

# EC Type Examination Certificate

This is to certify that:

3M United Kingdom Plc  
3M Centre  
Bracknell  
Berkshire  
RG12 8HT  
United Kingdom

Holds Certificate Number:

CE 557352

In respect of:

**Respiratory protective devices to EN 12941:1998+A2:2008**  
**Powered filtering devices incorporating a helmet or hood**  
**Models: Range based on the 3M™ Versaflo™ M-406/M-407 Helmets.**

On the basis of our examination, under the requirements of Council Directive 89/686/EEC "Personal Protective Equipment" Article 10, EC Type-Examination

For and on behalf of BSI, a Notified  
Body for the above Directive  
(Notified Body Number 0086):



Gary Fenton, Global Product Certification Director

First Issued: 22/09/2010

Latest Issue: 14/11/2016

Page: 1 of 8

...making excellence a habit.™

# EC Type Examination Certificate

No. CE 557352

**Product Details:**

**Product name:** Headtop based Powered Air Respiratory Protective Systems.

**Product type:** Powered air filtering devices incorporating a Helmet/Visor combination to additionally provide head, eye and face protection.

**Models:**  
(standard industrial products) 3M™ Versaflo™ M-406/M-407 Helmets - 3M™ Jupiter™ systems  
3M™ Versaflo™ M-406/M-407 Helmets - 3M™ Versaflo™ TR-302E systems  
3M™ Versaflo™ M-406/M-407 Helmets - 3M™ Versaflo™ TR-302E+ systems  
3M™ Versaflo™ M-406/M-407 Helmets - 3M™ Versaflo™ TR-602E systems.

**Technical Specification:** Harmonized European Standard EN 12941:1998+A2:2008.  
Harmonized European Standard EN 397:1995.  
Harmonized European Standard EN 166:2001.

**EN 12941 classifications:** 3M™ Jupiter™ systems: TH3  
3M™ Versaflo™ TR-302E systems: TH3  
3M™ Versaflo™ TR-302E+ systems: TH3  
3M™ Versaflo™ TR-602E systems: TH3.

|                                |                                        |                       |
|--------------------------------|----------------------------------------|-----------------------|
| <b>EN 397 classifications:</b> | <b>Non Mandatory EN 397 Attributes</b> | <b>Marking Symbol</b> |
|                                | Electrical properties                  | 440V a.c.             |
|                                | Lateral deformation.                   | LD                    |

|                                |                     |                                                                                                                                                                                                                     |                       |
|--------------------------------|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| <b>EN 166 classifications:</b> | <b>Visor</b>        | <b>EN 166 Attribute</b>                                                                                                                                                                                             | <b>Marking Symbol</b> |
|                                | M-925<br>(uncoated) | Optical class<br>Protection against high speed particles, medium energy impact at extremes of temperature<br>Protection against droplets and splashes of liquids<br>Protection against molten metal and hot solids. | 1<br>BT<br>3<br>9     |
|                                | M-927<br>(coated)   | Optical class<br>Protection against high speed particles, medium energy impact at extremes of temperature.<br>Protection against droplets and splashes of liquids                                                   | 1<br>BT<br>3          |

First Issued: 22/09/2010                      Latest Issue: 14/11/2016

# EC Type Examination Certificate

No. CE 557352

## Product Assessments:

The product assessments for the respiratory protection were based on BS EN 12941:1998+A2:2008, the English language version of EN 12941:1998+A2:2008, respiratory protective devices - powered filtering devices incorporating a helmet or hood.

The product assessments for the head protection were based on BS EN 397:1995, the English language version of EN 397:1995, industrial safety helmets, both documents incorporating Amendment No. 1.

The product assessments for the eye and face protection were based on BS EN 166:2002, the English language version of EN 166:2001 - personal eye protection.

## Additional independently Certified characteristics of the systems:

### Intrinsic Safety (IS)

The Jupiter Powered Air Turbo Unit has the option of being configured as an Intrinsically Safe (IS) Unit, consisting of the Turbo Unit, IS Battery Pack, IS Pouch.

