CleanAIR® Chemical 2F plus
Powered air purifying respirator

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

Description

The battery-powered air purifying respirator (PAPR), the breathing protective device for increasing comfort and safety when combined with approved headtops.

Application

In default Chemical 2F Plus provides protection against particulates, but is also capable to provide protection against wide range of contaminants when used with combined filters.

TECHNICAL DATASHEET

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Technical specification

Product code	510000FCA		
Flow rate	Airflow [lpm]	Mode	Filter category
	80 / 120 / 160	Mask EN 12942	Particle
	80 / 120 / 160		Light combined (class 1)
	80 / 120 / 160		Heavy combined (class 2)
	80 / 120 / 160		Heavy combined (class 3)
	160 / 185 / 210 / 235	Hood EN 12941	Particle
	160 / 185 / 210		Light combined (class 1)
	160		Heavy combined (class 2)
	160		Heavy combined (class 3)

Battery	Standard battery	Heavy Duty battery
Voltage	14,4 V	14,4 V
Capacity	3,2 Ah	4,9 Ah
Charging time	< 3 hours	< 6 hours
Operation time*	< 10 hour*	< 20 hours*
Battery lifespan	up to 500 charging cycles	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 (with standard battery)
Noisiness	< 70 dB
Materials	Unit: high performance polyamide Comfort Belt/Harness: 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 - waist size:	Comfort padded belt - up to 1 500 mm

Standard Protection class / NPF**	EN 12941 TH3 / 500	EN 12942 TM3 / 2000

Ingress protection	IP64: IP65: IP68:	When switched ON (without any further requirements) When switched ON (set of spark arresters and pre-filter holders - 50 01 12) 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 Operating conditions	– 10°C to + 55°C, humidity 20 - 95 % Rh 0°C to + 60°C, humidity 20 - 95 % Rh

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

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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).

Built-in barometric sensor – automatic airflow compensation depending on altitude. Works from -500m up to 4500m.

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

Product sets / variations

51 00 00FCA*	Powered air purifying respirator CA Chemical 2F, standard battery, charger (EURO - plug), comfort padded belt, flow indicator
51 00 00FDA*	Powered air purifying respirator CA Chemical 2F, standard battery, charger (EURO - plug), decontaminable belt, flow indicator
51 00 00LA*	Powered air purifying respirator CA Chemical 2F, standard battery, charger (EURO - plug), comfort leather belt, flow indicator

* for ordering variation with UK plug please add „U" at the end of the product code; for AUS plug please add „-AUS" at the end of the product code

Spare parts and accessories

510010	Battery CA Chemical 2F, Li-Ion (14,4V / 3,2Ah)
510020	Battery CA Chemical 2F Heavy Duty, Li-Ion (14,4V / 4,9Ah)
710092	Comfort padded belt
720092	Comfort leather belt
510011	Primary Li-Ion battery, non-rechargeable
510015.1	Power adaptor 230 V / 24 V for the main socket
510015.2	Power adaptor 12 V -24 V – car power socket
510051	Decontaminable belt PVC - 2F/3F
510052	Decontaminable harness PVC - 2F
510148/5	Protective cover for Chemical 2F - disposable, pck of 5 pcs
520044.1	Comfort padded harness
710060	Light flexi hose QuickLOCK™ - CA40x1/7"
710086	Rubber hose QuickLOCK™ – CA40×1/7"
710062F	Hose cover flameproof
700062C	Hose cover chemical resistant
700060	Light flexi hose CA40x1/7" - CA40x1/7" - mask compatible only
700086CA	Rubber hose CA40x1/7" - CA40x1/7" - mask compatible only
700086L	Rubber hose CA40x1/7" - CA40x1/7" straight - 900mm - mask compatible only
700086R	Rubber hose CA40x1/7" - CA40x1/7" 90° - mask compatible only
700086RL	Rubber hose CA40x1/7" - CA40x1/7" 90° - longer - mask compatible only
710060L	QuickLOCK Light flexi hose, extended

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710086L	QuickLOCK Rubber hose, extended
710094	Comfort harness - backpack
510030EUR	Charger Li-Ion 14,4 V - EURO
510030UK	Charger Li-Ion 14,4 V - UK
510030AUS	Charger Li-Ion 14,4 V - AUS
707051	Multicharger 2F - 5 slots, without power supply
707051P	Multicharger 2F -5 slots, incl. power supply and AC cords
51 00 46	Set of plugs (2x external thread, 1x internal thread) for decontamination of unit 2F
52 01 01	TFT display protective foil

