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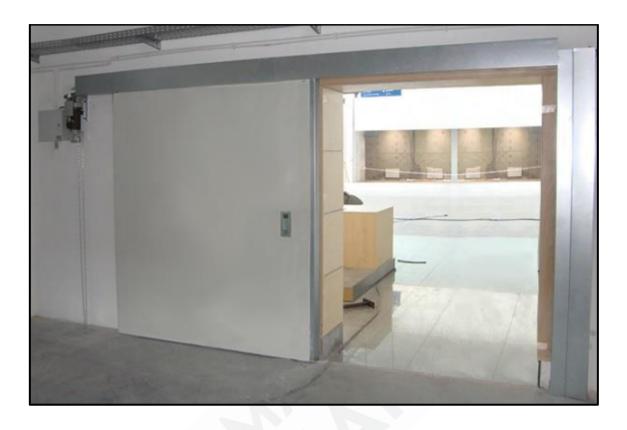
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# FIRE PROTECTION SLIDING GATE type: MARC-P1 EI120

MANUAL FOR THE USE,
OPERATION AND MAINTENANCE

revision: 03/2021

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FIRE PROTECTION GATE SLIDING, SINGLE-LEAF

type: MARC-P1 EI120

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#### INTRODUCTION

This manual for the fire protection overhead gate type MARC-P1 EI120 (hereinafter referred to as the fire protection device/gate) is the document that contains data and guidelines for the owner (user) necessary to know its operating principle, use, operation and maintenance.

To ensure long-term, safe use of the device, the user and operation personnel should fully read, understand and observe the requirements of this manual.

The use of the fire protection gate, including its operation and maintenance of proper technical condition and periodical inspections, maintenance, replacement of components and repairs should be completed in accordance with this manual.

This manual and other technical documents constituting annexes to it should be properly stored and available to the operation and service centre personnel.

We reserve the right to continuously review the content of this manual and to adjust it to the technical progress. We hope the user understands its content is subject to change without notice. Part of drawings or contents of the manual may differ from the physically delivered device due to improvement or regulatory changes and other reasons, the difference does not influence changes in recommendations for its use.

If the manual is lost or damaged, contact our service department to obtain the same version of the manual.

#### **CAUTION!**

The user's failure to adhere to the recommendations and guidelines in this manual shall release the manufacturer from any liability and warranty.

The scope of activities that can be performed by the service centre and the user is specified further in this manual. The installation, adjustment, replacement of components, repair and troubleshooting can only be performed by the manufacturer or their authorised service centre.

The manual includes standard equipment of the fire protection sliding gate, the possible use of optional equipment is described in the commercial contract.

The fire protection sliding gate should be used in accordance with the technical design developed for a specific structure, in which it is to be installed, considering:

- applicable technical and construction standards and regulations, in particular:
  - a) Regulation of the European Parliament and of the Council (EU) No. 305/2011 of 9 March 2011 laying down harmonised conditions for the marketing of construction products and repealing Council Directive 89/106/EEC (Official Journal of the European Union L88 of 4.4.2011, as amended),
  - b) Act of 16 April 2004 on construction products (Journal of Laws of 2019, item 266, 730),
  - c) The Construction Law Act of 7 July 1994 (Journal of Laws of 2019, item 1186, as amended),
  - d) Act of 13 April 2016 on the compliance and market supervision system (Journal of Laws of 2019, item 544),
  - e) Act of 24 August 1991 on fire protection (Journal of Laws of 2019, item 1372, 1518, 1593),
  - f) Regulation of the Minister of Infrastructure and Construction of 17 November 2016 on the method of declaring performance of construction products and marking them with the construction mark (Journal of Laws of 2016, item 1966),
  - g) Regulation of the Minister of Internal Affairs and Administration of 7 June 2010 on the fire protection of buildings, other structures and areas (Journal of Laws of 2010, no. 109, item 719, as amended),
  - h) Regulation of the Minister of Infrastructure of 12 April 2002 on the technical conditions, which must be fulfilled by buildings and their location (Journal of Laws of 2015, item 1422, as amended),
  - i) Harmonised standard EN 16034:2014-11 Pedestrian doorsets, industrial, commercial, garage doors and openable windows - Product standard, performance characteristics - Fire resisting and/or smoke control characteristics
  - j) Standard PN-EN 13501-2:2016-07 Fire classification of construction products and building elements —





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Part 2: Classification using data from fire resistance tests, excluding ventilation services.

- k) Harmonised standard EN 13241+A2:2016-10 Industrial, commercial, garage doors and gates. Product standard, performance characteristics
- I) Standard PN-EN 12635+A1:2010 Industrial, commercial and garage doors and gates Installation and use,
- m) Standard PN-EN 12424:2002 Industrial, commercial and garage doors and gates Resistance to wind load. - Classification;
- Declaration of Performance:
- this manual for the use, operation and maintenance.

In accordance with standard EN (i) and regulation MIIB (f), the fire protection gate belongs to the group of construction products subject to the system 1 of assessment and verification of constancy of performance. In accordance with the Regulation (a), the manufacturer, upon introduction of the construction product to the market, shall issue a Declaration of Performance and mark the fire protection gate with a legible CE marking label.

#### **CAUTION!**

A copy of the Declaration of Performance and the Warranty Card are delivered by the manufacturer to the user upon acceptance of the installation of the fire protection gate in accordance with the conditions of the contract (offer/contract).

A copy of the Declaration of Performance and the Warranty Card for the fire protection gate are an integral part of this manual and constitute annexes to it - see section 11 - ANNEXES.

The CE markings of the fire protection gate are placed on the nameplate - see section 10 - MARKING. The current list of companies authorised to perform installation, service inspections and maintenance (including the assessment and confirmation of proper performance of these activities) is available on the website (www.malkowski.pl) - of the fire protection gate manufacturer.

### 2. SCOPE AND CONDITIONS OF USE

### 2.1 Intended use

The fire protection single-leaf sliding gate type MARC-P1 EI120 constitutes a vertical, movable fire protection partition and it is used to close a passageway between fire partitions in industrial facilities, storage areas, technical storeys in office buildings, hospitals and other public buildings (it constitutes the so-called fire resistance partition)

The fire protection sliding gate type MARC-P1 in the basic version is made with the declared utility category CO (number of cycles: 1 – 499, as per EN 16034:2014-11) and wind load resistance class 1 (as per PN-EN 12424:2002).

At the Customer's request, the sliding gate type MARC-P1 can be made with the declared utility category 1 (number of cycles: 500 – 9,999), 2 (number of cycles: 10 –000 49,999), 3 (number of cycles: 50,000 – 99,999) or 4 (number of cycles: 100,000 – 199,999) or 5 (> 200,000) and wind load resistance class 2, 3 or 4.

## 2.2 IMPROPERUSE

The fire protection sliding gate type MARC-P1 EI120 is not suitable for the following use:

- in potentially explosive atmospheres (Ex zones) possible with suitable modifications made by the manufacturer,
- in an environment with dust, salts, salts, acids, alkalis and other aggressive chemicals (e.g. cement, lime) that cause corrosion (permissible relative humidity: max 80%),
- in an area of strong magnetic field impact (above 0.1 T),
- in an area of wind load stronger than provided for by the declared class on the nameplate and in the copy of the Declaration of Performance;





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#### CAUTION!

The wind load resistance, as per PN-EN 12424:2002, applies to the gate in the closed position. The use of the gate under strong wind conditions may prove dangerous.

Furthermore, the following is not permissible:

- installation of the fire protection gate by a company/installation team not authorised by the manufacturer,
- independent repairs, troubleshooting, improvements, modifications, replacement and installation of assemblies, parts outside the limits specified in this manual or without the written consent of the manufacturer of the gate (see consent/lack of consent of the manufacturer – tables in section 6 -TECHNICAL DATA),
- installation of parts or components being the so-called "substitutes" of original parts or components, not specified and not authorised by the manufacturer of the gate,
- use of a defective gate or gate partially/completely non-compliant with properties or intended use (due to the impact of fire, construction disaster, etc.),
- use of the gate without operator inspections, periodical service inspections and maintenance according to this manual (see section 8 - INSPECTION, MAINTENANCE, REPAIR) or to the individual arrangements specified in the contract between the user and the manufacturer of the fire protection sliding gate,
- use of the gate with mechanical damage or other defects caused by improper operation, including after emergency stop without repairing damage,
- use of the gate after finding irregularities in its operation or in individual components of the machine,
   without notifying the supervision, appropriate service and service centre of the manufacturer of the gate,
- use of the gate with the nameplate removed or damaged,
- operation and repair works during the movement of gate components,
- walking/running or driving through during the gate movement,
- washing, cleaning the gate with corrosive agents, based on various types of acid and solvent and washing with a washer, pressurised liquid (see subsection 8.4 - CLEANING, LUBRICATION).

