



TORMAX Automatic Door Systems

Overview Landert Group – Facts

General Facts

Established	1924
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Employees

Worldwide	710
- Switzerland	364 (thereof 49 trainees)

Worldwide setup

Group Companies	USA, GB, SE, DK, NO, RU, BE, FR, AU, CH, CN, Malaysia
Distribution Partners	over 150

Overview Landert Group – Two Business Units

Production Center:



★★★★★
TORMAX
AUTOMATIC

TORMAX

- Est. in 1951
- Automatic Door Systems
- Top 10 worldwide

SERVAX

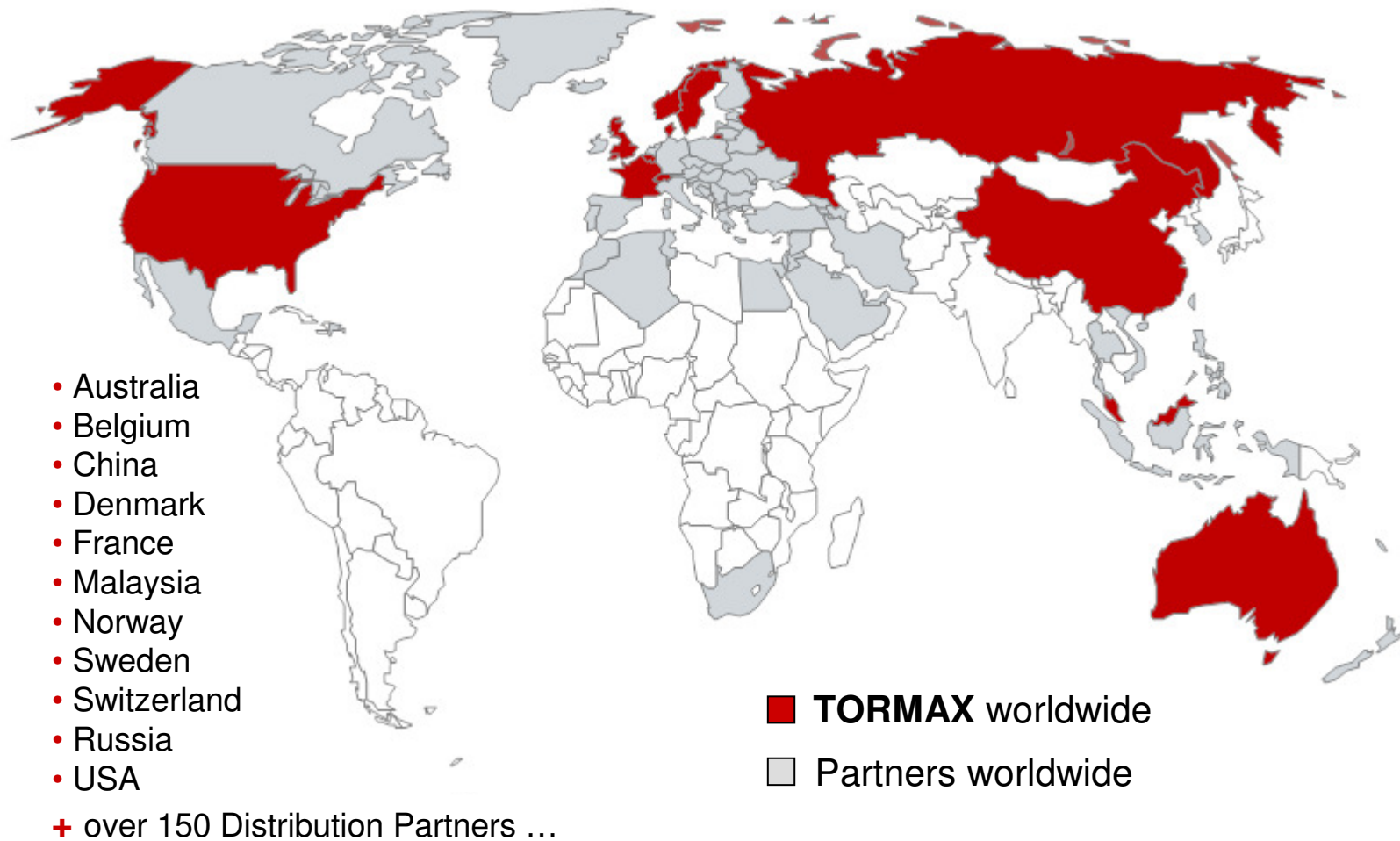
- Est. 1924
- Electrical Drives
- 25'000 Drives/Year

