

# 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.

Certified to ISO 9001

### 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

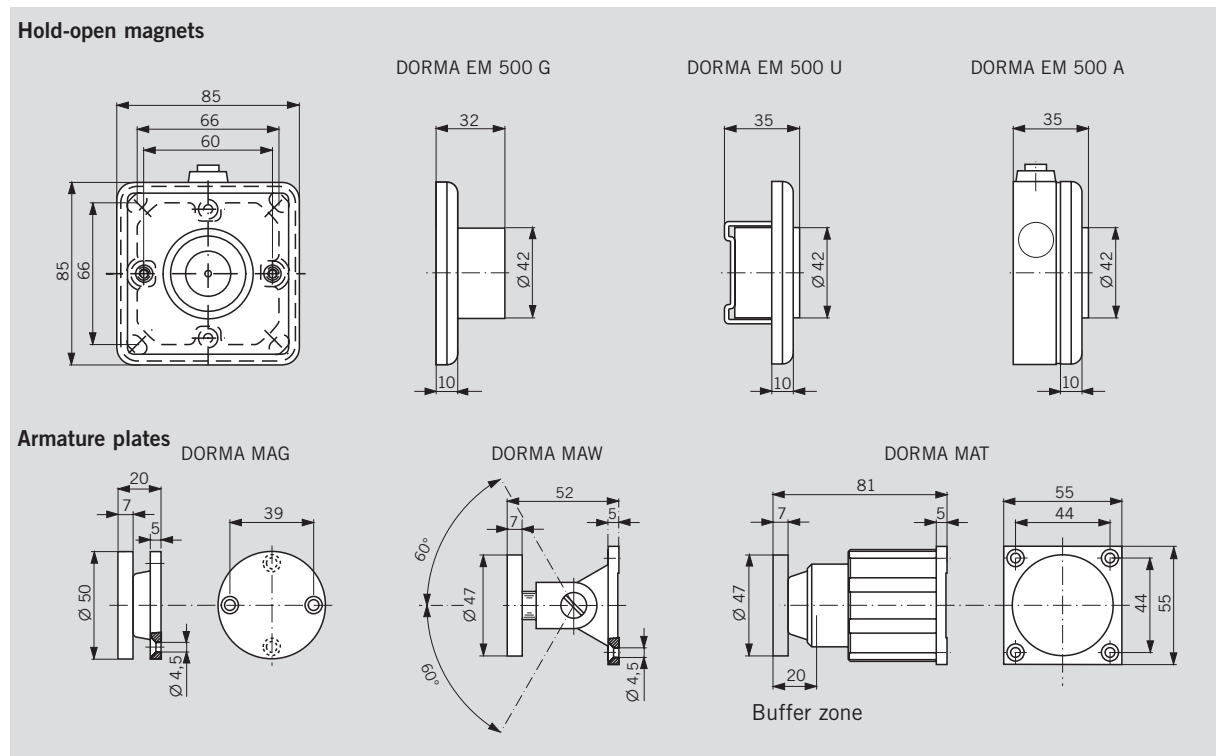
- Unobtrusive.
- Concealed cable run.
- Optimum holding force with minimum power consumption.

Data and features		500 G	500 U	500 A
Fixing	Surface-mounted	●	–	●
	Flush-mounted	–	●	–
	Floor-mounted <sup>1)</sup>	●	–	●
Holding force	400 N	●	●	●
Anti-remnance pin		●	●	●
Test pushbutton		–	–	●
Polarity reversal protection		●	●	●
Operating voltage	24 V AC/DC	●	●	●
Power consumption in W		1.5		
On-load factor in %		100 (rated for continuous service)		
Class of protection		IP 40 <sup>2)</sup>		
Ambient temperature in °C		0 – 50		
Weight in kg		0.41	0.42	0.46
Dimensions in mm	Width	85	85	85
	Length	85	85	85
	Depth	32	35	35
Hold-open devices tested to EN 1155		●	●	●
CE-mark for building products		●	●	●

● yes – no

<sup>1)</sup> Floor angle bracket required (accessory)