Failure to comply with the above restrictions will result in the loss of obligations and guarantees granted to the user in relation to the gate, including the maintenance of its declared fire resistance and the validity of the Declaration of Performance issued for this gate, by its manufacturer.

#### CAUTION!

The manufacturer shall be released from their obligations and guarantees for the gate in the following cases:

- installation of the product by an installation team not authorised by the manufacturer,
- natural wear, partial or complete, due to the performance or intended use of the gate (e.g. due to fire impact etc.),
- modifications, replacement of components, repairs, structural changes to the gate or its components by the user or third parties without agreement and written arrangement with the manufacturer,
- improper use or failure to perform ongoing maintenance of the gate or its components, in accordance with the provisions of this manual,
- failure to perform periodical inspection in accordance with this manual or in accordance with separate, documented arrangements with the manufacturer or their authorised service centre, if it influenced the formation of damage and other defects (including the removal or damage to the nameplate etc.).

In these cases, the manufacturer shall also not guarantee the maintenance of the declared fire resistance of the gate.

To ensure trouble-free operation and compliance with warranty conditions, please contact MAŁKOWSKI-MARTECH S.A. or a commercial partner to arrange a product training. The purpose of the training is to present





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the necessary information on proper use and, among other things, requirements for the operation personnel.

### 2.3 OHS RECOMMENDATIONS

During the use of the fire protection gate, observe generally applicable occupational health and safety regulations, including the conditions related to fire requirements (the so-called fire protection) and timely completion of the required periodical inspection and maintenance of the gate, replacement of components and repairs. Do not use the gate without eliminating damage in case of emergency stop.

During all works with the fire protection gate, observe the legal regulations related to the reduction of waste and its proper removal/disposal. In particular, during the cleaning, maintenance, replacement of components, repairs of the fire protection gate, make sure that no harmful substances, such as lubricants, cleaning products with solvents etc., reach the soil, sewage. These substances shall be collected, stored and transported in appropriate containers and disposed of in accordance with legal regulations.

### 2.4 REQUIREMENTS FOR OPERATION PERSONNEL

No special licences are required to operate the fire protection gate. The gate should be operated by the operator (e.g. maintenance technician) appointed for this purpose by the user. This person should be trained in operation by a representative of the manufacturer of the fire protection gate or their authorised installation team/company and the completion of training should be recorded in the report.

The user should make sure that the operation personnel is trained in occupational safety, including the potential hazards, as well as the requirements of job instructions, this manual and the manuals constituting annexes to it.

## 3. PACKAGING, STORAGE, TRANSPORT

Depending on the arrangements (individual provisions in the contract [offer/contract], the fire protection gate can be collected from the manufacturer warehouse or delivered to the installation site by the manufacturer, with reception confirmed in qualitative and quantitative terms in a "Delivery Note".

The fire protection gate is delivered in assemblies and components to be assembled and installed on site of the user. Every assembly and component is separately protected from mechanical damage in transport, namely:

- gate leaf panels are placed on a pallet, not smaller than the dimensions of a single panel, on waste wool or expanded polystyrene spacers, foiled and strapped with polyester tape through protecting beams,
- formed components are placed on a mineral wool or expanded polystyrene spacers with leaf panels or on a separate pallet,
- small accessory items, such as fasteners, etc., are assembled in a separate cardboard box,
- each package (packaging) is appended with a label with identification data of the assemblies, components placed in it, with the customer's order no., assembly no., fire protection gate type, no. of the Declaration of Performance;

The following rules shall be adhered to during the transport, storage and installation of the fire protection gate:

- during the transport, assemblies, components, parts of the gate should be adequately protected (with belts, spacers etc.),
- after unloading/during storage, the components of the gate must be stored in a sheltered room,
   protecting them from damage, contamination, weather impact (rain, snow), etc.,
- it is prohibited to walk, drive on assemblies, components and parts of the gate, place loads, tools, chemicals on them, lean against them and perform any other activities not mentioned herein, which could cause damage to them and reduce their value /quality;





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#### 4. INSTALLATION

The installation of the mechanical and electrical parts of the fire protection gate may only be performed by trained personnel of the manufacturer and installation teams/companies authorised by the manufacturer. As part of basic activities related to the installation of the fire protection gate:

- before starting the above works, check the delivered components for any quantitative deficiencies, including damage in transport or storage,
- check the compliance of installation conditions with the drawing of the order (with the drawing of the order),
- carefully perform and assemble all connections, check their proper seating.

The installation of the fire protection gate must be performed in accordance with the installation instructions (see section 11 - ANNEXES), proper performance of works and activities must be inspected after installation. The acceptance must be attended by the authorised representative of the Ordering Party and the representative of the manufacturer (or a member of the authorised installation team/company on the behalf of the manufacturer ), who confirm this activity with a record in the Periodical Inspection and Maintenance Sheet (constituting an annex to this manual) or in a separate work acceptance protocol.

### 4.1 MECHANICAL INSTALLATION

The installation of the mechanical part of the fire protection gate must be performed in accordance with installation instructions (see section 11 - ANNEXES), which are special technical documentation, intended only for the foremen of installation teams with appropriate certificates/assembly certificates issued by the manufacturer of the fire protection gate.

#### **CAUTION!**

To properly capture, lift and attach the entire structure of the fire protection gate, appropriate OHS conditions and equipment must be provided, e.g. ladders of appropriate height, harnesses, lanyards and other tools, such as slings, lifting bars, winch or lift truck with lifting capacity and height corresponding to the weight and attachment height of this structure.

The contract specifies, who shall provide this equipment – also during the periodical inspection and maintenance.

#### 4.2 ELECTRICAL INSTALLATION

The configuration of the electrical fittings kit of the fire protection gate depends on the order and the installation should be performed in accordance with special documentation (for installers), constituting annexes to this manual.

The electrical system diagram is included on the internal side of the control panel and in the installation instructions of the electrical fittings kit, constituting a annex to this document (see section 11 - ANNEXES).

### **CAUTION!**

On the installation site of the fire protection gate, the user should ensure access to an appropriate electrical system with proper parameters and protection values, which enable connection and performance of operational tests and uninterrupted operation of the fire protection gate on the site of use.

The electrical system for connecting the electrical fittings kit of the fire protection gate should be checked and in case of failure repaired by an electrician with appropriate qualifications and licences.

### 5. OPERATING PRINCIPLE OF ELECTRICAL FITTINGS

The basic function of the electrical fittings set (see subsection 6.11-6.12 - ELECTRICAL FITTINGS SET) is to automatically start closing the gate upon detection of a fire hazard. A detailed description of the construction, installation and operation of the above used alarm set and fire detection in the delivered fire protection gate is included in the installation instructions of the electrical set, constituting the annex to this document.





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The fire protection gate leaf is suspended on the track and maintained in the open position with an electromagnetic holder or electric motor, which is connected to the fire protection power supply, which in turn may be equipped with a fire protection panel by the manufacturer or connected directly to the facility fire alarm system (SAP).

If fire hazard is detected by smoke/temperature detectors, the fire protection panel (SAP) or power supply:

- isolates the voltage from the electromagnetic holder and releases the balance weight;
- OR -
- through the power supply, the voltage is fed to the electrical motor, which starts the leaf (optional);

As a result, the gate closes (using lines/chain/toothed belt).

The leaf can be also released manually with a special button, also connected to the control panel.

When the cause of the fire alarm is eliminated, the control panel returns to the normal operation mode, while the gate should be moved to the open position manually, so that the contacts of the electromagnetic holder are shorted.

### 6. TECHNICAL DATA

Parameter description	Parameter value	Notes	
Fire resistance class	El <sub>2</sub> 120	-	
Closing speed	< 0.30 m/s	-	
Operation (manual/mechanical)		operation only with balance weight or (optional) electric drive	
Leaf colour	any RAL colour	standard colours: RAL 9002, 9010, 7035	
Cover colour	on request		





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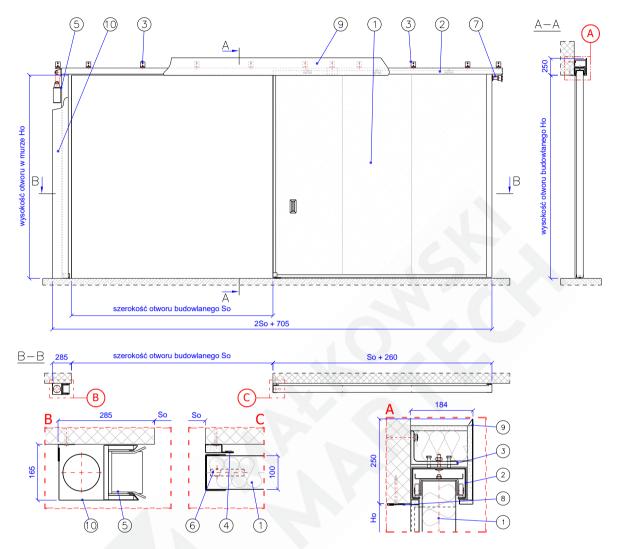


