



CERTIFICATE OF APPROVAL No CF 494

This is to certify that, in accordance with TS00 General Requirements for Certification of Fire Protection Products The undermentioned products of

HOPPE (UK) LIMITED

Gailey Park Industrial Estate, Gravelly Way, Standeford Wolverhampton WV10 7GW Tel: 01902 484407 Fax: 01902 484457

Have been assessed against the requirements of the Technical Schedule(s) denoted below and are approved for use subject to the conditions appended hereto:

CERTIFIED PRODUCT

ARRONE Series Door Closers AR8300 Door Closers & AR1998 and XX98181/6N & XX98181S6N Electromagnetic Hold Open/Swing Free Door Closers

TECHNICAL SCHEDULE

TS34 - The Contribution of Controlled Door Closing Devices and Accessories to Fire Resisting Doorsets

Signed and sealed for and on behalf of Exova (UK) Limited trading as Warrington Certification

Sir Ken Knight Chairman Impartiality Committee



Paul Duggan Certification Manager

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ARRONE Series Door Closers AR8300 & AR1998 and XX98181/6N & XX98181S6N Door Closers

- This approval relates to the use of ARRONE Series AR8300 overhead mounted door closing devices & AR1998, XX98181/6N & XX98181S6N electromagnetic hold open/swing free overhead mounted door closing devices, in contributing to the fire resistance performance of timber based doorsets for periods between 30 and 120 minutes integrity and metallic based doorsets for periods of up to 240 minutes integrity (ARRONE AR8300 only), as defined by BS EN 1634-1 or BS 476: Part 22: 1987. The range of closers comprise of fixed and adjustable power, units, for use in projecting and parallel arm arrangements (for the applications listed in the Scope of Approval only).
- 2. This certification is designed to demonstrate compliance of the product or system specifically with Approved Document B (England and Wales), the Technical Handbooks (Scotland) and Technical Booklet E (N. Ireland). If compliance is required to other regulatory or guidance documents there may be additional considerations or conflict to be taken into account..
- 3. This approval relates to their use with the following door assemblies:-

ARRONE Series AR8300, AR1998, XX98181/6N & XX98181S6N -Latched and unlatched, intumescent sealed door assemblies consisting of timber faced and edged leaves with timber, cellulosic or mineral cores in timber frames having a fire resistance up to 120 minutes (CERTIFIRE Code ITT).

<u>ARRONE Series AR8300 only</u> - Latched and unlatched, insulated and uninsulated, door assemblies consisting of metal faced and edged leaves in metal frames and having fire resistance's of up to 240 minutes (Code MM and IMM).

- 4. The closers are approved on the basis of:
 - i) Initial type testing to EN1154 and BS EN 1634-1
 - ii) An appraisal against TS34
 - iii) Certification of quality management system to ISO 9001: 2008.
 - iv) Inspection and surveillance of factory production control
 - v) On-going audit testing in accordance with EN 1154 and EN1155 requirements
- 5. This approval is applicable only to the specified closer used in projecting arm or parallel arm configurations (as indicated) with door assemblies of proven fire resistance (as defined in BS EN 1634-1 or BS 476: Part 22: 1987) and having power ratings appropriate to the leaf sizes subject to a minimum size 3 (as specified in BS EN 1154).

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ARRONE Series Door Closers AR8300 & AR1998 and XX98181/6N & XX98181S6N Door Closers

- 6. The closers shall only be fitted using the fixings supplied by the closer manufacturer.
- 7. The doorset, including door frame and associated building hardware, should be either CERTIFIRE approved for the relevant application and classification or the doorset, including door frame and associated building hardware, should have achieved at least the required fire resistance performance when tested, as required, or subsequently assessed to EN 1634-1 or BS 476: Part 22: 1987. In either case regard should be paid to the maximum door mass permitted to be used with the closer (see classification).
- 8. The doorset shall be installed in accordance with BS 8214.
- 9. The approval relates to on-going production. Product and/or its immediate packaging is identified with the manufacturer's name, the product name or number, the CERTIFIRE name or name and mark, together with the CERTIFIRE certificate number and application where appropriate.
- 10. The following table shows acceptable doorsets types and fire resistance periods:

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Issued: 8th August 2006 Reissued: 7th June 2016 Valid to: 6th June 2021





ARRONE Series Door Closers AR1998 and XX98181/6N & XX98181S6N - matrix of acceptable doorsets types and fire resistance periods

	Approved Door Type					
Class	IMM	ММ	TT	ITT	ITM	ITC
FD20	×	×	\checkmark	\checkmark	×	×
FD30	×	×	×	\checkmark	×	×
FD60	×	×	×	\checkmark	×	×
FD90	×	×	×	\checkmark	×	×
FD120	×	×	×	\checkmark	×	×
FD240	×	×	×	×	×	×
E 20	×	×	\checkmark	\checkmark	×	×
EI 20	×	×	\checkmark	\checkmark	×	×
E 30	×	×	×	\checkmark	×	×
EI 30	×	×	×	\checkmark	×	×
E 60	×	×	×	\checkmark	×	×
EI 60	×	×	×	\checkmark	×	×
E 90	×	×	×	\checkmark	×	×
EI 90	×	×	×	\checkmark	×	×
E 120	×	×	×	\checkmark	×	×
EI 120	×	×	×	\checkmark	×	×
E 240	×	×	×	×	×	×
EI 240	×	×	×	×	×	×

