

Control and signaling product selection guide

Explore control and signaling products per segment.

[discover products](#)

Life Is On

Schneider
Electric

Table of contents

Select a segment or product from the options below to learn about push buttons and relays.

Food & Beverage

3

Oil & Gas

4

Packaging

5

Water &
Wastewater

6

Control panel
builder

7

Search by
product

8



Food & Beverage



Industry challenge	Product options	Features and benefits
Refrigerated areas and outdoor environments prone to moisture and / or extreme temperatures	<ul style="list-style-type: none"> • 30mm pushbuttons – 9001SK • 22mm pushbuttons – XB5 • Control stations – XAL 	<ul style="list-style-type: none"> • Operating temperature: -40°F to 15 • Water-resistant standards <ul style="list-style-type: none"> – XB5: IP 66, IP 67, IP 69, IP 69 Type 4x – 9001SK: IP 66, UL Type 4x
Dust	<ul style="list-style-type: none"> • 30mm pushbuttons – 9001SK • 22mm pushbuttons – XB5 • Control stations – XAL 	<ul style="list-style-type: none"> • Dust-resistant standards <ul style="list-style-type: none"> – XB5: IP 66, IP 67, IP 69, IP 69K Type 4x – 9001SK: IP 66, UL Type 4x
Equipment requiring frequent cleaning	<ul style="list-style-type: none"> • 22mm pushbuttons – XB5F 	<ul style="list-style-type: none"> • Flush-mounted design
Hazardous environment such as flammable gases or dust	<ul style="list-style-type: none"> • 22mm pushbuttons – Haz Loc XB4-GEX • 30mm pushbuttons – 9001SK (with reed contacts) • Legacy relays – 750H • Zelio relays – SS solid state relays 	<ul style="list-style-type: none"> • Dedicated hazardous location offer <ul style="list-style-type: none"> – Adheres to IEC, UL , and ATEX standards • Approved for Class 1, Division 2 environments • Arc-less switching minimizes damage from a major arc fault
Operator efficiency	<ul style="list-style-type: none"> • 22mm pushbuttons – XB5 • 30mm pushbuttons – 9001SK 	<ul style="list-style-type: none"> • Large, flat pushbutton head designed to actuate while operator wears gloves
Exposure to corrosive chemicals from primary materials (milk, beer, etc.) or cleaning products	<ul style="list-style-type: none"> • 22mm pushbuttons – XB5 • 30mm pushbuttons – 9001SK 	<ul style="list-style-type: none"> • Plastic heads resist harsh chemicals
Security, safety, and accessibility	<ul style="list-style-type: none"> • 22mm biometric switch – XB5S 	<ul style="list-style-type: none"> • Limit access when necessary • Improve security and safety

Oil & Gas



Industry challenge	Product options	Features and benefits
Outdoor environments with rain, salt, and extreme temperatures	<ul style="list-style-type: none"> 30mm pushbuttons – 9001K, 9001SK 22mm pushbuttons – XB4, XB5 Control stations – XAP, XAL 	<ul style="list-style-type: none"> Operating temperature: -40°F to 158°F Water- and dust-resistant standards <ul style="list-style-type: none"> – XB4/XB5: IP66, 67, 69, 69K, UL Type 4x – 9001K: IP66, UL Type 4x – 9001SK: IP66, UL Type 4x
Downtime due to installation and maintenance	<ul style="list-style-type: none"> 22mm pushbuttons – XB4, XB5 30mm pushbuttons – 9001K Zelio relays – RXM, RPM, RUM Legacy relays – 792, 781, 782, 783, 784, 750 	<ul style="list-style-type: none"> Patented shake-proof terminal screw ensures connections are unaffected by vibrations Single-screw contact block mounting for easy installation Quick and easy replacement of plug-in electromechanical relays without disturbing wiring LED, test button, and locking test buttons
Operator efficiency	<ul style="list-style-type: none"> 22mm pushbuttons – XB4, XB5 30mm pushbuttons – 9001K 	<ul style="list-style-type: none"> Large, flat pushbutton head designed to actuate while operator wears gloves
Reduced visibility in direct sunlight	<ul style="list-style-type: none"> 22mm pushbuttons – XB4, XB5 30mm pushbuttons – 9001K 	<ul style="list-style-type: none"> High brightness Full-surface illumination
Hazardous environmental factors, such as flammable substances and waste	<ul style="list-style-type: none"> 22mm pushbuttons – Hazardous location XB4-GEX 30mm pushbuttons – 9001SK (with reed contacts) Legacy relays – 750H Zelio relays – SS solid state relays 	<ul style="list-style-type: none"> Dedicated hazardous location offer <ul style="list-style-type: none"> – Adheres to IEC, UL, and ATEX standards Approved for Class 1, Division 2 environments Arcless switching minimizes damage from a major arc fault