Fig. 1 – MARC-P120-01.00.00 [Fire protection sliding single-leaf gate type MARC-P1 EI120]

1 – Gate leaf, 2 – Track, 3 – Track support, 4 – Wall stop, 5 – Front module, 6 – Lower guide, 7 – Electromagnetic holder assembly, 8 – Head cover, 9 – Track cover, 10 – Front module cover

Wysokość otworu budowlanego	Construction opening height
Szerokość otworu budowlanego	Construction opening width

### List of components of the fire protection sliding gate type MARC-P1 EI120

Item	Name	Quantity	Drawing/catalogue/standard no.
1	Gate leaf	1	2 – MARC-P(1)120-01.01.00
2	Truck rail assembly	1	4 – MARC–P(1)120-01.02.00
3	Track support	*	5 – MARC–P(1)120-01.03.00, * - depending on gate width
4	Wall stop	1	6 – MARC–P(1)120-01.04.00
5	Front module	1	7 – MARC–P(1)120-01.05.00
6	Lower guide	1	8 – MARC–P(1)120-01.06.00
7	Electromagnetic holder assembly	1	9 – MARC–P(1)120-01.07.00
8	Head cover	1	10 - MARC-P(1)120-01.08.00







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9	Track cover	1	11 – MARC–P(1)120-01.09.00
10	Front module cover	1	12 - MARC-P(1)120-01.10.00

## LIST OF TRACK SUPPORT ANCHORING COMPONENTS

- CAUTION. 1. The standard set supplied with the gate includes components intended for installation on concrete (C20/25) and reinforced concrete walls.
  - 2. Using components other than listed for installation is possible, provided they were introduced to the market with the CE or B mark, at least with the same strength parameters and intended use.

Ite	Anchoring components	Notes			
m	Anchoring components				
A. FLOORS OF HOLLOW CORE SLABS OF STANDARD AND COMPRESSED CONCRETE					
A.1	Anchor for hollow core slabs (perforated) Fischer FHY, Hilti HKH	- size and type of components selected for transferred			
A.2	Anchor sleeve (driven) e.g. Fischer EA II, Hilti HKD	loads,			
B. W	ALLS, FLOORS AND UNIFORM CONCRETE AND REIN	FORCED BEAMS			
B.1	Anchor pin (ring) e.g. MKT BZ, Fischer FAZ II, Hilti HST3	- size and anchoring depth selected for transferred			
B.2	Screw-in anchor e.g. Fischer FBS II, Hilti HUS HR / CR	loads,			
В.3	Chemical attachment with threaded rod e.g. MKT VM Multi-plus, Fischer FIS SB	- rod min. M8 as per DIN 976, class min. 8.8 as per PN-EN ISO 898-1,			
C. M	ASONRY WALLS OF CELLULAR CONCRETE BLOCKS (e	.g. ytong, solbet, thermoalica)			
C.1	Screw-in anchor e.g. Fischer FBS II, Hilti HUS HR / CR	- size and anchoring depth selected for transferred loads,			
C.2	Chemical attachment with threaded rod e.g. MKT VM Multi-plus, Fischer FIS V, FIS P	- rod min. M8 as per DIN 976, class min. 8.8 as per PN-EN ISO 898-1,			
C.3	Pass-through wall installation with threaded rod	- rod as per DIN 976, size selected for transferred loads, class min. 8.8 as per PN-EN ISO 898-1, - nut as per PN-EN ISO 4032, class min. 8, - broadened washer as per PN-EN ISO 7093-200 HV,			
	ILL MASONRY WALLS (e.g. concrete blocks, silicate, DRILLED MASONRY WALLS (e.g. chequer brick, cav				
D.1	Chemical attachment with threaded rod e.g. MKT VM Multi-plus, Fischer FIS V, FIS P	- rod min. M8 as per DIN 976, class min. 8.8 as per PN-EN ISO 898-1,			
D.2	Screw-in anchor e.g. Fischer FBS II, Hilti HUS HR / CR	- size and anchoring depth selected for transferred loads,			
D.3	Pass-through wall installation with threaded rod	- as in sec. C.3, with replaceable washers, - washers as per PN-EN ISO 4079-200 HV,			
E. HC	T-DIP GALVANISED STEEL STRUCTURES AND FIRE P	ROTECTION STUD WALLS 1)			
E.1	Screw connection	- screw as per PN-EN ISO 4014-4017, size selected according to transferred loads, class min. 8.8 as per PN-EN ISO 898-1, - washers as per PN-EN ISO 4079-200 HV, - nut as per PN-EN ISO 4032, class min. 8,			

1) - Internal steel profiles must transfer static and dynamic loads related to gate installation and operation





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## LIST OF ANCHORING COMPONENTS FOR WALL STOPS, FRONT MODULE, COVERS 2)

F. RE	F. REINFORCED CONCRETE WALLS, MASONRY, OF CELLULAR CONCRETE BLOCKS, FULL AND DRILLED							
F.1	Steel expansion anchor (frame anchor)	- M8, M10, - minimum length 72 mm,						
F.2	Plastic anchor for Hilti HRD-CR frames	- size 8, 10, - minimum length 60 mm,						
F.3	Screws for steel structures (sheet-metal screws) e.g. Hilti S-MD, Stalco WS / FD / FM, Etanco GT	<ul> <li>min. St 4.8 x 25, as per DIN 7504,</li> <li>size selected according to transferred loads and thickness of walls of connected components,</li> </ul>						

<sup>2) –</sup> Except for the components listed below, all components from items B, C, D and E can be used

#### **6.1 GATE LEAF**

The leaf is the main part of the fire protection sliding gate. In the closed position, it forms a sealed partition with the fire resistance class EI120.

The gate leaf (thickness 100 mm) consist of 400 - 1200 mm wide vertical panels, top profile, bottom profile, reinforcements and galvanized steel sheet cladding (thickness 0.5 - 0.7 mm). Panels are filled with mineral wool slabs, catalogue number PRO<sub>MM</sub>17. Inside the mineral wool filling, in the central portions of each panel, there are vertical steel bars of steel, grade S235JR as per PN-EN 10025-2:2019-11, diameter 8.0 mm, with threaded ends, connecting the top profile with the bottom profile with M8 washers and nuts.

On both sides of the leaf, to the surface of every filling, vertical sheets of galvanised steel grade DX51D+Z275 as per PN-EN 10346:2015-09, with the thickness of 0.5-0.7 mm, are bonded with adhesive, catalogue number  $PRO_{MM}2$ ,  $PRO_{MM}12$  or O-PA.

The U-shaped top profile is made of steel sheet, thickness 3.0 mm, grade DX51D+Z275 as per PN-EN 10346:2015-09, and the bottom (top-hat) profile is made of steel sheet of the same grade, but 2.0 mm thick. Along the labyrinth sealing component edge of the leaf, there is a profile made of 2.0 mm thick steel sheet and two layers of strips made of fire-proof slabs, catalogue number  $PRO_{MM}3$ . The steel closing profile is also a part of the vertical labyrinth seal, with an intumescent gasket attached along the whole height of the closing profile, catalogue number  $PRO_{MM}15$ .

The lintel edge of the gate leaf is protected on either side with fire-proof slab strips, catalogue number  $PRO_{MM}3$ . The gate leaf edges (except for the lintel edge) are finished with 0.5 – 0.7 mm thick steel sheet profiles, grade DX51D+ Z275, fastened with steel rivets to the bottom profile and cladding metal sheets.

### Leaf - parameters

Parameter description	Unit	Parameter value	Notes
Width / height / thickness mm		So <sup>1)</sup> + 235 / Ho <sup>2)</sup> + 55 / 100	-
Colour	-	any RAL colour on request	standard colours: RAL 9002, 9010, 7035
Quantity	pcs.	1	-
Total weight	kg/m²	35	-

<sup>1) –</sup> Width of the gate opening (opening in the building partition), 2) – Height of the gate opening



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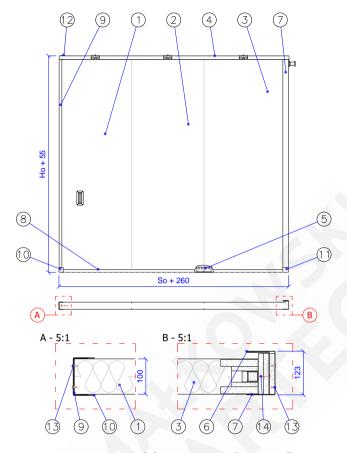


Fig. 2 - MARC -P(1)120-01.01.00 [Gate leaf]

1 – Front panel, 2 – Mid panel, 3 – Limit panel, 4 – Channel section 74x42x3, 5 – Channel section 30x20x2, 6 – Edging strip, 7 – Stop cover, 8 – Head cover, 9 – Front cover, 10 – Front bottom fitting, 11 – Rear bottom fitting, 12 – Line clip, 13 – St4.8x16 screw, 14 – St6.3x45 screw, 15 – 4x14 blind rivet

