Sensor Solutions
for Railway
Applications

Telemecanique
Sensors
Simply easy!

> Railway-ready sensors

The line of sensor products that make up the Telemecanique Sensors Railway Industry offer specifically address the necessary standards, constraints, and detection goals of railroad systems all over the world.

Increased safety according to the industry's EN455 standard

The Telemecanique Sensors products for the railway industry meet the most stringent standards in regard to reaction and resistance to fire:

- Compliant with the new fire behavior of the materials and components regulations
- Compliant with the HL2/R26 severity level of the EN 45545 standard
- Integrated with cables that are certified EN 50306 and EN 50264

EN45545 compliant

Unparalleled, robust sensor functionality
Consistent with the reputation built by Telemecanique Sensors, the products they offer for the railway industry are benchmarks in regard to their performance, reliability, and efficiency.

This line of railway industry sensors will:
- Resist shocks and vibrations according to the EN 61373 standard
- Resist a wide temperature range from -13°F to 158°F (-25°C to 70°C)
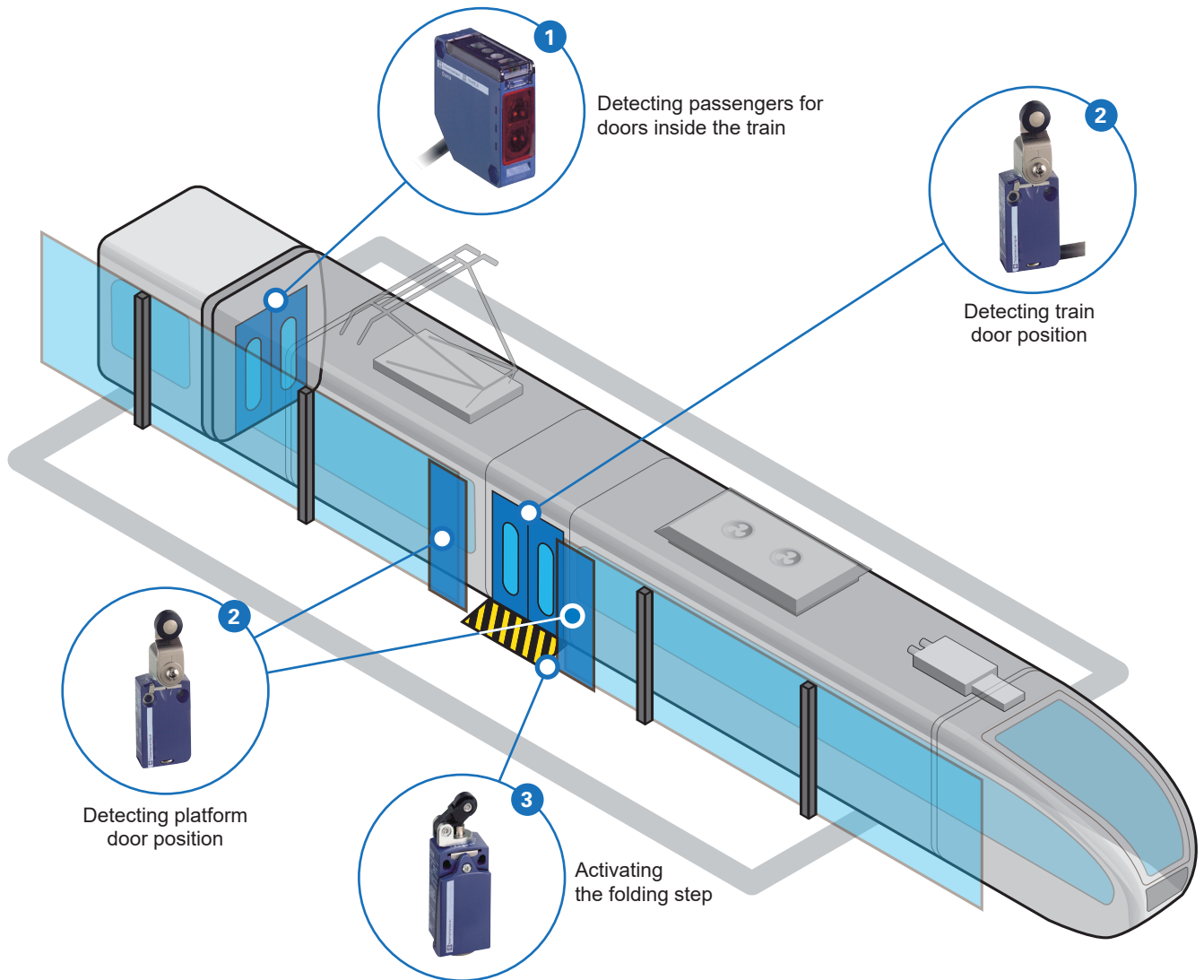- Endure up to several million mechanical and electrical operations

