

Hold-open magnets

DORMA EM

A modular system for fire and smoke doors Setting new standards for hold-open magnets

DORMA's new range of EM hold-open magnets provides the perfect complement to a technically and aesthetically advanced range of fire and smoke door products. These new market-orientated developments are characterised by their ease of fixing and functional elegance.

And thanks to comprehensive quality assurance, they also offer maximum reliability and service life.



Plus points ...

... for the trade

- Cost-effective modular system offering the advantages of maximum flexibility with minimal stocking levels.
- A further component in the DORMA range for single-source supply.

... for the installer

- Quick and easy to fix.
- Sophisticated accessories suitable for a wide range of applications.

... for the specifier/ architect

- Uniform appearance common to all models.
- Modular system for application flexibility.

... for the user

- Unobtrusive.
- Concealed cable run.
- Optimum holding force with minimum power consumption.

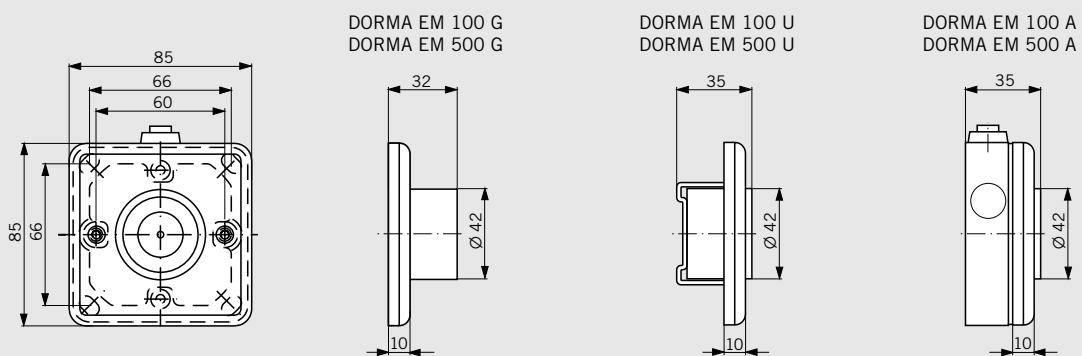
Data and features		500 G	100 G	500 U	100 U	500 A	100 A
Fixing	Surface-mounted	●	●	-	-	●	●
	Flush-mounted	-	-	●	●	-	-
	Floor mounted ¹⁾	●	●	-	-	●	●
Holding force	400 N	●	●	●	●	●	●
	100 N	-	-	-	-	-	-
Anti-remnance pin		●	-	●	-	●	-
Test pushbutton		-	-	-	-	●	●
Polarity reversal protection		●	●	●	●	●	●
Operating voltage	24v AC/DC	●	●	●	●	●	●
	48v DC	●	-	●	-	●	-
Power consumption		1.5 W					
On-load factor		100 % (rated for continuous service)					
Class of protection		IP 40 ²⁾					
Ambient temperature		0 - 50 °C					
Weight (kg)		0.41		0.42		0.46	
Dimensions (mm)	Width	85		85		85	
	Length	85		85		85	
	Depth	32		35		35	

● yes - no

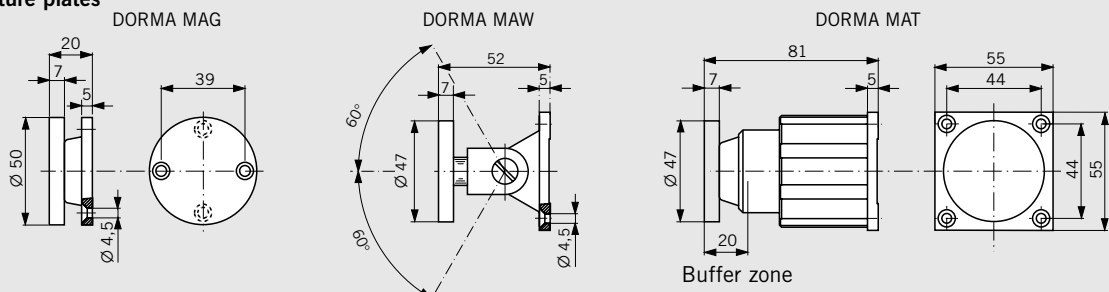
¹⁾ Floor angle bracket required (accessory)