### Leaf - list of components

Item	Name	II.	Replacement / Repair			Notes
			<b>U</b> 1)	<b>A</b> 2)	<b>P</b> 3)	
1	Front panel	1	-	-	YES	-
2	Mid panel	*	-	-	YES	* - depending on the gate width
3	Limit panel	1	-	-	YES	-
4	Channel section 74 x 42 x 3	*	ı	YES	YES	* - number of all panels -1
5	Channel section 30 x 20 x 2	*	-	YES	YES	* - number of all panels -1
6	Edging strip	1	-	YES	YES	-
7	Stop cover	1	-	YES	YES	-
8	Threshold cover	2	-	YES	YES	-
9	Front cover	1	-	YES	YES	-





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10	Front bottom fitting	1	-	YES	YES	-
11	Rear bottom fitting	1	-	YES	YES	-
12	Line clip	1	-	YES	YES	-
13	4.8 x 16 screw	*	YES	YES	YES	* - every 500 mm, not less than 3 rows, DIN 7504 N-H / ISO 15482
14	6.3 x 45 screw	*	YES	YES	YES	* - every 500 mm, not less than 3 rows, DIN 7504 N-H / ISO 15482
15	4 x 14 steel blind rivet	*	YES	YES	YES	* - every 500 mm, PN 15979

<sup>1) -</sup> User, 2) - Authorised service centre, 3) - Manufacturer

CAUTION! If parts reserved for the manufacturer only are replaced by a third party - this results in immediate nullity of the CE marking on the gate and related performance, in particular fire resistance, is cancelled.

## **6.2 TRACK (SLIDE SYSTEM)**

The gate movement system comprises steel trolleys by Małkowski-Martech S.A., a steel track, and a closing system with balance weights (optional: drive).

The steel trolley is made up of two pairs of steel bearings with an outer diameter of 40 mm, connected to a steel body.

The 160 x 90 mm outer cross-section track is made of galvanised steel sheet profiles, grade DX51D+ Z275 as per PN-EN 10346:2015-09, thickness 3.0 mm.

The tracks are fixed to the building partition using steel brackets made of 150 x 100 mm angle brackets as per PN-EN 10056-2:1998+Ap1:2003 or brackets made of cold-bent steel channel sections (100 x 50 x 5 mm). The anchoring element type depends on the building partition material. The track with the top gate leaf steel profile form a horizontal labyrinth sealing connection. Intumescent gaskets, catalogue number PRO  $_{\text{MM}}$  15, are attached along the whole height of the labyrinth sealing connection.

The gate movement system is also secured with fire-proof slab strips, catalogue number  $PRO_{MM}3$ , and guarded by steel sheet profiled sections, grade DX51D+Z275, thickness 0.5-0.7 mm.

The closing system is formed by an electromagnetic holder, line pulls with a steel line with a diameter of not less than 3.0 mm, and balance weights made of coiled steel sheet or solid steel discs.

The gates can be optionally equipped with VIC type electric drives by Małkowski-Martech S.A.





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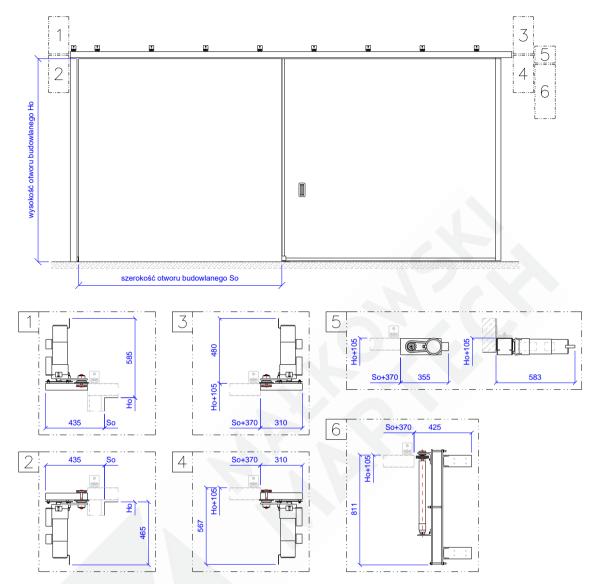


Fig. 3 – Variants of electrical drive installation type VIC

rig. 5 Variants of electrical arrive installation type vie						
Wysokość otworu budowlanego	Construction opening height					
Szerokość otworu budowlanego	Construction opening width					

### Track - parameters

The state of the s								
Parameter description	Unit	Parameter value	Notes					
Width / height / length mm 160		160 / 90 / So <sup>1)</sup> + 835	-					
Colour	-	galvanised	any RAL colour on request					
Quantity / gate	set	1	-					
Total weight	kg/lm.	8.75	-					

<sup>1) –</sup> Width of gate opening (opening in the building partition)



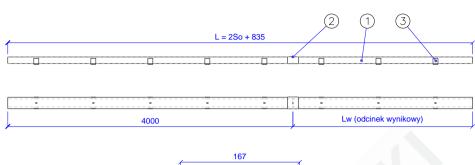


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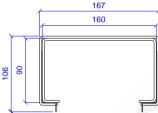


Fig. 4 – MARC –P(1)120-01.02.00 [Track]

1 - Rail, 2 - Rail connector, 3 - Cover mounting profile

Track - list of components

Item	Name	II.	Replacement / Repair			Notes
			U 1)	<b>A</b> 2)	<b>P</b> 3)	
1	Rail - profile	1*	-	-	YES	* - sections 3 or 4 m and resulting section
2	Rail connector	*	1	YES	YES	* - depending on the gate width
3	Cover installation profile	2*	-	-	YES	* - every 800 mm

<sup>1) -</sup> User, 2) - Authorised service centre, 3) - Manufacturer

CAUTION! If parts reserved for the manufacturer only are replaced by a third party - this results in immediate nullity of the CE marking on the gate and related performance, in particular fire resistance, is cancelled.

### **6.3 TRACK SUPPORT**

Track supports are used to attach the track to the partition in the structure.

The single bracket is made of a mill angle  $150 \times 100 \times 10$  as per PN-EN 10056-2. Its length is 70 mm and as standard the surface is finished by galvanisation. The horizontal shelf features threaded opening for fixing M8 x 40 hexagon head screws, used to level and lock the track position.

**Track support - parameters** 

Parameter description	Unit	Parameter value	Notes
Width / height / length	mm	150 x 100 x 70	-
Colour	-	galvanised	any RAL colour on request
Quantity	pcs.	*	* - depending on the width doors, every 400 – 800 mm
Total weight	kg/pc.	1.33	-





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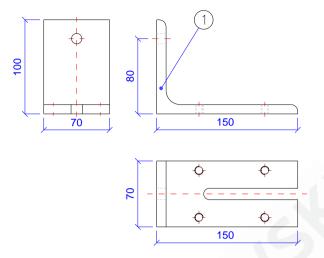


Fig. 5 - MARC -P(1)120-01.03.00 [Track support]

### **Track support - list of components**

Item	Name	II.	Replacement / Repair Note		Notes	
			<b>U</b> 1)	<b>A</b> 2)	<b>P</b> 3)	
1	Track support	*	-	YES	YES	* - depending on the gate width, every 400 – 800 mm

<sup>1) -</sup> User, 2) - Authorised service centre, 3) - Manufacturer

CAUTION! If parts reserved for the manufacturer only are replaced by a third party - this results in immediate nullity of the CE marking on the gate and related performance, in particular fire resistance, is cancelled.

### 6.4 WALL STOP

The wall stop is a Z-shaped labyrinth component made of 2 mm thick sheet metal grade DX51D+Z275 as per PN-EN 10346:2015-09, fire-proof panel and cover of 0.7 mm thick steel sheet.

Along the components, at their entire length, an intumescent gasket is placed, catalogue number  $PRO_{MM}15$ .

### Wall stop - parameters

Parameter description	Unit	Parameter value	Notes
Width / height / length	mm	62 / 25 / Ho <sup>1)</sup> + 15	-
Colour	-	galvanised	any RAL colour on request
Quantity	pcs.	1	-
Total weight	kg/lm.	1.5	-

<sup>1) –</sup> Height of gate opening (opening in the building partition)



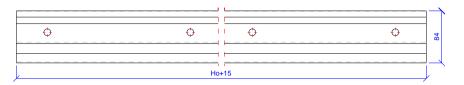


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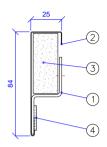


Fig. 6 - MARC -P(1)120-01.04.00 [Wall stop]

1 - Cover profile, 2 - Cover, 3 - Fire-proof panel, 4 - Intumescent seal

#### Wall stop - list of components

Item	Item Name		Replacement / Repair			Notes
			U 1)	<b>A</b> 2)	<b>P</b> 3)	
1	Stop profile	1		YES	YES	-
2	Stop cover	1	-	YES	YES	-
3	Fire-proof panel	1	-	YES	YES	-
4	Intumescent seal	1		YES	YES	PRO <sub>MM</sub> 15

<sup>1) -</sup> User, 2) - Authorised service centre, 3) - Manufacturer

CAUTION! If parts reserved for the manufacturer only are replaced by a third party - this results in immediate nullity of the CE marking on the gate and related performance, in particular fire resistance, is cancelled.

