

# EMF/EMR Series

## Holder/Release devices with integral door closers

We make access in life smart and secure



## EMR Series—holder/release device

The EMR Series holder/release device incorporates a photoelectric detector and can control the spread of smoke and fire in a specific location or throughout the building if wired into a central alarm panel.

The EMR Series is designed to monitor and contain the spread of fire and smoke while allowing unimpeded, easy access throughout a building. The EMR Series includes the TS93, 8900, and 8600 door closers. The TS93 in Contur Design, with the extra efficient cam and roller technology, can be used on larger doors, while the 8900 and 8600 rack and pinion closers offer a narrow projection alternative.

These units are compatible with new or existing fire/smoke control systems. Integral features of the EMR models are the photoelectric detector and holder/release device. The EMR's integral detector offers an array of electrical and signaling features along with the capability of controlling a non-detected EMF unit for pairs of doors. The holder/release device holds a door open under normal conditions. However, if an alarm state or loss of electric current occurs, it permits the closing of the door from any angle of opening.

These units are particularly suited for use in hotels, hospitals, nursing homes, schools, and senior facilities because they allow easy accessibility on a day-to-day basis, while quickly curtailing the spread of smoke and/or fire in an emergency.

In the case of an alarm state signaled by the central control system or main power failure, current to the electromagnetic hold open device is interrupted, thus allowing the door closing mechanism to take over and shut the door.

### Technical details

- Door closing control by the proven TS93, 8900, or 8600 Series closer with spring power adjustment and adjustable hydraulic backcheck.
- Hold Open (HO) design prevents damage to the door, frame, holder/release device, or other installed hardware. This design enables initial hold while allowing the door to be manually opened beyond the hold open point.
- Detector can control one EMF unit for pairs of doors.
- Interfaces with new or existing smoke or fire control systems.
- Can be wired for concealed or surface wiring.
- HO can be released manually.
- HO – single point adjustable on pull side, push side, and double egress applications
- Separate door stops recommended to limit maximum door swing.

### Certification

- The DORMA EMR Series is listed by UL and CUL under their continuing reinspection programs.
- The EMR Series is certified to conform to the requirements of ANSI/BHMA 156.15.
- CSFM approved.



### Hold open power requirement

24 V AC/DC at 165 mA (1 electromagnet), 310 mA (2 electromagnets). 120 VAC requires optional transformer (TRANSF). See accessories, back page. (The EMR detector is capable of powering and controlling a non-detected EMF unit; the two solenoid value above represents an EMR/EMF combination).

### Detector

The integral detector of the EMR can be powered by a 24 V input only. A built-in rectifier converts AC linevoltage to DC, allowing all EMR models to accommodate a 24 VDC or 24 VAC input. When using 120 V line voltage, a transformer external from the unit is required to step the voltage down from 120 V to 24 V.



### Detector contact ratings

Alarm and/or accessory contacts (resistive load): 1.25 A max. at 24 VDC, 0.3 A max. at 120 VAC. Trouble contact (resistive load): 0.5 amps max. at 24 VDC. Maximum remote alarm indicator lamp output: 0.3 A at 24 VDC. Provides power to operate remote LED.

### Detector alarm indications

1. Red LED on in alarm.
2. Alarm relay contacts transfer.

### Detector trouble indications

1. N.C. trouble contacts open upon loss of power.
2. Red LED stops flashing.

### Detector compatibility

Connects to one area detector for remote sensing. Interfaces with alarm systems using N.C. or N.O. alarm contacts and N.C. (under power) trouble contacts. Five EMR detectors may be interconnected for zone control of doors or pairs of doors.

### Transient protection

Door closer/holder with and without integral detector to meet U.L. 228 Standard.

### Servicing detector

Detector is field removable from unit. Smoke chamber field removable for cleaning.

**Note:** In applications requiring the 4-wire alarm initiating loop, the installing company will be responsible for placing the appropriate value resistor as required for use with the control panel.



Intertek



Intertek

dormakaba USA quality and environmental management systems in Reamstown, PA and Steeleville, IL are certified to ISO 9001:2008 and ISO 14001:2004.

## Finishes

### Standard sprayed finishes

- Primed for Painting: 600
- Aluminum: 689
- Bronze: 691 (Dull), 690
- (Statuary), or 695
- (Dark Duranodic)
- Gold: 696
- Black: 693

### Optional custom color or designer color finishes

Contact Customer Service.

### Specifications (TS93 EMR)

TS93 EMR electromagnetic surface applied fire/life safety hydraulic door closer to suit hold open specification. The closer must utilize cam and roller technology with greater efficiency than a typical rack and pinion track closer to allow use on wider doors. The closers will have hydraulic backcheck to prevent uncontrolled opening of the door. Devices to accommodate doors ranging from 2'-8" to 5'-0". Door sizes vary depending on installation type.

Devices must accept 24 VDC or 24 VAC. 120 VAC is available with an external step-down transformer (120 VAC to 24 VAC). The TS93 EMR to have positive single point HO at any angle from 80° to 105° on T applications, 80° to 95° on PT applications, and 80° to 115° on TDE applications when current is applied. Degree of hold open range will vary for doors hung on sizes other than 4-1/2" x 4-1/2" hinges or 3/4" offset pivots. Separate door stops recommended to limit maximum door swing. Loss of electric current or a manual pull on the door disengages the hold open function and the TS93 door closer closes the door. If the unit is connected to a central control system and it goes into an "alarm condition," the door closer will close the door. All closers to have sex nuts standard for 1-3/4" thick composite or labeled fire doors (SN3).

### Optional specifications (TS93 EMR)

All devices to have exposed wiring (EXP). All devices to have wireless release of hold open with radio frequency receiver (RFR 433) and hand held transmitter (HHRFT 1 433).