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



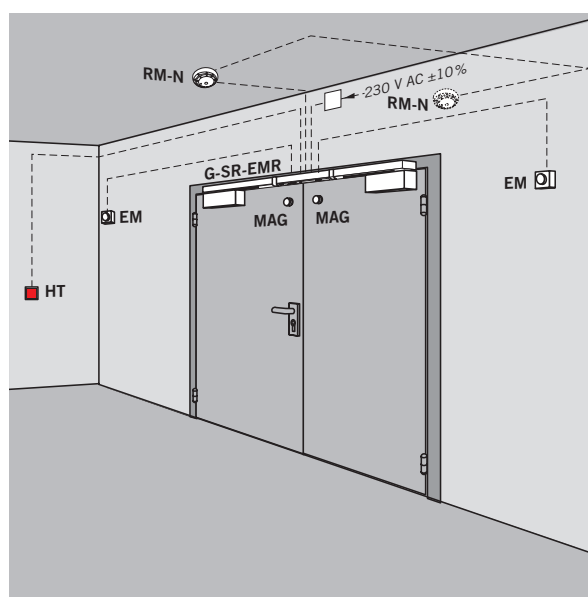
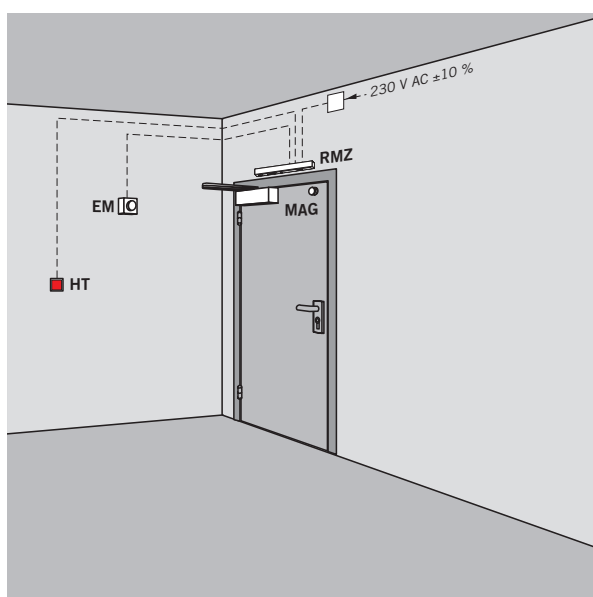
## Electro-magnets for hold-open systems

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.