²⁾ EM 500/100 A in conjunction with floor angle bracket: Class of protection IP 43

Hold-open magnets



Armature plates



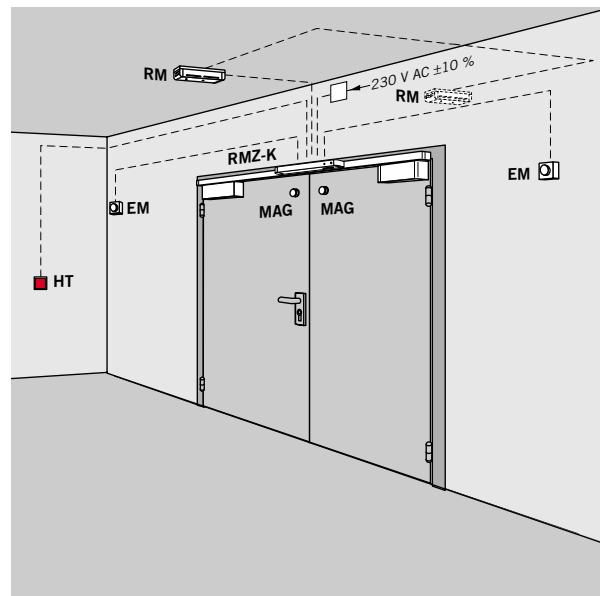
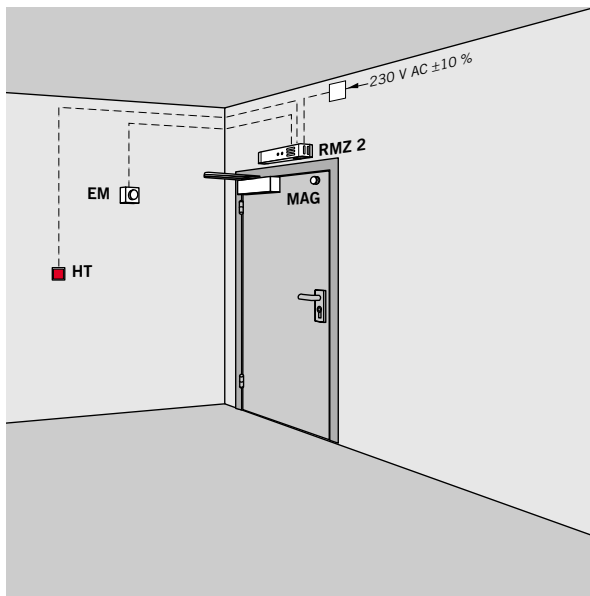
Electro-magnets for hold-open systems

The statutory regulations which apply in many countries allow fire and smoke doors to be held open for a limited period of time by electro-magnetic hold-open devices which, in the event of a fire, are de-energised to release the door so as to enable automatic closing. Such systems consist of a hold-open device, fire/smoke detection and alarm system,

power supply and release device, and generally have to be approved by an accredited institute or building authority (in Germany: the German Institute for Building Technology, Berlin). Electro-magnets are devices which hold open fire and smoke doors. In the event of a fire, the hold-open magnet is de-

energised by the release device responding to a signal from the fire detector. The automatic closing action is provided by door closers which, in Germany, must correspond to DIN EN 1154 and be third-party verified. It must also be possible to manually release the hold-open device. According to the guidelines for hold-open systems applicable to

Germany, a manual release pushbutton is necessary when employing electro-magnets in such applications. The pushbutton employed must be red, carry the wording "Close door", be located in the immediate vicinity of the door, and must not be hidden when the door is in its hold-open position.



- EM** = Electro-magnet
- HT** = Manual release pushbutton
- MAG** = Armature plate
- RM** = Smoke detector (ceiling-mounted)
- RMZ 2** = Smoke detector (lintel-mounted)
- RMZ-K** = Smoke detector (lintel-mounted)

F Approval certification

Electro-magnets of the series DORMA EM 500 for 24v AC/DC are tested and third-party verified by the Verband der Sachversicherer (VdS) e.V., Cologne (Association of Property Insurers), and have been approved by the German Institute for Building Technology (DIBt), Berlin, for use in

combination with the DORMA RMZ 2 smoke detector, the DORMA RM smoke detector and other reputable smoke detector systems, (e.g. with DORMA RMZ 2/RM: approval certificate No. Z-6.5-1310). In Germany, inspection and approval of the hold-open system is additionally required.

