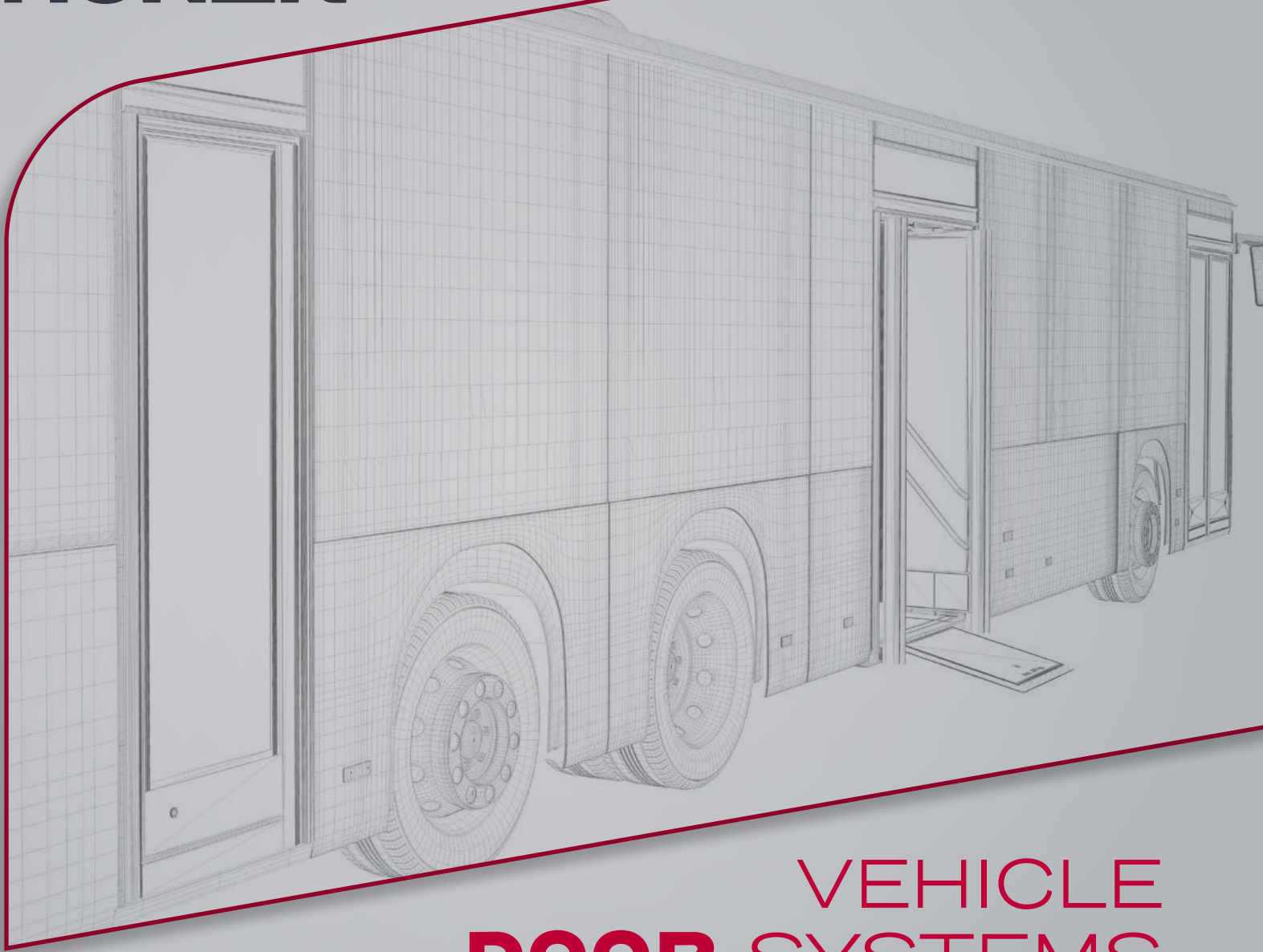


HÜNER



VEHICLE
DOOR SYSTEMS

Esmak Makine is an international trading company focused on the automotive industry based in Turkey. One of its main field of operation is the global procurement of raw material, components and consumables for the automotive production process, spare parts for the after sales service, equipment for service workshop and engineering.

