

## **DORMA RTS87 EN 1-4 TRANSOM CLOSER**

This folder contains all technical documentation detailing the compliance of the DORMA RTS87 EN1-4 Transom Closer complies with the technical and product requirements contained within United Kingdom Building Regulations and Construction Product Regulations 1991.

### Contents

**1. Declaration of Performance**

The RTS87 is CE marked to BS EN1154

**2. EN1154 Certificate of Constancy of Performance**

The RTS87 has been successfully independently third party tested to BS EN1154

**3. Certifire Certificate CF127**

The RTS87 is Certifire Approved as per enclosed Certificate and is suitable for the following applications:-

Single and Double Action Timber doors of up to 60 minutes fire resistance when installed on doors with a minimum thickness of 54mm and frames with a minimum thickness of 119mm and minimum height of 69mm using DORMA intumescent pack.

**4. Torque Curve to demonstrate compliance with requirements of ADM and BS8300**

The RTS87 when fitted to size EN3 (Minimum size for a fire door) will exert an opening force of 30N or less between 0 and 30 degrees and 22.5N or less between 30 and 60 degrees of opening when applied to doors 800mm wide or above.

### **Technical Specification**

DORMA RTS87 EN1-4 Transom Closer with backcheck, adjustable closing speed in two independent ranges, closing force infinitely variable between EN1-4, Single or Double Action, Non Handed, CE Marked to BS EN1154 and Certifire Certificated CF127.

**Once the RTS87 Transom Closer has been fitted and adjusted accordingly this document can be passed to Building Control to demonstrate compliance with UK Building Regulations and to the 'responsible person' of the Building owner/occupier for use in respect of RR(FS)O requirements.**

# LEISTUNGSERKLÄRUNG

# DECLARATION OF PERFORMANCE

DOP\_0033

**EN EU Nr. 305/2011 Declaration of Performance**

- Unique identification code of the product-type: Controlled door closing devices  
**DORMA RTS 87 EN 1-4, DORMA RTS 87 H EN 1-4**
- Intended use/es: On fire and smoke compartmentation doors to fulfil the self closing requirements of such doors.
- Manufacturer: dormakaba Deutschland GmbH - DORMA Platz 1 - 58256 Ennepetal
- System/s of assessment and verification of constancy of performance (AVCP): System 1
- Harmonised standard: EN 1154: 1996/A1: 2002/AC: 2006
- Notified body/ies: MPA NRW 0432
- Declared performance/s:

| Essential characteristic   | Performance   | Harmonised technical specification |
|----------------------------|---|------------------------------------|
| Self-closing               | <ul style="list-style-type: none"> <li>▪ Closing doors from <math>\geq 105^\circ</math> open grade 3</li> <li>▪ Door closer power size EN 1-4</li> <li>▪ Suitability for fire/smoke door use grade1</li> <li>▪ Safety grade 1</li> <li>▪ Temperature dependence <math>+40^\circ\text{C}</math> and <math>-15^\circ\text{C}</math>: <math>\geq 3\text{s}</math> <math>\leq 25\text{s}</math></li> <li>▪ Back check</li> <li>▪ Adjustable closing force</li> <li>▪ Zero position <math>\leq 3\text{mm}</math> (0 testcycles), <math>\leq 6\text{mm}</math> (500000 testcycles)</li> </ul> | EN 1154: 1996/A1: 2002/AC: 2006    |
| Durability of self-closing | <ul style="list-style-type: none"> <li>▪ Durability 500000 cycles grade 8</li> <li>▪ Very high corrosion resistance grade 4</li> </ul>  |                                    |
| Dangerous substances       | <ul style="list-style-type: none"> <li>▪ Substances of very high concern &lt; threshold values</li> </ul>   |                                    |

The performance of the product identified above is in conformity with the set of declared performance/s. This declaration of performance is issued, in accordance with Regulation (EU) No 305/2011, under the sole responsibility of the manufacturer identified above.