EM 500/100 G for wall or floor mounting***Specification text:**

Hold-open magnet with pole reversal protection for wall or floor mounting*

Holding force 400 N

Design:

24v AC/DC

Generally approved by DIBt-Berlin for use in hold-open systems. (System acceptance inspection may be necessary.)

48v DC

Requisite accessories:

Armature plate

Make: DORMA EM 500 G

Specification text:

Hold-open magnet with pole reversal protection for wall or floor mounting*

Holding force 100 N

Design:

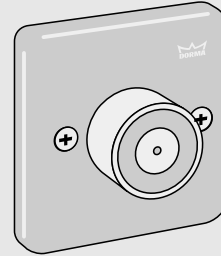
24v AC/DC

Requisite accessories:

Armature plate

Make: DORMA EM 100 G

(*in conjunction with floor angle bracket, see Page 6)

**EM 500/100 U for flush fixing****Specification text:**

Hold-open magnet with pole reversal protection for flush fixing

Holding force 400 N

Design:

24v AC/DC

Generally approved by DIBt-Berlin for use in hold-open systems. (System acceptance inspection may be necessary.)

48v DC

Requisite accessories:

Armature plate

Make: DORMA EM 500 U

Specification text:

Hold-open magnet with pole reversal protection for flush fixing

Holding force 100 N

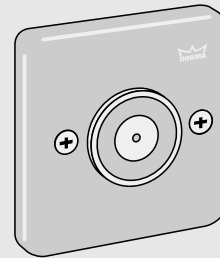
Design:

24v AC/DC

Requisite accessories:

Armature plate

Make: DORMA EM 100 U

**EM 500/100 A for wall or floor mounting* with integral test pushbutton****Specification text:**

Hold-open magnet with pole reversal protection and integral test pushbutton, for wall or floor mounting*

Holding force 400 N

Design:

24v AC/DC

Generally approved by DIBt-Berlin for use in hold-open systems. (System acceptance inspection may be necessary.)

48v DC

Requisite accessories:

Armature plate

Make: DORMA EM 500 A

Specification text:

Hold-open magnet with pole reversal protection and integral test pushbutton, for wall or floor mounting*

Holding force 100 N

Design:

