

Type Approval and decision on production control

SC1323-13

Swing door operator EM PSW250

Holder/Issued to

Entrematic Group AB

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Product description

EM PSW250 is a motorized swing door operator which is operated by contact or impulse sensor. EM PSW250 can be mounted on the wall on either side of the door for pull or push action and is suitable for single or double doors fitted with butt hinges or pivots.

Double doors require two EM PSW250.

Connects to single phase power supply. EM PSW250 has tree variants of arm systems, model 1007965 for push, models 1008401 and 1011998 for pull.

See also the paragraph "Comments".

Intended use

Impulse driven engine operation for impact doors with the maximum moment of inertia for the door as follows.

- only PUSH = max. $140 \text{ kg} / \text{m}^2$
- only PULL = \max . 80 kg / m^2
- Alternatively selectable PUSH = max. $80 \text{ kg} / \text{m}^2$ or PULL = max. $50 \text{ kg} / \text{m}^2$ with cam model 1017827. To hold a door leaf in closed position in the event of a fire. As 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 bracket in upper edge of door leaf, and also listed on page 4 "Doors for which a lock with a latch bolt can be replaced with EM PSW250 swing door operator".

Trade name

EM PSW250

Approval

The product satisfy the requirements set forth in chapter 8, 4 § 2 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):

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

^{*}The swing doors will be accepted without stop switch.

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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









Associated documents

Swing Door Operator EM PSW250, User Manual Original instructions Ref. No 1008788-EMEI-10.0, Issue 2014-09-02.

Swing Door Operator EM PSW250 Installation and Service Manual Original instructions Ref. No 1007913-FMFI-8.0 – Issue 2014-09-09.

Control

The factory production control (FPC) is monitored by an independent inspection body. Control agreement: Ref no. 210-97-0863, Inspection body: RISE

When the building proprietor performs inspection at the building site, he shall check the markings to ensure that the correct products have been supplied and that they are used in accordance with the requirements stated in the approval and the 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 that lock with latch can be replaced by Swing Door opener EM PSW250" 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 shall be marked at the factory. The marking consists of a label on every unit supplied and includes:

Approval holder

Manufacturing site
Boverket's registered trademark
Certification body and accreditation No.
Product type designation
Approval number
Serial number and date
Inspection body

Entrematic Group AB Landskrona,

Sweden Factory No. 6

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RISE Certifiering 1002

EM PSW250 SC1323-13 No / date RISE

Basis for judgement/approval

Reports 3P01246, 3P06849-5, PX18681, PX181681-01, PX181681-02, PX181681-03, PX181681-04, PX21967 and PX22992 from SP Technical Research Institute of Sweden.

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Comments

The electrical equipment shall comply with the applicable electric regulations

ELSÄK-FS 2000:1; the Swedish National Electrical Safety Board regulations for certain electrical material and general advice on their applicability and ELSÄK-FS 2007:1, 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 PSW250 fulfil requirements for maximum clamping forces according to EN 16005:2012 and EN ISO 13849-1:2008 which means;

that in the event of interruptions in the power supply or unit failure, it shall be possible to open the door by manual force not exceeding 67 N to release a latch, 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 direction of travel.

The product meets the most essential requirements in SS EN 60335-1 and -2-103 according to the summary in test report PX18681 from SP Technical Research Institute of Sweden.

EM PSW250 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.

They must also be disabled if there is a power cut. Smoke detectors shall be arranged 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 any smoke detectors is 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.

Coordinator type 1013027 with rod Kit 1013050 can be used for fire classed double door with rebate in Class E 30. Max. outside dimensions of each door leaf, W x H 1221 x 2053 mm.

This approval supersedes the previous approval with the same number dated 2014-12-04.

Validity

Valid through 2019-01-20.

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.

Annika Hermodsson

Ingvar Pettersson

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

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A register over doors for which a lock with a latch bolt can be replaced with EM PSW250 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.

operator.		,
<u>Door</u>	Approval certificate no.	<u>Comments</u>
Sapa Front SFB	1199/94 (SP)	Applies to single and double doors with max. door leaf size W×H
2060	, , ,	1200/2200 mm $ imes$ 2100 mm. The opening force at the front edge of
	\	the door is to be minimum 67 N.
Sapa Front SFB	14 45 01 (SP)	Applies to single and double doors with max. door leaf size W×H
2074		1200/2200 mm $ imes$ 2100 mm. The opening force at the front edge of
		the door is to be minimum 67 N.
Schüco Jansen	17 62 06 (SP)	Applies to single and double doors with max. door leaf size W×H
Janisol 2		1290/2580 mm $ imes$ 2599 mm. The opening force at the front edge of
		the door is to be minimum 85 N.
Schüco Jansen	17 62 07 (SP)	Applies to single and double doors with max. door leaf size W×H
Economy 50/60		1200/2200 mm $ imes$ 2100 mm. The opening force at the front edge of
		the door is to be minimum 100 N.
Schüco ADS 65.	17 62 12 (SP)	Applies to single doors with max. door leaf size W×H 1200 mm ×
NI FR 30		2100 mm. The opening force at the front edge of the door is to be
		minimum 85 N.
Schüco ADS 80	17 62 10 (SP)	Applies to single and double doors with max. door leaf size W×H
FR 30		1200/2500 mm \times 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. However, does not apply to designs with
		an anti-trap hanging stile. 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 door is to be fitted with heat
		expanding seals according to type approval certificate No. 0616/99.
		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.