Signed for and on behalf of the manufacturer by:

Ennepetal 08.11.2016



Michael Hensel

Senior Vice President  
Access Solutions DACH

# EG-KONFORMITÄTSZERTIFIKAT

## 0432 –CPD – 0076

Gemäß der Richtlinie des Rates der Europäischen Gemeinschaften vom 21. Dezember 1988 zur Angleichung der Rechts- und Verwaltungsvorschriften der Mitgliedstaaten über Bauprodukte –89/106/EWG– (Bauproduktenrichtlinie – BPR), geändert durch die Richtlinie des Rates der Europäischen Gemeinschaften vom 22. Juli 1993 –93/68/EWG–, umgesetzt in Deutschland durch das Bauproduktengesetz – BauPG vom 28. April 1998, wird hiermit bestätigt, dass das Bauprodukt

### Rahmentürschließerfamilie DORMA RTS

Türschließmittel mit kontrolliertem Schließablauf gemäß der Zusammenstellung und Klassifikation in der Anlage 1,

in Verkehr gebracht durch

**DORMA GmbH & Co. KG**  
**DORMA Platz 1**  
**D-58256 Ennepetal**

und hergestellt durch

**Herstellwerk DO 2.20**

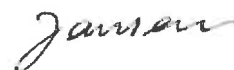
durch den Hersteller einer werkseigenen Produktionskontrolle sowie zusätzlichen Prüfungen von im Werk entnommenen Proben nach festgelegtem Prüfplan unterzogen werden und dass die notifizierte Stelle – 0432 MPA NRW – eine Erstprüfung der relevanten Eigenschaften des Produkts, eine Erstinspektion des Werkes und der werkseigenen Produktionskontrolle durchgeführt hat und eine laufende Überwachung, Beurteilung und Anerkennung der werkseigenen Produktionskontrolle durchführt.

Dieses Zertifikat bestätigt, dass alle Vorschriften über die Bescheinigung der Konformität und die Leistungseigenschaften, beschrieben im Anhang ZA der Norm

**EN 1154: 1996 + A1:2002**  
**(DIN EN 1154: 2003-04)**

angewendet wurden und dass das Produkt alle darin vorgeschriebenen Anforderungen erfüllt. Dieses Zertifikat wurde erstmals am 11.07.2005 ausgestellt und gilt solange, wie die Festlegungen in der angeführten harmonisierten technischen Spezifikation oder die Herstellbedingungen im Werk oder die werkseigene Produktionskontrolle selbst nicht wesentlich verändert werden

Dortmund, 27.06.2013



Dipl.-Ing. H. Jansen  
Leiter der Zertifizierungsstelle

**MATERIALPRÜFUNGSAMT NORDRHEIN-WESTFALEN**

Türschließer mit kontrolliertem Schließablauf gemäß DIN EN 1154

**Produkt:** **DORMA RTS 87**

**Typenbezeichnung / type :** **DORMA RTS 87 EN1-4**  
**Beschreibung /description :** Rahmentürschließer mit stufenlos einstellbarer Schließkraft, Zur Verwendung an Pendeltüren und mittig aufgehängten Anschlagtüren geeignet. Integrierte mechanische Öffnungsdämpfung.  
 2 Schließbereiche:  
 1) 15° bis max. Türöffnung und  
 2) 0° bis 15° Türöffnung  
**Gestänge / arm :** Sonderbeschläge des Herstellers  
**Anschlagart / installation :** Montage im Rahmen der Tür. Die Verbindung zur Tür erfolgt über einen Türhebel. Die Türen müssen für die Verbindung mit dem Rahmentürschließer geeignet sein  
**Größe / size :** EN 1-4  
**Klassifikation / classification :** 3 8 1-4 1 1 4  
**Bemerkungen / remarks :** Bei Verwendung an Feuer- und Rauchschutztüren muß das Schließmittel mindestens auf Türschließer - Größe EN 3 eingestellt werden. Bei Verwendung an Feuer- / Rauchschutztüren muß die selbstschließende Funktion aus jedem möglichen Türöffnungswinkel gewährleistet sein. Bei Türöffnungswinkel größer 170°, muß deshalb der Türöffnungswinkel wirksam begrenzt werden.

