# Technical Fact Sheet





# 3M<sup>™</sup> Aircare<sup>™</sup> Filtration Unit ACU-03/ACU-04

### **Main Features**

The 3M<sup>™</sup> Aircare<sup>™</sup> Filtration Unit provides high quality air from an external source of compressed air by removing water and oil droplets, solid particles and odours. The unit removes condensation and contamination from within the air system before it is delivered to the user.

- Three-stage filtration system removes particulates, water and oil droplets and hydrocarbon vapours
- One-handed operation to easily remove filter bowls. No tools required
- Simple, screw-fit filter elements for simple and secure maintenance.
- Secure attachment of filter stages for added confidence
- Semi-automatic drains empty the first and second stage bowls when the system is depressurised
- Solid, aluminium bowl construction for increased robustness
- Differential pressure indicator indicates when second stage filter needs changing/inspecting
- Provides Airflow in excess of 1200 litres per minute
- Multiple users/tools 2-way and 3-way manifolds available
- Optional anti-tamper lockout kit provides added security

# **Approvals**

This product is approved by 3M United Kingdom Plc for use with 3M air fed devices where the supply pressure and flow rates are met by the filtration unit.

The PPE Directive 89/686/EEC does not apply to this type of device, therefore this device is not CE marked.

## Standards

The Aircare<sup>M</sup> Unit is tested to ISO 8573-1:2010 Class 6-1. This defines filter performance for:

Particulates - Water vapour - Oil

Class 6 (particulates) defines a maximum mass concentration of  $< 5 \mbox{ mg/m3}$ 

Class '-' (water vapour) refers to the water vapour class not being defined as this is dependent on the dew point of the system.

Class 1 (oil) refers to the maximum concentration of oil of 0.01 mg/m3.

# Applications

The Aircare unit provides a continuous flow of high quality compressed air.

Applications include:

- Pharmaceuticals
- Chemical mixing/handling
- Laboratories
- Paint Spraying
- Fibreglass handling
- Chemical and Agrochemical spraying
- Welding
- Foundries
- Grinding

### **Use Limitations**

The 3M<sup>™</sup> Aircare<sup>™</sup> Filtration Unit must be used with industrial compressed air systems only.

- Air into the compressor should be of breathable quality in accordance with EN12021.
- Gases such as carbon dioxide, carbon monoxide and other toxic dusts and gases should be prevented from entering the compressed air supply.
- The unit will not reduce concentrations of oxygen, carbon monoxide or carbon dioxide in the air.
- Do not use with asphyxiates
- Do not use outside the ambient temperature range of -10°C to +50°C.
- If used at higher temperatures (+50°C to +80°C) see maintenance section of the user instructions.
- Do not exceed the maximum working pressure of 10 Bar.
- Do not use in environments that are immediately dangerous to life and health (IDLH).
- Do not use in oxygen deficient environments.
- In case of intended use in potentially explosive atmospheres please contact 3M.

### **Technical Specifications**

Compressed air for general use. Contaminants and purity classes. ISO 8573-1:2010 Class 6-1

Inlet Pressure: Maximum pressure 10 Bar

**Outlet Flow Characteristics:** Maximum Flow 1200 litres per minute

Operating Conditions: -10°C to +50°C

#### Weight:

Wall mounted unit 2.6kg

Floor mounted unit 3.8kg

Inlet Port: 1/2" BSP

Outlet Port: 3/8" BSP

Pressure Gauge port: 1/4" BSP

#### Consumables/Spares/Accessories

Consumables	
ACU-20	Replacement Filter Kit
Spare Parts	
ACU-14	Pressure Gauge
ACU-22	T-Bracket Connector
ACU-23	Differential Pressure Indicator Kit
ACU-24	Metal Bowl with semi-auto drain (Stage 1,2)
ACU-25	Metal Bowl with manual drain (Stage 3)
Accessories	
ACU-21	Anti-tamper lockout kit