



CERTIFICATE OF APPROVAL No CF 119

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

DORMA UK LTD

Wilbury Way, Hitchin, Hertfordshire SG4 0AB Tel: 01462 477600 Fax: 01462 477601

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
DORMA TS 90, TS 91, TS 92, TS 93, TS 97, TS 98 and TS 99
OVERHEAD MOUNTED DOOR
CLOSERS

TECHNICAL SCHEDULE
TS 34 - 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

Paul Duggan
Certification Manager



Issued: 3rd February 1992 Revised: 16th March 2018 Valid to: 28th June 2022

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DORMA TS 90, TS 91, TS 92, TS 93, TS 97, TS 98 and TS 99 OVERHEAD MOUNTED DOOR CLOSERS

1. Dorma TS90, TS 91, TS 92, TS 93, TS 97, TS98 and TS 99 are overhead mounted cam action door closing devices. The TS 92, TS 93, TS98 and TS 99 have adjustable power. The TS 93 and TS 98 also includes integral back check and delayed action. The TS 99 is a free swing unit complying with EN 1155. This approval relates to the following configurations:

	Link-arms			Slide arms			
	Projecting arm (Fig. 1) Body door mounted on pull face	Projecting arm (Fig. 61) Body transom mounted on push face	Parallel arm (Fig. 6) Body door mounted on push face	Body door mounted on pull face	Body transom mounted on push face	Body door mounted on push face	Body transom mounted on pull face
TS 90	×	×	×	✓	×	×	✓
TS 91 B	×	×	×	✓	✓	×	×
TS 92 B	×	×	×	✓	✓	×	×
TS 92 G	×	×	×	*	×	✓	✓
TS 93 B 2-5	×	*	*	✓	✓	×	×
TS 93 G 2-5	×	×	*	×	×	✓	✓
TS 93 B 5-7	×	×	*	✓	×	×	×
TS 93 G 5-7	×	×	*	×	×	×	✓
TS 97	×	×	*	✓	×	×	✓
TS98	×	×	*	✓	✓	✓	✓
TS 99 FL	×	×	*	✓	×	×	✓
G-EMF	×	×	×	✓	×	✓	×
G-EMR	×	×	*	✓	×	✓	×
GSR	*	×	*	✓	×	x	×
GSR EMF	×	×	*	✓	×	×	×
GSR EMR	×	*	*	✓	×	*	×

Key: ✓ - approved

Not approved

Note: Where alternative arms for non-fire applications are included within the packaging, the use of these components on fire resisting door assemblies will invalidate the certification.

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.

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DORMA TS 90, TS 91, TS 92, TS 93, TS 97, TS 98 and TS 99 OVERHEAD MOUNTED DOOR CLOSERS

3. This approval relates to its use with the following door assemblies:-

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 (Code ITT).

Latched and unlatched, door assemblies consisting of metal faced and edged leaves in metal frames, <u>fully-insulated</u> for the required classification period, with or without intumescent sealing, and having a fire resistance up to 240 minutes (Codes MM & IMM)

Latched and unlatched, intumescent sealed door assemblies consisting of timber faced and edged leaves with timber, cellulosic or mineral cores in <u>fully-insulated</u> steel frames having a fire resistance up to 120 minutes (Code ITM)

- 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) Inspection of quality management system
 - iv) Inspection and surveillance of factory production control
 - v) Ongoing audit testing in accordance with EN 1154 requirements
- 5. This approval is applicable only to the specified closers when mounted in the applications stated above and under the classification codes section of this certificate and used 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).
- 6. The closers shall be fixed with screws supplied by the closer manufacturer. Bolt-through fixings shall not be used.
- 7. Where the closers are fitted to door leaves or frames that are manufactured from mineral composite-based materials, or low-density cellulosic- based material, the door assembly shall have previously been shown capable of accommodating the installation of closers at the head of the doorset, without detriment to the door assembly's performance.