### Specifications (8900 EMR)

DORMA 8900 EMR electromagnetic surface applied fire/life safety hydraulic door closer to suit hold open specification. The 8900 closer incorporates a rack and pinion design with a narrow 2-1/8" projection and sex nuts standard. The closers will have hydraulic backcheck to prevent uncontrolled opening of the door. Devices to accommodate doors ranging from 2'-8" to 4'-0". Door sizes vary depending on installation type. Devices must accept 24 VDC, 24 VAC, or 120 VAC with an external step-down transformer (120 VAC to 24 VAC). The 8900 EMR to have positive single point HO at any angle from 80° to 110° on T applications, 80° to 95° on PT applications, and 80° to 120° on TDE applications when current is applied. Degree of hold open range will vary for doors hung on sizes other than 4-1/2" x 4-1/2" hinges or 3/4" offset pivots. Separate door stops recommended to limit maximum door swing. Loss of electric current or a manual pull on the door disengages the hold open function and the 8900 door closer closes the door. If the unit is connected to a central control system and it goes into an "alarm condition," the door closer will close the door. All 8900 fully adjustable spring force door closers to include an integral design to positively stop adjustment of the spring at the minimum and maximum spring force settings. All closers to have sex nuts standard for 1-3/4" thick composite or labeled fire doors (SN1).

### Optional specifications (8900 EMR)

Door closers to have full metal cover (FMC). All devices to have exposed wiring (EXP). All devices to have wireless release of hold open with radio frequency receiver (RFR 433) and hand held transmitter (HHRFT 1 433).

### Specifications (8600 EMR)

DORMA 8600 EMR Series electromagnetic surface applied fire/life safety hydraulic door closer to suit hold open specification. The 8600 closer incorporates a rack and pinion design with a slim cover and a narrow 2-1/8" projection. The closers will have hydraulic backcheck to prevent uncontrolled opening of the door. Devices to accommodate door widths ranging from 2'-8" to 4'-0", door sizes vary depending on installation type. Devices must accept 24 VDC or 24 VAC. 120 VAC is available with an external step-down transformer (120 VAC to 24 VAC). The 8600 EMR to have positive single point HO at any angle from 80° to 115° on T applications, 80° to 95° on PT applications, and 80° to 120° on TDE applications when current is applied. Degree of hold open range will vary for doors hung on sizes other than 4-1/2" x 4-1/2" hinges or 3/4" offset pivots. Separate door stops recommended to limit maximum door swing. Loss of electric current or a manual pull on the door disengages the hold open function and the 8600 door closer closes the door. If the unit is connected to a central control system and it goes into an "alarm condition," the door closer will close the door. All 8600 fully adjustable spring force door closers to include an integral design to positively stop adjustment of the spring at the minimum and maximum spring force settings. All closers to have sex nuts standard for 1-3/4" thick composite or labeled fire doors (SN1).

### Optional specifications (8600 EMR)

Door closers to have full plastic cover (FC) or full metal cover (FMC). All devices to have exposed wiring (EXP). All devices to have wireless release of hold open with radio frequency receiver (RFR 433) and hand held transmitter (HHRFT 1 433).

### Warranty

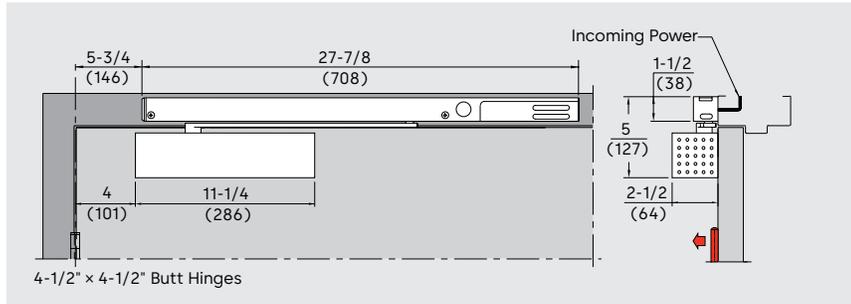
For details, refer to dormakaba Warranty Policy on our website.

# Technical drawings

## Technical drawing symbols & notes

- – Recommended application
- N/A – Not applicable/application not recommended

### TS93 EMR T (Pull side installation)

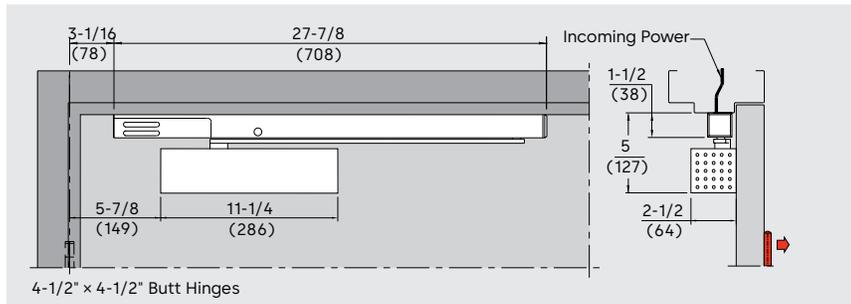


- Minimum 2" overhead clearance required for track assembly
- Minimum 2" top door rail required for closer.
- Maximum door swing 145°
- Hold open range 80°–105°

## Size selection chart

Model	Interior/Exterior	Door width					
		2'-9" min.	3'-0" max.	3'-6" max.	4'-0" max.	4'-6" max.	5'-0" max.
TS9315 EMR T	Interior	•	•	•	•	N/A	N/A
TS9356 EMR T	Interior	N/A	N/A	N/A	•	•	•

### TS93 EMR PT (Push side installation)

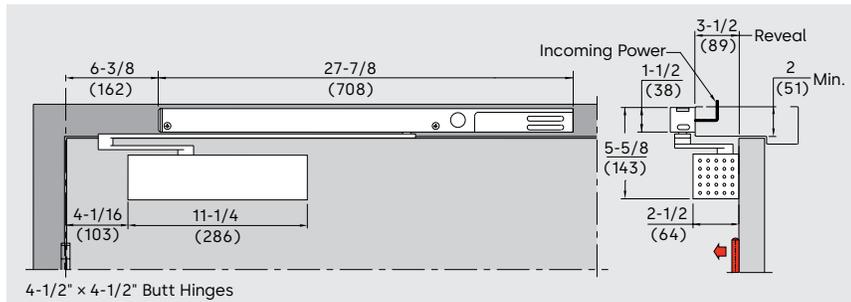


- Minimum 4-1/2" top door rail required for closer (5/8" stop).
- Maximum door swing 110°.
- Hold open range 80°–95°.