This configuration has been assessed by Sira Certification Limited and is referenced on Product Conformity Certificate Sira Ex09Y2202X, assessed as follows:

BS EN 60079-0:2006, Electrical apparatus for explosive gas atmospheres. General requirements.

BS EN 60079-11:2007, Explosive atmospheres. Equipment protection by intrinsic safety "i".

BS EN 61241-1:2004, Electrical apparatus for use in the presence of combustible dust. Protection by enclosures "tD".

### Certification code and marking:

Ex ib IIB T3 Gb

Ex tb IIIC T55°C Db

Ta= -20°C to +40°C

II 2GD

**Note:** When assembled for an Intrinsically Safe configuration a BT-20S, BT-20L or BT-30 Breathing Tube must be used.

First Issued: 22/09/2010

Latest Issue: 14/11/2016

Page: 3 of 8

This certificate has been issued by and remains the property of BSI Assurance UK Ltd, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP, United Kingdom and should be returned immediately upon request.

To check its validity telephone +44 (0) 345 080 9000. An electronic certificate can be authenticated [online](#).

BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.  
A member of BSI Group of Companies.

# EC Type Examination Certificate

No. CE 557352

## Dust and Water Ingress Protection

### In Use Configuration

BS EN 60529:1992, Degrees of protection provided by enclosures (IP code).

| Powered Air Turbo Unit | Protection Code Description                        | Code |
|------------------------|----------------------------------------------------|------|
| Jupiter                | Dust protected                                     | IP5X |
|                        | Protected against spraying water                   | IPX3 |
| Jupiter with IS pouch  | Dust tight                                         | IP6X |
|                        | Protected against spraying water                   | IPX3 |
| TR-302E and TR-302E+   | Dust protected                                     | IP5X |
|                        | Protected against spraying water                   | IPX3 |
| TR-602E                | Dust protected                                     | IP5X |
|                        | Protected against spraying water in all directions | IPX4 |

### Decontamination configuration

BS EN 60529:1992, Degrees of protection provided by enclosures (IP code).

| Powered Air Turbo Unit                                                           | Protection Code Description                 | Code |
|----------------------------------------------------------------------------------|---------------------------------------------|------|
| TR-602E Turbo fitted with cleaning and storage plugs (no Filter or Battery Pack) | Dust tight                                  | IP6X |
|                                                                                  | Protected against temporary water immersion | IPX7 |
| TR-602E Battery Packs fitted with cleaning cover                                 | Protected against temporary water immersion | IPX7 |

### Electromagnetic Compatibility (EMC)

The Jupiter, TR-302E and TR-602E Powered Air Turbo Units also comply with the requirements of the Electromagnetic Compatibility Directive 2004/108/EC whilst the TR-302E+ Powered Air Turbo Unit complies with the Electromagnetic Compatibility Directive 2014/30/EC.

First Issued: 22/09/2010

Latest Issue: 14/11/2016

Page: 4 of 8

This certificate has been issued by and remains the property of BSI Assurance UK Ltd, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP, United Kingdom and should be returned immediately upon request.  
To check its validity telephone +44 (0) 345 080 9000. An electronic certificate can be authenticated [online](#).

BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.  
A member of BSI Group of Companies.

# EC Type Examination Certificate

No. CE 557352

## Systems Components

The major components of each system are a 3M Versaflo Headtop with a 3M Breathing Tube and, as standard, a 3M Waist Belt mounted Powered Air Turbo complete with Battery and Filter(s).

### Components common to all systems:

#### Headtops

The Versaflo M-406 and M-407 Headtops comprise of an Industrial Safety Helmet complete with a lift-up Visor Carrier incorporating a clear coated or clear uncoated Visor and with an Inner Collar and High Durability or Flame Resistant Outer Shroud.

The models are identical except that as standard the M-406 and M-407 are fitted with High Durability and Flame Resistant Outer Shrouds respectively. In use the Outer Shrouds are interchangeable.

#### Breathing Tubes (see Note)

Each system can be fitted with the BT-Series Breathing Tubes consisting of the BT-20S (lightweight, short/medium), BT-20L (lightweight, medium/long), BT-30 (self-adjusting) or BT-40 (heavy duty rubber) Breathing Tubes.