We are offering a whole range components for the bus industry and commercial vehicle assembly as interior trim, exterior trim, mechanical, electrical components. Esmak Makine's procurement mission is to achieve the lowest overall cost for the goods, ensure that they meet the required quantity of goods at worldwide locations in time.

In addition to its supply capability, another field of activity is to respond to the demands by producing door and manual ramp products used in the bus and commercial vehicle industry with its production capability.

While meeting the qualifications required by OEM customers by offering diversity in door production, it can offer solutions to different customer demands in the most appropriate conditions thanks to its expert team. In manual ramp products, it can offer the most suitable product for the requested features and designs.

Fully experienced in managing international sales operations from market research to pricing and from advertising to logistics. Esmak makine is a partner that will satisfy all of its customers and supplier network. Esmak makine is also engaged in domestic and international trading of various products such as machinery, metals, minerals and chemicals, as well as providing services in logistics and construction.

CONTENT

4 — **Double Doors**
Inward Open

6 — **Double Doors**
Outward Open

8 — **Single Door**
Inward Open

10 — **Single Door**
Outward Open

12 — **Electrical Single Door**
Outward Open

14 — **Double Doors**
Fold Open

16 — **Manual**
Ramp



DESCRIPTION

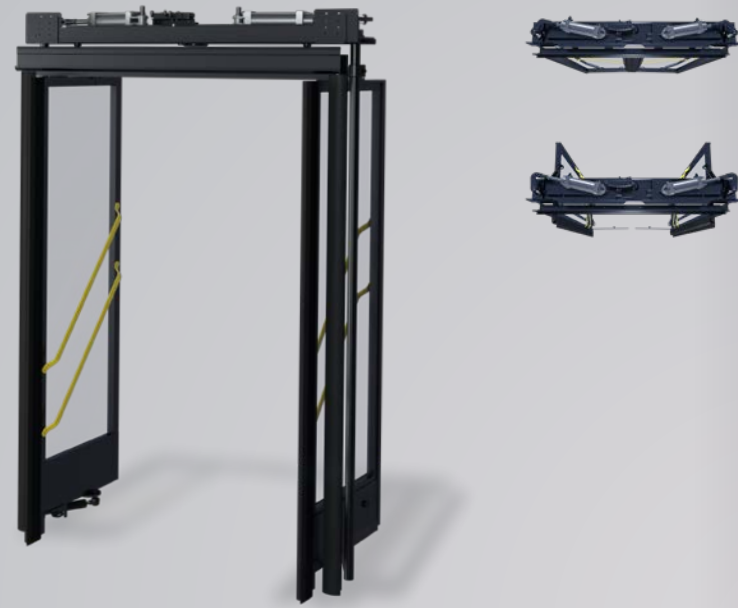
- Inward-opening double door with pneumatic system.
- Braking system.
- Emergency safety system - Internal and external.
- Emergency override at vehicle speed >3 km/h - 20 Km/h.
- Motion sensitivity.
- Standard lock.
- Sealing components - Rubber.
- Acoustic insulation.
- Single wing - Double wing operation.
- Single glass.
- Electrostatic paint.
- Door wing - Metal - Aluminum alloy.
- Joints - Cast steel - Aluminum - Metal - plastic.