★★★★★
SERVAX
DRIVES

LANDERT MOTOREN AG



Worldwide Sales & Service Network



Pioneer in Door Automation – Milestones



iMotion®
the passion to drive doors

First electromechanical sliding door drive in the industry – the birth of a new standard

1951

1963

TORMAX, first European manufacturer of automatic door drives

1991

First processor controlled drive for automatic doors

1995

First independent UNINET System which integrates automatic doors in building management systems

2004

First plug'n play drive unit for automatic doors

2006

First door operator with integrated risk processor

2008

First direct drive in the world

2009



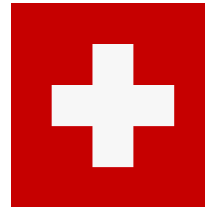
Today

- Intelligent solutions and products
 - **Processor controlled automatic door drives** for sliding, swing and revolving doors
 - **Total Solutions** (escape doors, security doors, revolving doors, etc.)
 - **Special applications** (hermetic doors, barrier-free access, retro kits, etc.)
- Mobile computing based configuration and service tool (wireless)
- Built-in preventive maintenance system

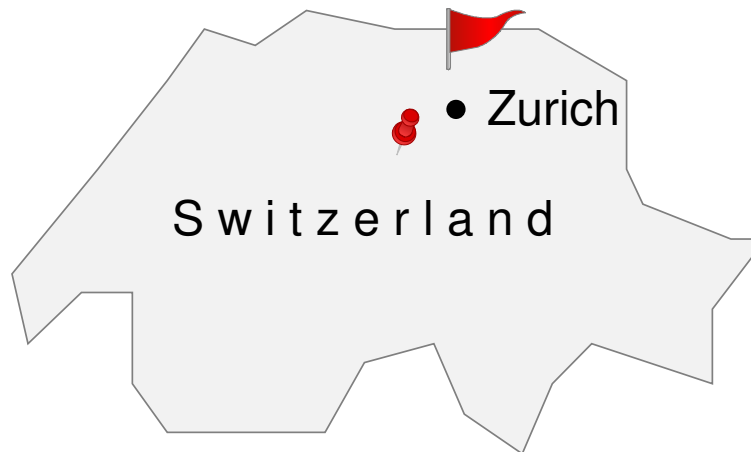


TORMAX: Solutions provider for safe and high quality systems and products!

Production Center for Automatic Door Operators (1/2)



TORMAX | Landert Motoren AG
Headquarters
CH-8180 Bülach



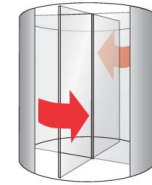
Competence Center for ...

Operators

- Swing door operators
- Revolving door operators

Market Services (Bülach)

- TORMAX training center
- Research & Development
- Marketing
- Support of the worldwide Sales & Service network



Production Center for Automatic Door Operators (2/2)



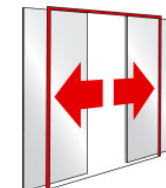
Competence Center for ...

Operators

- Sliding door operators



Landert GmbH
DE-86356 Neusäss



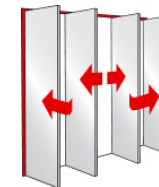
Production Center for Multifunctional Doors