Compact and easy-to-install solutions
Space is at a premium in the railway industry, both on the trains themselves and in the stations that service them. The Telemecanique Sensors product offering reflects our innovative focus not only in regard to making our products compact and lighter to fit the majority of railway application designs, but in regard to making our sensors adaptable by offering a wide range of connectors.

Take them out of the box. Quickly install them. Simply easy!

> Automatic doors

1 Detecting passengers for doors inside the train

2 Detecting train door position

2 Detecting platform door position

3 Activating the folding step

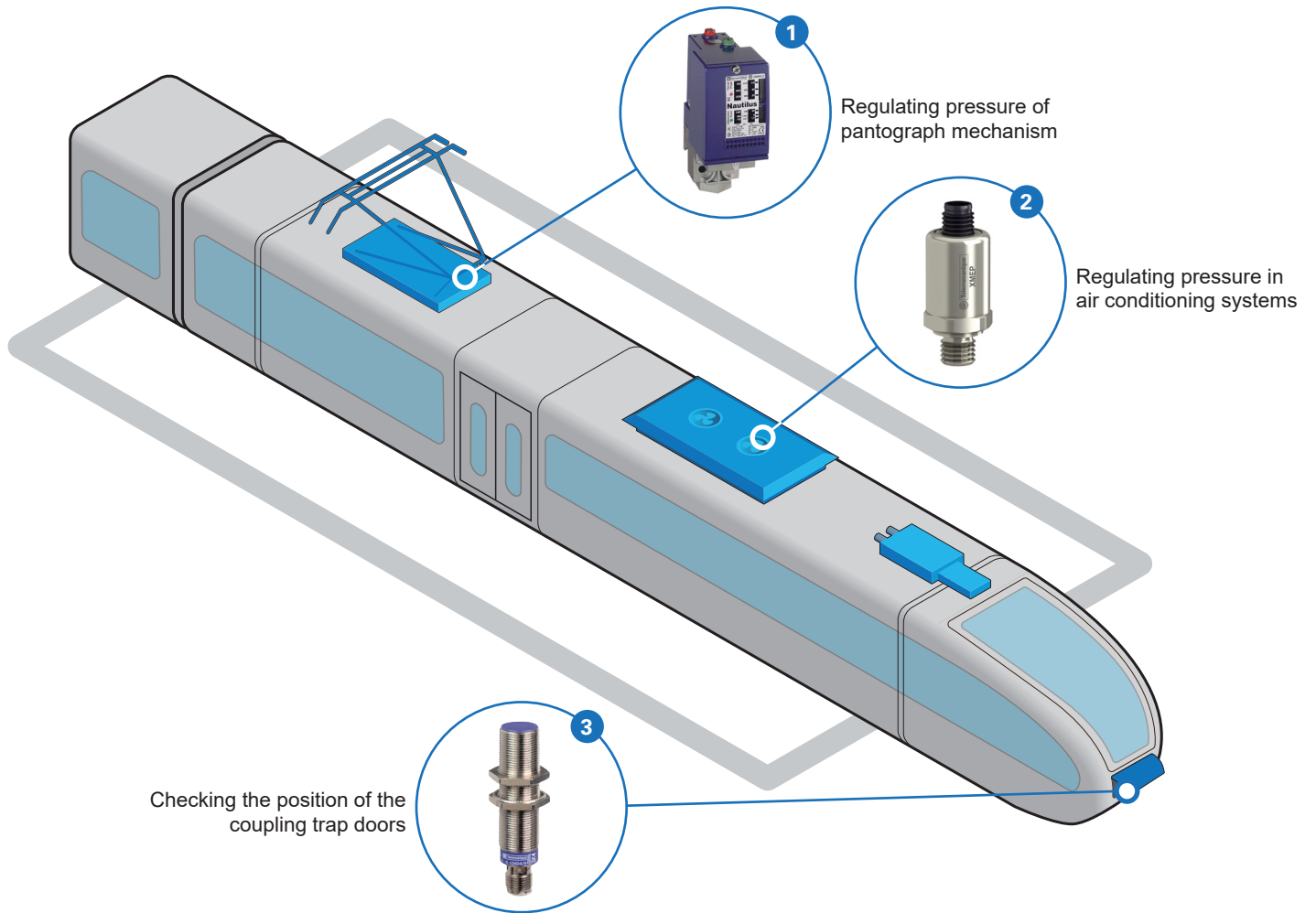| 1	XUK9 Photoelectric Sensor	Compact photoelectric sensor
2	XCMD or XCMN Limit Switch	Miniature limit switch
3	XCKD Limit Switch	Universal limit switch with roller lever plunger