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DORMA TS 90, TS 91, TS 92, TS 93, TS 97, TS 98 and TS 99 OVERHEAD MOUNTED DOOR CLOSERS

- 8. The approval relates to on-going production. The 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.
- 9. The following table shows acceptable doorsets types and fire resistance periods:

		App	roved Door	Туре	
Class	ММ	IMM	ITT	ITM	ITC
FD20	√ *	√ *	✓	√*	✓
FD30	√*	√*	✓	√*	✓
FD60	√*	√ *	✓	√*	✓
FD120	√*	√ *	✓	√*	✓
FD240	√ *	√ *	×	×	×
E 20	×	×	✓	√ *	✓
EI 20	√ *	√ *	✓	√*	✓
E 30	×	×	✓	√ *	✓
EI 30	√ *	√ *	✓	√ *	✓
E 60	×	×	✓	√*	✓
EI 60	√*	√*	✓	√*	✓
E 90	×	×	✓	√*	✓
EI 90	√*	√ *	✓	√*	✓
E 120	×	×	✓	✓*	✓
EI 120	√ *	√ *	✓	✓*	✓
E 240	×	×	×	×	×
EI 240	√ *	√*	×	×	×

Key:

approved

Not approved

√* - Fully-insulated steel-based doors and frames only.

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DORMA TS 90, TS 91, TS 92, TS 93, TS 97, TS 98 and TS 99 OVERHEAD MOUNTED DOOR CLOSERS

10. Doors are classified as the following types:

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 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:

- Doors may not include uninsulated glass above 20% of their total area.
- All closer models are only approved in the fitting applications detailed with their classification codes.
- Closers are only approved for use with steel-based doors and frames that are fullyinsulated for the required classification period.
- Mechanical hold open option is not approved.

Classification codes

The approval provides the following classifications:

Dorma TS 90 Door leaf mounted pull side only:

3 8	4 3	1	1	3
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DORMA TS 90, TS 91, TS 92, TS 93, TS 97, TS 98 and TS 99 OVERHEAD MOUNTED DOOR CLOSERS

Classification codes (continued)

Dorma TS 90

Transom mounted pull side only:

3 8 3 1 1 3

Dorma TS 91 B

Door leaf mounted pull side and transom mounted push side only (model suffixed B)

4 8 3	1	1	3
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Dorma TS 92 B & TS 92 G

Door leaf mounted pull side and transom mounted push side (model suffixed B)

Door leaf mounted push side and transom mounted pull side (model suffixed G)

4 8	4	1	1	3
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Dorma TS 93 B & TS 93 G (EN 2-5)

Door leaf mounted pull side and transom mounted push side (model suffixed B)

Door leaf mounted push side and transom mounted pull side (model suffixed G)

4 8	5 2	1	1	4
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Dorma TS 93 B/G EN 5-7

Door leaf mounted pull side (model suffixed B)

Transom mounted pull side (model suffixed G)

4	8	7 5	1	1	4
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Note: power ratings shall be appropriate to the leaf sizes subject to a minimum size 3 (as specified in BS EN 1154).

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DORMA TS 90, TS 91, TS 92, TS 93, TS 97, TS 98 and TS 99 OVERHEAD MOUNTED DOOR CLOSERS

Classification codes (continued)

Dorma TS 97 Door leaf mounted p	ull side an	d transom	n mounted	pull side	only
	_				i

3 8	4 2	1	1	3
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Dorma TS 98 Door leaf mounted pull side and transom mounted pull side only

4 8	6 1	1	1	4
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Dorma TS 98 Door leaf mounted push side only

3 8	6 1	1	1	4
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Dorma TS 98

Transom mounted push side only

4 8	5 1	1	1	4
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Dorma TS 99 FL EN 2-5 (EN1155) – Standard or Top jamb Installation Door leaf mounted pull side and transom mounted pull side only

3 8 5 3	1	1	3
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Note: power ratings shall be appropriate to the leaf sizes subject to a minimum size 3 (as specified in BS EN 1154).

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DORMA TS 90, TS 91, TS 92, TS 93, TS 97, TS 98 and TS 99 OVERHEAD MOUNTED DOOR CLOSERS

Accessories

The following accessories are approved for use with the TS 91, TS 92 and TS 93:

- o G-EMF Electro-mechanical hold-open
- o G-EMR Electro-mechanical hold-open and integral smoke detector
- o GSR Standard door co-ordinator
- o GSR EMF Door co-ordinator with electro-mechanical hold-open
- o GSR EMR Door co-ordinator with integral smoke detector

Classification of these slide arm channels is given as follows:

G-EMR & G-EMF

Closer body door leaf mounted pull side and door leaf mounted push side only

3 8 5	1	1	3
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GSR, GSR-EMR & GSR-EMF

Closer body door leaf mounted pull side only

3	8	5 3	1	1	3
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Note: Where one of the above slide arm channels are used in conjunction with a closer model having a differing classification code, the lower code shall apply.

Further Information

Further information regarding the details contained in this data sheet may be obtained from Dorma UK Limited (Tel: 01462 477600).

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

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