TECHNICAL DATA

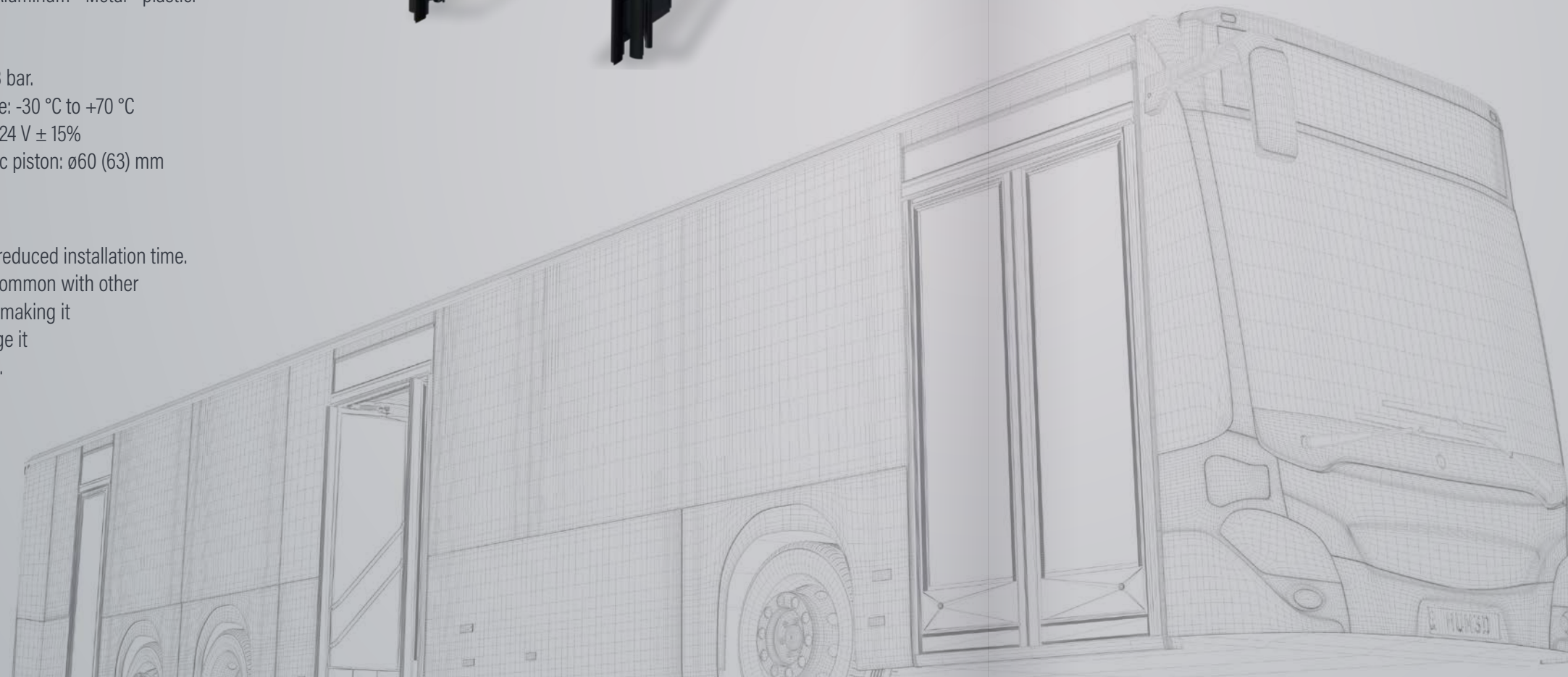
- Air pressure 0.4 - 0.8 bar.
- Working temperature: -30 °C to +70 °C
- Nominal voltage: 12/24 V ± 15%
- Horizontal pneumatic piston: ø60 (63) mm