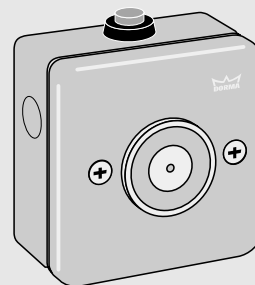
24v AC/DC

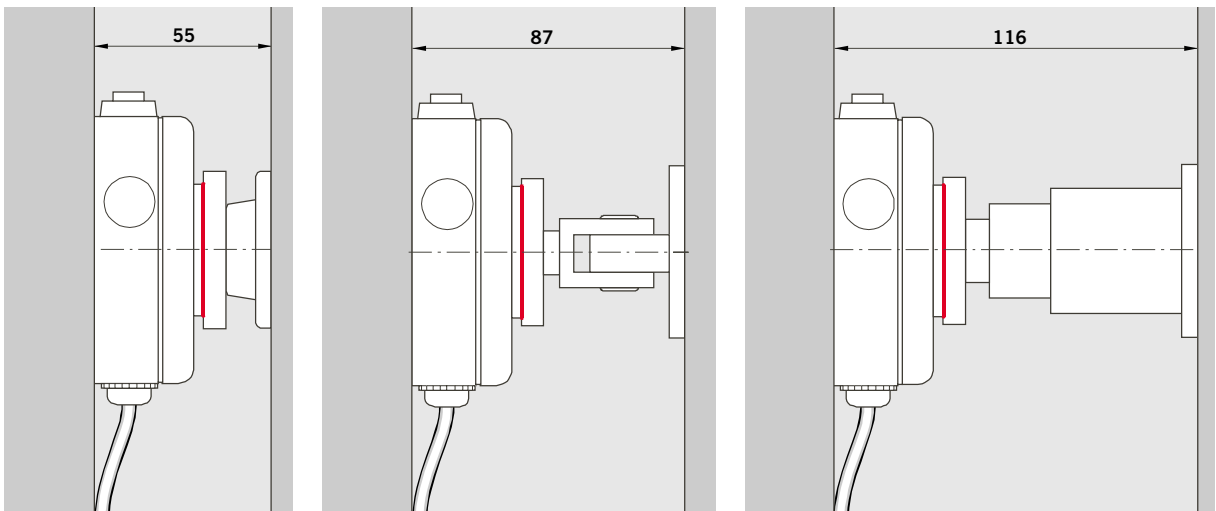
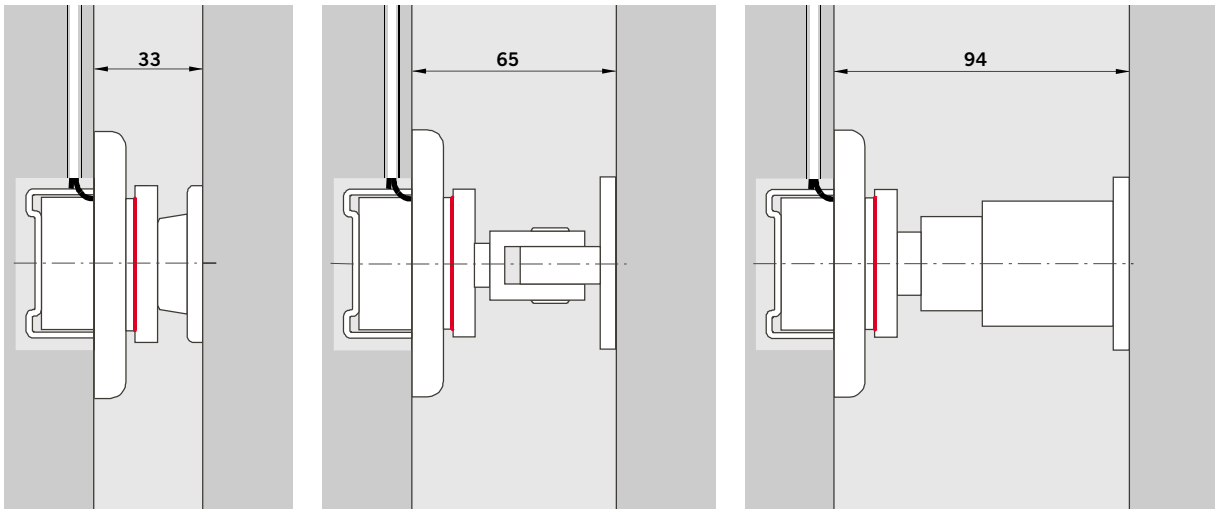
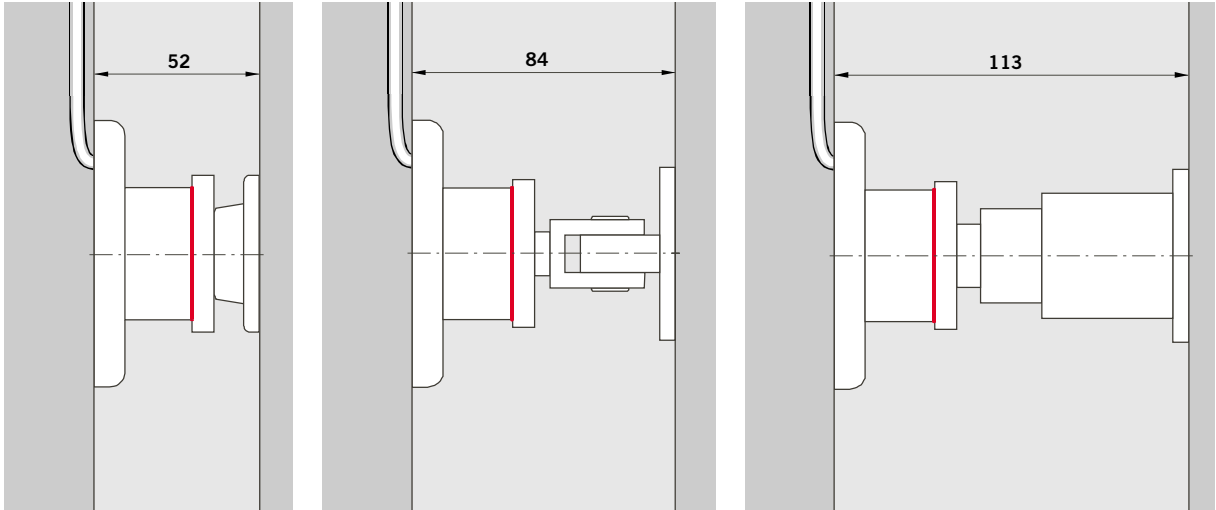
Requisite accessories:

Armature plate

Make: DORMA EM 100 A

(*in conjunction with floor angle bracket, see Page 6)

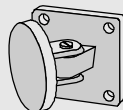




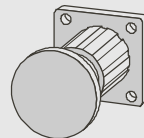
MAG



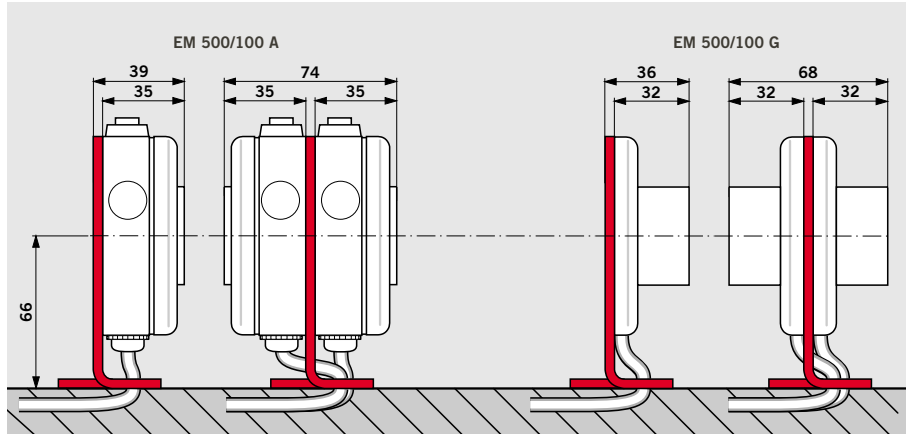
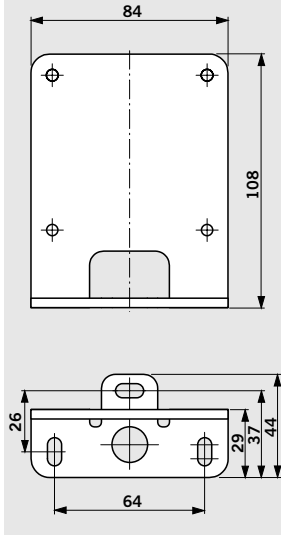
MAW



MAT



Floor angle bracket

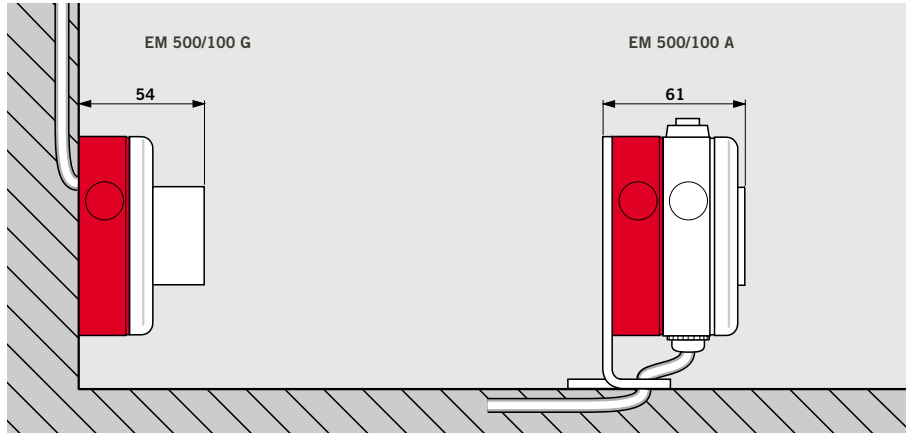
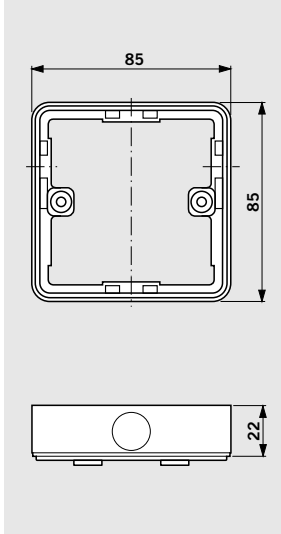


For installation of hold-open magnets EM 500/100 G and EM 500/100 A as floor-mounted units.