### 6.5 FRONT MODULE

The main component of the module is the receiver recess, made of 1.0 mm thick sheet metal grade DX51D+Z275 as per PN-EN 10346:2015-09. The inside of the recess is lined with 12.5 mm thick fire-proof panels and 0.5 mm thick sheet metal masking treatment.

In the upper part, the module has a connector made of 3.0 mm thick sheet metal grade DX51D+Z275 as per PN-EN 10346:2015-09, to which the track is inserted. Inside the connector, the line roller with rubber bumper is screwed.

In the rear part of the module, the ballast assembly is suspended using a 3 mm diameter steel line. In the lower part of the recess, the flooring is fitted with a steel ramp with rubber bumper.

### Front module - parameters

Parameter description	Unit	Parameter value	Notes
Height	mm	Ho <sup>1)</sup> + 210	depending on the gate size
Colour	-	galvanised	any RAL colour on request
Quantity	set	1	-
Total weight	kg	*	weight depending on gate dimensions

<sup>1) –</sup> Height of gate opening (opening in the building partition)





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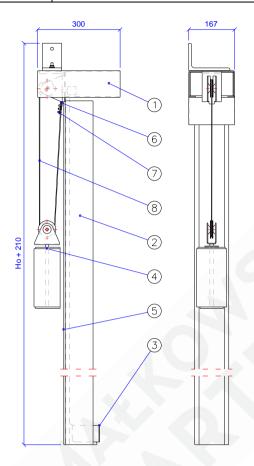


Fig. 7 - MARC -P(1)120-01.05.00 [Front module]

1 – Rail-to-recess connector, 2 – Receiver recess, 3 – Run-in ramp, 4 – Balance weight assembly, 5 – Balance weight guide, 6 – Thimble 3, 7 – U-bolt line grip 3, 8 – Steel line 3 mm

### Front module - list of components

Item	em Name		Replacement / Repair			Notes
		II.	U 1)	<b>A</b> 2)	<b>P</b> 3)	
1	Rail-to-recess connector	1	-	YES	YES	-
2	Receiver recess	1	-	YES	YES	-
3	Run-in ramp	1	-	YES	YES	-
4	Balance weight assembly	1	-	YES	YES	-
5	Balance weight guide	1	-	YES	YES	-
6	Thimble 3	1	-	YES	YES	DIN 6899 / PN-EN 13411-1+A1
7	U-bolt line grip 3	3	-	YES	YES	DIN 741
8	3 mm line, 6 x 7 + FC		-	YES	YES	DIN 3058 / PN-EN 12385-4+A1

<sup>1) -</sup> User, 2) - Authorised service centre, 3) - Manufacturer

CAUTION! If parts reserved for the manufacturer only are replaced by a third party - this results in immediate nullity of the CE marking on the gate and related performance, in particular fire resistance, is cancelled.

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### **6.6 LOWER GUIDE**

The guide is designed to maintain the leaf in the vertical position. It consists of a 23 mm diameter steel roller fastened with a M8 screw to the base made of a  $100 \times 20 \times 10$  mm steel flat bar.

### Lower guide - parameters

Parameter description	Unit	Parameter value	Notes
Width / height / length	mm	20 / 40 / 100	-
Colour	-	galvanised	any RAL colour on request
Quantity	pcs.	1	-
Total weight	kg	0.15	\ -\ \-\ \-

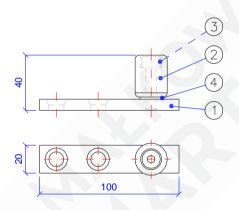


Fig. 8 - MARC -P(1)120-01.06.00 [Lower guide]

1 – Mounting plate, 2 – Guiding roller, 3 – M8x25 screw, 4 – Washer 8,4

### Lower guide - list of components

Item Name		II.	Replacement / Repair			Notes
			<b>U</b> 1)	<b>A</b> 2)	<b>P</b> 3)	
1	Mounting plate	1				
2	Guiding roller	1	VEC		VEC	
3	M8x25 cheese head bolts	1	YES	YES	YES	component to be replaced in entirety
4	Washer 8,4 200HV	1				

<sup>1) -</sup> User, 2) - Authorised service centre, 3) - Manufacturer





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### 6.7 ELECTROMAGNETIC HOLDER ASSEMBLY

The assembly consists of a bracket made of a milling angle  $200 \times 100 \times 10$  and screwed electromagnetic holder. The holder jumper is factory mounted to the door leaf.

### Electromagnetic holder assembly - parameters

	-, parame		
Parameter description	Unit	Parameter value	Notes
Height / width / length	mm	200 / 70 / 100	-
Colour	-	galvanised*	* - applies to the bracket, any RAL colour on request
Quantity	set	1	-
Total weight	kg	2.5	

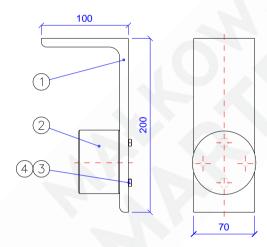


Fig. 9 – MARC –P(1)120-01.07.00 [Electromagnetic holder assembly]

1 - Holder support, 2 - Electromagnetic holder, 3 - M6x16 screw, 4 - Plain washer 6,4

### Electromagnetic holder assembly - list of components

Item	Item Name		Replacement / Repair			Notes
	1121110	II.	U 1)	<b>A</b> <sup>2)</sup>	<b>P</b> 3)	1.0.00
1	Holder support	1	YES	YES	YES	-
2	Electromagnetic holder	1	YES	YES	YES	the holder jumper is factory mounted on the leaf
3	M6 x 16 cheese head bolts	2	YES	YES	YES	DIN 912 / ISO 4762
-4	Washer 6.2	2	YES	YES	YES	PN-EN ISO 7089

<sup>1) –</sup> User, 2) – Authorised service centre, 3) – Manufacturer





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### 6.8 HEAD COVER

The cover masks the lintel edge and it is made of 0.7 mm thick steel sheet grade DX51D+Z275 as per PN-EN 10346:2015-09 and fire-retardant strip.

### **Head cover - parameters**

ricad total parameters			
Parameter description	Unit	Parameter value	Notes
Width / height / length	mm	85 / 13 / So <sup>1)</sup> + 100	-
Colour	-	any RAL colour on request	standard colours: RAL 9002, 9010, 7035
Quantity	set	1	-
Total weight	kg/lm.	1.10	\ -\ \-

<sup>1) –</sup> Width of gate opening (opening in the building partition)

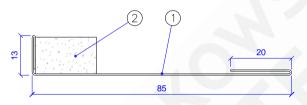


Fig. 10 – MARC –P(1)120-01.08.00 [Head cover]

1 – Cover profile, 2 – Fire-proof panel

### Head cover - list of components

Item	Name	II.	Replacement / Repair			Notes	
			U 1)	<b>A</b> 2)	<b>P</b> 3)		
1	Cover profile	1	1	YES	YES	-	
2	Fire-proof panel	1	-	YES	YES	-	

<sup>1) –</sup> User, 2) – Authorised service centre, 3) – Manufacturer





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#### **6.9 TRACK COVER**

The cover masks the track and it is made of 0.7 - 1.0 mm thick steel sheet grade DX51D+Z275 as per PN-EN 10346:2015-09 and fire-retardant strip.

#### **Track cover - parameters**

Parameter description Unit Parameter		Parameter value	Notes
Width / height / length	mm	26 / 200 / 2So <sup>1)</sup> + 660	-
Colour	-	any RAL colour on request	standard colours: RAL 9002, 9010, 7035
Quantity	set	1	-
Total weight	kg/lm.	2.4 – 2.8*	* - depending on the thickness of the sheet metal used

<sup>1) –</sup> Width of gate opening (opening in the building partition)



Fig. 11 - MARC -P(1)120-01.09.00 [Track cover]

1 – Cover profile, 2 – Fire-proof panel

### Track cover - list of components

Item	Name	II.	Replacement / Repair			Notes
			U 1)	<b>U</b> 1) <b>A</b> 2) <b>P</b> 3)		
1	Cover profile	1	YES	YES	YES	-
2	Fire-proof panel	1	YES	YES	YES	-

<sup>1) –</sup> User, 2) – Authorised service centre, 3) – Manufacturer





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### **6.10 FRONT MODULE COVER**

The cover masks the front module and it is made of 0.7 - 1.0 mm thick steel sheet grade DX51D+Z275 as per PN-EN 10346:2015-09.