SPECIALITIES

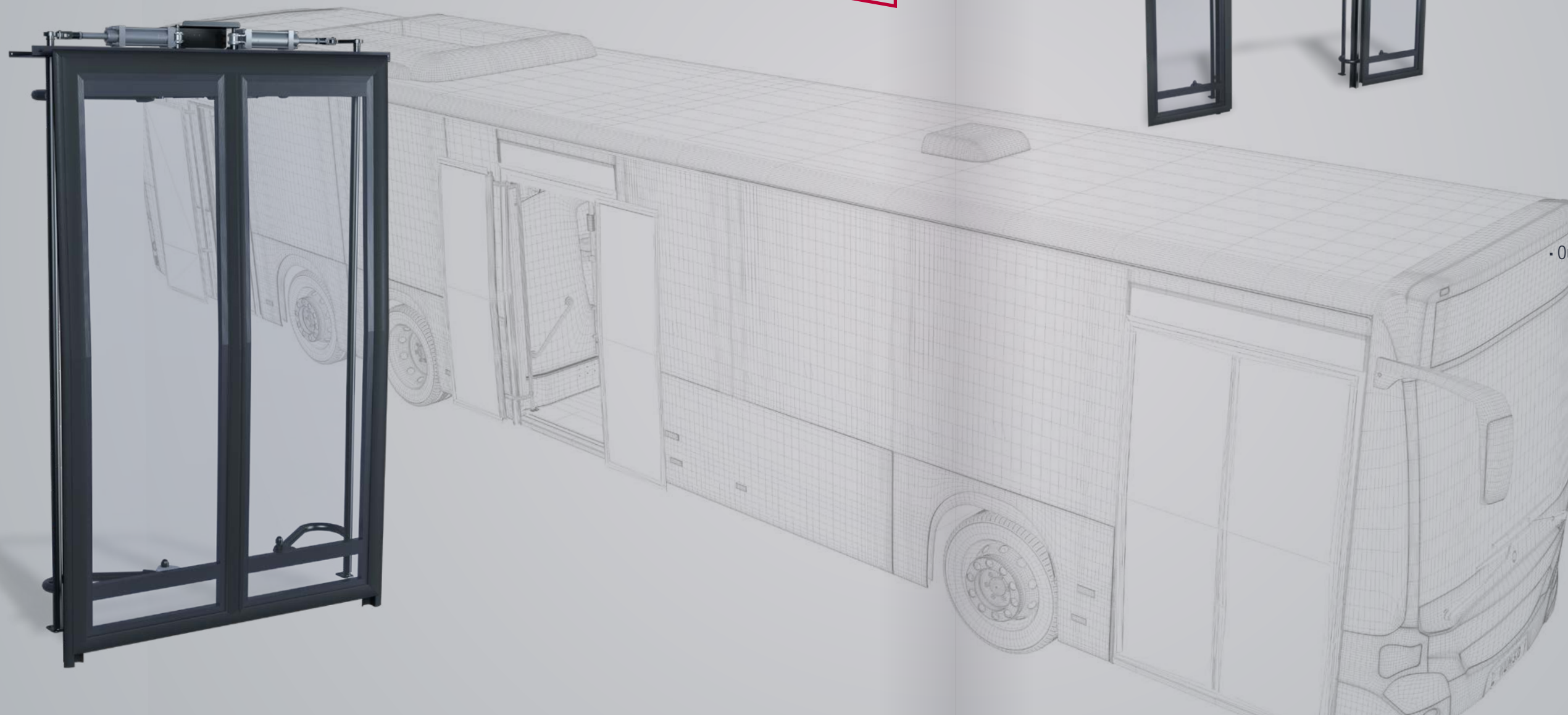
- Easy assembly and reduced installation time.
- Fixing anchorages common with other sliding door systems, making it possible to interchange it with other equipment.



Double **Doors Inward** Open



Double **Doors Outward** Open



TECHNICAL DATA

- Air pressure 0.4 - 0.8 bar.
- Working temperature: -30 °C to +70 °C
- Nominal voltage: 12/24 V \pm 20%
- Horizontal pneumatic piston: \varnothing 60 (63) mm

DESCRIPTION

- Outward-opening double door with pneumatic system.
- Braking system.
- Emergency safety system - Internal and external.
- Motion sensitivity.
- Standard lock.
- Sealing components - Rubber.
- Acoustic insulation.
- Single glass.
- Electrostatic paint.
- Door wing - Metal - Aluminum alloy.
- Joints - Cast steel - Aluminum - Metal - plastic.

SPECIALITIES

- Suitable for passengers exit.
- Free door emergency by pneumatic push buttons.

