

Swing door operator EM SW EMO

Holder/Issued to

Entrematic Group AB

Lodjurgatan 10, SE-261 44 Landskrona, Sweden

Organisation number: 5561903088

Phone: +46 (0)10 47 48 300, Fax: +46 (0)418 28 412

E-mail: info.em@entrematic.com , Web: www.entrematic.com

Product description

EM SW EMO is a motorized swing door operator which is operated by contact or impulse sensor.

EM SW EMO can be mounted on the wall on either side of a hinged door or balance door, BDS, for pull or push action and is suitable for single or double doors fitted with butt hinges or pivots. Connects to single phase power supply. EM SW EMO has twelve variants of arm systems, model 1003576, 103577, 172312, 172313, 172314, 172315, 1007134, 1005273, 1007241, 1007965, 1008401 and 1011998.

See also the paragraph "Comments".

Intended use

Impulse driven engine operation for swing doors with maximum door leaf weight 90 kg.

With pushing function (Arm system PUSH), the EM SW EMO can hold a door leaf in closed position in the event of a fire and is an alternative to a lock with a latch bolt, for doors with technical approval up to class E 30, A 30 and EI 30 that are tested without latch bolt and with a closing force at the arm fixing point at the upper edge of the door leaf. EM SW EMO can also be used on doors listed on page 4 "A register over doors for which a lock with a latch bolt can be replaced with EM SW EMO swing door operator".

Trade name

EM SW EMO

Approval

The product satisfies the requirements set forth in chapter 8, 4 § 2 and 4 PBL, in respect to and under conditions stated in this certificate, and are therefore approved in accordance with the provisions of the following sections of Boverket Building Regulations (BBR), issued by the National Board of Housing, Building and Planning.

Fire resistance class E 30, A 30, EI 30	5:231
Door closer class C5	5:254
Doors, evacuation (manual opening)	5:335
Protection against damage by mobile devices*	8:33

* The swing doors will be accepted without stop switch.

Associated documents

Swing Door Operator EM SW EMO, User Manual Original instructions, 1005099- EMEI-6.0, Issue 2014-02-25.

Type approval SC0840-09 | 2019-02-13

RISE Research Institutes of Sweden AB | Certification
Box 857, SE-501 15 Borås, Sweden
Phone: +46 10-516 50 00
certifiering@ri.se | www.ri.se

2018-01-30



8P08859



Control

The factory production control (FPC) is monitored by an independent inspection body.

Control agreement: Ref no. 210-97-0863, Inspection body: RISE Research Institutes of Sweden AB

When the building proprietor performs inspection at the building site, markings shall be checked to ensure that the correct products have been supplied and that they are used in accordance with the conditions in this approval and associated documents. He must also check that the product is accompanied by a manufacturing assurance, which certifies that the product has been manufactured in accordance with the documents on which this certificate is based.

In addition, to ensure that the opening force at the leading edge of the door leaf is according to the list in page 4: "Doors for which a lock with latch can be replaced by Swing Door opener EM SW EMO" and the power to push the door should be less than 150N for doors with pressure plate or 220N for quite leaf in evacuation route according to BBR 5:335.

According to BBR 5:12, the fire protection documentation shall include written instructions for testing, care and maintenance performed by the user / administrator. Measuring the opening forces shall be performed in accordance with EN 1154 at least four times per year by the opening angle 0°, the test results shall be recorded. Information on this control should be in the instructions for the supervision of escape routes to be included in the fire protection documentation.

If automatic activation units are used, the function shall comply with information described in paragraph "Comments".

Manufacturing place

Production control includes the following place:

Factory No. 6

Marking

The product is to be marked at the factory. The marking consists of a label on every unit supplied and includes:

Holder	Entrematic Group AB Landskrona
Factory code	Factory No. 6
Product type designation	EM SW EMO
Consecutive manufacture no./date of production	nr/datum
Type approval number	SC0840-09
Boverket's registered trade mark	✚
RISE Accreditation number	1002
Certification body and Inspection body	RISE

Basis for judgement/approval

Reports no PX28577, 3P03554-03, 3P04167-3, 3P03554-02, 3P03554-01, 3P03554, 3P03425 and F603709-A from SP Technical Research Institute of Sweden.

Comments

The electrical equipment shall comply with the applicable electric regulations:

ELSÄK-FS 2017:2; *The National Electrical Safety Board's regulations and general advice on electrical installation work.* ELSÄK-FS 2017:3 *The National Electrical Safety Board's regulations on electrical installation companies and on the execution of electrical installation work.* ELSÄK-FS 2016:3 *the Swedish National Electrical Safety Board regulations for electro-magnetic compatibility (EMC) with amendments*, in order to fulfil the requirements of the approval.

