



# Certificate of Conformity

Certificate num.	Registration date	Version	Issue date	Valid until	Page 1 of 2
<b>afp - 1496</b>	23-Nov-2001	Number 22	3-Apr-2024	30-Apr-2025	

## Product designation

**Tyco, Model D51MX, analogue addressable, duct sampling unit**

(Refer to the Schedule/enclosures for further specified details)

## Agent/distributor

Johnson Controls Fire Detection Products  
Level 3, 37 Dalmore Drive, Carribbean Park, SCORESBY, VIC, AUSTRALIA, 3179

## Registrant

Johnson Controls Fire Detection  
17 Mary Muller Drive, Hillsborough, Christchurch, NEW ZEALAND, 8022

### Producer

Tyco Fire & Security  
47 Gilby Road, MOUNT WAVERLEY, VIC, AUSTRALIA, 3149

## Conformance criteria and evaluation

The Tyco, Model D51MX, analogue addressable, duct sampling unit has been evaluated and verified as conforming with the relevant requirements of the following criteria.

1. Australian Standard AS 1603.13-1998, 'Automatic fire detection and alarm systems - Duct sampling units'.

## Limitations/conditions of conformance

Limitations/conditions of conformance, where identified on this certificate, are derived from qualifications from evaluation(s) for conformity and/or other related technical documentation. All details with respect to design, assembly and installation instructions and restrictions should be checked against the producer's current technical manual/data sheets and the requirements of the Authority having Jurisdiction.

Specified limitations/conditions, determined from the evaluation for conformity, include the following.

- i. The minimum pressure differential exceeds 3.4 Pa.
- ii. The maximum duct size is 1.8 m.
- iii. Should only be installed in accordance with the installation instructions provided with the DSU.
- iv. Compatibility of this fire detector and its base assembly with new or existing control and indicating equipment should be verified prior to installation.

Issued by

Kai Loh

Executive Officer – ActivFire Scheme



This certification is issued within the scope of CSIRO Verification Services – Rules governing ActivFire Scheme and is valid only for the product(s) as submitted for evaluation and verification of conformity, subject to the following conditions.

- Reference to details, limitations and requirements, where documented as a schedule/enclosure with this certificate.
- The Registrant is responsible for their attestation of conformity and ensuring that on-going production complies with the conformance criteria defined in this certificate.
- This certificate will not be valid if any changes or modifications are made to the product which have not been notified and validated by CSIRO Verification Services.
- This certificate is subject to periodical re-validation upon verification that all requirements, as determined by the conformity assessment body, continue to be satisfactorily met by the Registrant.
- This certificate may only be reproduced in its published form, without modification and inclusive of all schedules/enclosures.
- Any changes, errors or omissions, must be submitted in writing and if necessary or requested, substantiated with relevant evidence.
- Any representations, such as advertising or other marketing related activities or articles shall reflect the correct contents of this certificate and conform with all relevant trade practices and consumer protection legislation and regulations.
- Any terms or conditions of use as applicable to content and documentation as published or accessed through web sites administered by the CSIRO Verification Services.

# Schedule to Certificate of Conformity

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Page 2 of 2

## Producer's description

The Tyco, Model D51MX, analogue addressable, duct sampling unit is a housing and detector for detecting smoke in air-conditioning ducts. The detection system consists of a sensor, field wiring terminations and tubes for drawing air out of an air-conditioning duct, passing the air through the sensor and exhausting the air back into the air-conditioning duct.

The Tyco, Model D51MX, analogue addressable, duct sampling unit consists of the following components:

- Tyco, Model D51B duct housing.
- Tyco MX, Model 814PH, analogue addressable multi-sensor, photoelectric smoke and heat detector or Tyco MX, Model 814P, analogue addressable, photoelectric smoke detector, or Tyco MX, Model 850P, analogue addressable, photoelectric smoke detector, or Tyco MX, Model 850PH, analogue addressable, multi-sensor, photoelectric smoke and heat detector.
- Tyco Model 4B, 4B-C, 5B or M614 universal base.
- Junction box and lid with field wiring terminals.
- Tyco Model D51T3 Sampling tube (cut to appropriate length).

The Tyco MX, Model 814PH, analogue addressable multi-sensor, photoelectric smoke and heat detector and Tyco MX, Model 814P, analogue addressable, photoelectric smoke detector and Tyco MX, Model 850P, analogue addressable, photoelectric smoke detector and Tyco MX, Model 850PH, analogue addressable, multi-sensor, photoelectric smoke and heat detector produce a digital signal proportional to smoke density. The compatible control and indicating equipment (CIE) monitors the detector output and initiates an alarm state when an alarm threshold is exceeded. The CIE may be programmed to have the alarm state latch or be non-latching as required and is normally programmed to illuminate the red LED fitted to the detector to indicate an alarm state. The field wiring terminals also allow a remote alarm indicator to be activated by the CIE.

## Technical specification

The following details are a representative extract of the technical specification for the Tyco, Model D51MX, analogue addressable, duct sampling unit and may be subject to change. Complete and current details should be determined from the designated producer's technical manual/data sheets.

<b>Nominal sensitivity:</b>	8.0% obs./m
<b>Operating voltage:</b>	20.0 to 40.0 Vdc (loop voltage)
<b>Quiescent current:</b>	250 $\mu$ A (typical) @ 25°C with 814P/814PH; 330 $\mu$ A with 850P/850PH
<b>Alarm current:</b>	3 mA (typical), 3.3 mA (maximum) @ 25°C 10 mA with remote indicator fitted
<b>Operating temperature:</b>	-10° to +55°C
<b>Relative humidity:</b>	95% (non-condensing)
<b>Maximum duct width:</b>	1.8 m
<b>Remote indicator:</b>	Tyco E500Mk2 series
<b>Compatible CIE:</b>	Vigilant, MX4428, MX1, Simplex 4100ESi

## Supplementary information

### Terminal Markings PCB

<b>IN +V</b>	Positive analogue detector loop from CIE
<b>IN -V</b>	Negative analogue detector loop from CIE
<b>OUT +V</b>	Positive analogue detector loop to next detector or back to CIE
<b>OUT -V</b>	Negative analogue detector loop to next detector or back to CIE
<b>REMOTE +V</b>	Positive to Remote Indicator
<b>REMOTE OUT</b>	Negative to Remote Indicator