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Issued: 8th August 2006 Reissued: 7th June 2016 Valid to: 6th June 2021





ARRONE Series Door Closers AR8300 - matrix of acceptable doorsets types and fire resistance periods

	Approved Door Type					
Class	IMM	ММ	TT	ITT	ITM	ITC
FD20	\checkmark	\checkmark	×	\checkmark	×	×
FD30	\checkmark	\checkmark	×	\checkmark	×	×
FD60	\checkmark	\checkmark	×	\checkmark	×	×
FD90	\checkmark	\checkmark	×	\checkmark	×	×
FD120	\checkmark	\checkmark	×	\checkmark	×	×
FD240	\checkmark	\checkmark	×	×	×	×
E 20	\checkmark	\checkmark	×	\checkmark	×	×
EI 20	\checkmark	\checkmark	×	\checkmark	×	×
E 30	\checkmark	\checkmark	×	\checkmark	×	×
EI 30	\checkmark	\checkmark	×	\checkmark	×	×
E 60	\checkmark	\checkmark	×	\checkmark	×	×
EI 60	\checkmark	\checkmark	×	\checkmark	×	×
E 90	\checkmark	\checkmark	×	\checkmark	×	×
EI 90	\checkmark	\checkmark	×	\checkmark	×	×
E 120	\checkmark	\checkmark	×	\checkmark	×	×
EI 120	\checkmark	\checkmark	×	\checkmark	×	×
E 240	\checkmark	\checkmark	×	×	×	×
EI 240	\checkmark	\checkmark	×	×	×	×

Key:

- approved

Not approved

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ARRONE Series Door Closers AR8300 & AR1998 and XX98181/6N & XX98181S6N Door Closers

11. Doors are classified as the following types:

Type MM - 20 minute to 240 minute doorsets that consist of metallic leaves in metallic frames that do not contain intumescent materials in the frame to leaf gap.

Type IMM - 20 minute to 240 minute doorsets that consist of metallic leaves in metallic frames that contain intumescent materials in the frame to leaf gap.

Type TT - 20 minute doorsets that consist of non-metallic leaves in timber frames that do not contain intumescent materials in the frame to leaf gap.

Type ITT - 20 minute to 120 minute doorsets containing intumescent seals and consisting of non-metallic faced and edged leaves hung in timber frames

Type ITM - 20 minute to 120 minute doorsets containing intumescent seals and consisting of non-metallic faced and edged leaves hung in metal frames.

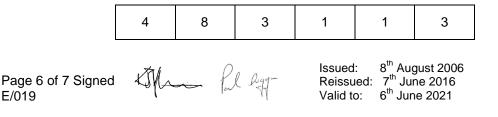
Type ITC - 20 minute to 120 minute doorsets containing intumescent seals and consisting of non-metallic faced and edged leaves hung in proprietary composite frames, of which the principal material is other than timber or metal but which may include any other materials.

Scope of Approval:

- The closers may be fitted to doorsets without intumescent protection for up to 20 minutes integrity.
- All applications apply to unglazed doorsets and glazed doorsets incorporating an uninsulated glass panel size of less than 20% of the leaf area.
- The closers may not be fitted to timber doorsets without intumescent protection.
- Only the AR8300 closers may be fitted to metallic doorsets.
- The closer application is as referenced in the Classification code section below in accordance with EN 1154 and EN 1155.
- All the door closers Door Closers are approved for projection arm, S2 Figure 6 and Figure 6 brackets only.

<u>Classification codes</u> - The above approval provides the following classifications:

AR1998, XX98181/6N & XX98181S6N (Power size 3) mounted in regular projecting arm application (maximum 180° opening) with adjustable latch action:



This certificate is the property of Exova (UK) Limited trading as Warrington Certification

Reg. Office: Exova (UK) Limited, Lochend Industrial Estate, Newbridge, Midlothian EH28 8PL United Kingdom. Co. Reg. No. SC070429





ARRONE Series Door Closers AR8300 & AR1998 and XX98181/6N & XX98181S6N Door Closers

AR1998, XX98181/6N & XX98181S6N (Power size 3) mounted in parallel arm applications with adjustable latch action:



AR1998, XX98181/6N & XX98181S6N (Power size 4) mounted in regular projecting arm and in parallel arm applications with adjustable latch action:

3 8	4	1	1	3	
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AR8300 mounted in projecting arm (Figure 1) with adjustable latch action and back check*

3 8	5 3	1	1	3
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*Back check applicable only up to size 4

AR8300 mounted in parallel arm (Figure 6) with adjustable latch action and back check

3 8	3	1	1	3
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AR8300 transom mounted push side (Figure 61) with adjustable latch action (50 mm maximum head projection)

3 8 4	1	1	3
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Further Information

Further information regarding the details contained in this certificate may be obtained from Hoppe (UK) Ltd (Tel: 01902 484400).

Further information regarding CERTIFIRE certification and other approved products can be obtained from CERTIFIRE (Tel: 01925 646777).

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