A DORMA EM 500/100 B hold-open magnet for floor mounting comprises an EM 500/100 G or

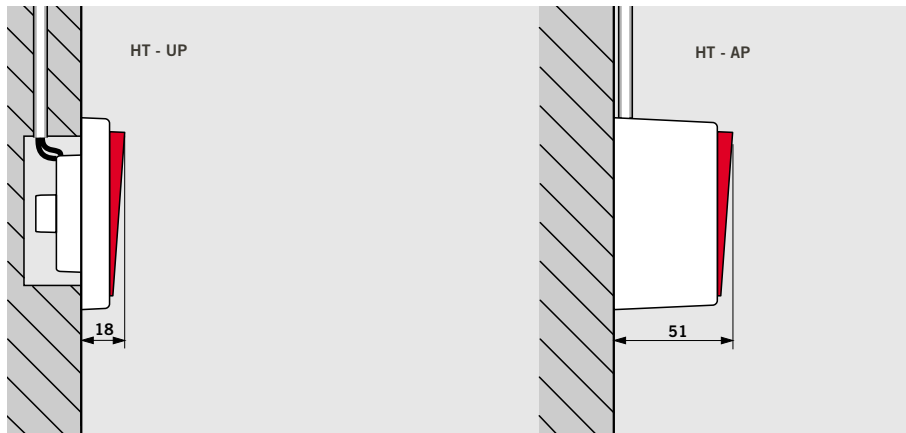
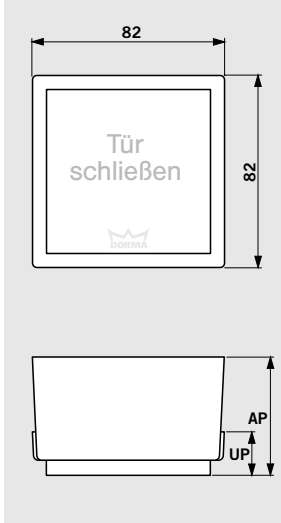
EM 500/100 A hold-open magnet and an associated floor angle bracket. **Specification text:** see Page 4

Adapter frame



The frame can be combined with the individual hold-open magnets of the series EM 500/100 G/U/A.

Separate manual release switch



For releasing the hold-open device by hand.

When employing electro-magnets in hold-open systems for fire and smoke doors, a manual switch may have to be provided in accordance with

local or national regulations (e.g. the guidelines of the German Institute for Building Technology (DIBt), Berlin, for German applications).

Special models EM 500 H for floor, ceiling and wall mounting, with integral test pushbutton

Specification text:

24v DC hold-open magnet with pole reversal protection and integral test pushbutton for floor, ceiling and wall mounting.

Holding force 490 N.

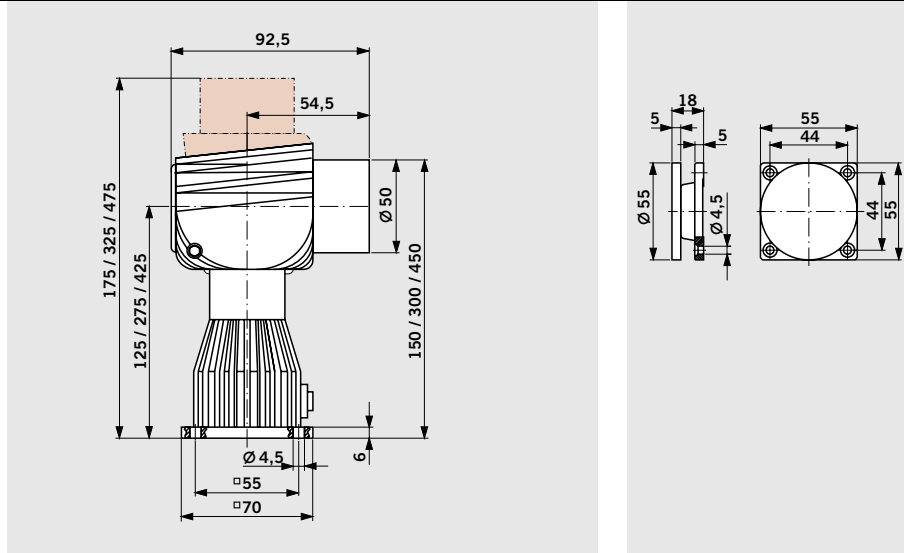
Generally approved by the DIBt-Berlin for use in hold-open systems (in Germany). (System acceptance inspection may be necessary.)