## Size selection chart

Model	Interior/Exterior	Door width					
		2'-9" min.	3'-0" max.	3'-6" max.	4'-0" max.	4'-6" max.	5'-0" max.
TS9315 EMR PT	Interior	•	•	•	•	N/A	N/A
TS9356 EMR PT	Interior	N/A	N/A	N/A	•	•	•

### TS93 EMR TDE (Double egress installation)



- Minimum 2" overhead clearance required for track assembly.
- Minimum 2" top door rail required for closer.
- Maximum door swing 130°.
- Hold open range 80°–115°.
- Accommodates 3-1/2" reveal. Consult factory for others.
- Minimum 4-1/2" arm clearance required between door face and wall for 90° opening.
- Minimum double door width 72" (36" single door).

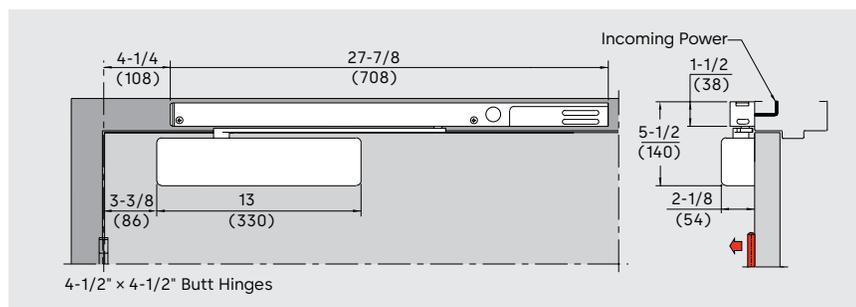
## Size selection chart

Model	Interior/Exterior	Door width				
		3'-0" min.	3'-6" max.	4'-0" max.	4'-6" max.	5'-0" max.
TS9315 EMR TDE	Interior	•	•	•	N/A	N/A
TS9356 EMR TDE	Interior	N/A	N/A	•	•	•

**Technical drawing symbols & notes**

- – Recommended application
- N/A – Not applicable/application not recommended

**8900 EMR T (Pull side installation)**

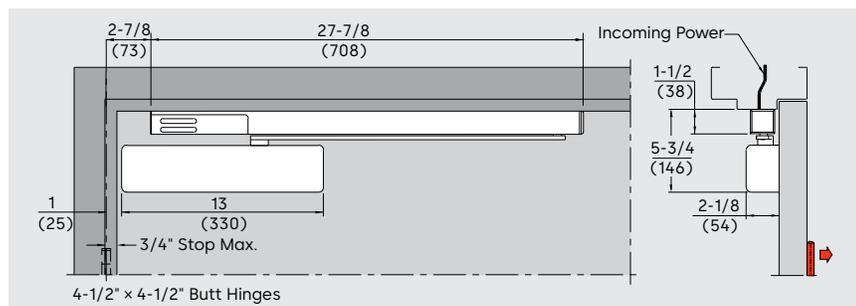


- Minimum 2" overhead clearance required for track assembly.
- Minimum 3" door rail required for mounting closer.
- Maximum door swing 170°.
- Hold open range 80°–110°.

**Size selection chart**

Model	Interior/Exterior	Door width			
		2'-9" min.	3'-0" max.	3'-6" max.	4'-0" max.
8916 EMR T	Interior	•	•	•	N/A
8956 EMR T	Interior	N/A	N/A	•	•

**8900 EMR PT (Push side installation)**

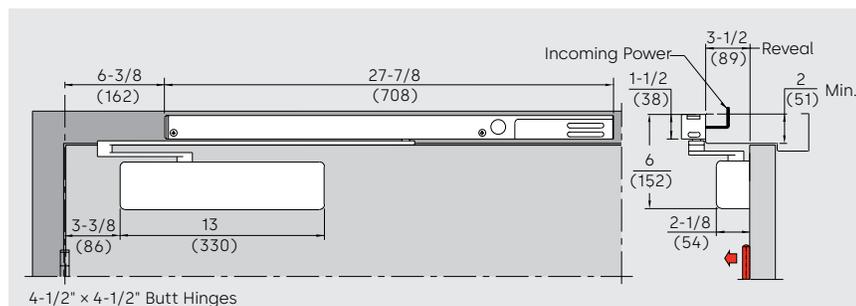


- Minimum 6" top door rail required for closer (5/8" stop).
- Maximum door swing 120°.
- Hold open range 80°–95°.

**Size selection chart**

Model	Interior/Exterior	Door width			
		2'-9" min.	3'-0" max.	3'-6" max.	4'-0" max.
8916 EMR PT	Interior	•	•	•	N/A
8956 EMR PT	Interior	N/A	N/A	•	•

**8900 EMR TDE (Double egress installation)**



- Minimum 2" overhead clearance required for track assembly.
- Minimum 3-1/2" top door rail required for closer.
- Maximum door swing 130°.
- Hold open range 80°–120°.
- Accommodates 3-1/2" reveal. Consult factory for others.
- Minimum 4-1/2" arm clearance required between door face and wall for 90° opening.
- Minimum double door width 72" (36" single door).