The Breathing Tubes incorporate a quick release connector which allows easy connection/disconnection to the Headtops.

**Note:** It is not intended for the BT-30 to be used in systems incorporating the Headtops and the TR-602E Turbo and TR-600 Filters.

First Issued: 22/09/2010

Latest Issue: 14/11/2016

Page: 5 of 8

This certificate has been issued by and remains the property of BSI Assurance UK Ltd, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP, United Kingdom and should be returned immediately upon request.

To check its validity telephone +44 (0) 345 080 9000. An electronic certificate can be authenticated [online](#).

BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.  
A member of BSI Group of Companies.

# EC Type Examination Certificate

No. CE 557352

## Components of specific systems:

| Systems incorporating a Jupiter Turbo Unit |                      |
|--------------------------------------------|----------------------|
| Batteries                                  |                      |
| Description                                | Part No.             |
| 4 hour (IS)                                | 007-00-62            |
| 4 hour                                     | 007-00-63            |
| 8 hour                                     | 007-00-64            |
| Filters                                    |                      |
| P R                                        | 450-00-25            |
| A2P R                                      | 453-00-25            |
| A1B1E1P R                                  | 456-18-25            |
| K1P R                                      | 453-16-25            |
| A2B1E1K1P R                                | 453-09-25            |
|                                            |                      |
| Belt and Braces                            |                      |
| Belt                                       | BLT-12               |
| Braces                                     | TR-329/<br>022-25-10 |
|                                            |                      |
|                                            |                      |
|                                            |                      |

| Systems incorporating a TR-302 or a TR-302E+ Turbo Unit |                      |
|---------------------------------------------------------|----------------------|
| Batteries                                               |                      |
| Description                                             | Part No.             |
| Standard Economy                                        | TR-330               |
| High Capacity                                           | TR-332               |
|                                                         |                      |
| Filters                                                 |                      |
| P R                                                     | TR-3712E             |
| P R plus nuisance level Organic Vapour                  | TR-3802E             |
| P R plus nuisance level Acid Gas (HF 10xTLV)            | TR-3822E             |
|                                                         |                      |
|                                                         |                      |
|                                                         |                      |
| Belts, Braces and Backpack                              |                      |
| Standard Belt                                           | TR-325               |
| Leather Belt                                            | TR-326               |
| Easy Clean Belt                                         | TR-327               |
| Backpack                                                | BPK-01               |
| Braces                                                  | TR-329/<br>022-25-10 |

| Systems incorporating a TR-602E Turbo Unit          |                      |
|-----------------------------------------------------|----------------------|
| Batteries                                           |                      |
| Description                                         | Part No.             |
| Standard Economy                                    | TR-630               |
| High Capacity                                       | TR-632               |
|                                                     |                      |
| Filters                                             |                      |
| P R                                                 | TR-6710E             |
| A1P R                                               | TR-6110E             |
| A1B1E1P R                                           | TR-6130E             |
| A2P R                                               | TR-6310E             |
| P R plus nuisance level Organic Vapour and Acid Gas | TR-6820E             |
| A2B2E2K1HgP R                                       | TR-6580E             |
| Belts, Braces and Backpack                          |                      |
| High Durability Belt                                | TR-626               |
| Easy Clean Belt                                     | TR-627               |
| Backpack                                            | BPK-01               |
| Braces                                              | TR-329/<br>022-25-10 |
|                                                     |                      |

First Issued: 22/09/2010

Latest Issue: 14/11/2016

Page: 6 of 8

This certificate has been issued by and remains the property of BSI Assurance UK Ltd, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP, United Kingdom and should be returned immediately upon request.  
To check its validity telephone +44 (0) 345 080 9000. An electronic certificate can be authenticated [online](#).

BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.  
A member of BSI Group of Companies.



# EC Type Examination Certificate

No. CE 557352

## Packaged variants

In addition to the products referenced on this Certificate the standard industrial products may also be sold as market specific packaged variants. Such variants will be differentiated and the Technical File(s) will be updated with the appropriate information.

