### CERTIFICATE OF APPROVAL No CF119

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

### DORMAKABA 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 Warringtonfire Testing and Certification Limited

Paul Duggan Certification Manager



Issued: Revised: Valid to: 3<sup>rd</sup> February 1992 15<sup>th</sup> February 2023 12<sup>th</sup> July 2027





## CERTIFICATE No CF119 DORMAKABA UK Ltd

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

- 1. This certification is provided to the client for their own purposes and we cannot opine on whether it will be accepted by Building Control authorities or any other third parties for any purpose.
- 2. This approval relates to the following Dorma overhead mounted cam action door closing devices and configurations:

	Table 1						
		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	×	×	×	✓	×	x	×
TS 91 B	×	×	×	✓	✓	×	×
TS 92 B	×	×	×	✓	✓	×	×
TS 92 G	×	×	×	×	×	✓	✓
TS 93 B 2-5	×	×	×	✓	✓	×	×
TS 93 G 2-5	×	×	×	×	×	✓	✓
TS 93 B 2-5 Basic	×	×	×	✓	✓	×	×
TS 93 G 2-5 Basic	×	×	×	×	×	✓	✓
TS 93 B 5-7	×	×	×	✓	✓	×	×
TS 93 G 5-7	×	×	×	×	×	✓	✓
TS 97	×	×	×	✓	×	×	✓
TS 97FL	×	×	×	✓	×	✓	✓
TS98	×	×	×	✓	✓	✓	✓
TS 99 FL	×	×	×	✓	✓	✓	×
G-EMF	×	×	×	✓	×	✓	×
G-EMR	×	×	×	✓	×	✓	×
GSR	×	×	×	✓	×	✓	×
GSR EMF	×	x	×	✓	×	✓	×
GSR EMR	×	×	×	✓	×	×	×

Key:

approved

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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.

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This certificate is the property of Warringtonfire Testing and Certification Limited Registered in England and Wales

Registered Office: 3rd Floor, Davidson Building, 5 Southampton Street, London, WC2E 7HA. Company Registration No: 11371436

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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 predominantly steel faced and edged leaves in steel frames, <u>fully-insulated</u> for the required classification period as defined by EN1634-1 or BS476-22, with or without intumescent sealing, and having a fire resistance up to 240 minutes (Codes MM & IMM)

Latched and unlatched, door assemblies consisting of predominantly steel faced and edged leaves in steel frames, <u>uninsulated</u> for the required classification period, with or without intumescent sealing, and having a fire resistance up to 240 minutes (Codes MM & IMM) <u>with closers fitted to the fire risk face only\*</u>

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)

\*The closer <u>must not be used</u> in this application where a specific direction of fire exposure for the doorset cannot be identified

- 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.

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## CERTIFICATE No CF119 DORMAKABA UK Ltd

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

- 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.
- 8. Timber based doorset shall be installed in accordance with BS 8214.
- 9. EN1634-1 was issued originally in 2000, with amended versions issued in 2008, 2014 and 2018. The differences between each version are mainly procedural and are not considered to have a practical impact on the performance of the samples under test. On this basis this evaluation is consider applicable to all versions of EN1634-1 issued prior to the issue of this certificate.
- 10. 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.

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### CERTIFICATE No CF119 DORMAKABA UK Ltd

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

		Table 2		
		Approved	Door Type	
Class	ММ	IMM	ITT	ITM
FD20	<b>√</b> * <sup>#</sup>	<b>√</b> * <sup>#</sup>	$\checkmark$	√*
FD30	<b>√</b> * <sup>#</sup>	<b>√</b> * <sup>#</sup>	$\checkmark$	√*
FD60	<b>√</b> * <sup>#</sup>	<b>√</b> * <sup>#</sup>	$\checkmark$	√*
FD120	<b>√</b> * <sup>#</sup>	<b>√</b> * <sup>#</sup>	$\checkmark$	√*
FD240	<b>√</b> * <sup>#</sup>	<b>√</b> * <sup>#</sup>	×	×
E 20	✓#	$\checkmark^{\#}$	$\checkmark$	√*
EI 20	√*	√*	$\checkmark$	√*
E 30	✓#	√#	$\checkmark$	<b>√</b> *
EI 30	√*	√*	$\checkmark$	√*
E 60	✓#	√#	$\checkmark$	<b>√</b> *
EI 60	√*	√*	$\checkmark$	√*
E 90	✓#	✓#	$\checkmark$	√*
EI 90	√*	√*	$\checkmark$	√*
E 120	✓#	√#	$\checkmark$	√*
EI 120	√*	√*	$\checkmark$	√*
E 240	✓#	√#	×	×
EI 240	√*	√*	×	×

<u>Key:</u>

X

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- approved

Not approved

- Fully-insulated steel-based doors and frames only

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- Fitted to the fire risk face only of Uninsulated steel-based doors and frames only

 Fitted to <u>Fully-insulated steel-based doors and frames</u>, or the fire risk face only of <u>Uninsulated</u> steel-based doors and frames

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

11. Doors are classified as the following types:

**Code ITT** - 20 minute to 120 minute doorsets containing intumescent seals and consisting of timber faced and edged leaves with timber, cellulosic or mineral cores, hung in timber-based frames.