**Size selection chart**

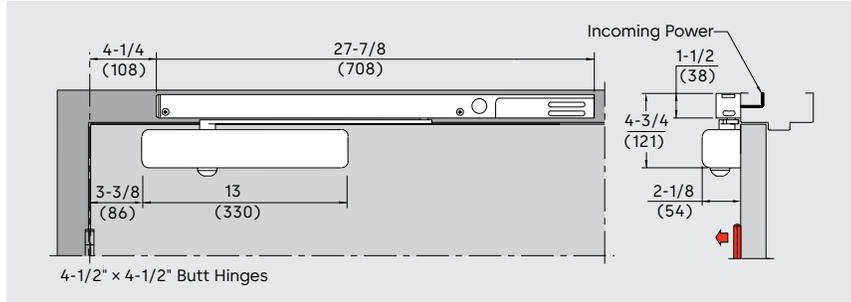
Model	Interior/Exterior	Door width		
		3'-0" min.	3'-6" max.	4'-0" max.
8916 EMR TDE	Interior	•	•	N/A
8956 EMR TDE	Interior	N/A	•	•

# Technical drawings

## Technical drawing symbols & notes

- Recommended application

### 8600 EMR T (Pull side installation)

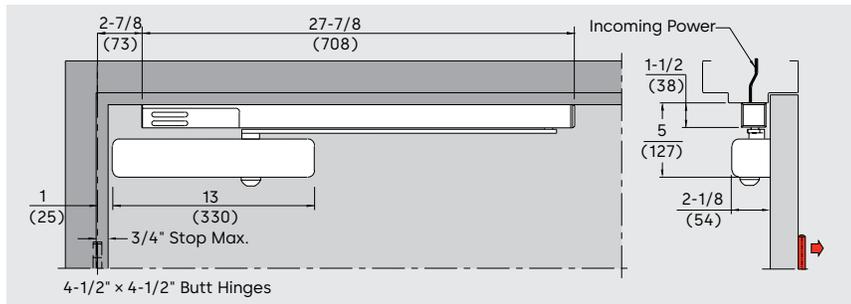


- Minimum 2" overhead clearance required for track assembly.
- Minimum 2-1/2" top door rail required for closer.
- Maximum door swing 170°.
- Hold open range 80°–115°.

## Size selection chart

Model	Interior/Exterior	Door width			
		2'-9" min.	3'-0" max.	3'-6" max.	4'-0" max.
8656 EMR T	Interior	•	•	•	•

### 8600 EMR PT (Push Side Installation)

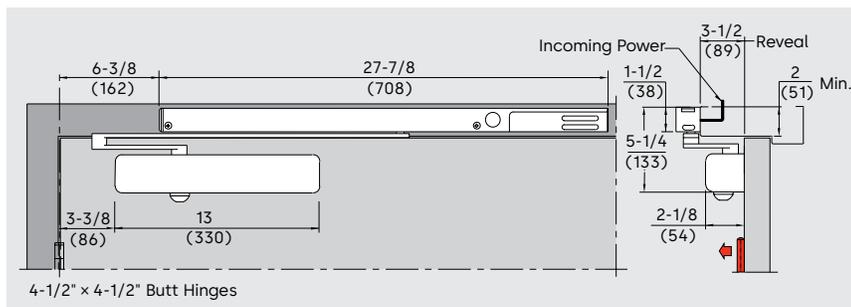


- Minimum 5-1/2" top door rail required for closer (5/8" stop).
- Maximum door swing 120°.
- Hold open range 80°–95°.

## Size selection chart

Model	Interior/Exterior	Door width			
		2'-9" min.	3'-0" max.	3'-6" max.	4'-0" max.
8656 EMR PT	Interior	•	•	•	•

### 8600 EMR TDE (Double egress installation)



- Minimum 2" overhead clearance required for track assembly.
- Minimum 3" top door rail required for closer.
- Maximum door swing 130°.
- Hold open range 80°–120°.
- Accommodates 3-1/2" reveal. Consult factory for others.
- Minimum 4-1/2" arm clearance required between door face and wall for 90° opening.
- Minimum double door width 72" (36" single door).

## Size selection chart

Model	Interior/Exterior	Door width		
		3'-0" min.	3'-6" max.	4'-0" max.
8656 EMR TDE	Interior	•	•	•

## EMF Series—hold open door closer

The EMF Series is an electromagnetically controlled, frame-mounted, track hold open door closer for use on fire and/or smoke barrier doors. The EMF can be interconnected with an EMR to control pairs of doors.

Like the EMR, the non-detected EMF Series is designed to contain the spread of fire and smoke. Three models are available. When using an EMF and EMR on a pair of doors, models with matching closers can be used. The TS93 in Contur Design, 8900, and 8600 Series closers offer the same features and functions as with the EMR models.

These units are compatible with new or existing fire/smoke control systems. An integral feature of the EMF is the holder/release device. It acts as a hold open unit in normal conditions. However, in an alarm state or loss of electric current, it permits the closing of the door from any angle of opening. In the case of an alarm state signaled by the central control system or main power failure, current to the electromagnetic hold open device is interrupted, thus allowing the door closing mechanism to take over and close the door.

### Technical details

- Door closing control by the proven TS93, 8900, or 8600 Series closer with spring power adjustment and adjustable hydraulic backcheck.
- Hold Open (HO) design prevents damage to the door, frame, holder/release device, or other installed hardware. This design enables initial hold while allowing the door to be manually opened beyond the hold open point.
- Interfaces with new or existing smoke or fire control systems.
- Can be wired for concealed or surface wiring.
- HO can be released manually.
- HO – single point adjustable on pull side, push side, and double egress applications.
- Can be used as companion unit to detected EMR unit for cross corridor door application. (Unit is 24 VDC only.)
- Separate door stops recommended to limit maximum door swing.

### Specifications (TS93 EMF)

DORMA TS93 EMF electromagnetic surface applied fire/life safety hydraulic door closer to suit hold open specification.

Closer to use cam and roller technology with greater efficiency for use on wider doors than a typical rack and pinion track closer. Closers to have hydraulic backcheck to prevent uncontrolled opening of the door. Devices to accommodate doors ranging from 2'-4" to 5'-0". Door sizes vary depending on installation type. A 24 VDC or 24 VAC device to be available using the external (TRANSF) transformer. The TS93 EMF to have positive single point HO at any angle from 80° to 125° on T applications, 80° to 95° on PT applications, and 80° to 115° on TDE applications when current is applied. Degree of hold open range will vary for doors hung on sizes other than 4-1/2" x 4-1/2" hinges or 3/4" offset pivots. Separate door stops recommended to limit maximum door swing. Loss of electric current or manual pull on the door disengages hold open function and the TS93 closes the door. If the unit is connected to a central control system and it goes into an "alarm condition," the door closer will close the door. All closers to have sex nuts standard for 1-3/4" thick composite or labeled fire doors (SN3).