#### Front module cover - parameters

Parameter description	Unit	Parameter value	Notes
Width / height / length	mm	237 / 165 / Ho <sup>1)</sup>	-
Colour	-	any RAL colour on request	standard colours: RAL 9002, 9010, 7035
Quantity	set	1	-
Total weight	kg/lm.	4.0 – 5.1*	* - depending on the thickness of the sheet metal used

<sup>1) –</sup> Height of gate opening (opening in the building partition)

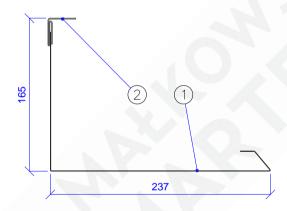


Fig. 12 - MARC -P(1)120-01.10.00 [Front module cover]

1 – Cover profile, 2 – Mounting clip

### Front module cover - list of components

Item	Name	II.	Replacement / Repair		nt /	Notes	
			<b>U</b> 1)	<b>A</b> 2)	<b>P</b> 3)		
1	Cover profile	1	YES	YES	YES	-	
2	Mounting clip	1	YES	YES	YES	-	

<sup>1) –</sup> User, 2) – Authorised service centre, 3) – Manufacturer



## MAŁKOWSKI MARTECH

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### 6.11 ELECTRICAL FITTINGS KIT - VIC-EH

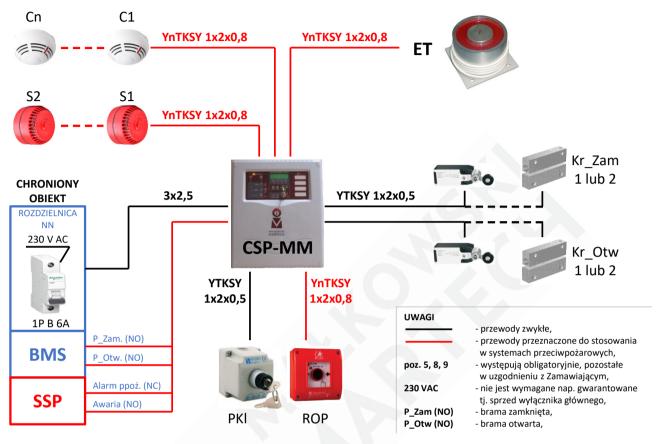


Fig. 13 - MARC-P1 control system with electromagnetic holder

CHRONIONY OBIEKT	MONITORED OBJECT
ROZDZIELNICA NN	LV SWITCHGEAR
BMS	BMS
SSP	SSP
P_Zam. (NO)	G_close (NO)
P_Otw. (NO)	G_open (NO)
Alarm ppoż (NC)	Fire alarm (NC)
Awaria (NO)	Failure (NO)
PKI	PKI
ROP	ROP
UWAGI	NOTES
-przewody zwykłe	- regular wires
-przewody przeznaczone do stosowania w systemach przeciwpożarowych	- fire alarm system rated wires
poz.	item
· ·	119.11
-występują obligatoryjnie, pozostałe w uzgodnieniu z Zamawiającym	- obligatory, other in agreement with the Ordering Party
-nie jest wymagane nap. gwarantowane tj. sprzed	- guaranteed voltage is not required, namely upstream of
wyłącznika głównego	the main switch
P_Zam (NO)	G_close (NO)
P_Otw (NO)	G_open (NO)
-brama zamknięta	- gate closed
-brama otwarta	- gate open
Kr_Otw 1 lub 2	LS_open 1 or 2
Kr_Zam 1 lub 2	LS_close 1 or 2







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Item	Figure marking	Item type	Item designation	Item code	Recommended quantity	Notes
			optical smoke detector	DRP-100	2	
1	C1 - Cn	point fire detector	class A1R heat detector	DCP-100	2	recommended DRP-100, max. 32 pcs.
			multi-vector smoke and heat detector	DMP-100	2	шах. 32 pcs.
2	C1 - Cn	detector receptacle	standard fire detector receptacle	DB100	2	quantity equal to number of detectors
3	ROP	manual call point	standard manual call point	ROP-100/PL	1	max. 10 pcs.
4	S1, S2	fire alarm indicator	fire alarm sounder, low base	SPP-100	1	max. 2 lines
5	ET	electromagnetic holder	land holder	EM-xxxx	1	-
6	LS_close	limit switch 1 mag. sensor 2	mecha. limit switch magnetic reed relay switch	KB F1 S11 MS-240-S45	1	application option, selection 1 or 2
7	LS_open	limit switch 1 mag. sensor 2	mecha. limit switch magnetic reed relay switch	KB F1 S11 MS-240-S46	1	application option, selection 1 or 2
8	PKI	keyswitch	key switch operated K1 control box	SP22K1/07-1	1	-
9	CSP-MM	control	universal drive controller	CSP-MM 1(2)	1	-



## MAŁKOWSKI MARTECH

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### 6.12 ELECTRICAL FITTINGS KIT - VIC-0701

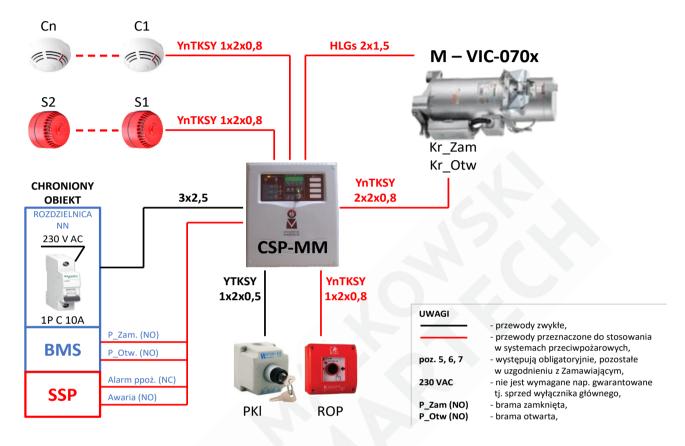


Fig. 14 - MARC-P1 control system with externally-mounted 24 V DC drive unit

variant I – closing/opening with drive; variant II – closing with balance weight, opening with drive

CUDONIONYODIEVE	MONITORED OBJECT
CHRONIONY OBIEKT	
ROZDZIELNICA NN	LV SWITCHGEAR
BMS	BMS
SSP	SSP
P_Zam. (NO)	G_close (NO)
P_Otw. (NO)	G_open (NO)
Alarm ppoż (NC)	Fire alarm (NC)
Awaria (NO)	Failure (NO)
PKI	PKI
ROP	ROP
UWAGI	NOTES
-przewody zwykłe	- regular wires
-przewody przeznaczone do stosowania w systemach	- fire alarm system rated wires
przeciwpożarowych	
poz.	item
-występują obligatoryjnie, pozostałe w uzgodnieniu z	- obligatory, other in agreement with the Ordering Party
Zamawiającym	
-nie jest wymagane nap. gwarantowane tj. sprzed	- guaranteed voltage is not required, namely upstream of
wyłącznika głównego	the main switch
P_Zam (NO)	G_close (NO)
P_Otw (NO)	G_open (NO)
-brama zamknięta	- gate closed
-brama otwarta	- gate open
Kr_Otw	LS_open
Kr_Zam	LS_close





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Item	Figure marking	Item type	Item designation	Item code	Recommended quantity	Notes
			optical smoke detector	ID100	2	
1	C1 - Cn	point fire detector	class A1R heat detector	ID200	2	recommended ID100, max. 6 pcs.
			smoke and heat detector	ID300	2	тах. о рсз.
2	C1 - Cn	Detector receptacle	Standard fire detector receptacle	EB0010	2	quantity equal to number of detectors
3	ROP	manual call point	standard manual call point	ROP OP1	1	max. 10 pcs.
4	S1, S2	fire alarm indicator	fire alarm sounder, low base	SPP-100	1	max. current 200 mA
5	М	electric drive	internal (tubular)	VIC-070x	1	-
6	PKzM	console	remote console	PKzM	1	-
7	CSP-MM	control	universal drive controller	CSP-MM 1(2)	1	-

### 7. PROBABLE FAILURES AND RESOLUTION OPTIONS

All failures of the fire protection sliding gate must be reported to the manufacturer and eliminated in accordance with their recommendations, by authorised persons (see section 8 - INSPECTION, MAINTENANCE, REPAIR).

Failure type	Causes of failure / operation error	Method of troubleshooting by operator
	Blocked or damaged track	Call the service centre for clearing or replacement of the track
The door leaf does not close	Mechanical damage to structural component	Call the service centre for repair,
	Locked or ruptured balance weight	replacement of the damaged component
Fire detector does not work /		
does not activate the control	Contaminated, damaged	Call the service centre for cleaning,
system		adjustment, replacement
Optoacoustic sounder does not		aujustinient, repiacement
activate	Damage to the system	
Local control system (panel)	component	Call the service centre to eliminate the
displays an error		failure
Manual call point does not work / is damaged	Broken glass in the call point	Call the service centre for replacement



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### 8. INSPECTION, MAINTENANCE, REPAIR

## 8.1 INSPECTION AND MAINTENANCE INTERVALS TABLE

Inspections, maintenance and repairs of the fire protection gate should be performed by a person with proper knowledge and experience in these activities.