Compatible headtops

704441 600	Welding helmet AerTEC™ OptoMAX Air incl. ADF with air distribution, silver	TH3
704441 601	Welding helmet AerTEC™ OptoMAX Air incl. ADF with air distribution, black	TH3
720101	Short hood CA-1 Lite	TH3
720201	Long hood CA-1 Lite	TH3
720102B	Short protective hood CA-1, blue	TH3
720102	Short protective hood CA-1, orange	TH3
720112	Short protective hood CA-1+, orange	TH3
720112B	Short protective hood CA-1+, blue	TH3
720202B	Long protective hood CA-2, blue	TH3
720202	Long protective hood CA-2, orange	TH3
721002	Chem-proof protective hood CA-10	TH3
721002G	Chem-proof protective hood CA-10, grey	TH3
721202	Protective hood CA-12 with garment interface, chemically resistant, yellow	TH3
721203	Protective hood CA-12 with garment interface, chemically resistant, grey	TH3
721204	Protective hood CA-12 with garment interface, chemically resistant, white	TH3
721205	Protective hood CA-12 with garment interface, chemically resistant, CLF, olive	TH3
720300.01	Protective face shield UniMask, grey	TH3
720300.02	Protective face shield UniMask, blue	TH3
720300.03	Protective face shield UniMask, orange	TH3
720300.04	Protective face shield UniMask, red	TH3
720300.08	Protective face shield UniMask, neoprene	TH3
703100	Protective faceshield Omnira air	TH3
710401Y	Safety helmet CA-4 yellow face seal	TH2
710403B	Safety helmet CA-4 additonal flip-up visor, earmuffs	TH2
704000	Helmet CA - 40 with welding visor	TH3
704100	Safety helmet CA-40G grinding shield	TH3
704203	Safety helmet CA-40GW grinding + welding shield, V5-8/9-13 AerTEC X110	TH3

Disclaimer Notice
All the information contained herein is believed to be accurate and is subject to change without notice. Users should independently evaluate the suitability of each product for their own applications. CleanAIR® products are not designed for, and may not be used in, all applications.

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703001	Welding helmet CleanAIR® Verus air, incl. ADF S60+	TH3
703201	Welding helmet CleanAIR Omnira COMBI air, incl. ADF S60F	TH3
700500	Half mask CA-5 Eurmask DIN	TM2
710600	Full face mask GX02, size (S, M, L)	TM3
720600	Full face mask CF02, size (M, L)	TM3
740600.05	Full face mask CM-6, 6-point	TM3
740600.15	Full face mask CM-6M, 6-point, fluid intake	TM3

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"															
500357	A1P3	✓	✓									✓	✓	✓	-
500157	A2P3	✓	✓							✓		✓	✓	✓	-
500557	A3AXP3	✓	✓	✓								✓	✓		-
500162	B2P3	✓			✓				✓	✓		✓	✓	✓	-
500160	K2P3	✓					✓		✓	✓		✓	✓	✓	-
500167	A2B2P3	✓	✓		✓				✓	✓		✓	✓	✓	-
500164	A2B2E2P3	✓	✓		✓	✓			✓	✓		✓	✓	✓	-
500364	A1B1E1P3	✓	✓		✓	✓						✓	✓	✓	-
500168	A2B2E2K2P3	✓	✓		✓	✓	✓		✓	✓		✓	✓	✓	-
500165X	NBC - A2B2E2K2P3	✓	✓		✓	✓	✓			✓		✓	✓	✓	NBC filter
500166	A2B2E2K2HgP3	✓	✓		✓	✓	✓	✓	✓	✓		✓	✓	✓	max. 50 hours
500257	A2P - ZERO	✓	✓							✓		✓	✓	✓	two-thread filter
500266	A2B2E2K2HgP - ZERO	✓	✓		✓	✓	✓	✓	✓	✓		✓	✓	✓	two-thread filter
500268	A2B2E2K2P - ZERO	✓	✓		✓	✓	✓		✓	✓		✓	✓	✓	two-thread filter
Particle filters, thread RD40*1/7"															
500048	P3	✓									✓	✓	✓	✓	-
500249	ZERO	✓									✓	✓	✓	✓	two-thread filter
504048	P3 lite	✓									✓	✓	✓	✓	-
504249	ZERO lite	✓									✓	✓	✓	✓	two-thread filter