TECHNICAL DATA

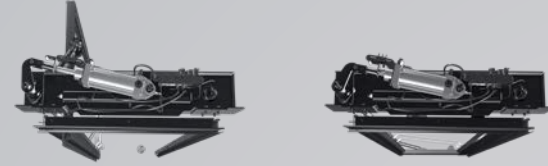
- Air pressure 0.4 - 0.8 bar.
- Working temperature: -30 °C to +70 °C
- Nominal voltage: 12/24 V \pm 15%
- Horizontal pneumatic piston: \varnothing 60 (63) mm

DESCRIPTION

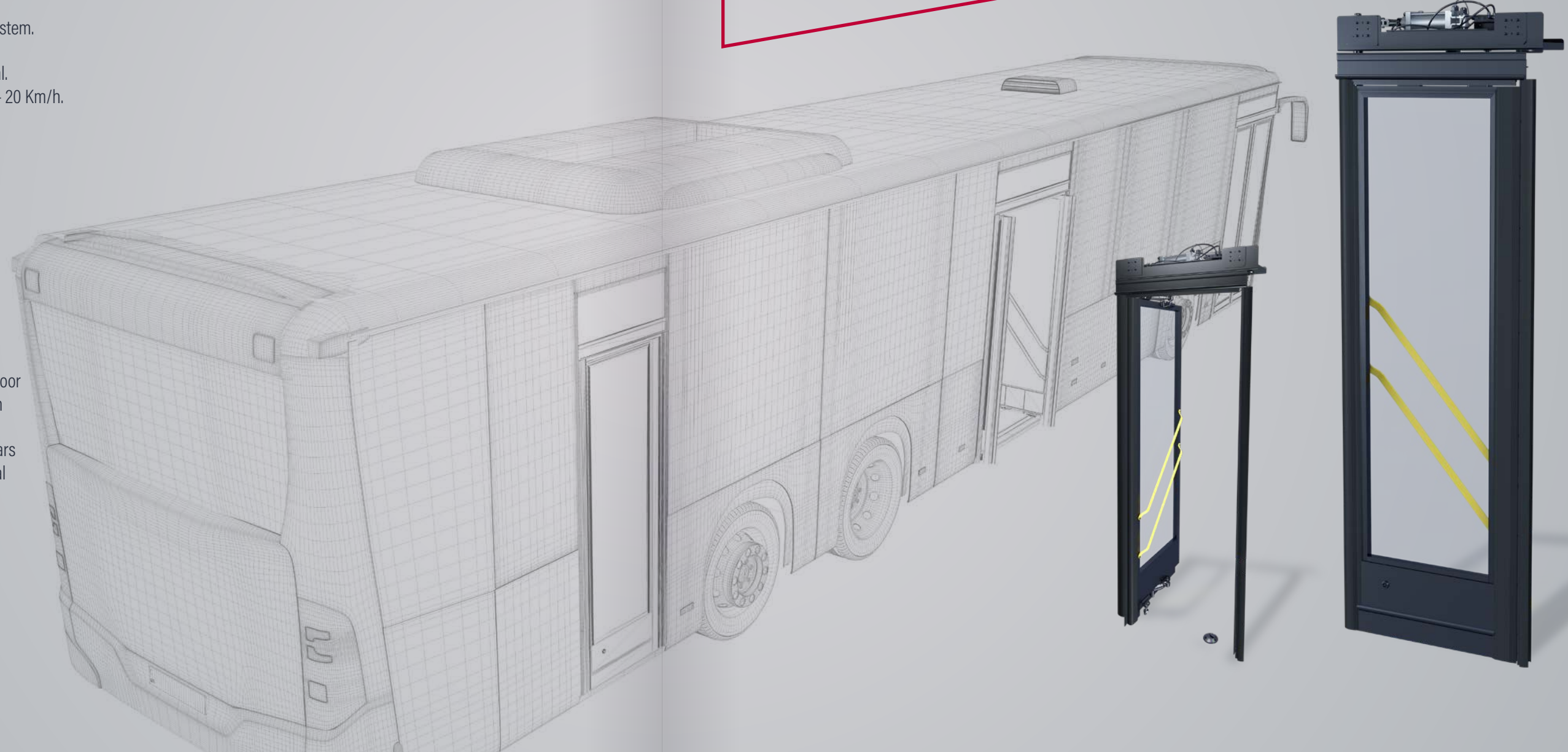
- Inward-opening double door with pneumatic system.
- Braking system.
- Emergency safety system - Internal and external.
- Emergency override at vehicle speed > 3 km/h - 20 Km/h.
- Motion sensitivity.
- Standard lock.
- Sealing components - Rubber.
- Acoustic insulation.
- Single wing - Double wing operation.
- Single glass.
- Electrostatic paint.
- Door wing - Metal - Aluminum alloy.
- Joints - Cast steel - Aluminum - Metal - plastic.