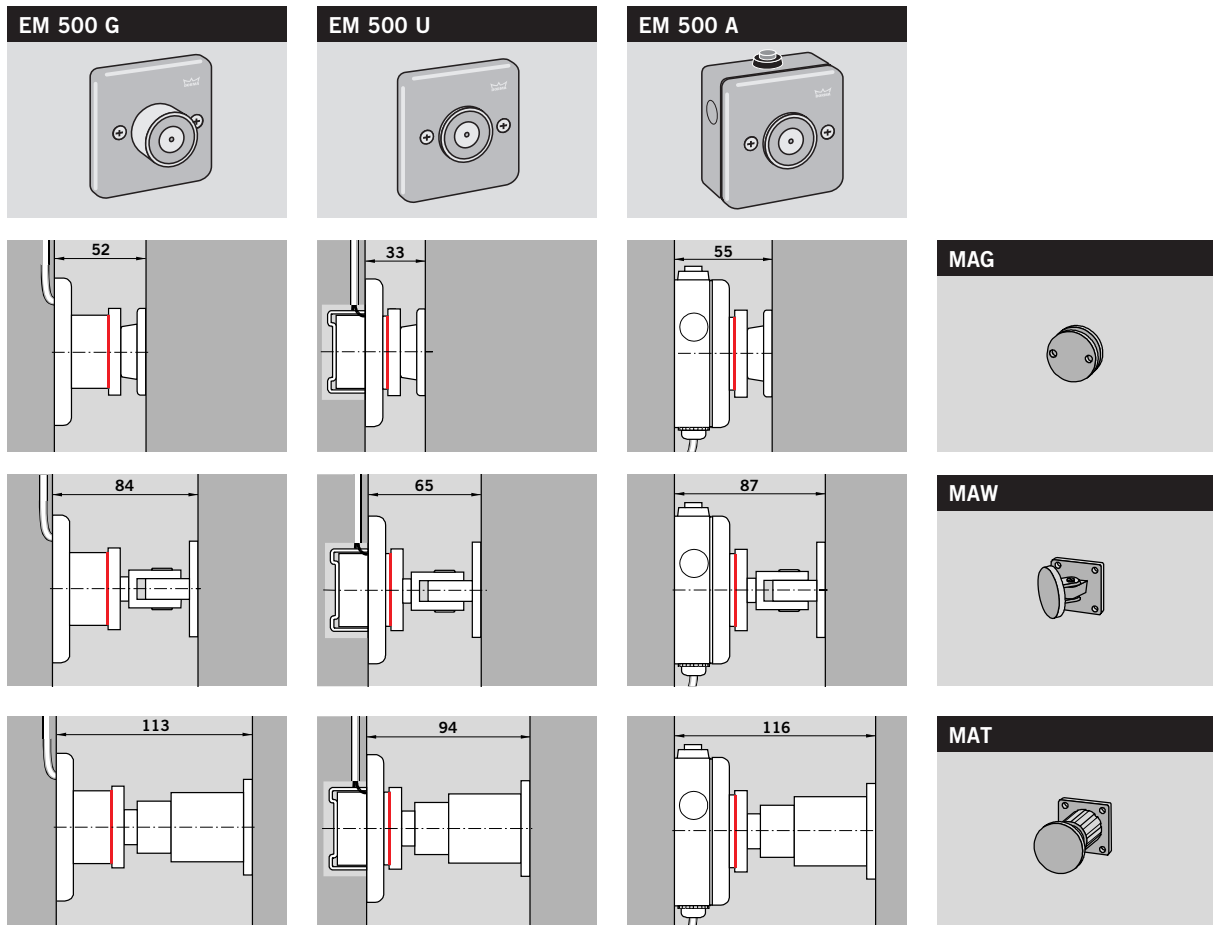


- EM** = Electro-magnet
- HT** = Manual release pushbutton
- MAG** = Armature plate
- RM-N** = Smoke detector (ceiling-mounted)
- RMZ** = Smoke detector (lintel-mounted)
- G-SR-EMR** = Door co-ordinator with integral smoke detector

## 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 smoke detector and other reputable smoke detector systems, (e.g. with DORMA RMZ: approval certificate No. Z-6.5-1890). In Germany, inspection and approval of the hold-open system is additionally required.



## Specification text

**EM 500 G**

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

Holding force 400 N

24v AC/DC

Generally approved by DIBt-Berlin for use in hold-open systems.

(System acceptance inspection may be necessary.)

Requisite accessories:

Armature plate

**Make:** DORMA EM 500 G

**EM 500 U**

Hold-open magnet with pole reversal protection for flush fixing

Holding force 400 N

24v AC/DC

Generally approved by DIBt-Berlin for use in hold-open systems.

(System acceptance inspection may be necessary.)

Requisite accessories:

Armature plate

**Make:** DORMA EM 500 U

**EM 500 A**

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

Holding force 400 N

24v AC/DC

Generally approved by DIBt-Berlin for use in hold-open systems.

(System acceptance inspection may be necessary.)