Manufacturer of the fire protection gate or their authorised installation teams/companies (see guidelines in section 1 - INTRODUCTION and subsection 2.4 - REQUIREMENTS FOR OPERATION PERSONNEL in this manual) in accordance with the conditions in the contract, perform paid service inspections and maintenance, repairs, troubleshooting of the fire protection gate. The above-mentioned have proper technical resources, spare parts and qualified service personnel with the required qualifications.

Written orders for the performance of the above works shall be sent to the service centre of MAŁKOWSKI-MARTECH S.A. (serwis@malkowski.pl or fax: + 48 61 22 27 501). The contact addresses of the service centre are also included on the manufacturer's website and in the warranty document.

Inspections and maintenance should be performed in accordance with this manual (see the guidelines in the following tables), ensure proper and safe use and they are obligatory to maintain the declared performance of the fire protection sliding gate and during the warranty subject to it becoming null and void.





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Inspection type	Frequency	Completed by
Inspection before use	Before each use (not applicable to fire situation)	Operator
Monthly inspection	Every 1 month	
Service inspection and maintenance	Every 6 months	Authorised service centre

S - check, review, clean; X - adjust, lubricate

### Inspection and maintenance intervals table

Assembly, component	Activity required	Before every use	Every 1 month	Every 6 months
Entire device				
	Check the varnished surface (no contamination, rust etc.), clean if necessary.		S	S
Design of the device	Check the completeness of components, check for no mechanical and operational damage	S	S	S
	Check the gate marking (if the nameplate is present and legible)		S	S
Gate leaf	Check for contamination, mechanical damage, etc, clean if necessary	S	S	S
Brackets, covers	Check the fastenings and their condition			S
Gate leaf closing/ope	ning assembly			
Track	Check the fastenings, their condition and blockage.			S
Balance weight	Check the fastening of lines and their condition			S
assembly	Check for travel block, lubricate if required 1)		S	S
Electrical / control sys	stem			
Complete set of electrical fittings	Check proper operation of the set by triggering the detectors, adjust if necessary			SX
Fire detector	Check the condition, clean, adjust if necessary			SX
Manual fire alarm	Check the condition and proper activation			S
Controller (panel)	Check proper operation of all components in the panel			S
Controller (parier)	Check if no error are displayed	S	S	S
Key switch	Check the condition, namely for damage, operation		S	S
Electric drive motor	Check the condition (even operation, no jerking, no chirping, vibrations etc.)		S	S
Battery	Check the condition of terminals and cables, clean if necessary, lubricate 1)		S	SX
battery	Check the electrolyte level, charge level, add electrolyte if necessary, charge		S	S
Electrical system <sup>2)</sup>	Check the fittings attachments, line tracks and their condition		S	S

<sup>1) –</sup> technical vaseline is recommended



<sup>2) -</sup> check the insulation resistance of the power supply electrical system and the continuity of wires at least every 5 years



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Replace worn and damaged parts, only replace with new parts. For maintenance and repairs, use only original parts authorised by the manufacturer of the fire protection gate. The performance of inspection, maintenance, overhaul is certified by the authorised employee with records in accordance with the scope in the Periodical Inspection and Maintenance Sheet included in section 11 - ANNEXES of this manual or in a separate report.

The user of the fire protection gate should retain the records of performed inspections, maintenance, repair and overhauls.

### **8.2 INSPECTIONS BY OPERATOR**

Inspection by operator should be performed by a person designated for this purpose by the user and trained by the manufacturer of the fire protection gate or their authorised installation team/company (see also the guidelines in subsection 2.4 - REQUIREMENTS FOR OPERATION PERSONNEL and 8.1 - INSPECTION AND MAINTENANCE INTERVALS TABLE).

During inspection works, use basic personal protection equipment, e.g. rubber gloves etc.

In case of failure, damage to the fire protection gate or noticing of irregularities in operation, notify the supervisor and manufacturer or their authorised installation team/company.

#### 8.3 SERVICE INSPECTIONS AND MAINTENANCE

Servicing is performed by teams of qualified and experienced personnel of the manufacturer, MAŁKOWSKI-MARTECH S.A., or subcontracting teams/companies authorised by the manufacturer to service fire protection gates.

For the Customers to be sure that the service is performed by a fully professional/authorised team/company, the personnel authorised to these works should hold and present the Installation Authorisation Certificate, and service technicians — a Facility Service Authorisation Certificate issued by the manufacturer of the fire protection gate. MAŁKOWSKI-MARTECH SA

According to the "Lists of components, parts" in section 6 - TECHNICAL DATA, in this manual, the manufacturer of the fire protection gate clearly defined, who has the right to perform repairs /replacement of assemblies, components and parts, subject to the loss of warranty and invalidity of the declaration of performance of the fire protection gate.

### **CAUTION!**

According to the Regulation (Journal of Laws 2010.109.719, as amended) §3.2 "Fire protection equipment (...) should be subject to technical inspections and maintenance activities in accordance with the rules and as specified in the Polish Standards applicable to fire protection equipment and extinguishers, in the operation and maintenance manual and in operation manuals prepared by their manufacturers". §3.3 "Technical inspections and maintenance activities should be performed at intervals set by the manufacturer, not less frequently, however, than once per year".

The service inspections, maintenance, repairs, overhauls of the fire protection gate may only be performed by trained employees of the manufacturer or their authorised service team/company.

The user of the fire protection sliding gate or their authorised entity/person shall arrange and hold documented confirmations of the performance of service inspections and maintenance at least once per six months, unless stated otherwise in the contract (or special local requirements/conditions at the user's require different intervals of service inspections and maintenance).





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#### 8.4 CLEANING

The operator shall keep the workplace and the fire protection gate clean. For cleaning, use commercially available household cleaning agents – such as dishwashing liquid.

For cleaning, do not use aggressive cleaning agents and organic solvents, do not use pressure washing (with water etc.). In case of contamination of the fire protection sliding gate with non-soluble materials, remove them mechanically, while taking care not to cause damage to the paint coating, scratches etc.

#### 8.5 REPLACEABLE PARTS

When ordering replaceable parts, specify: year of manufacture of the fire protection gate, part number and name, quantity.

REPLACEMENT PARTS, USED TO PERFORM INSPECTIONS, MAINTENANCE, REPAIRS, OVERHAULS SHOULD BE ORIGINAL PARTS OF THE MANUFACTURER IN ACCORDANCE WITH THE LISTS AS IN "LISTS OF COMPONENTS, PARTS..." IN SECTION 6 - TECHNICAL DATA, IN THIS MANUAL.

### 9. DISPOSAL

Disposal of the fire protection gate and its worn components should be performed in accordance with applicable regulations.

In the case of total wear, destruction of the fire protection gate or its individual components:

- remove the door components and the electrical system by reversing the installation and hand over the components for recycling (e.g.: electric motor),
- hand over plastic, rubber, mineral wool components for disposal,
- cut the steel structure, sheets, profiles, rods and scrap with other steel components (screws, pins etc.).

#### 9.1 INFORMATION FOR USE

No component of the fire protection sliding gate contains asbestos or coatings/components that cause the release of gases with adverse impact on the ozone layer of the atmosphere. Colourants and anti-corrosion coatings of the structures and components do not contain cadmium chromates, etc., which could contaminate the air and aguifers of the soil.





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### 10. MARKING

The fire protection sliding single-leaf gate type MARC-P1 is marked with nameplate, of which the template is shown below. Parameters related to the supplied fire protection gate are given on the label placed on it.

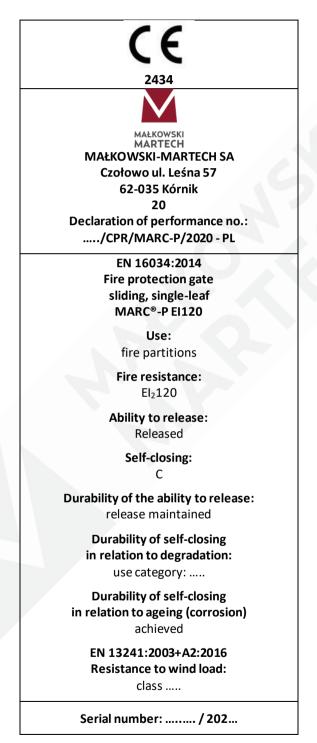


Fig. 15 – Example nameplate of the fire protection sliding gate (as per EN 16034:2014-11)

The nameplate is placed in factory on the leaf, near the shell pull.