SPECIALITIES

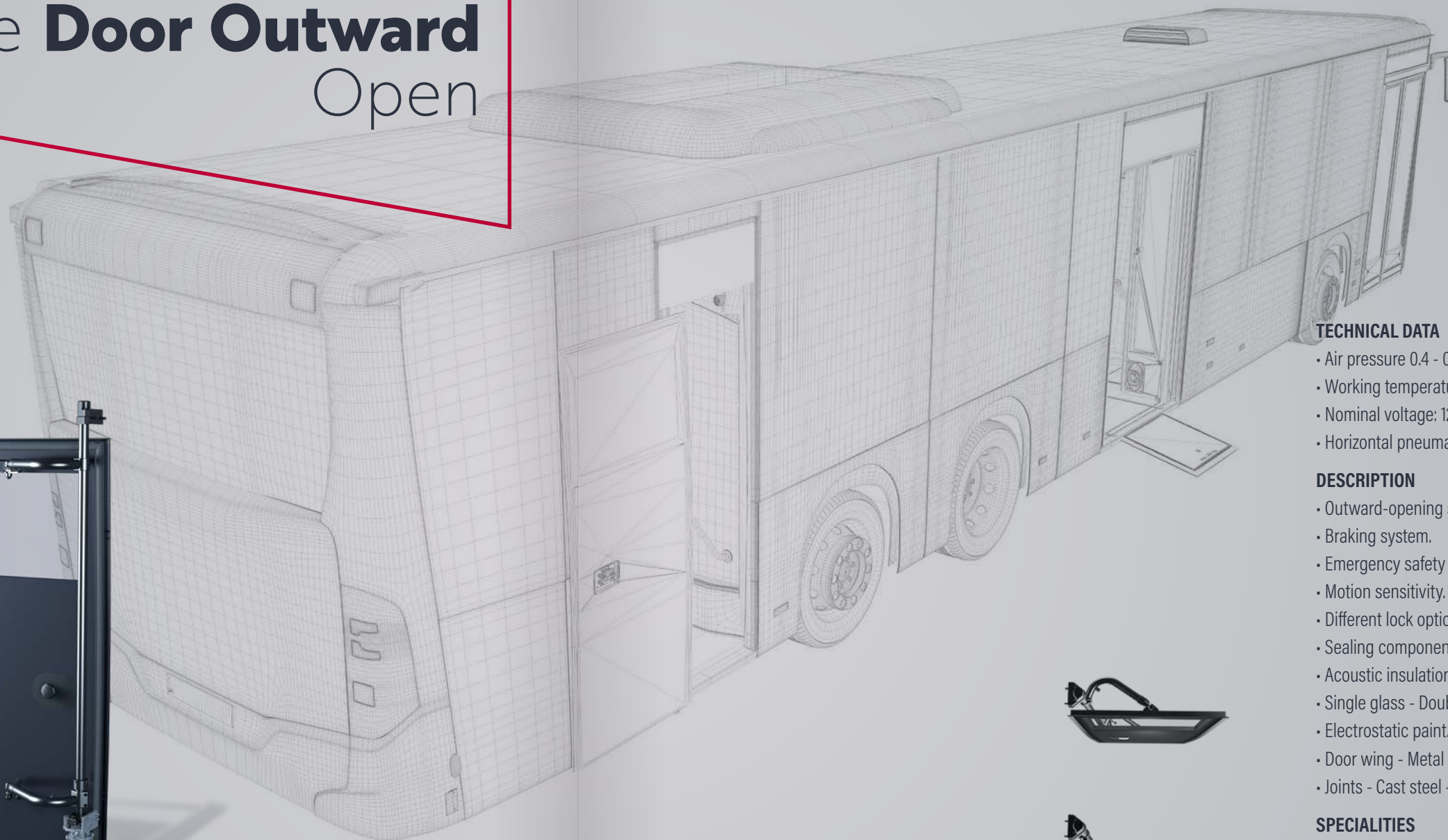
- • Easy assembly and reduced installation time.
- Fixing anchorages common with other sliding door systems, making it possible to interchange it with other equipment.
- The mechanical components, such as leaves, bars and supports, are common between the electrical and pneumatic versions.