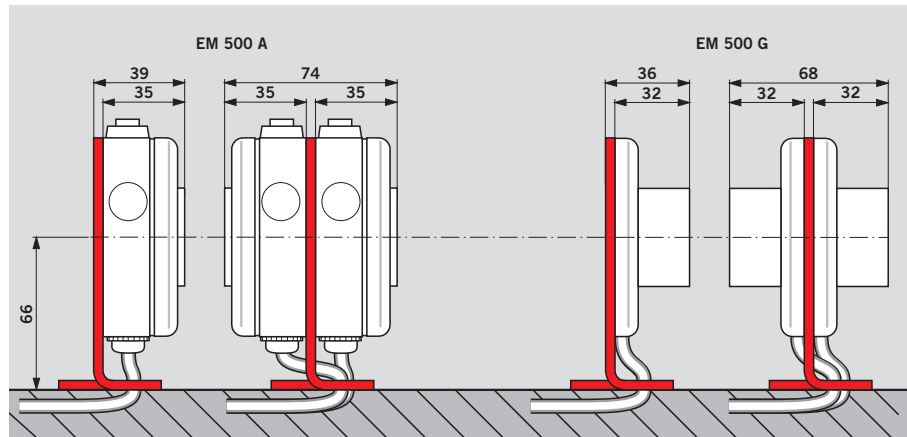
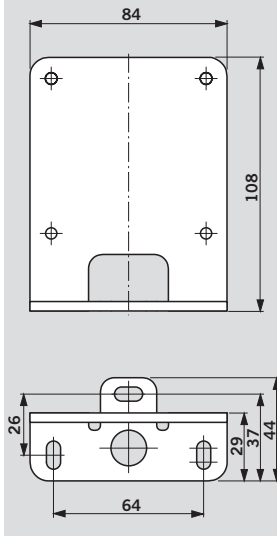
Requisite accessories:

Armature plate

**Make:** DORMA EM 500 A

\*) in conjunction with floor angle bracket, see Page 5

**Floor angle bracket**



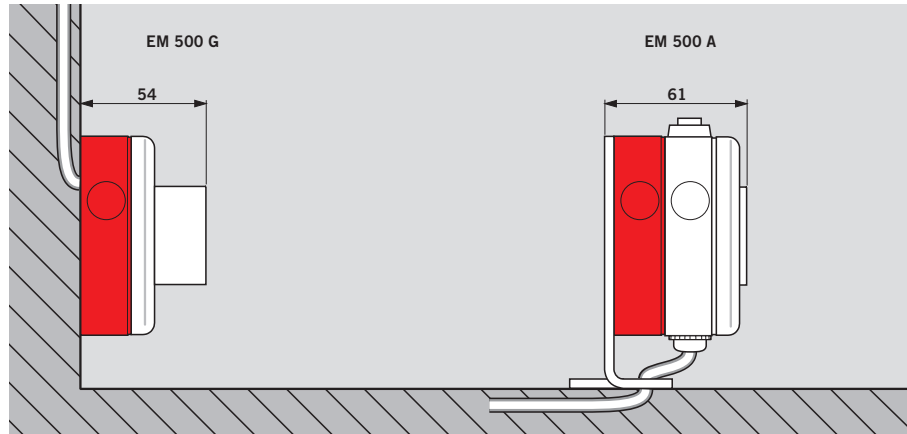
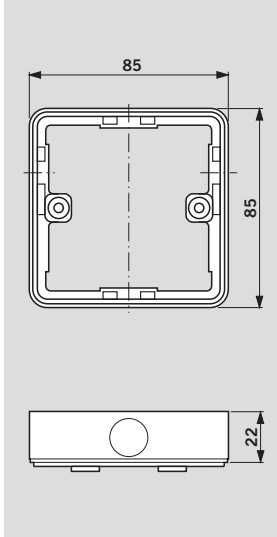
For installation of hold-open magnets EM 500 G and EM 500 A as floor-mounted units.

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

associated floor angle bracket.