Size:

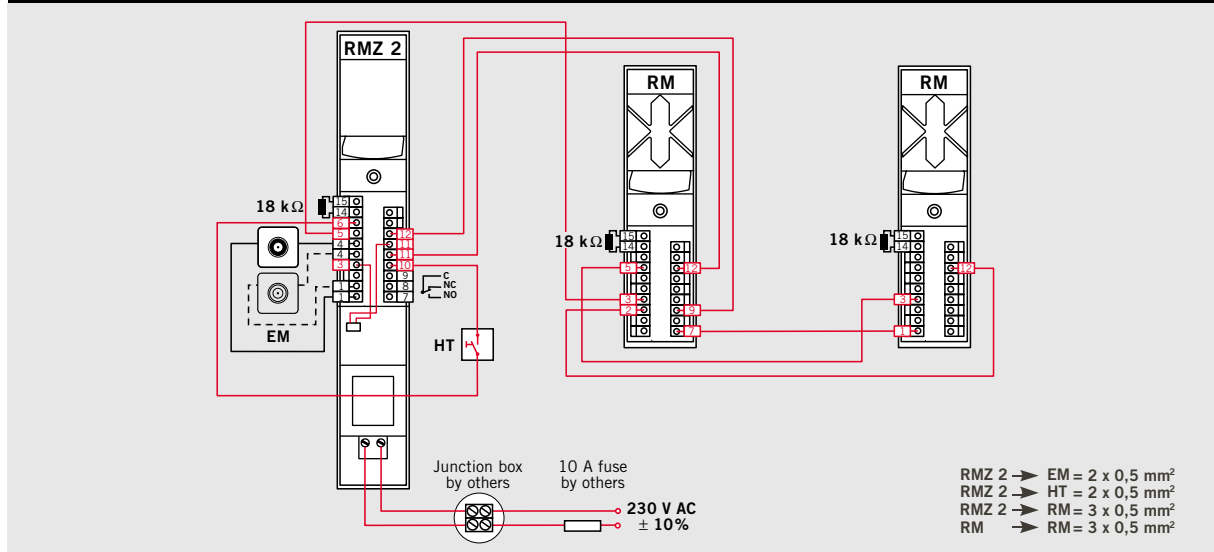
- 150/175 mm
- 300/325 mm
- 450/475 mm

Requisite accessories:
Armature plate

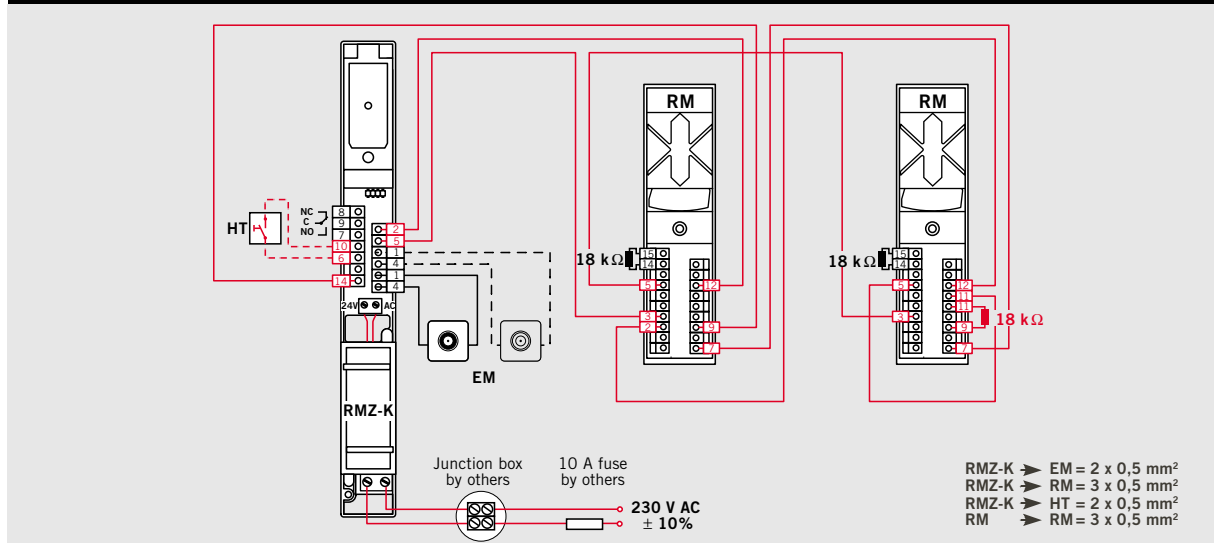
Make: DORMA EM 500 H



EM + RMZ 2 + 2xRM



EM + RMZ-K + 2xRM



		MAG	MAW	MAT	MAG I	Floor angle bracket	Adapter frame
		X 69020110	X 69020111	X 69020112	X 69021113	69011540	690xx541
EM 500 G 	24v AC/DC ■ 690xx511	X	X	X		#	#
	48v DC ■ 690xx512	X	X	X		#	#
EM 500 U 	24v AC/DC ■ 690xx521	X	X	X			#
	48v DC ■ 690xx522	X	X	X			#
EM 500 A 	24v AC/DC ■ 690xx531	X	X	X		#	#
	48v DC ■ 690xx532	X	X	X		#	#
EM 100 G 	24v AC/DC ■ 690xx111	X	X	X		#	#
EM 100 U 	24v AC/DC ■ 690xx121	X	X	X			#
EM 100 A 	24v AC/DC ■ 690xx131	X	X	X		#	#
EM 500 H 24v DC 	150/175 mm ■ 69015005				X		
	300/325 mm ■ 69015006				X		
	■ 69015007				X		

Separate manual release switch

HT-UP
35901531

HT-AP
35901532

Note:
A hold-open magnet for floor mounting comprises an electro-magnet of the type EM 500/100 G or EM 500/100 A and the floor angle bracket.

■ = Hold open magnet separate
X = Armature plate separate
= Accessory

Colour **XX**
white 11
stainless steel finish 12

DORMA Door Controls Ltd.