Single Door Inward Open



Single **Door Outward** Open



TECHNICAL DATA

- Air pressure 0.4 - 0.8 bar.
- Working temperature: -30 °C to +70 °C
- Nominal voltage: 12/24 V \pm 15%
- Horizontal pneumatic piston: \varnothing 100 mm

DESCRIPTION

- Outward-opening single door with pneumatic system.
- Braking system.
- Emergency safety system - Internal and external.
- Motion sensitivity.
- Different lock options.
- Sealing components - Rubber.
- Acoustic insulation.
- Single glass - Double glass.
- Electrostatic paint.
- Door wing - Metal - Aluminum alloy.
- Joints - Cast steel - Aluminum - Metal - plastic.

SPECIALITIES

- The emergency system allows door opening within eight minutes.
- Easy maintenance & fixing.
- Remote control.



SPECIALITIES

- Easy Installation
- Workable without the air compressor in the vehicle.
- Easy Maintenance
- Sealing rubbers for dust & water.
- Opening and Closing by Remote Control(optional)

DESCRIPTION

- Outward opening with electric driving mechanism
- Electronic control unit
- The emergency manuel control lever located inside and outside enables unlocking and opening of the door.
- Electrostatic paint
- Aluminum Door Wing

TECHNICAL DATA

- Working temperature: -30 °C to +70 °C
- Nominal voltage: 12 V \pm 20% (24V Optional)
- Complies with regulation UN R107.
- For Class II, III



Electrical Single Door Outward Open



Double Doors Fold Inward



DESCRIPTION

- Inward-infolding door with pneumatic system.
- Braking system.
- Emergency safety system - Internal and external.
- Sealing components - Rubber.
- Single wing - Double wing operation.
- Single glass.
- Electrostatic paint.
- Joints - Cast steel - Aluminum - Metal - plastic.

