

Type Approval Certificate (English Issue) P-4005/10

Applicant: GEZE GmbH
Reinhold-Vöster-Straße 21-29
71229 Leonberg

Production plant: GEZE GmbH
Reinhold-Vöster-Straße 21-29
71229 Leonberg

Type Approval Mark:



Subject matter of test:

Door drive for swing doors model with roller lever / link arm

Permissible version:

- automatic door drive for 1-leaf single-action doors DIN left or right
- automatic door drive for 2-leaf single-action doors, comprising two electrically connected drives

Type:

The swing door drive can be provided in various designs corresponding to the specific requirements. The corresponding type descriptions and permitted designs:

Slimdrive EMD

1-leaf/2-leaf Door drive for swing doors

Permitted installation types:

- Transom installation hinge side with roller guide rail (KM BS RS)
- Transom installation opposite hinge side with link arm (KM BGS ST)
- Transom installation opposite hinge side with roller guide rail (KM BGS ST)
- Door leaf installation hinge side with roller guide rail (TBM BS RS)

Slimdrive EMD-F

1-leaf/2-leaf Door drive for swing leaf doors with and without fire protection requirements

Permitted installation types:

- Transom installation hinge side with roller guide rail (KM BS RS)
- Transom installation opposite hinge side with link arm (KM BGS ST)
- Transom installation opposite hinge side with roller guide rail (KM BGS ST)
- Door leaf installation hinge side with roller guide rail (TBM BS RS)

Slimdrive EMD F/R

1-leaf Door drive for swing leaf doors on fire protection doors with integrated smoke control unit

Permitted installation types:

- Transom installation hinge side with roller guide rail (KM BS RS)
- Transom installation opposite hinge side with link arm (KM BGS ST)
- Transom installation opposite hinge side with roller guide rail (KM BGS RS)

Slimdrive EMD-F-IS

2-leaf Door drive for swing leaf doors with and without fire protection requirements with integrated closing sequence

Permitted installation types:

- Transom installation hinge side with roller guide rail (KM BS RS)
- Transom installation opposite hinge side with link arm (KM BGS ST)
- Transom installation opposite hinge side with roller guide rail (KM BGS RS)

Slimdrive EMD F/R IS

2-leaf Door drive for swing leaf doors on fire protection doors with integrated closing sequence and integrated smoke switch control unit

Permitted installation types:

- Transom installation hinge side with roller guide rail (KM BS RS)
- Transom installation opposite hinge side with link arm (KM BGS ST)
- Transom installation opposite hinge side with roller guide rail (KM BGS RS)

Slimdrive EMD Invers

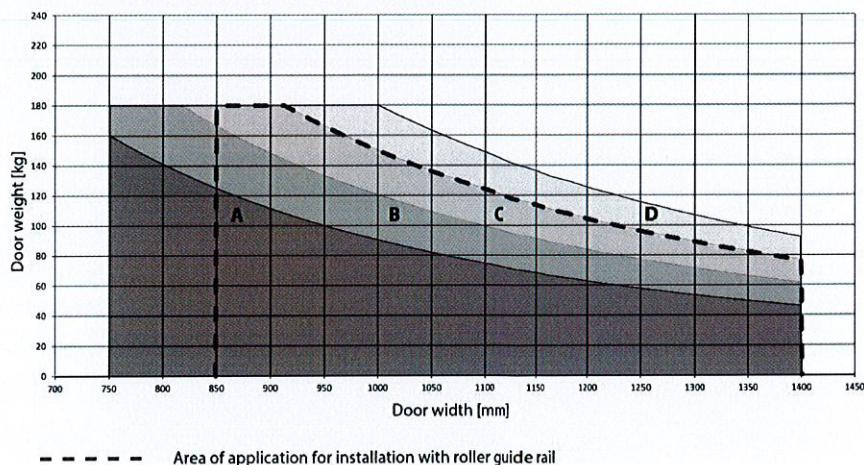
1-leaf/2-leaf Door drive for swing leaf doors without mechanical opening sequence control

Permitted installation types:

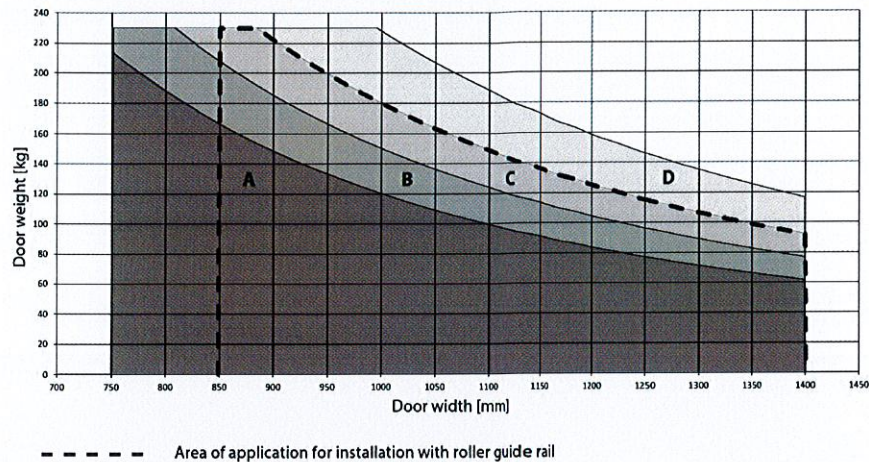
- Transom installation hinge side with roller guide rail (KM BS RS)
- Transom installation opposite hinge side with link arm (KM BGS ST)
- Transom installation opposite hinge side with roller guide rail (KM BGS RS)
- Door leaf installation hinge side with roller guide rail (TBM BS RS)

The permitted ranges of use for the specific door drives with link arm or roller guide rail depend on the leaf width and the leaf weight and are shown in the following charts.