> Pantograph, air conditioning and coupling systems

Regulating pressure of pantograph mechanism

Regulating pressure in air conditioning systems

Checking the position of the coupling trap doors

1	XMLC Pressure Sensor	Electromechanical pressure sensor with pre-adjusted pressure threshold
2	XMEP Pressure Sensor	Compact electronic pressure sensor for HVAC
3	XS618 Inductive Sensor	Inductive proximity sensor

> Air supply and braking system

1 Managing compressed air in the air supply systems

2 Controlling the railroad turnout system

3 Checking pressure in the braking systems

4 Detecting platform presence
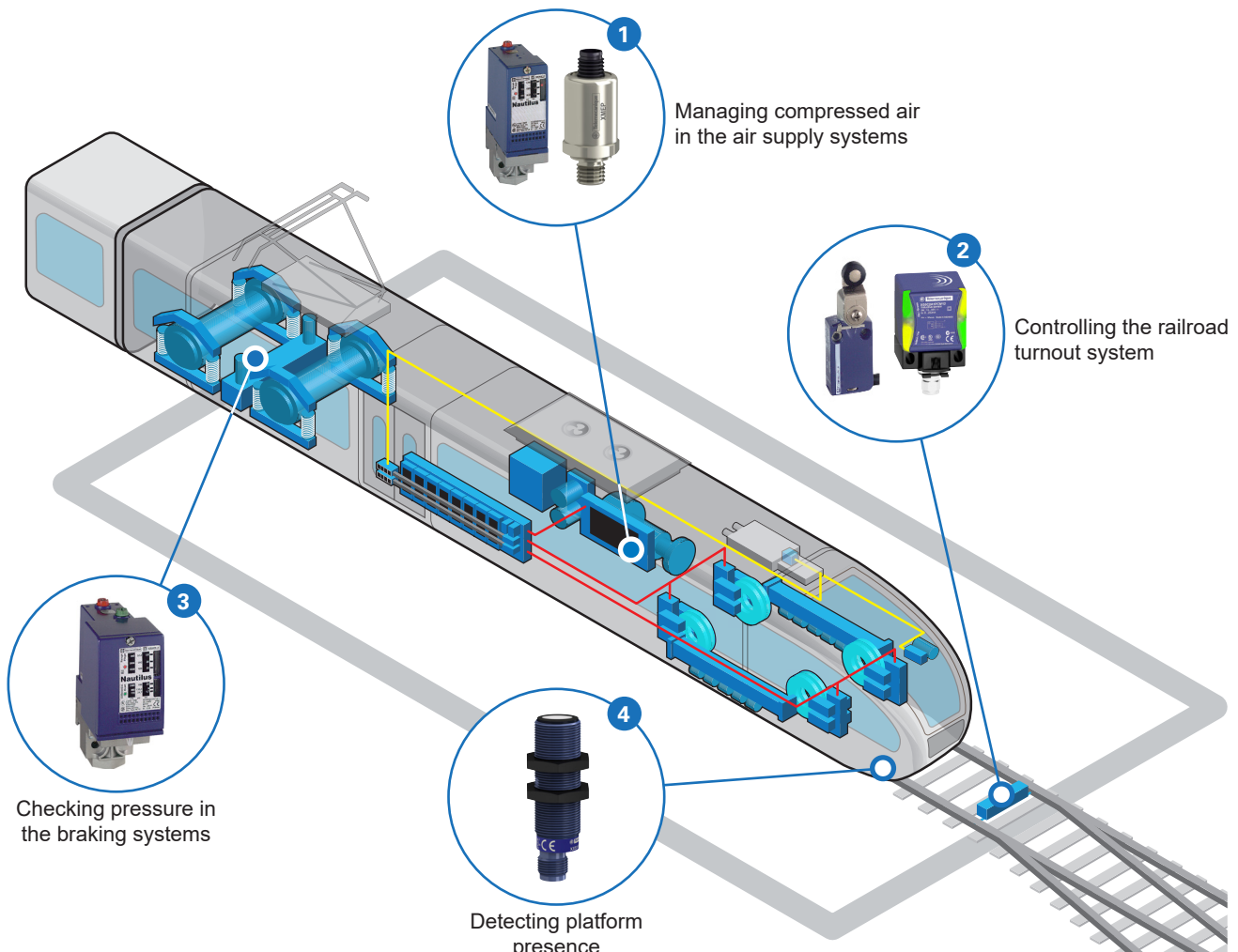
1	XMLA/B or XMEP Pressure Sensor	Electromechanical or electronic pressure sensor
2	XCMD Limit Switch or XS Inductive	Limit switch or inductive proximity sensor
3	XMLA/B or C Pressure Sensor	Electromechanical pressure sensor with pre-adjusted pressure threshold
4	XX Ultrasonic Sensor	Software configurable and resistant to electromagnetic interference