**Code ITM** - 20 minute to 120 minute doorsets containing intumescent seals and consisting of timber faced and edged leaves with timber, cellulosic or mineral cores, hung in steel frames.

**Code MM** - 20 to 240 minute doorsets consisting of uninsulated or insulated predominantly steel leaves, hung in steel frames without intumescent seals.

**Code IMM** - 20 to 240 minute doorsets consisting of uninsulated or insulated predominantly steel leaves, hung in steel frames with intumescent seals.

#### **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 91 B

Door leaf mounted pull side

4	8	3	1	1	3
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Dorma TS 91 B

Transom mounted push side only

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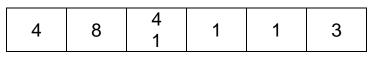
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## DORMA TS 90, TS 91, TS 92, TS 93, TS 97, TS 98 and TS 99 OVERHEAD MOUNTED DOOR CLOSERS

#### **Classification codes (continued)**

Dorma TS 92 B Door leaf mounted pull side & Dorma TS 92 G transom mounted pull side:



Dorma TS 92 B transom mounted push side & Dorma TS 92 B Door leaf mounted pull side:



TS93 B EN2-5 and TS93 B Basic Door leaf mounted pull side and TS93 G EN2-5 and TS93 G Basic transom mounted pull side:

4 8 5 2	1	1	4
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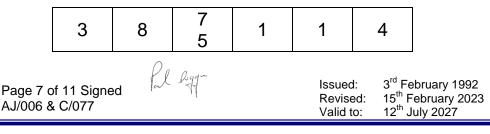
TS93 B EN2-5 and TS93B Basic Transom mounted push side and TS93G EN2-5 and TS93 G Basic door leaf mounted push side:

3 8 5 1 1 4
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TS93 B EN5-7 Door leaf mounted pull side and TS93G EN5-7 transom mounted pull side:



TS93 B EN5-7 transom mounted push side and TS93G EN5-7 door leaf mounted push side:



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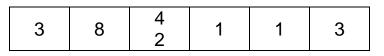
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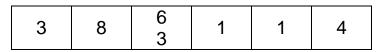
## DORMA TS 90, TS 91, TS 92, TS 93, TS 97, TS 98 and TS 99 OVERHEAD MOUNTED DOOR CLOSERS

#### **Classification codes (continued)**

Dorma TS 97 Door leaf mounted pull side and transom mounted pull side



Dorma TS 97 FL Door leaf mounted pull side, transom mounted push side and transom mounted pull side



Dorma TS 98 Door leaf mounted pull side and transom mounted pull side only

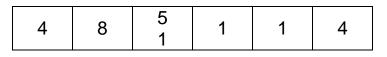
4 8	6 1	1	1	4
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Dorma TS 98 Door leaf mounted push side only

	3	8	6 1	1	1	4
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Dorma TS 98 Transom mounted push side only

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Dorma TS 99 FL EN 2-5 (EN1155) Door leaf mounted pull side, transom mounted push side and transom mounted pull side

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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## CERTIFICATE No CF119 DORMAKABA UK Ltd

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

#### Scope of Approval:

- Doors may not include uninsulated glass above 20% of their total area. Uninsulated glass shall not be included directly beneath the door closer body
- The closers may not be fitted to timber doorsets without perimeter intumescent fire seals to the frame rebate or door edge.
- All closer models are only approved in the fitting applications detailed with their classification codes.
- Closers are approved for use on both sides of steel-based doors and frames that are fully-insulated for the required classification period as defined by EN1634-1 or BS476-22.
- For uninsulated steel-based doors and frames the closers shall be fitted to the <u>fire</u> risk face only. The closer must not be used in this application where a specific direction of fire exposure for the doorset cannot be identified
- Mechanical Hold open option is not approved.

	Table 3	3		
Closer Ref.	Application (See Table 1)	Latch Control	Backcheck	Delayed- Action
TS 90	All configurations	No	No	No
TS 91 B	All configurations	No	No	No
TS 92 B	All configurations	No	No	No
TS 92 G	All configurations	No	No	No
TS 93 B 2-5	All configurations	Yes	Yes	Yes
TS 93 G 2-5	All configurations	Yes	Yes	Yes
TS 93 B 2-5 Basic	All configurations	Yes	Yes	No
TS 93 G 2-5 Basic	All configurations	Yes	Yes	No
TS 93 B 5-7	All configurations	Yes	Yes	Yes
TS 93 G 5-7	All configurations	Yes	Yes	Yes
TS 97	All configurations	Yes	No	No
TS 97FL	All configurations	Yes	Yes	Yes
TS98	All configurations	Yes	Yes	Yes
TS 99 FL	All configurations	Yes	No	No

• The following functions are supported by this certification:

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#### **Accessories**

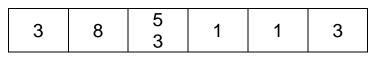
The following accessories are approved for use with the TS 91, TS 92 and TS 93:

- o G-EMF Electro-mechanical hold-open
- o G-EMR Electro-mechanical hold-open and integral smoke detector
- 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



GSR

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

3 8 5 3	1	1	3
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#### GSR-EMF

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



**GSR-EMR** 

Closer body door leaf mounted pull side only

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3	8	5 3	1	1	0
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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.

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## CERTIFICATE No CF119 DORMAKABA UK Ltd

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

#### **Further Information**

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

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

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