SPECIALITIES

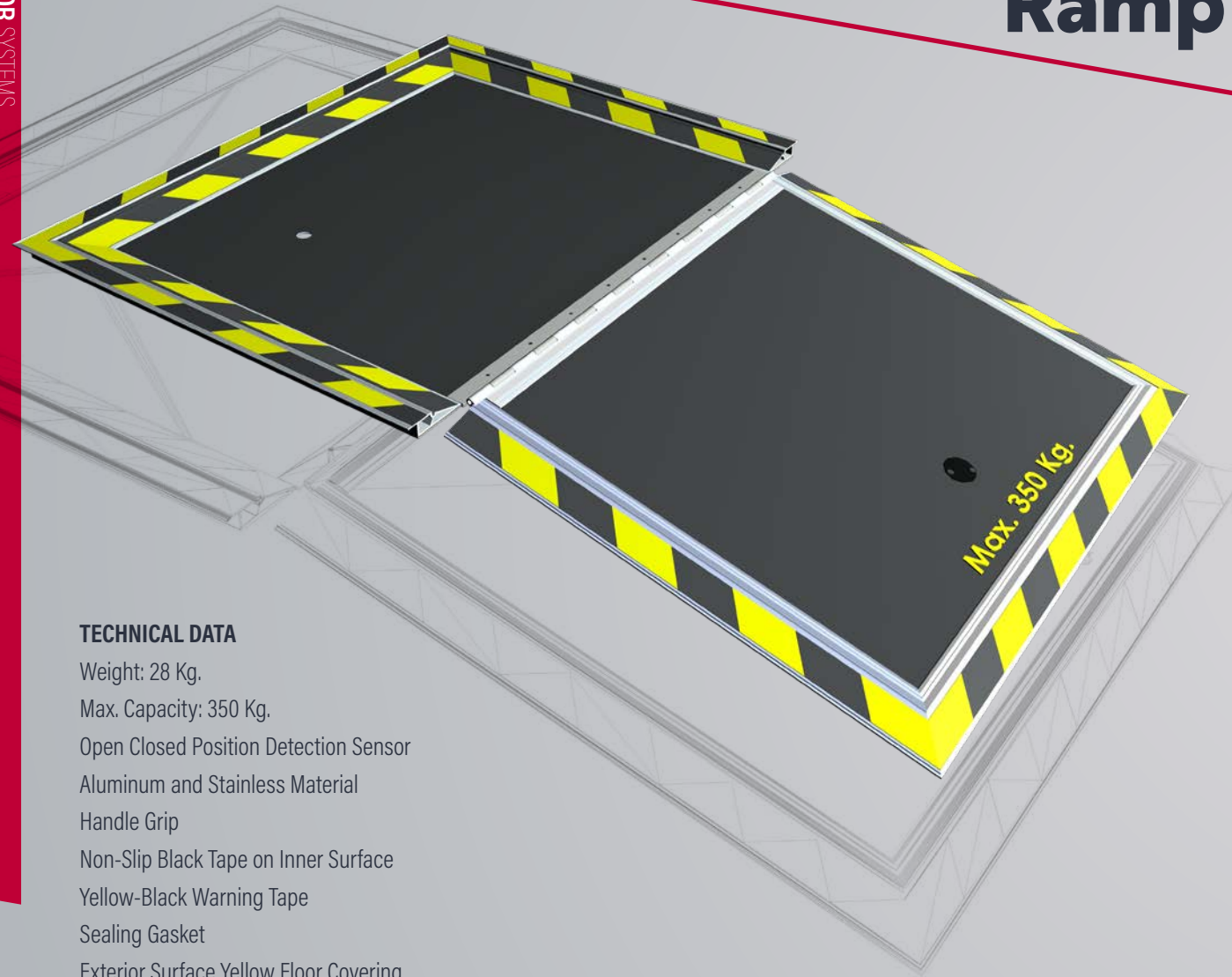
- Motion sensitivity.
- Acoustic insulation.
- Standard lock.

TECHNICAL DATA

- Air pressure 0.4 - 0.8 bar.
- Working temperature: -30 °C to +70 °C
- Nominal voltage: 12/24 V \pm 15%
- Horizontal pneumatic piston: \varnothing 60 (63) mm



Manual Ramp



TECHNICAL DATA

Weight: 28 Kg.
 Max. Capacity: 350 Kg.
 Open Closed Position Detection Sensor
 Aluminum and Stainless Material
 Handle Grip
 Non-Slip Black Tape on Inner Surface
 Yellow-Black Warning Tape
 Sealing Gasket
 Exterior Surface Yellow Floor Covering
 (Color is applied according to request)
 Complies with regulation UN 107 / Ec.



Notes



Head Office

ESMAK MAKİNE Sanayi Dış Tic. Ltd. Şti

D 100 Karayolu Üzeri.
Topçular Mah 627. Sok. No: 7
Çilimli / Düzce / TÜRKİYE

+90 380 537 54 95/96
+90 380 537 55 00/10
+90 380 537 54 99

esmak@esmakmakine.com.tr
www.esmakmakine.com.tr