Max. range of use EMD:



Maximum range of use Slimdrive EMD-F, Slimdrive EMD-F/R, Slimdrive EMD-F-IS, Slimdrive EMD-F/R-IS, Slimdrive EMD Invers:



Permitted operating modes:

The door drives have the following basic functions:

Basic function / Swing door drive	EMD	EMD-F EMD-F/R EMD-F/R-IS EMD-F-IS	EMD Invers
Automatic mode	X	X	X
Low-energy function	X	X	-
Servo mode	-	X	-

Various settings (operating modes) are possible within the basic functions irrespective of the drive type:

Operating modes / Basic function	Automatic	Low-energy function	Servo
Automatic	X	X	- ¹⁾
Exit only	X	X	- ¹⁾
Hold open	X	X	X ¹⁾
Off	X	X	X
Night mode	X	X	X

1) In Servo mode, the compensation for the door weight can be started by sensors by setting these operating modes. Normally, the compensation for the door weight is started by a small, manual movement of the door leaf.

For drives on 2-leaf doors, the passive leaf can be set as active or passive.

Permitted sensors:

- Signal transmitters and presence sensors in accordance with the sensor list attached as Annex I in the currently valid version.

Agreed test principles:

1. DIN 18650-1/2: 2010-06
Building hardware – Powered automatic doors
2. DIN EN 16005: 2013-01 + Ber 1:2015-10
(German version EN 16005:2012 + EN 16005:2012/AC:2015)
Power operated pedestrian doorsets – Safety in use

3. DIN EN 60335-1: 2020-08
(German version EN 60335-1:2012 + AC:2014 + A11:2014 + A13:2017 + A1:2019 + A2:2019 + A14:2019)
Household and similar electrical appliances – Safety
Part 1: General requirements
 4. DIN EN 60335-2-103:2016-05
(German version EN 60335-2-103:2015)
Household and similar electrical appliances – Safety –
Part 2-103: Particular requirements for drives for gates, doors and windows
 5. DIN EN ISO 13849-1/2:2016-06 und 2013-02
(German version EN ISO 13849-1:2015 und EN ISO 13849-2:2012)
Safety of machinery - Safety-related parts of control systems
- as well as the mutually applicable standards, regulations and directives listed in the above test principles.

Conditions:

1. Swing door drives of the types "Slimdrive EMD, Slimdrive EMD-F, Slimdrive EMD- F/R, Slimdrive EMD-F-IS, Slimdrive EMD-F/R-IS, Slimdrive EMD Invers" are only suitable for dry rooms and have to be labelled correspondingly.
2. Before using the swing door drives. a risk analysis and risk assessment has to be performed for the specific use. Corresponding to the results of the risk analysis and risk assessment, the automatic swing door drive must be fitted with the required sensors and action must be taken so that there are no dangers for the user from the automatic swing leaf door.
3. The sensors listed in the sensor list attached as Annex I to the type examination certificate must be used as sensors for activation of the drive and use of the presence sensors. The usage limits set out in the manufacturer's specifications must be observed.
4. The swing door drives may only be used for the leaf in the range of use and the permitted installation versions and basic functions. The charts for the range of use of the leaf in the installation and service instructions and for the setting of the low-energy function in the wiring diagram must be observed.
5. The following and supplemental technical documents must be enclosed with each swing door drive.
 - Template for local safety analysis,
 - Installation and service instructions with:
 - Safety notices,
 - Details about the area of application,
 - Details about installation and commissioning,
 - Declaration of conformity
 - Wiring diagram
 - User manual with:
 - Functional description of the system
 - Notes about faults and repair work
 - Test specifications and their deadlines
 - A copy of this certificate P-4005/10.
6. Before commissioning automatic swing door drives of the types "Slimdrive EMD, Slimdrive EMD-F, Slimdrive EMD-F/R, Slimdrive EMD-F-IS, Slimdrive EMD-F/R-IS, Slimdrive EMD Invers", it is necessary for an expert to check the test results with written verification.

The provisions of the regional building code valid at the installation location apply for recurring tests. The specifications provided by the manufacturer regarding maintenance intervals must be heeded.

Notes:

1. There is no need for equipment with an emergency control (emergency switch).
2. The door system has been tested to durability class 2 (500,000 cycles).
3. A force limitation system has been integrated in the control of the swing door drive which limits the static forces to values of < 150 N.
4. In the basic function "low-energy function" the permitted forces of 67N are not exceeded. For a correct setting, the kinetic energy of the leaf/leaves is less than 1.6J.

Verification of the suitability of the "Slimdrive EMD-F" swing door drive for use on fire protection doors, smoke protection doors or as hold-open system was not object of the examination.

5. Evidence of the requirements of Appendix R of DIN EN 60335-1 was alternatively proven by applying DIN EN 13849-1 / 2.
6. These performance characteristics must be verified by independent official building approvals / design certifications.
7. The certificate of conformity is valid until 31.12.2025. A new inspection may become necessary if there are material changes to the technical regulations.
8. This certificate replaces certificate P-4005/10 dated 15/06/2021.

Zella-Mehlis/Germany, 17.09.2021

Technischer Überwachungsverein Thüringen e.V.
Test Centre for Construction Products

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