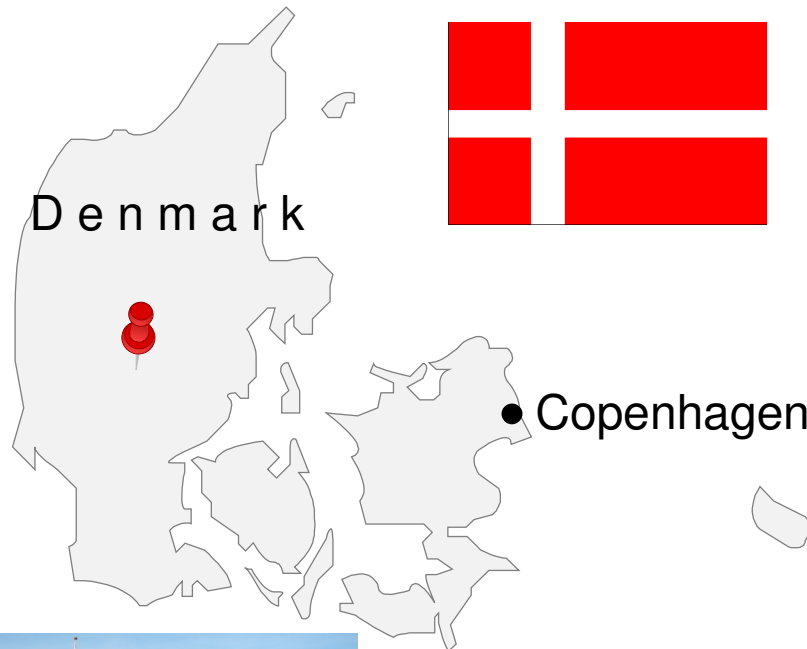
N.V. TORMAX Belgium S.A.
BE-9090 Melle

Competence Center for ... *Systems*

- Fire and smoke protection doors
- Rescue and escape routes (RER)
- Sliding and break out doors
- Burglary resistance doors with resistor classes 2 & 3
- Thermally insulated doors (DIN 14351)



Production Center for Revolving- & Curved Doors

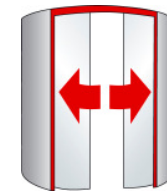
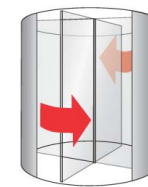


Competence Center for ... *Systems*

- Classic revolving doors
- Light frame (LF) revolving doors
- Full glass (FG) revolving doors
- Curved doors



TORMAX Denmark A/S
DK-7323 Give





iMotion Overview

What is iMotion®?

iMotion® is a new family of products designed to meet the needs for today without limiting future demands.



Main Benefits



intelligent



modular



ecological



reliable



economical

Main Benefits



iMotion® offers you more opportunities!

- Self configuration
(easy to configure)
- Self monitoring/adjustment
(permanent best performance)
- Individual parameterisation
(custom tailor-made functions)

Main Benefits



iMotion® grows as your requirements grow!

- **Modular System**
(flexible configuration and exchange)
- **Uniform design of all drives**
(same control unit, user interface)
- **Rapid replication of standards**
(customer specific pre-setting)

Main Benefits



iMotion® takes care of the environment!

- Energy Saving
(minimum consumption)
- Ecological Modularity
(less parts and travel time)
- Environmental friendly components
(designed for a clean future)

Main Benefits



iMotion® makes your life easier!

- **Reliable motor technology**
(noiseless, service free brush-less synchronous motor)
- **High-end technology**
(latest technology for high reliability)
- **Long lifecycle**
(early warning system)

Main Benefits



iMotion® protects your investment!

- Investment protection
(modular components, easy changes)
- Long lifecycle
(maintenance free motor)
- Function based pricing
(you pay only what you need)

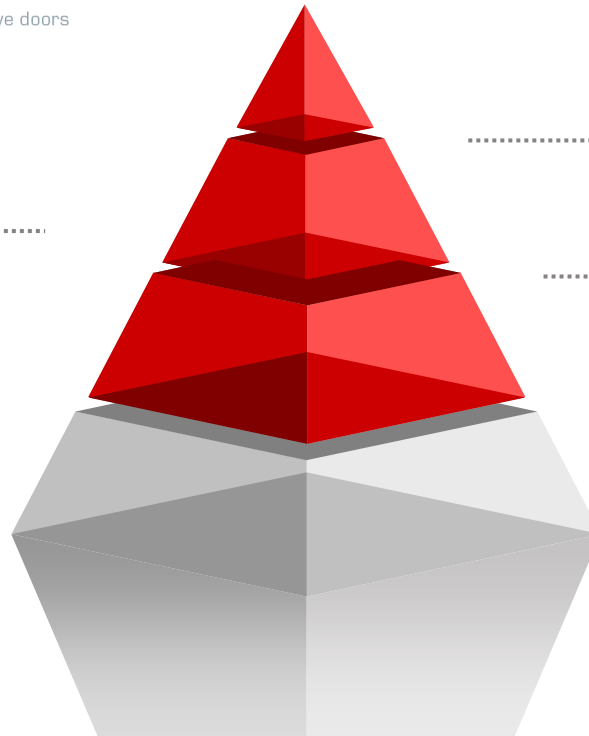
Positioning

iMotion®
the passion to drive doors

iMotion 2401
iMotion 2301
iMotion 2202

Win Drive 2201

No TORMAX
activity



High-End

High functionality, high
quality, high lifetime

Mid-Range

Medium functionality,
high quality, high lifetime

Mid-Low-Range

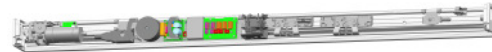
Medium functionality, good
quality, market lifetime