### Optional specificationsv (TS93 EMF)

All devices to have exposed wiring (EXP). All devices to have wireless release of hold open with radio frequency receiver (RFR 433) and hand held transmitter (HHRFT 1 433).

### Certification

- The DORMA EMF Series is listed by UL and CUL under their continuing reinspection programs.
- The EMF Series is certified to conform to the requirements of ANSI/BHMA 156.15.
- CSFM approved.



### Power Requirements

24 V AC/DC at 150 mA.

The 24 VDC unit utilizes a 24 VDC solenoid. A 24 VAC unit utilizes a 24 VDC solenoid with an in-line rectifier to convert line voltage from AC to DC. 120 VAC requires an external transformer (TRANSF) to be delivered and installed externally from the EMF.

A feature of the EMR detector is an auxiliary 24 VDC output. This output can be used to power and control an EMF unit for pairs of doors.

### Finishes

#### Standard sprayed finishes

- Primed for Painting: 600
- Aluminum: 689
- Bronze: 691 (Dull), 690 (Statuary), or 695
- (Dark Duranodic)
- Gold: 696
- Black: 693

#### Optional custom color or designer color finishes

Contact Customer Service.

**Specifications (8900 EMF)**

DORMA 8900 EMF electromagnetic surface applied fire/life safety hydraulic door closer to suit hold open specification. Closer incorporates rack and pinion design with a narrow 2-1/8" projection. Closers to have hydraulic backcheck to prevent uncontrolled opening of the door. Devices to accommodate doors ranging from 2'-4" to 4'-0". Door sizes vary depending on installation type. A 24 VDC or 24 VAC device to be available. Specify voltage. The 8900 EMF to have positive single point HO at any angle from 80° to 110° on T applications, 80° to 95° on PT applications, and 80° to 120° on TDE applications when current is applied. Degree of hold open range will vary for doors hung on sizes other than 4-1/2" x 4-1/2" hinges or 3/4" offset pivots. Separate door stops recommended to limit maximum door swing. Loss of electric current or manual pull on door disengages hold open function and the 8900 closes the door. If the unit is connected to a central control system and it goes into an "alarm condition," the door closer will close the door. All 8900 fully adjustable spring force door closers to include an integral design to positively stop adjustment of the spring at

the minimum and maximum spring force settings. All closers to have sex nuts standard for 1-3/4" thick composite or labeled fire doors (SN1).

**Optional specifications (8900 EMF)**

Closers to have full metal cover (FMC). All devices to have exposed wiring (EXP). All devices to have wireless release of hold open with radio frequency receiver (RFR 433) and hand held transmitter (HHRFT 1 433).

**Specifications (8600 EMF)**

DORMA 8600 EMF electromagnetic surface applied fire/life safety hydraulic door closer to suit hold open specification. Closer incorporates rack and pinion design with slim cover and a narrow 2-1/8" projection. Closers will have hydraulic backcheck to prevent uncontrolled opening of the door. Devices to accommodate doors ranging from 2'-4" to 4'-0". Door sizes vary depending on installation type. A 24 VDC or 24 VAC device to be available. The 8600 EMF to have positive single point HO at any angle from 80° to 115° on T applications, 80° to 95° on PT applications, and 80° to 120° on TDE applications when current is applied. Degree of hold open range will vary

for doors hung on sizes other than 4-1/2" x 4-1/2" hinges or 3/4" offset pivots. Separate door stops recommended to limit maximum door swing. Loss of electric current or manual pull on door disengages the hold open function and the 8600 closes the door. If the unit is connected to a central control system and it goes into an "alarm condition," the door closer will close the door. All 8600 fully adjustable spring force door closers to include an integral design to positively stop adjustment of the spring at the minimum and maximum spring force settings. All closers to have sex nuts standard for 1-3/4" thick composite or labeled fire doors (SNB1).