**Typenbezeichnung / type :** **DORMA RTS 87 H EN1-4**  
**Beschreibung /description :** Rahmentürschließer mit stufenlos einstellbarer Schließkraft, Zur Verwendung an Pendeltüren und mittig aufgehängten Anschlagtüren geeignet. Integrierte mechanische Öffnungsdämpfung.  
 2 Schließbereiche:  
 1) 70° bis max. Türöffnung und  
 2) 0° bis 70° Türöffnung  
**Gestänge / arm :** Sonderbeschläge des Herstellers  
**Anschlagart / installation :** Montage im Rahmen der Tür. Die Verbindung zur Tür erfolgt über einen Türhebel. Die Türen müssen für die Verbindung mit dem Rahmentürschließer geeignet sein  
**Größe / size :** EN 1-4  
**Klassifikation / classification :** 3 8 1-4 1 1 4  
**Bemerkungen / remarks :** Bei Verwendung an Feuer- und Rauchschutztüren muß das Schließmittel mindestens auf Türschließer - Größe EN 3 eingestellt werden. Bei Verwendung an Feuer- / Rauchschutztüren muß die selbstschließende Funktion aus jedem möglichen Türöffnungswinkel gewährleistet sein. Bei Türöffnungswinkel größer 170°, muß deshalb der Türöffnungswinkel wirksam begrenzt werden.





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## CERTIFICATE OF APPROVAL

### No CF 127

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

## DORMA UK LIMITED

**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:

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#### CERTIFIED PRODUCT

**DORMA BTS 75 V, 80 F, 80 EMB  
& 80 FLB Floor Springs**

**Dorma RTS 87, 87 H, 80 EMB &  
80 FLB Transom Mounted  
Closers and Associated  
Accessories**

#### 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: 2<sup>nd</sup> April 1993  
Revised: 14<sup>th</sup> March 2019  
Valid to: 15<sup>th</sup> November 2020





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## CERTIFICATE No CF 127

### DORMA UK LTD

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**DORMA BTS 75 V, 80 F, 80 EMB AND 80 FLB FLOOR SPRINGS AND RTS 87, 87 H, 80 EMB and 80 FLB EN3, EN4 & EN5 TRANSOM MOUNTED CLOSERS AND ACCESSORIES**

1. BTS 75 V, 80 F, 80 EMB and 80 FLB Floor Springs are adjustable floor mounted closing devices which may be used with the following accessories:
  - i) Top centre 8066, 7411K56F and 6150
  - ii) Dorma Bottom Strap 7421
  - iii) Offset bottom straps 4150, 7411/56
  
2. RTS 87, 87 H, 80 EMB and 80 FLB, EN3, EN4 & EN5 closers are adjustable or fixed power, transom mounted closing devices which shall be used with the following accessories:
  - i) Side load arm 8530
  - ii) Dorma Bottom Strap 7421
  - iii) Floor pivot 7471AX or 7475AX
  
3. 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.
  
4. This approval relates to their 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 60 minutes (Code ITT).

Latched and unlatched, intumescent sealed door assemblies consisting of timber faced and edged leaves with timber, cellulosic or mineral cores in steel frames having a fire resistance up to 60 minutes (Code ITM).

Latched and unlatched, intumescent sealed door assemblies consisting of metallic faced and edged leaves with cellulosic or mineral cores in steel frames having a fire resistance up to 240 minutes (Code MM and IMM).
  
5. The floor springs 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 requirements.
  
6. This approval is applicable only to the specified floor springs used with door assemblies of proven fire resistance (as defined in BS 476: Part 22: 1987 or BS EN 1634-1 as applicable) and having power ratings appropriate to the leaf sizes subject to a minimum size 3 (as specified in BS EN 1154). The approval does not include mechanical hold open variants.



