontamination of unit 2F

* To use the Chemical 2F Ex in a potentially explosive atmosphere, it is necessary that the user wears clothing that complies with EN 1149-1 or EN 61340-4-9.

Technical features

Warning system - visual and audible warning for low airflow and low battery charge

Flow control system - maintains level of airflow constant regardless filter clogging or battery charge

Automatic closing system - reduces the risk of unwanted contamination of the unit while the filters are being changed

Allows immersion disinfection - with input and output threads plugs on (Sodium hypochloride or Persteril)

LED display - LED display visualises airflow, filter clogging and battery charge

Battery locking screw - disables the user to remove the battery by accident (screwdriver necessary)

Antistatic materials - belt and the unit are made of the materials which dissipate electrostatic charges