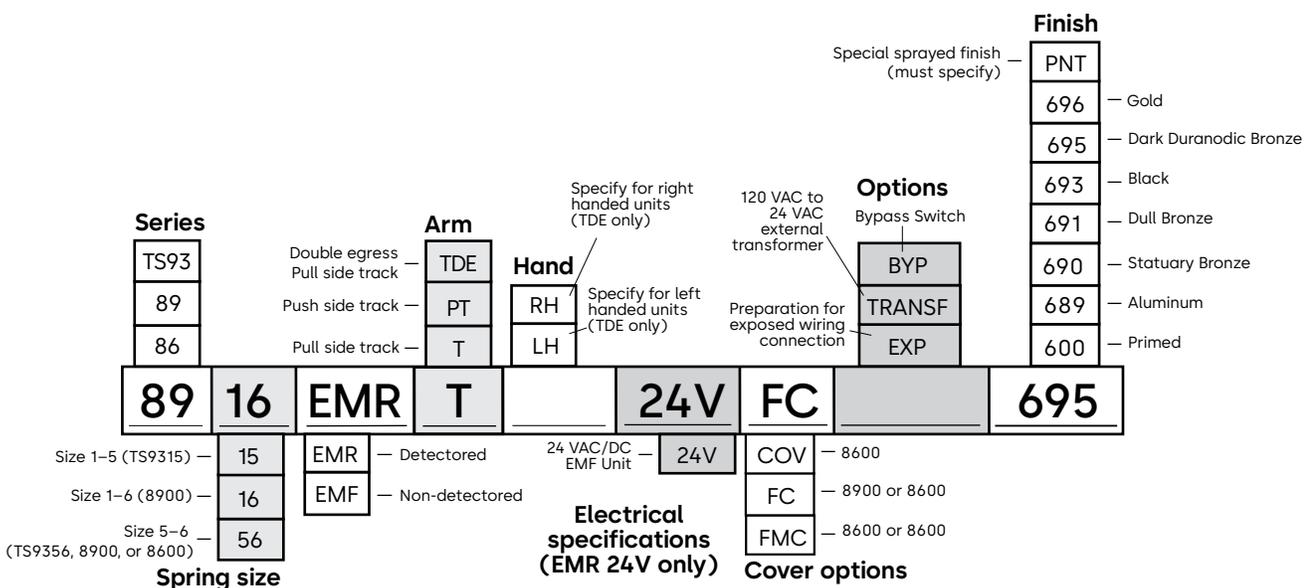
**Optional specifications (8600 EMF)**

Door closers to have full plastic cover (FC) or full metal cover (FMC). All devices to have exposed wiring (EXP). All devices to have wireless release of hold open with radio frequency receiver (RFR 433) and hand held transmitter (HHRFT 1 433).

**Warranty**

For details, refer to dormakaba Warranty Policy on our website.

# How to order EMF/EMR



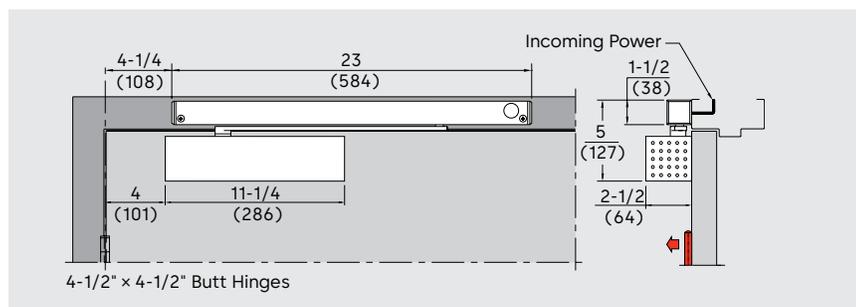
**Note:** All combinations of features and options are not available for all models. Please refer to back page for details.

# Technical drawings

## Technical drawing symbols & notes

- – Recommended application
- N/A – Not applicable/application not recommended

### TS93 EMF T (Pull side installation)

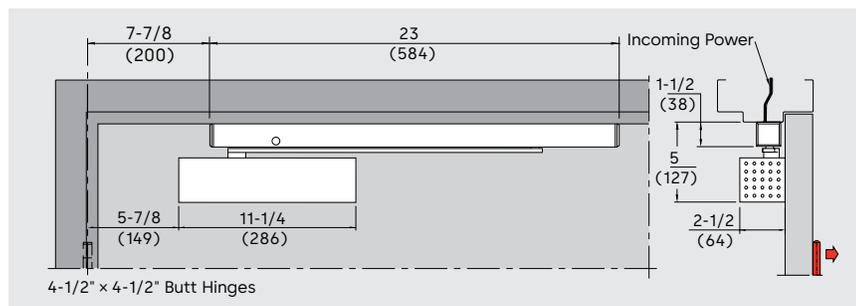


- Minimum 2" overhead clearance required for track assembly.
- Minimum 2" door rail required for closer.
- Maximum door swing 170°.
- Hold open range 80°–125°.

#### Size selection chart

Model	Interior/Exterior	Door width						
		2'-4" min.	2'-6" max.	3'-0" max.	3'-6" max.	4'-0" max.	4'-6" max.	5'-0" max.
TS9315 EMR T	Interior	•	•	•	•	•	N/A	N/A
TS9356 EMR T	Interior	N/A	N/A	N/A	N/A	•	•	•

### TS93 EMF PT (Push side installation)

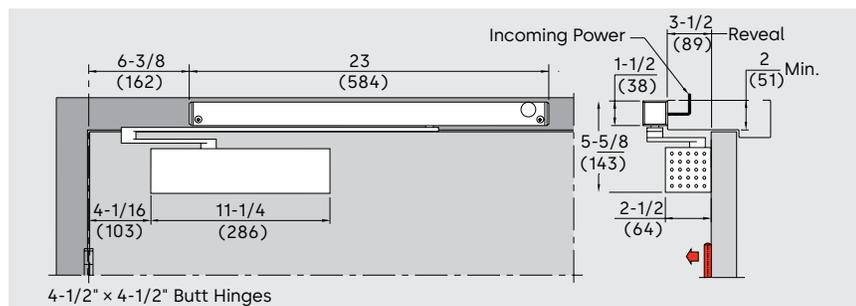


- Minimum 4-1/4" top door rail required for closer (5/8" stop).
- Maximum door swing 110°.
- Hold open range 80°–95°.

#### Size selection chart

Model	Interior/Exterior	Door width					
		2'-8" min.	3'-0" max.	3'-6" max.	4'-0" max.	4'-6" max.	5'-0" max.
TS9315 EMF PT	Interior	•	•	•	•	N/A	N/A
TS9356 EMF PT	Interior	N/A	N/A	N/A	•	•	•

### TS93 EMF TDE (Double egress installation)



- Minimum 2" overhead clearance required for track assembly.
- Minimum 2" top door rail required for closer.
- Maximum door swing 130°.
- Hold open range 80°–115°.
- Accommodates 3-1/2" reveal. Consult factory for others.
- Minimum 4-1/2" arm clearance required between door face and wall for 90° opening.
- Minimum double door width 60" (30" single door).