## Kits and packouts

The products referenced on this Certificate may also be combined with other 3M products into a kit or packout. There will be no change to the product but the User Information may vary, in such instances the applicable Technical File(s) will be updated with the appropriate information.

## Certificate Administration Details

### Technical File References:

| System Component                                      | Technical File |
|-------------------------------------------------------|----------------|
| 3M Versaflo M-406/M-407 Helmets.                      | TF0215.        |
| 3M BT-20S/BT-20L, BT-30 & BT-40 Breathing Tubes.      | TF0137.        |
| 3M Jupiter Filters.                                   | TF0200.        |
| 3M Jupiter Powered Air Turbo.                         | TF0210.        |
| 3M Versaflo TR-302E Powered Air Turbo & Filters (1).  | TF0211.        |
| 3M Versaflo TR-302E+ Powered Air Turbo & Filters (2). | TF0211.        |
| 3M Versaflo TR-602E Powered Air Turbo.                | TF0405.        |
| 3M Versaflo TR-600 Filters.                           | TF0429.        |

- (1) Technical File up to and including Amendment 9 – 25.05.2016 references the 3M TR-302E model.
- (2) Technical File from Amendment 10 – 30.09.2016 onward references the 3M TR-302E+ model.

First Issued: 22/09/2010

Latest Issue: 14/11/2016

Page: 7 of 8

This certificate has been issued by and remains the property of BSI Assurance UK Ltd, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP, United Kingdom and should be returned immediately upon request.  
To check its validity telephone +44 (0) 345 080 9000. An electronic certificate can be authenticated [online](#).

BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.  
A member of BSI Group of Companies.

# EC Type Examination Certificate

No. CE 557352

(3)

## Certificate Amendment Record and internal BSI Review related to this Certificate:

| Issue date        | Comments                                                                                                                                                                                                                          | BSI Review No.                  |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|
| 22 September 2010 | First issue, model 3M Versaflo M-406/M-407 Helmet with 3M Versaflo TR-302E and Jupiter Powered Air Turbo systems.                                                                                                                 | 0086:7461145                    |
| 24 February 2012  | Addition of Dustmaster Powered Air Turbo and associated items.<br>Addition of M-925 visor and change of classification of M-927 visor.                                                                                            | 0086:7795560                    |
| 20 March 2012     | Removal of 008-00 Breathing Tubes from Components Table – included in error.                                                                                                                                                      | Review added to<br>0086:7795560 |
| 9 April 2015      | Deletion of Dustmaster systems, Dustmaster Turbo no longer manufactured.<br>Addition of the 3M Versaflo TR-602E systems and TR-600 filters.<br>Article 11B Certificate reference changed to that of the 'multi-site' Certificate. | 0086:8197715                    |
| 28 August 2015    | Addition of filters TR-6130E, TR-6310E and TR-6820E for the 3M Versaflo TR-602E systems.                                                                                                                                          | 0086:8411249                    |
| 23 June 2016      | Addition of filter TR-6580E for the 3M Versaflo TR-602E systems.                                                                                                                                                                  | 0086:8548310                    |
| November 2016     | Addition of the 3M Versaflo TR-302E+ systems.                                                                                                                                                                                     | 0086:8645406                    |

## Certificate validity

The Certificate holder is responsible for ensuring that the Notified Body is advised of changes to any aspect of the overall processes utilised in the manufacture of the product, failure to do so could invalidate the Certificate in respect of product manufactured following the introduction of such changes.

The validity of the Certificate is also dependent on the maintenance of the EC quality of production by monitoring system, PPE Article 11B, as referenced on BSI issued Certificate CE 595701.

First Issued: 22/09/2010

Latest Issue: 14/11/2016

Page: 8 of 8

This certificate has been issued by and remains the property of BSI Assurance UK Ltd, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP, United Kingdom and should be returned immediately upon request.  
To check its validity telephone +44 (0) 345 080 9000. An electronic certificate can be authenticated [online](#).

BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.  
A member of BSI Group of Companies.