Low-End

Minimal functionality, low
quality, low lifetime

Sliding door drives

iMotion 2202



iMotion 2401



Win Drive 2201



slim & compact



compact & durable

iMotion 2301

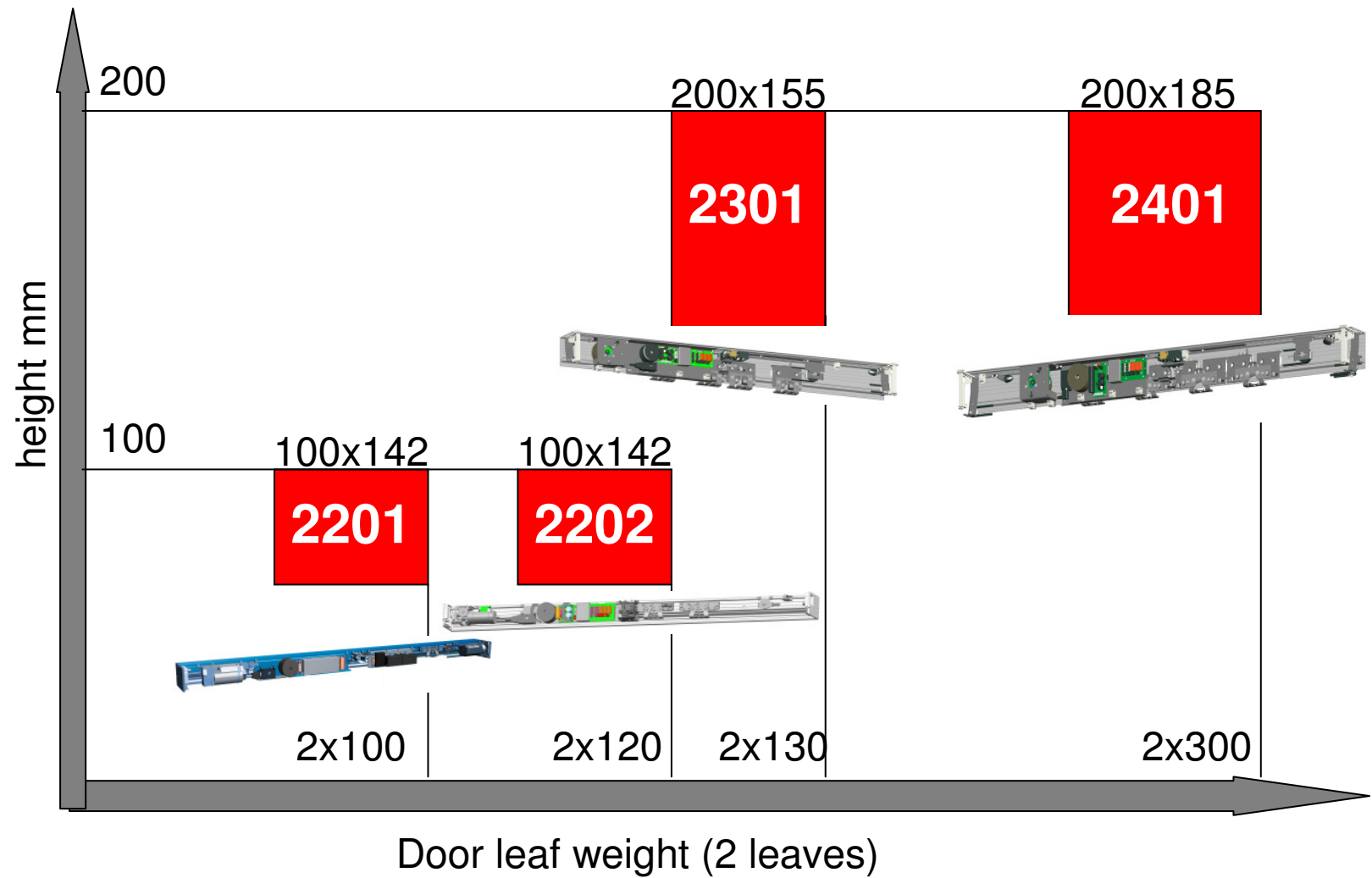


universal & durable

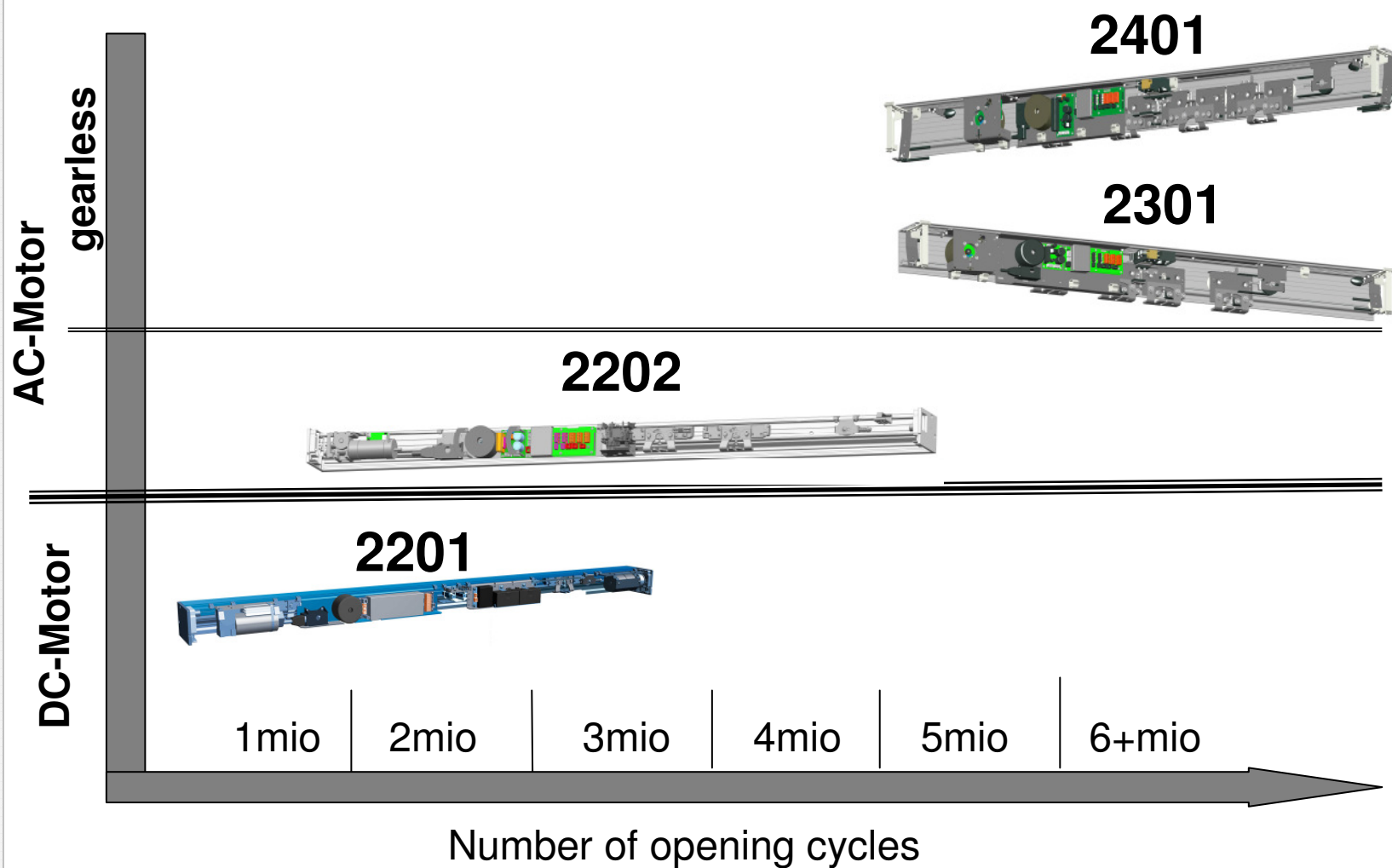


powerful & dynamic

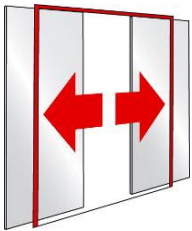
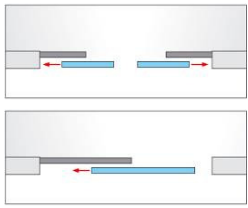
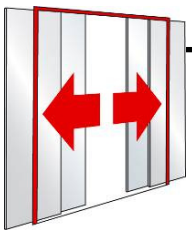
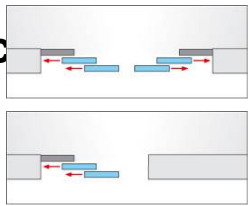
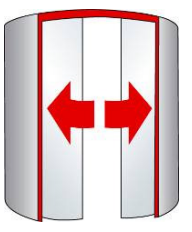
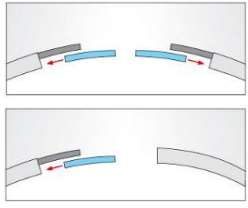




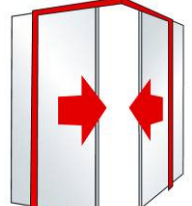
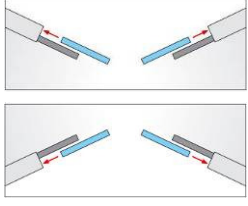



TORMAX Sliding Door Drives










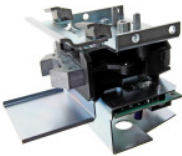
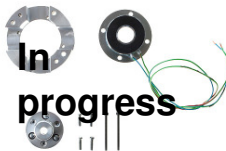



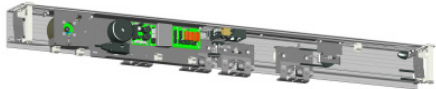


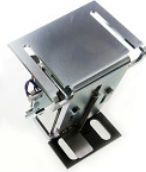