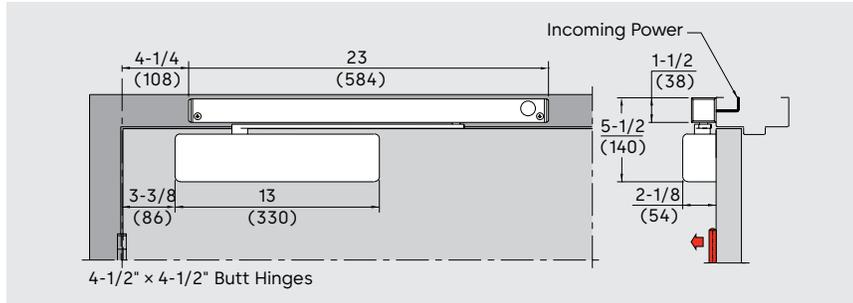
#### Size selection chart

Model	Interior/Exterior	Door width					
		2'-8" min.	3'-0" max.	3'-6" max.	4'-0" max.	4'-6" max.	5'-0" max.
TS9315 EMF TDE	Interior	•	•	•	•	N/A	N/A
TS9356 EMF TDE	Interior	N/A	N/A	N/A	•	•	•

**Technical drawing symbols & notes**

- – Recommended application
- N/A – Not applicable/application not recommended

**8900 EMF T (Pull side installation)**

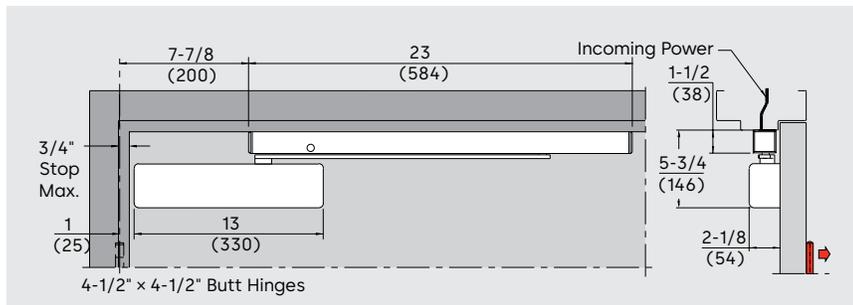


- Minimum 2" overhead clearance required for track assembly.
- Minimum 3" top door rail required for closer.
- Maximum door swing 170°.
- Hold open range 80°–110°.

**Size selection chart**

Model	Interior/Exterior	Door width				
		2'-4" min.	2'-6" max.	3'-0" max.	3'-6" max.	4'-0" max.
8916 EMF T	Interior	•	•	•	•	N/A
8956 EMF T	Interior	N/A	N/A	N/A	•	•

**8900 EMF PT (Push side installation)**

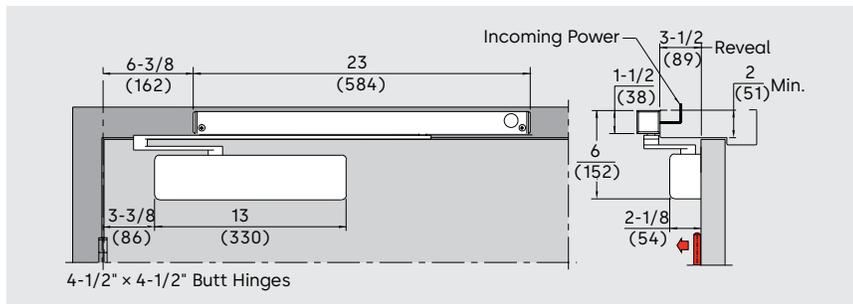


- Minimum 6" top door rail required for closer (5/8" stop).
- Maximum door swing 120°.
- Hold open range 80°–95°.

**Size selection chart**

Model	Interior/Exterior	Door width			
		2'-8" min.	3'-0" max.	3'-6" max.	4'-0" max.
8916 EMF PT	Interior	•	•	•	N/A
8956 EMF PT	Interior	N/A	N/A	•	•

**8900 EMF TDE (Double egress installation)**



- Minimum 2" overhead clearance required for track assembly.
- Minimum 3-1/2" top door rail required for closer.
- Maximum door swing 130°.
- Hold open range 80°–120°.
- Accommodates 3-1/2" reveal. Consult factory for others.
- Minimum 4-1/2" arm clearance between door face and wall for 90° opening.
- Minimum double door width 60" (30" single door).

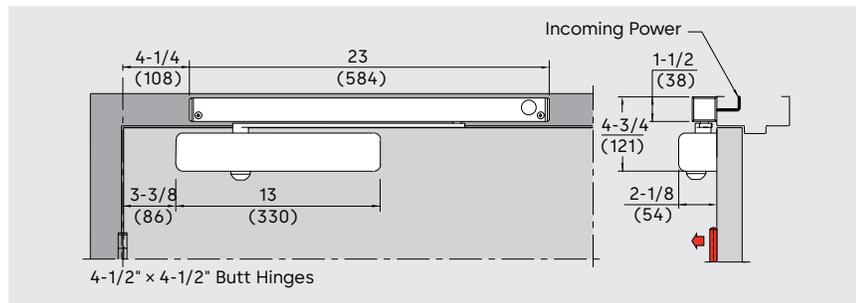
**Size selection chart**

Model	Interior/Exterior	Door width			
		2'-8" min.	3'-0" max.	3'-6" max.	4'-0" max.
8916 EMF TDE	Interior	•	•	•	N/A
8956 EMF TDE	Interior	N/A	N/A	•	•

**Technical drawing symbols & notes**

- - Recommended application

**8600 EMF T (Pull side installation)**

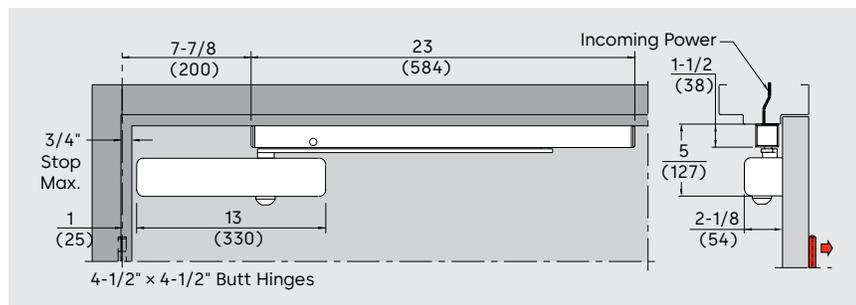


- Minimum 2" overhead clearance required for track assembly.
- Minimum 2-1/2" top door rail required for closer.
- Maximum door swing 170°.
- Hold open range 80°–115°.

