Description

The 3M™ Versaflo™ Powered Air Turbo TR-603E-ASB, when combined with the 3M™ Full Face Mask 7900PF and 3M™ Versaflo™ Breathing Tube BT-50, forms a power-assisted system for respiratory protection against particles, organic gases and vapours. The system is specifically intended for use in asbestos/abatement environments.

Technical Features

**Powered Air Turbo TR-603E-ASB:**
- Controlled airflow delivers steady flow as battery discharge or filter loads with particulates
- Display shows battery charge status and particulate loading status during use
- No user calibration of the turbo is required
- Electronic audible, visual and vibratory alarm in case of low battery and/or low airflow
- Two-button operation
- Two filter options available:
  - P
  - A1P
- Lightweight lithium ion battery with LED to indicate charge status
- Easy-clean belt
- Suitable for shower decontamination (IP54) when using filter cover and temporary submersion (IP67) when fitted with cleaning plugs

**Full Face Mask 7900PF:**
- Double faceseal
- Quick release buckles
- Six-strap harness

**Breathing Tube BT-50:**
- DIN connection to face mask
- Bayonet connection to Powered Air Turbo
- Optional breathing tube retainer and disposable cover available

Approvals

The approved 3M respiratory system comprises the Powered Air Turbo TR-603E-ASB, Full Face Mask 7900PF and Breathing Tube BT-50.

The system has been shown to meet the Basic Safety Requirements under Article 10 and 11B of the European Directive 89/686/EEC and is CE marked.

The system was examined at the design stage by: BSI, Kitemark Court, Davy Avenue, Knowhill, Milton Keynes MK5 8PP, UK (Notified Body number 0086). The product complies with the European EMC Directive 2004/108/EC.

Standards

**Respiratory Protection:**
The Powered Air Turbo TR-603E-ASB, Full Face Mask 7900PF and Breathing Tube BT-50 have been tested and approved to EN 12942:1998+A2:2008

**Dust and Water Ingress Protection:**
- TR-603E-ASB (including battery) meets EN 60529 IP54 (5 = dust protected, 4 = protected against spraying water in all directions) when in use.
- TR-603E-ASB (without filter or battery) meets EN 60529 IP67 (6 = dust tight, 7 = protected against temporary water immersion) when fitted with cleaning and storage plugs.
- TR-632 high capacity battery (for use with TR-603E-ASB) meets EN 60529 IPX7 (7 = protected against temporary water immersion) when fitted with cleaning cover.
Applications
The Powered Air Turbo TR-603E-ASB (when fitted with the appropriate filter), Full Face Mask 7900PF and Breathing Tube BT-50, provides protection against:
- Particles e.g. fine dusts, mists and metal fume
- Organic gases and vapours (with boiling point > 65°C)
- Note: The system is specifically intended for use in asbestos/abatement environments

Limitations
The TR-603E-ASB Powered Air Turbo should not be used in the following conditions:
- In atmospheres containing less than 19.5% oxygen
- Confined spaces (lack of ventilation)
- When the risk is considered to be immediately dangerous for life or health (IDLH)
- Where the contaminant concentration is above the Exposure Limit defined for the system

Materials
Powered Air Turbo TR-603E-ASB:
- Turbo Body = Polycarbonate / Acrylonitrile Butadiene Styrene
- Battery Casing = Polycarbonate / Acrylonitrile Butadiene Styrene
- Easy Clean Belt = Ethylene vinyl acetate foam, polyurethane coated polyester web

Full Face Mask 7900PF:
- Face Mask = Silicone
- Lens = Polycarbonate

Breathing Tube BT-50:
- Tube = Ethylene propylene diene monomer (EPDM) rubber
- DIN/Bayonet Connector = Acrylonitrile Butadiene Styrene

Technical Specifications
Nominal Protection Factor (NPF):
Protection Class TM3
- NPF = 2000 (Power On)
- NPF = 1000 (Power Off)

Outlet Flow Characteristics
- Manufacturer’s Minimum Design Flow (MMDF) 160 l/min
- Nominal Flow = 180 l/min

Battery Duration (with new battery and clean filter at 20°C)
- When using P Filter = 9 hours
- When using A1P Filter = 7 hours

Battery Charge Time
- High Capacity Battery = Less than 4.5 hours

Storage Conditions
- -30°C to +50°C < 90%RH

Operating Temperature
- -10°C to +55°C

Spare & Accessories

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