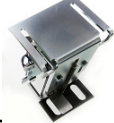




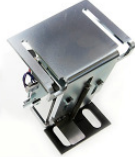
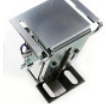

TORMAX Sliding Door Drives









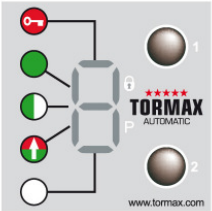



Versions / door leaf weights

			2201	2202	2301	2401
 Linear standard			2x100 kg	2x120 kg	2x130 kg	2x300 kg
			1x120 kg	1x130 kg	1x150 kg	1x450 kg
 Telescopic Space-saving			4x80 kg	2x80 kg	4x80 kg	4x100 kg
			2x80 kg	2x80 kg	2x100 kg	2x120 kg
 Curved Design			Nur TTS 2x100 kg 1x100 kg		2x120 kg 1x120 kg TTS	2x180 kg 1x180 kg TTS
					2x100 kg	
 Angle Design					2x100 kg	





















Building safety

Drive unit	Lock for trolleys	Holding break	Multi-point Lock	WK 2 resistance	WK3 resistance
2201 					
2202 					
2301 					
2401 					

User interface

Drive unit	User interface	3-Pos. switch	Key-switch	FRW-key switch
2201 				
2202 MCU32 2301 MCU32 2401 MCU 32 				

Norms / verification

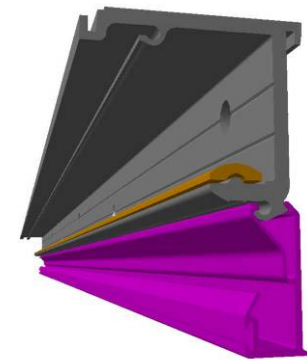
Guidelines / Norms / Testing institutes	Win Drive 2201	iMotion 2202	iMotion 2301 iMotion 2401
DIN 18650 	Certificate 	Certificate 	Certificate 
EC machinery directive 2006/42/EG EN 13849 	Declaration of incorporation 	Declaration of incorporation 	Declaration of incorporation 
Low voltage directive EN 60335-1 	Declaration of conformity 	Declaration of conformity 	Declaration of conformity 
EMC directive EN 61000-6-2 EN 61000-6-3 	Declaration of conformity 	Declaration of conformity 	Declaration of conformity 
UL 325 			Certificate  Intertek

Win Drive 2201 typical applications



- Internal doors / external doors
- Limited space
- Limited height (100mm / metal construction)
- Limited number of cycles
- Limited functions