**Size selection chart**

Model	Interior/Exterior	Door width				
		2'-4" min.	2'-6" max.	3'-0" max.	3'-6" max.	4'-0" max.
8656 EMF T	Interior	•	•	•	•	•

**8600 EMF PT (Push side installation)**

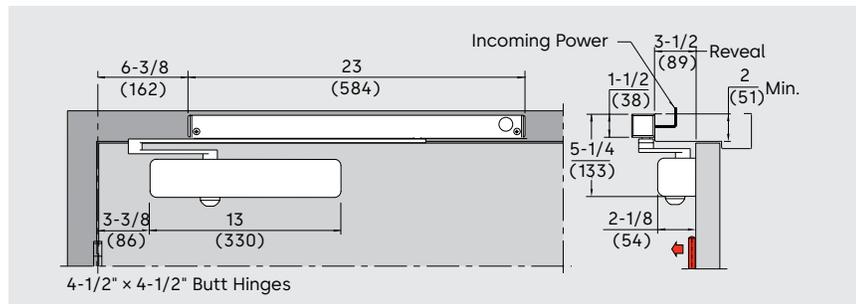


- Minimum 5-1/2" top door rail required for closer (5/8" stop).
- Maximum door swing 120°.
- Hold open range 80°–95°.

**Size selection chart**

Model	Interior/Exterior	Door width			
		2'-8" min.	3'-0" max.	3'-6" max.	4'-0" max.
8656 EMF PT	Interior	•	•	•	•

**8600 EMF TDE (Double egress installation)**



- Minimum 2" overhead clearance required for track assembly.
- Minimum 3" top door rail required for closer.
- Maximum door swing 130°.
- Hold open range 80°–120°.
- Accommodates 3-1/2" reveal. Consult factory for others.
- Minimum 4-1/2" arm clearance between door face and wall for 90° opening.
- Minimum double door width 60" (30" single door).

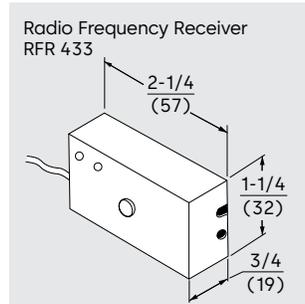
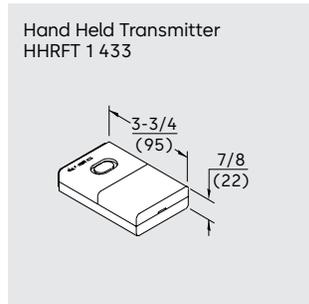
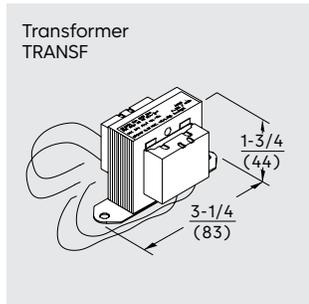
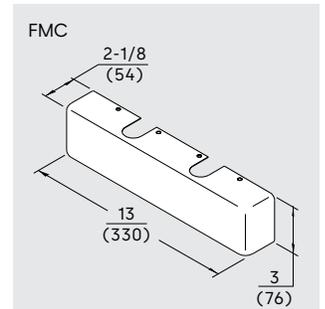
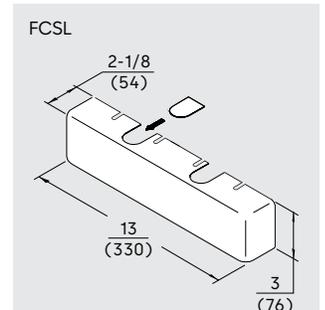
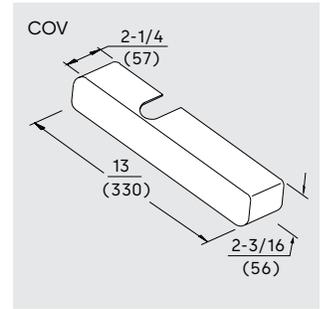
**Size selection chart**

Model	Interior/Exterior	Door width			
		2'-6" min.	3'-0" max.	3'-6" max.	4'-0" max.
8656 EMF TDE	Interior	•	•	•	•

# EMF/EMR options/accessories

Options		TS93	8900	8600	
BYP	Concealed switch to release hold open function	•	•	•	EMF
		•	•	•	EMR
TRANSF	Transformer for 120 VAC applications (120 to 24 VAC). One transformer per unit. Fits standard 4" x 4" electrical box.	-	-	-	EMF
		•	•	•	EMR
EXP	Exposed wiring preparation for surface wiring	•	•	•	EMF
		•	•	•	EMR
Accessories					
COV	Slim plastic slotted cover for door closer (standard with 8600 unit)	-	-	•	EMF
		-	-	•	EMR
FCSL	Full plastic slotted cover for door closer	-	•	•	EMF
		-	•	•	EMR
FMC	Full metal cover for door closer	-	•	•	EMF
		-	•	•	EMR
SN1	1/4-20 sex nuts (4) for 1-3/4" door	-	•	-	EMF
		-	•	•	EMR
SN3	10-32 sex nuts (4) for 1-3/4" door	•	-	-	EMF
		•	-	-	EMR
SNB1	1/4-20 sex nuts w/machine screws (4) for 1-3/4" door	-	-	•	EMF
		-	-	-	EMR
SD2	Replacement smoke detector module	-	-	-	EMF
		•	•	•	EMR
RFR 433	Radio frequency receiver for wireless release of hold open (433 Mhz.)	•	•	•	EMF
		•	•	•	EMR
HHRFT 1 433	Hand held transmitter, transmits signal to the RFR 433 receiver (433 Mhz.)	•	•	•	EMF
		•	•	•	EMR

**Note:** When using the EMR or EMF unit with wide throw or swing clear hinges, consult factory for details.  
 • / • Yes    - / - No



DHW\_1743\_BR\_EN CEI 0225  
 Subject to change without notice

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