## CERTIFICATE No CF 127 DORMA UK LTD

**DORMA BTS 75 V, 80 F, 80 EMB AND 80 FLB FLOOR SPRINGS AND RTS 87, 87 H, 80 EMB and 80 FLB EN3, EN4 & EN5 TRANSOM MOUNTED CLOSERS AND ACCESSORIES**

7. 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.

Matrix of acceptable doorset types and fire resistance periods for BTS 75 V.

| Class  | Approved Door Type |    |    |     |     |     |
|--------|--------------------|----|----|-----|-----|-----|
|        | IMM                | MM | TT | 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

See CERTIFIRE Technical Schedules for designation of doorset types i.e. IMM etc.

\* Limitations apply, see scope of approval.



## CERTIFICATE No CF 127 DORMA UK LTD

DORMA BTS 75 V, 80 F, 80 EMB AND 80 FLB FLOOR SPRINGS AND RTS 87,  
87 H, 80 EMB and 80 FLB EN3, EN4 & EN5 TRANSOM MOUNTED CLOSERS AND  
ACCESSORIES

Matrix of acceptable doorset types and fire resistance periods for BTS 80 F, 80 EMB and 80 FLB.

| Class  | Approved Door Type |    |    |     |     |     |
|--------|--------------------|----|----|-----|-----|-----|
|        | IMM                | MM | TT | 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

See CERTIFIRE Technical Schedules for designation of doorset types i.e. IMM etc.

\* Limitations apply, see scope of approval.





## CERTIFICATE No CF 127 DORMA UK LTD

**DORMA BTS 75 V, 80 F, 80 EMB AND 80 FLB FLOOR SPRINGS AND RTS 87,  
87 H, 80 EMB and 80 FLB EN3, EN4 & EN5 TRANSOM MOUNTED CLOSERS AND  
ACCESSORIES**

Matrix of acceptable doorset types and fire resistance periods for RTS 87, RTS 87 H and RTS 80 EMB EN3, EN4 and EN5 transom mounted closers.

| Class  | Approved Door Type |    |    |     |     |     |
|--------|--------------------|----|----|-----|-----|-----|
|        | IMM                | MM | TT | ITT | ITM | ITC |
| FD20   | x                  | x  | x  | x   | x   | x   |
| FD30   | x                  | x  | x  | x   | x   | x   |
| FD60   | x                  | x  | x  | ✓   | x   | x   |
| FD120  | x                  | x  | x  | x   | x   | x   |
| FD240  | x                  | x  | x  | x   | x   | x   |
| E 20   | x                  | x  | x  | x   | x   | x   |
| EI 20  | x                  | x  | x  | x   | x   | x   |
| E 30   | x                  | x  | x  | x   | x   | x   |
| EI 30  | x                  | x  | x  | x   | x   | x   |
| E 60   | x                  | x  | x  | x   | x   | x   |
| EI 60  | x                  | x  | x  | x   | x   | x   |
| E 90   | x                  | x  | x  | x   | x   | x   |
| EI 90  | x                  | x  | x  | x   | x   | x   |
| E 120  | x                  | x  | x  | x   | x   | x   |
| EI 120 | x                  | x  | x  | x   | x   | x   |
| E 240  | x                  | x  | x  | x   | x   | x   |
| EI 240 | x                  | x  | x  | x   | x   | x   |

**Key:**

- ✓ - approved
- x - Not approved

See CERTIFIRE Technical Schedules for designation of doorset types i.e. IMM etc.



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## CERTIFICATE No CF 127

### DORMA UK LTD

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**DORMA BTS 75 V, 80 F, 80 EMB AND 80 FLB FLOOR SPRINGS AND RTS 87, 87 H, 80 EMB and 80 FLB EN3, EN4 & EN5 TRANSOM MOUNTED CLOSERS AND ACCESSORIES**

**Scope of Approval:**

**Floor spring closers**

The closers may not be fitted to timber doorsets without intumescent protection. Where the door leaves are 45mm thick the approval is limited to FD30 with codes ITT and ITM.

Timber doorsets to EN 1634-1 must include a door leaf that is a minimum of 54 mm thick.