> Choose the product best-suited for your application

The following tables present a small part of our offer for railway applications.
To learn more, visit our website www.tesensors.com or contact your local sales agency for adapted products.

Limit switches

All contacts are positive opening contacts according to EN60947-5-1 and NFPA 79

	Contacts composition	Roller plunger	Roller lever	Vertical or horizontal action roller lever plunger
Miniature metal body with 1m cable halogen free	NO+NC snap action	XCMD2102T1	XCMD2115T1	XCMD2128T1
Miniature metal body with 1m cable halogen free	NO+NO+NC+NC snap contacts	XCMD4102T1	XCMD4115T1	XCMD4128T1
Miniature plastic body with 1m cable halogen free	NO+NC snap action	XCMN2102T1	XCMN2115T1	XCMN2121T1
Classic metal body, EN50047 format, ISO M16x1.5 output	NO+NC snap action	XCKD2102P16	XCKD211816	XCKD2121P16
Pg11 x 3 entries, metal body	NO+NC snap action	XCKM102	XCKM115	XCKM121

Pressure sensors

Electromechanical pressure switches, 2 thresholds and 1 contact 145psi (10 bar), (with special eyelet terminal lug and dedicated factory setting on request)	XMLB010A2S11
Electromechanical pressure switches, 2 thresholds and 2 separate contacts 145psi (10 bar), (with special eyelet terminal lug and dedicated factory setting on request)	XMLC010B2S11
Electronic pressure transmitters 10 … 60 bar fluid entry 7/16 - 20 UNF	XMEP060BD71F

Inductive sensors

Cylindrical M18 inductive proximity sensor, 24 ... 240 VAC/DC

XS618B1MBL20

Cubic inductive proximity sensor with M12 connector, 12 ... 48 VDC

XS8C2A1PCM12

Photoelectric sensors

8m Reflex polarized photoelectric sensor, 24 ... 240 VAC/DC, with a reflector

XUK9ARCNT   XUZC50

Ultrasonic sensors

Ø18 Ultrasonic sensor, 1m sensing distance, Analog 4...20 mA output

XXS18P1AM12

> Telemecanique Sensors

Simply easy!

Simplicity

+

Expertise

+

Proximity

Telemecanique Sensors is a world-class global brand offering a comprehensive line of products with over 25,000 types of sensors, including limit switches, pressure sensors, photoelectric sensors and proximity sensors. In addition, we provide state-of-the-art RFID systems that are compatible with many PLC manufacturers.

Telemecanique Sensors has all the right agency approvals, such as UL, IEC, NEMA, CE, CCC, UL, CSA, and EAC.

Telemecanique Sensors is focused on three core values — Simplicity, Proximity, and Expertise. We have become experts in factory automation sensors as well as specialists in demanding applications, making our customers' lives ''Simply easy!''

Discover our complete offer: www.tesensors.com or contact your local sales agency

Due to the constant evolution of standards and equipment, the specifications indicated in the text and images of this document can only be guaranteed after confirmation by our departments. Print: Schneider Electric Photos: Schneider Electric

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