DORMA Trading Park
Staffa Road
GB-London E10 7QX
Tel. 020 8558 8411
Fax 020 8558 6122
E-mail: hardware@dorma-uk.co.uk

DORMA Door Controls Ltd.
19, Sandyford Office Park
Foxrock
IRL-Dublin 18
Tel. 01 295 82 80-82
Fax 01 295 85 84
E-mail: dormadublin@dorma.com

DORMA Door Controls Pte. Ltd.
No. 2, Jalan Terusan, Jurong
Singapore 619285
Rep. of Singapore
Tel. 0065 2687633
Fax 0065 2657914

DORMA Door Controls Pty. Ltd.
P.O. Box 1092
Narre Warren Vic 3805
52 Abbott Road
Hallam Victoria 3803
Australia
Tel. 0061 3/97 96 35 55
Fax 0061 3/97 96 39 55

DORMA Gulf Door Controls FZE
Jebel Ali Free Zone, Roundabout 8,
Unit VC 02
P.O. Box 17268
Jebel Ali, Dubai
United Arab Emirates
Tel. 00971 48 /83 90 14
Fax 00971 48 /83 90 15

DORMA Door Controls (Pty.) Ltd.
Kings Court
P.O. Box 82182
2135 Southdale · South Africa
Tel. 0027 11/8 30 02 80
Fax 0027 11/8 30 02 91

DORMA GmbH + Co. KG
P.O. Box 40 09
58247 Ennepetal
Breckerfelder Straße 42-48
58256 Ennepetal
Germany
Tel. +49(0)23 33/7 93-0
Fax +49(0)23 33/79 34 95

The address of a subsidiary/
representation in your area you
can find at the DORMA-website:
www.dorma.com