Doors fitted with door opener EM SW EMO meet the requirements for maximum clamping forces according to EN 16005:2012 and EN ISO 13849-1:2016, for instance; that in the event of failure of the power supply or unit failure, it shall be possible to open the door with a manual force not exceeding 67 N to release a lock, 90 N to set the door in motion and 67 N to fully open the door, when the force is applied perpendicular to the main closing edge in the travel direction.

The product meets the most essential requirements in SS EN 60335-1 and -2-103 according to the summary in report 3P03554 from SP Technical Research Institute of Sweden.

EM SW EMO is tested with doors for fire resistance according to SS-EN 1634-1:2008.

To avoid unintentional opening of the door in case of fire, one of the following conditions must be met:

-That only elbow contact or a pushbutton is used as impulse unit to open the door.

-If automatic activation units are used, they must be disabled by a signal from the central fire alarm system or separate smoke detectors.

Smoke detectors shall be arranged so that they disconnect the signal cable from the automatic activation units to the automatic door mechanism, both when they are active or inactive.

When establishing (in accordance with BBR 2:52) that fire protection installations are ready for operation, the function of smoke detectors are to be checked.

Necessary reinforcement of the door leaves is described in the type approval for each door, according to the list in page 4.

This approval supersedes the previous approval with the same number dated 2014-12-09, with project number 4P08266.

Validity

Valid through 2024-02-12.

The validity of this approval expires when the characteristics included in this approval shall be CE-marked according to the Construction Products Regulation (EU) 305/2011.

Ingvar Pettersson

Annika Hermodsson

This is a translation from the Swedish original document. In the event of any dispute as to its content, the Swedish text shall take precedence.

A register over doors for which a lock with a latch bolt can be replaced with EM SW EMO swing door operator.

Valid for arm system PUSH.

For double leaved door, the flush-bolt at the passive door leaf, can be replaced by a swing door operator.

<u>Door</u>	<u>Approval certificate no.</u>	<u>Comments</u>
Sapa Front SFB 2060	1199/94 (SP)	Applies to single and double doors with max. door leaf size W×H 1200/2200 mm × 2100 mm. The opening force at the front edge of the door is to be minimum 67 N.
Sapa Front SFB 2074	14 45 01 (SP)	Applies to single and double doors with max. door leaf size W×H 1200/2200 mm × 2100 mm. The opening force at the front edge of the door is to be minimum 67 N.
Schüco Jansen Janisol 2	17 62 06 (SP)	Applies to single and double doors with max. door leaf size W×H 1290/2580 mm × 2599 mm. The opening force at the front edge of the door is to be minimum 85 N.
Schüco Jansen Economy 50/60	17 62 07 (SP)	Applies to single and double doors with max. door leaf size W×H 1200/2200 mm × 2100 mm. The opening force at the front edge of the door is to be minimum 100 N.
Schüco ADS 65. NI FR 30	17 62 12 (SP)	Applies to single doors with max. door leaf size W×H 1200 mm × 2100 mm. The opening force at the front edge of the door is to be minimum 85 N.
Schüco ADS 80 FR 30	17 62 10 (SP)	Applies to single and double doors with max. door leaf size W×H 1200/2500 mm × 2100 mm. The opening force at the front edge of the door is to be minimum 85 N.
Wicstyle 77FP	0055/06 (SP)	Applies to single and double doors with max. door leaf size W×H 1200/2300 mm × 2200 mm. The opening force at the front edge of the door is to be minimum 100 N.
SP 35000	4294/88 (SP)	Applies to single and double doors with max. door leaf size W×H 1200/2300 mm × 2200 mm. The opening force at the front edge of the door is to be minimum 100 N.
SP 35000	4295/88 (SP)	Applies to single and double doors with max. door leaf size W×H 1100/2000 mm × 2100 mm. The opening force at the front edge of the door is to be minimum 67 N.
SP 76500	1946/89 (SP)	Applies to single and double doors with max. door leaf size W×H 1200/2300 mm × 2300 mm. The opening force at the front edge of the door is to be minimum 100 N.
Sapa SFB 2086	SC0836-14 (SP)	Applies to single and double doors with max. door leaf size W×H 1200/2200 mm × 2100 mm. The opening force at the front edge of the door is to be minimum 67 N.