For all 60 minute timber doorset applications for floor spring closers, the closer bottom strap, top centre and cover plate must all be bedded onto 1 mm thick mono ammonium phosphate intumescent sheet material as supplied by DORMA.

**Transom mounted closers**

RTS 87, RTS 87 H, RTS 80 EMB and RTS 80 FLB transom mounted closers are only approved for use with double action FD60 ITT code doorsets.

Doorsets shall satisfy the following minimum requirements:

- The door leaf shall have a minimum thickness of 54 mm and must be previously proven capable of accommodating a concealed closer or similar item within its head.
- The door frame shall be hardwood with a minimum density of 650kg/m<sup>3</sup>.
- The door frame head section shall have minimum dimensions of 119 mm wide by 69 mm high.
- Doorsets shall include a 20 mm by 4 mm intumescent seal fitted centrally to the frame head member and two 15 mm by 4 mm intumescent seals to the door leaf head. The frame mounted seals will only be interrupted at the position of the closer, the two leaf mounted seals shall be continuous across the head of the door and over the closer arm assembly.

The mortises for the closer body and the arm assembly shall be fully lined with 2 mm thick graphite intumescent sheet. The closer cover plate shall also be bedded on to a 2 mm thickness of the same material between it and the door frame.

'7421' bottom strap shall be bedded onto a 2 mm thickness of the same graphite sheet material, or alternatively may be bedded with 1 mm thick mono ammonium phosphate intumescent sheet material.

The intumescent sheet material shall be as supplied by DORMA.



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## CERTIFICATE No CF 127

### DORMA UK LTD

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**DORMA BTS 75 V, 80 F, 80 EMB AND 80 FLB FLOOR SPRINGS AND RTS 87, 87 H, 80 EMB and 80 FLB EN3, EN4 & EN5 TRANSOM MOUNTED CLOSERS AND ACCESSORIES**

**Classification codes**

The above approval provides the following classification for BTS 75 V floor spring:

|   |   |        |   |   |   |
|---|---|--------|---|---|---|
| 3 | 8 | 4<br>3 | 1 | 1 | 4 |
|---|---|--------|---|---|---|

The above approval provides the following classification for BTS 80 F floor spring:

|   |   |        |   |   |   |
|---|---|--------|---|---|---|
| 4 | 8 | 6<br>4 | 1 | 1 | 4 |
|---|---|--------|---|---|---|

The above approval provides the following classification for BTS 80 EMB and BTS 80 FLB floor springs:

|   |   |        |   |   |   |
|---|---|--------|---|---|---|
| 3 | 8 | 6<br>4 | 1 | 1 | 4 |
|---|---|--------|---|---|---|

The above approval provides the following classification for RTS 87 and RTS 87 H transom mounted closer:

|   |   |        |   |   |   |
|---|---|--------|---|---|---|
| 3 | 8 | 4<br>3 | 1 | 1 | 4 |
|---|---|--------|---|---|---|



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## CERTIFICATE No CF 127

### DORMA UK LTD

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**DORMA BTS 75 V, 80 F, 80 EMB AND 80 FLB FLOOR SPRINGS AND RTS 87, 87 H, 80 EMB and 80 FLB EN3, EN4 & EN5 TRANSOM MOUNTED CLOSERS AND ACCESSORIES**

#### Classification codes (continued)

The above approval provides the following classification for RTS 80 EMB and RTS 80 FLB EN4 transom mounted closer:

|   |   |   |   |   |   |
|---|---|---|---|---|---|
| 3 | 8 | 4 | 1 | 1 | 4 |
|---|---|---|---|---|---|

The above approval provides the following classification for RTS 80 EMB EN5 transom mounted closer:

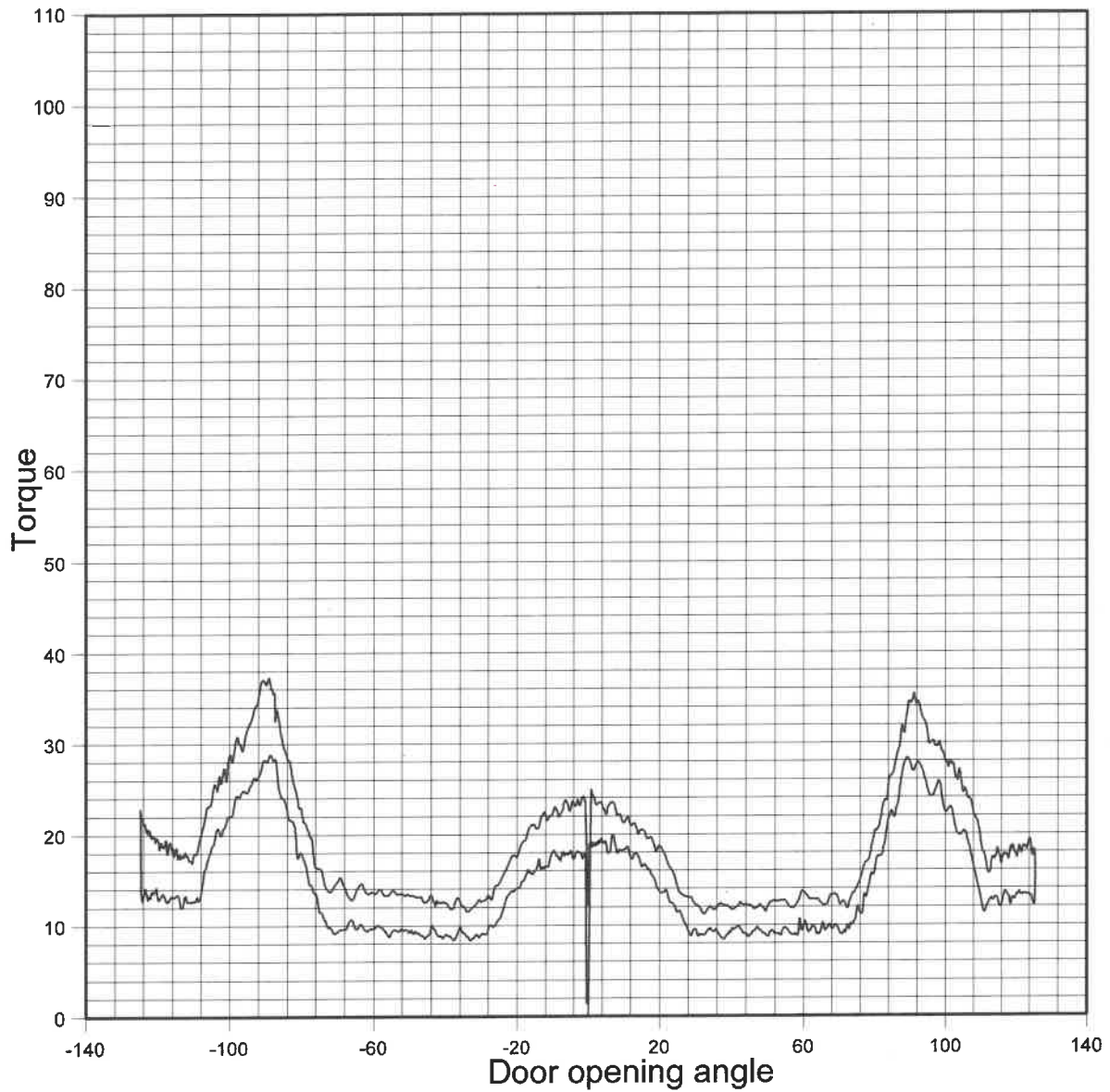
|   |   |   |   |   |   |
|---|---|---|---|---|---|
| 3 | 8 | 5 | 1 | 1 | 4 |
|---|---|---|---|---|---|

#### 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).

# Torque curve



Controlled door closing device EN 1154

Manufacturer: DORMA  
Model: RTS 87 EN 1-4  
Sample: B 1  
Size: 3  
5000 Cycles

Standard installation



29.08.2012

*Jansen*