## MAŁKOWSKI MARTECH

Czołowo, ul. Leśna 57, 62-035 Kórnik phone: +48 61 222 75 00 fax: +48 61 222 75 01 email: biuro@malkowski.pl, www.malkowski.pl

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### 11. ANNEXES:

- Periodical inspection, maintenance sheet,
- Warranty card example,
- Copy of the Declaration of Performance,
- Available for companies with installation authorisation certificate issued by the manufacturer:
  - Installation instructions for the VIC type electrical fitting sets,
  - Installation instructions for the fire protection sliding gate type MARC-P1 EI120;





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## PERIODICAL INSPECTION, MAINTENANCE SHEET

Device	е туре.	Seriai number.		real of illaliulacture,
Item	Works performed	Date, stamp and signature of authorised person		Notes
1				
2				
3			5	
4				
6		40		
7				
8				
9				
10				
11				
12				
13				
14				
15				
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17				
18				
19				
20				





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#### **WARRANTY CARD**

Warranty for the Purchaser / Eligible under the warranty*:		Installation site*:			
Warranty period(:		According to the agreement, order no.*:			
Item	Subject of sale	Additional description*:		Designation no.*:	Quantity*:
1	Fire protection gate, sliding, single-leaf MARC-P1 EI120	El₂60			1
2	Local control system (panel)	CSP M-M			1
3	Fire detector, thermal	DRP-100			2
4	Manual fire alarm	ROP- 100/PL	46		1
5	Optoacoustic sounder	SPP-100	M		1

#### ξ1

### Shipment; Acceptance of the product; Activities before installation

- 1. The acceptance of the subject of sale in qualitative terms is performed before loading at MAŁKOWSKI-MARTECH S.A. (hereinafter referred to as the Guarantor). The signature of the Installer/Buyer, on the delivery note delivered with the subject of sale confirms that the subject of sale is complete and consistent with the specification in this delivery note.
- 2. Before installing the subject of sale, the installer should carefully and thoroughly check it for damage in transport, it is in perfect condition and corresponds to the order placed by the Buyer. Upon finding non-compliance of the subject of sale with the order and/or occurrence of any defect, immediately stop installing the subject of sale and immediately notify the Guarantor of the fact.
- 3. If the defect of the subject of sale may have been identified, with due diligence, before starting the installation of the subject of sale COMPLAINTS submitted after installation will be dismissed as unfounded.

## § 2 General terms of warranty

- 1. The Entitled shall retain warranty rights provided that:
  - a) performance of the installation of the subject of sale by the Guarantor or entity holding the Installation Authorisation Certificate (granted by the Guarantor), confirmed by entry on the last page of this warranty card.
  - b) ordering cyclical service inspections were performed by the Guarantor or the entity holding the Servicing Certificate (on the basis of a separate agreement) of the subject of sale covered by this Warranty, at the following intervals:
    - every 6 months in the case of the subject of sale remaining, without cyclical activation, in an extreme position open or closed,
    - every 3 months in the case of using the subject of sale otherwise than in the above cycle, according to the criteria specified by the Guarantor in the above-mentioned agreement;
- 2. These warranty conditions apply to the subject of sale of the Warrantor purchased and installed in the territory of the Republic of Poland.
- 3. Service inspections listed in item 1 are performed against payment.
- **4.** The Entitled under warranty shall submit copies of the reports of service inspections performed by an entity with the Service Authorisation Certificate to the Guarantor within 14 days of performance:
  - a) by e-mail to the following e-mail address: serwis@malkowski.pl and,
  - b) to the address of the registered office of the Guarantor, subject to losing the warranty rights.
- 5. The warranty period shall run from the date of official acceptance of the subject of sale after installation.
- 6. The rights under the Warranty granted do not include the right to demand reimbursement of lost profits, to





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compensate for any damage related to the failure of the subject of sale.

#### §3

### Procedure for reporting claims and exercising the rights under the Warranty

- 1. The Entitled shall immediately report any defect of the subject of sale in writing, not later than within 14 days of its discovery.
- 2. Any claim shall be submitted to the Guarantor in writing, otherwise being null and void.
- **3.** The claim should include:
  - a) a copy of the Warranty Card,
  - b) a detailed description of the discovered damage, causes and conditions of the defect,
  - c) serial number of the subject of sale,
  - d) confirmation of performance of the periodical service inspections of the subject of sale in accordance with the provisions in § 2, item 4.
- **4.** In order to ensure a smooth warranty procedure, it is recommended to attach pictures of the damaged subject of sale allowing for an evaluation of the damage.
- 5. The Entitled under warranty shall ensure the conditions (in particular by enabling access to the subject of sale and disabling other equipment that could be dangerous to the person performing the repairs) to permit and enable repairing the subject of sale.
- **6.** Failure to submit a claim within the time limit specified in section 1 shall release the Guarantor from the obligation to satisfy the claim.

## § 4 Warranty rights

- 1. If claims under the Guarantee is justified, the Guarantor shall, at its own discretion, remove the defect of the subject of sale (perform a repair) or replace the subject of sale (or a part thereof) with a new one.
- 2. The replaced defective subject of sale shall become the property of the Guarantor.
- **3.** If defects or failures preventing the use of the subject of sale are discovered during the warranty period, the Guarantor shall take the necessary actions to remove the defects or failures within 10 working days from the moment of reporting the defect.
- **4.** If defects or failures preventing the use of the subject of sale are discovered during the warranty period, the Guarantor shall take the necessary actions to remove the defects or failures within 20 working days from the moment of reporting the defect.
- 5. The time limits specified in sections 3 and 4 above may be extended for important reasons, in particular if:
  - a) the parts necessary for the execution of warranty rights are not available on the market at a given moment,
  - b) it is necessary to import some parts from abroad,
  - c) for reasons beyond the control of the Guarantor, of the occurrence of which the Entitled shall be notified.
- **6.** Business days shall be understood as days from Monday to Friday, excluding holidays and other statutory days off work.
- 7. If, in the performance of its obligations, the Guarantor supplies the Entitled under warranty with an item free of defects instead of a defective item, or has made significant repairs of the item covered by the guarantee, the guarantee period shall run again from the moment of delivery of the item free of defects or return of the repaired item.
- **8.** The warranty for the above-mentioned parts shall start again from the moment of delivery of the part being free of defects or repaired, in relation to the part mentioned.
- 9. The replacement of parts shall not result in extending the warranty on the whole subject of sale.
- **10.** The Guarantor is entitled to charge the Entitled under warranty with the costs related to the unfounded notification of damage (in which case it should be understood as a lack of defect or a notification of a request to remove the defect not covered by the warranty).
- **11.** The costs referred to in section 10 above include in particular the costs of travel and the costs of removal of the defect if it is removed.
- **12.** The costs of removing defects not covered by the Warranty shall be valued according to the price list of the Guarantor.





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#### **Exclusions of rights under the Warranty**

The warranty does not cover:

- 1. defects caused for reasons other than those existing in the subject of sale
- 2. defects resulting from making any interference in the subject of sale by the Entitled under warranty or third parties, in particular modifications and structural changes of the subject of sale, without the prior written consent of the Guarantor, subject to the invalidity of the DECLARATION OF PERFORMANCE AND THE WARRANTY GRANTED.
- **3.** defects caused by improper use of the subject of sale or lack of ongoing maintenance, in particular use and maintenance contrary to the provisions of its operation manual, to which this warranty card is an annex,
- **4.** defects resulting from assembly or repair works performed by persons who do not hold the Guarantor's authorisation,
- 5. the subject of sale installed in the facility covered by the warranty, in respect of which service inspections have not been performed by the Guarantor or entity with Service Authorisation Certificate,
- **6.** parts of the subject of sale subject to natural partial/total wear in accordance with their properties or their intended use (e.g. due to slide components, batteries etc.),
- 7. mechanical damage to the subject of sale and defects caused thereby,
- 8. defects resulting from defectiveness of the structure, in which the subject of sale has been installed,
- 9. incorrect selection of the subject of sale to the conditions existing at the installation site,
- **10.** defective operation of the installed equipment not originating from the Guarantor having a negative impact on the performance of the subject of sale. Upon identification of such a facts, the DECLARATION OF PERFORMANCE ISSUED FOR THE SUBJECT OF SALE AND THE WARRANTY GRANTED shall immediately become null and void.
- **11.** defects resulting from the action of external factors, in particular: fire, abnormal weather conditions and fortuitous events,
- 12. damage caused as a result of improper or inconsistent use of the subject of sale, including its excessive operation,
- 13. the use of spare parts of other manufacturers other than the original parts of the Guarantor,
- 14. the subject of sale, for which this Warranty Card has been changed or replaced in any way,
- 15. the subject of sale, of which the nameplate has been removed, damaged or modified,
- 16. a security seal on the subject of sale has been broken or damaged.

Date and signature of the authorised Representative of the company with the Installation Authorisation Certificate the Guarantor
Authorization no. and date of issue