Win Drive 2201 advantages



- Slim and compact design
 - 100x142mm
- Adequately dimensioned
 - Door leaf weights: 1x120kg / 2x100kg
 - Appropriate load distribution, 4 rollers per door leaf
- Low noise door leaf movement
 - Rubber inlay between guide rail and profile absorbs vibration
- High reliability
 - 1Mio cycles @ 4000 cycles per day (DIN 18650, TÜV certified)
- Fast and straightforward installation and commissioning

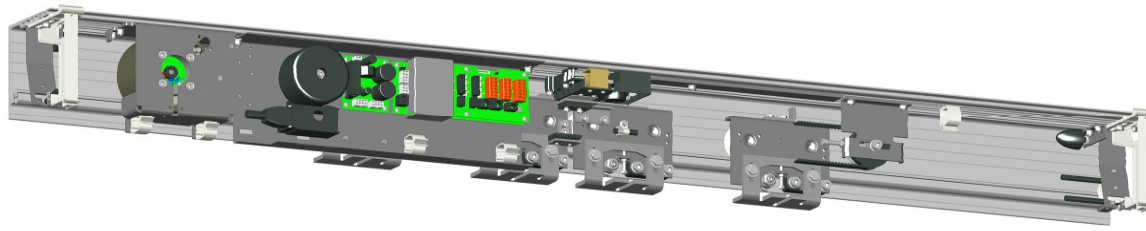
iMotion® 2301 typical applications



- External and internal doors
- Transportation, public buildings, retail business
 - Highest frequency, highest longevity (2.8 Mio. cycles / 2 years)
 - Dynamic door leaf movements
 - Highest functionality (I/O etc.)
- Internal doors (health care)
 - Silent door leaf movement
- Special applications (Corrosive environment)



iMotion® 2301 advantages



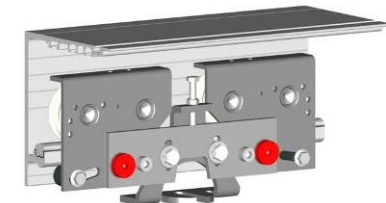
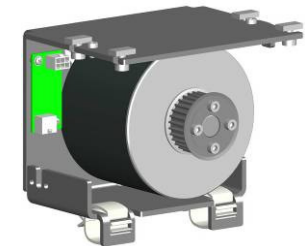
- Highest longevity, service free motor
 - AC-Motor (no brushes, no wear, no noise)
 - Gearless drive unit (low number of moving parts, no wear)
 - Swiss Made (experience from TEP, TLP, TXP)
- Highest reliability
 - Encoder: magnetic principal (resistant against dust, no aging, no wear)
- Highest user comfort, extremely dynamic door leaf movements
 - Motor with external rotor achieves high acceleration, door leafs open very dynamically, no hesitation
- Silent door leaf movement
 - Rubber inlay between guide rail and profile absorbs vibrations

iMotion® 2401 typical applications




- External and internal doors
- Monumental entrance areas
- For highest door leaf weights
- Transportation, public buildings, retail, prestige entrances
 - Highest frequency, highest longevity
 - Very dynamic door leaf movements
 - Highest functionality (air lock etc.)


iMotion® 2401 advantages



- Most powerful drive unit on the market
- Highest longevity and reliability
 - Core technology as iMotion 2301
 - Gearless AC Motor
 - Encoder based on magnetic principle
 - Swiss Made
- High user comfort with highest door leaf weights
 - Motor with external rotor technology for dynamic door leaf movements
- Optimised operating characteristics of the door leafs
 - Self adjusting double trolley with 8 rollers per door leaf



D | E | F

COMPANY | PRODUCTS | INNOVATIONS | SERVICE | REFERENCES | ARCHITECTS



Thank You For Your Attention!





News
The new TORMAX web-site goes on line. Have a look!
[\[...\] more](#)



the **passion**
to drive **doors**

Automatic Door Systems

Our Passion is Making Doors Move


TORMAX is one of the world's leading manufacturers of automatic doors. In 1951, the founders of the company, which is head-quartered in Switzerland, installed Europe's first electro-hydraulic swing door in Davos, Switzerland. The drive is still in use today, almost 60 years later. "Peak performance for life-long contented customers".

WELCOME

TORMAX worldwide

- on all 5 Continents
- in 50 Countries
- over 500 Partners

[\[...\] more](#)



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