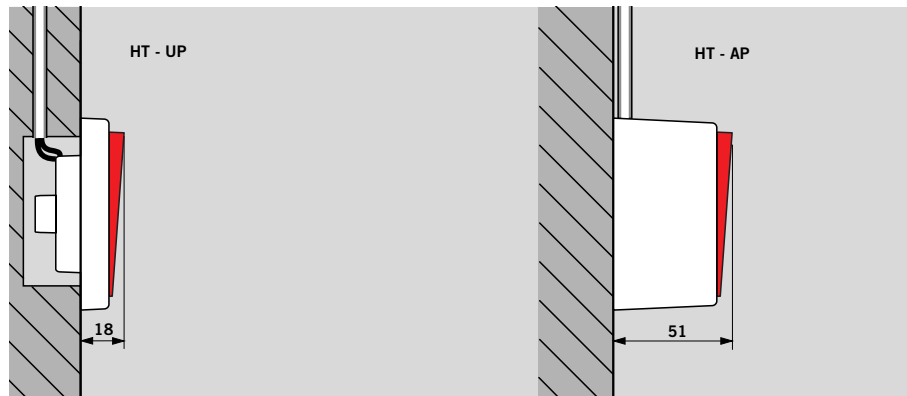
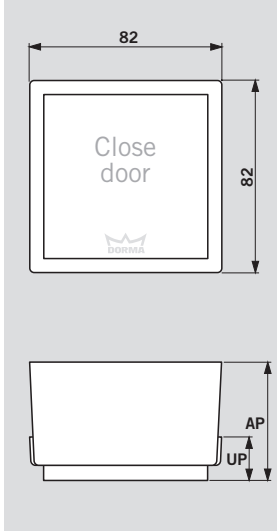
**Specification text:**  
see Page 4

**Adapter frame**



The frame can be combined with the individual hold-open magnets of the series EM 500 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.)

