



Certificate of Conformity

Certificate num.	Registration date	Version	Valid until	
afp - 2459	10-Nov-2010	Number 11	Issue date 11-Jul-2019	30-Apr-2020

Page 1 of 3

Product designation

LPG, FM-200® low (24.8 bar) / high (41.4 bar) pressure, fixed gaseous fire extinguishing system
(Refer to the Schedule/enclosures for further specified details)

Agent/distributor

LPG Fire Australia
8/30 Mudgeeraba Road, WORONGARY, QLD, AUSTRALIA, 4213

Registrant

Johnson Controls
Burlingham House, Hewett Road, Gapton Hall Industrial Estate, GREAT YARMOUTH, NORFOLK,
UNITED KINGDOM, NR31 0NN

Producer

Tyco Fire Protection Products
Burlingham House, Hewett Road, Gapton Hall Industrial Estate, GREAT YARMOUTH, NORFOLK, UNITED
KINGDOM, NR31 0NN

Conformance criteria and evaluation

The LPG, FM-200® low (24.8 bar) / high (41.4 bar) pressure, fixed gaseous fire extinguishing system has been evaluated and verified as conforming with the relevant requirements of the following criteria.

1. Australian Standard AS 4214:2018, 'Gaseous fire-extinguishing systems'.
2. Technical rule VdS 2344en : 2005-12, 'Procedure for testing, approval and evaluation for conformity of equipment, components and systems for fire protection and security technologies'.
3. Loss Prevention Standard LPS 1027, 'Components for halon and carbon dioxide fire extinguishing systems - Requirements for testing procedures for nozzles'.

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.

(Limitations/conditions of conformance continue)

Issued by

David Whittaker
Executive Officer – ActivFire Scheme



© CSIRO Australia, 2019



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

Certificate num.	Registration date	Version	Valid until	
afp - 2459	10-Nov-2010	Number 11	Issue date 11-Jul-2019	30-Apr-2020
				Page 2 of 3

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

- i. The LPG, FM-200® low (24.8 bar) / high (41.4 bar) pressure, fixed gaseous fire extinguishing system shall be designed, installed, operated, and maintained, in accordance with the LPG system's "Installation, Maintenance and User Manual for FM-200 Fire Extinguishing Systems").

Producer's description

The LPG, FM-200® low (24.8 bar) / high (41.4 bar) pressure, fixed gaseous fire extinguishing system is of the fixed central-storage automatic and/or manual type. This system is intended to extinguish the fires of Classes 'A', 'B' and 'C' that occur in enclosures which are suitable for gaseous total-flooding type fire protection. Manual actuation systems incorporate devices to prevent accidental discharges.

The LPG, FM-200® low (24.8 bar) / high (41.4 bar) pressure, fixed gaseous fire extinguishing system uses FM-200® (HFC-227 ea, Heptafluoropropane) agent. FM-200®'s principle of suppression is physical cooling. The cooling effects are due to evaporation of droplets of liquid agent discharged by the nozzles, and thermo-chemical dissociation of some of the FM-200® that contact the fire.

The number of FM-200 cylinders required to protect the hazard area is determined by specific calculation for each application. Cylinder banks should always be located as close as possible of the protected area and when possible outside of the protected area.

Technical specification

The following details are a representative extract of the technical specification for the LPG, FM-200® low (24.8 bar) / high (41.4 bar) pressure, fixed gaseous fire extinguishing system and may be subject to change. Complete and current details should be determined from the designated producer's technical manual/data sheets.

Schedule of components and/or assemblies

The following is a schedule of validated components and/or assemblies of the certified/listed equipment.

Description	Reference
5, 13'4, 26'8, 40'2, 67, 67'5, 75, 80 L Non-welded Cylinder	FT 013
High pressure solenoid valve	FT 017
PTFE hose	FT 040
Rigid hose 0.1"	FT 042
Telescopic rigid hose 0 1 1/2"	FT 045
Rigid Hose 0 1 1/2 "	FT 047
Pressure switch w/locking device	FT 051
High pressure hand lever release	FT 013
Non return valve 0 1"	FT 056
Non return valve 0 2"	FT 057
High pressure pneumatic cone release	FT 058
High pressure hand dual pneumatic release	FT 064
High pressure pneumatic cone actuator	Part No.: 30027200
Tee 3 ways w/plug for pneumatic cone actuator	Part No.: 35116429
Decompression screw R 1/4"	FT 070
Depressurization valve R 1/4"	FT 075
142 l. welded cylinder	FT 080
100, 120 l. non-welded cylinder	FT 082
Modular cylinder bracket	FT 108
175, 240 l. welded cylinder	FT 118
High pressure solenoid valve with coupling G. 1/8"	FT 122
LP-230 master cylinder valve	FT 124
LPG-128-90 valve for 3'0 L. pilot cylinder	FT 132
Standard nozzle 180°	FT 135
Standard nozzle 360°	FT 136
R2T hose	FT 139
T/M pressure gauge	FT 164
100, 120 L cylinder with 150 bar pressure test	FT 166
Rigid hose LP 2 1/2"	FT 168

Schedule to Certificate of Conformity

Certificate num.	Registration date	Version		Valid until	
afp - 2459	10-Nov-2010	Number 11	Issue date 11-Jul-2019	30-Apr-2020	Page 3 of 3

Description	Reference
Low pressure pneumatic head	FT 169
Check valve 2 ½"	FT 170
LP-230 auxiliary cylinder valve	FT 171
LPG-190-50 valve	FT 178
LPG-128-50 valve	FT 186
LPG-145-50 valve	FT 188
LPG-128-55 valve	FT 191
LPG-145-55 valve	FT 192
LPG-190-55 valve	FT 193
1" two bodies check valve	FT 194
Telescopic 1" two bodies check valve	FT 195
FM-200 [®] , 25 and 42 Bar Fixed Fire Extinguishing System "Installation, Maintenance and User Manual for FM-200 Fire Extinguishing Systems", Publication: 14A-07L Issue 2, October 2015	MU/27/03/IN

Recognised body references

Recognised body.:	Criteria	Reference
Loss Prevention Certification Board (LPCB)	LPS 1027	Cert. num.: 446a
Verband der Schadenverhütung (VdS)	Procedure Guidelines VdS 2344en : 2005-12	Approval num.: G 300020