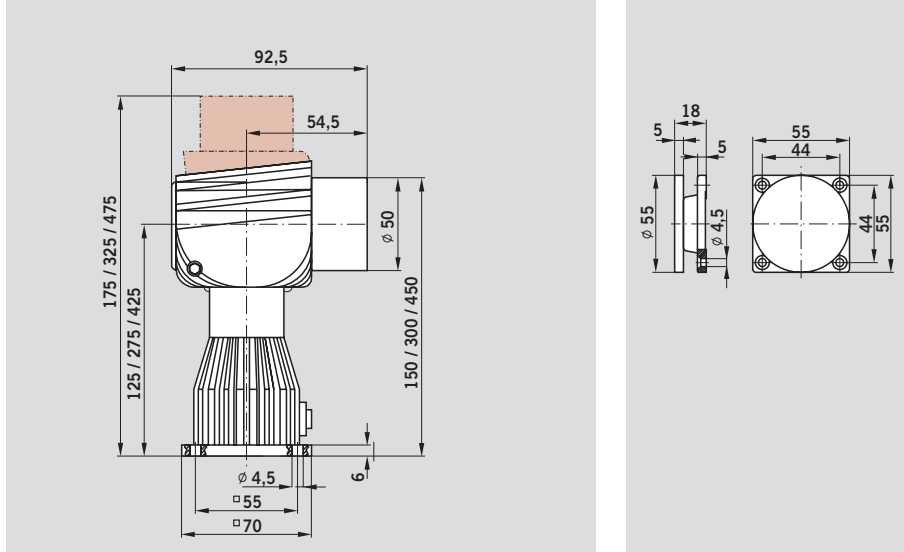
**Size:**

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

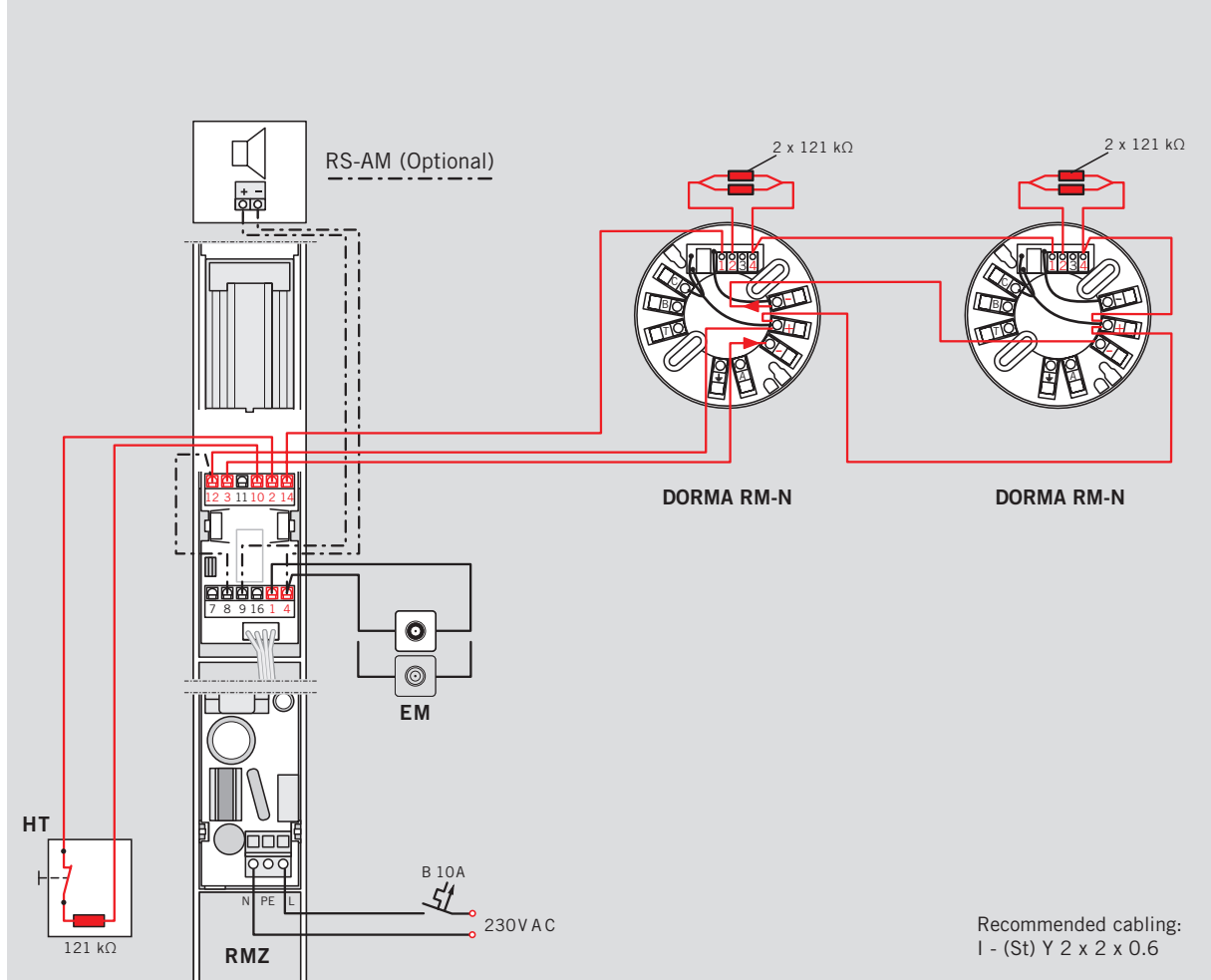
Requisite accessories:










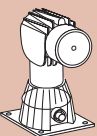
Armature plate



**Make:** DORMA EM 500 H



**EM + RMZ + 2x RM-N**



Standard equipment and accessories						
	MAG 	MAW 	MAT 	MAG I 	Floor angle bracket 	Adapter frame 
	□ 69020110	□ 69020111	□ 69020112	□ 69021113	69011540	690xx541
<b>EM 500 G</b>  24 V AC/DC ■ 690xx511	■ □	■ □	■ □		#	#
<b>EM 500 U</b>  24 V AC/DC ■ 690xx521	■ □	■ □	■ □			#
<b>EM 500 A</b>  24 V AC/DC ■ 690xx531	■ □	■ □	■ □		#	#
<b>EM 500 H</b> 24 V DC  150/175 mm ■ 69015005 300/325 mm ■ 69015006 ■ 69015007				■ □		
				■ □		
				■ □		

Separate manual release switch	
	<b>HT-UP</b> 35901531
	<b>HT-AP</b> 35901532

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

■ = Hold open magnet separate  
 □ = Armature plate separate  
 # = Accessory

Colour	XX
white	11
stainless steel finish	12



WN 051 364 51532, 03/12, EM, GB, x. DD, xx/12 - Subject to change without notice



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