Packaging



Industry challenge	Product options	Features and benefits
High-pressure washing and environmental factors such as dust	<ul style="list-style-type: none"> 22mm pushbuttons – XB4, XB5 30mm pushbuttons – 9001SK 	<ul style="list-style-type: none"> Water- and dust-resistant standards <ul style="list-style-type: none"> – XB4/XB5: IP66, 67, 69, 69K, UL Type 4x – 9001SK: IP66, UL Type 4x
Downtime due to installation and maintenance	<ul style="list-style-type: none"> 22mm pushbuttons – XB4, XB5 30mm pushbuttons – 9001K Zelio relays – RXM, RPM, RUM Legacy relays – 792, 781, 782, 783, 784, 750 	<ul style="list-style-type: none"> Patented shake-proof terminal screw ensures connections are unaffected by vibrations Single-screw contact block mounting for easy installation Quick and easy replacement of plug-in electromechanical relays without disturbing wiring LED, test button, and locking test buttons
Quickly assess process issues	<ul style="list-style-type: none"> Tower lights – XVU, XVC Illuminated e-stop – XB5AS (Illuminated e-stop control box); XALK (Illuminated E-Stop Control Box) 	<ul style="list-style-type: none"> High visibility of machine status and alarms
Operator efficiency	<ul style="list-style-type: none"> 22mm pushbuttons – XB4, XB5 30mm pushbuttons – 9001K 	<ul style="list-style-type: none"> Large, flat pushbutton head designed to actuate while operator wears gloves

Water & Wastewater



Industry challenge	Product options	Features and benefits
Outdoor environments with rain, salt, and extreme temperatures	<ul style="list-style-type: none"> • 30mm pushbuttons – 9001K, 9001SK • 22mm pushbuttons – XB4, XB5 • Control stations – XAP, XAL • Control stations – 9001KYSS, 9001SKY 	<ul style="list-style-type: none"> • Operating temperature: -40°F to 158°F • Water- and dust-resistant standards <ul style="list-style-type: none"> – XB4/XB5: IP66, 67, 69, 69K, UL Type 4x – 9001K: IP66, UL Type 4x – 9001SK: IP66, UL Type 4x
Corrosive and toxic environments	<ul style="list-style-type: none"> • 30mm pushbuttons – 9001SK • 22mm pushbuttons – XB4, XB5 • Control stations – XAP, XAL 	<ul style="list-style-type: none"> • Water-and corrosion-resistant standards <ul style="list-style-type: none"> – XB4/XB5: IP66, 67, 69, 69K, UL Type 4x – 9001SK: IP66, UL Type 4x
Investment and maintenance costs	<ul style="list-style-type: none"> • 22mm pushbuttons – XB4, XB5 • 30mm pushbuttons – 9001K • Zelio relays – RXM, RPM, RUM • Legacy relays – 792, 781, 782, 783, 784, 750 	<ul style="list-style-type: none"> • Patented shake-proof terminal screw ensures connections are unaffected by vibrations • Single-screw contact block mounting for easy installation • Quick and easy replacement of plug-in electromechanical relays without disturbing wiring • LED, test button, and locking test buttons
Equipment reliability and longevity	<ul style="list-style-type: none"> • 30mm pushbuttons – 9001K, 9001SK • 22mm pushbuttons – XB4, XB5 	<ul style="list-style-type: none"> • 22mm rated for a minimum of 10 million operations

Control panel builder



Industry challenge	Product options	Features and benefits
Dust	<ul style="list-style-type: none"> 22mm pushbuttons – XB4, XB5 30mm pushbuttons – 9001K 	<ul style="list-style-type: none"> Dust-resistant standards <ul style="list-style-type: none"> – XB5: IP 66, IP 67, IP 69, IP 69K, UL Type 4x – 9001SK: IP 66, UL Type 4x High brightness Full-surface illumination
Downtime due to installation and maintenance Cost of installation and maintenance	<ul style="list-style-type: none"> 22mm pushbuttons – XB4, XB5 22mm pushbuttons – XB7 Customizable legend panels Zelio relays – RXM, RPM, RUM Legacy relays – 792, 781, 782, 783, 784, 750 	<ul style="list-style-type: none"> Monolithic pilot lights and spring clamp terminal blocks are easier to install and wire than standard products Minimizes time required for door layout Quick and easy replacement of plug-in electromechanical relays without disturbing wiring LED, test button, and locking test buttons
Equipment reliability and longevity	<ul style="list-style-type: none"> 22mm pushbuttons – XB4, XB5 30mm pushbuttons – 9001K Zelio relays – SS solid state relays 	<ul style="list-style-type: none"> 22mm rated for a minimum of 10 million operations No moving parts increases product lifecycle
Product design and differentiation	<ul style="list-style-type: none"> 22mm pushbuttons – XB4F, XB5F Customizable 22mm pushbuttons Customizable legend panels 	<ul style="list-style-type: none"> Design provides a clean appearance Customize pushbuttons, pilot lights, and legend panels with custom graphics, logos, colors, etc.

Search by product

Pushbutton

A pushbutton is a simple switch mechanism that controls an aspect of a machine or a process.

The term “pushbutton” often refers to two different product applications:

1. A button assembly located on a panel
2. A group of components or mechanical man machine interface, including:
 - Indicating lights
 - Selector switches
 - Potentiometers
 - Pushbuttons

Pushbuttons are the most common type of control devices found in industrial and some commercial facilities. Almost all industrial machines contain pushbuttons, even if the operations run automatically.

To meet disinfection and hands-free demands, pushbuttons are available in easy-clean, touchless, foot- and elbow-actuated, and other hygienic variations.



Selector switch



Emergency stop



Key selector switch

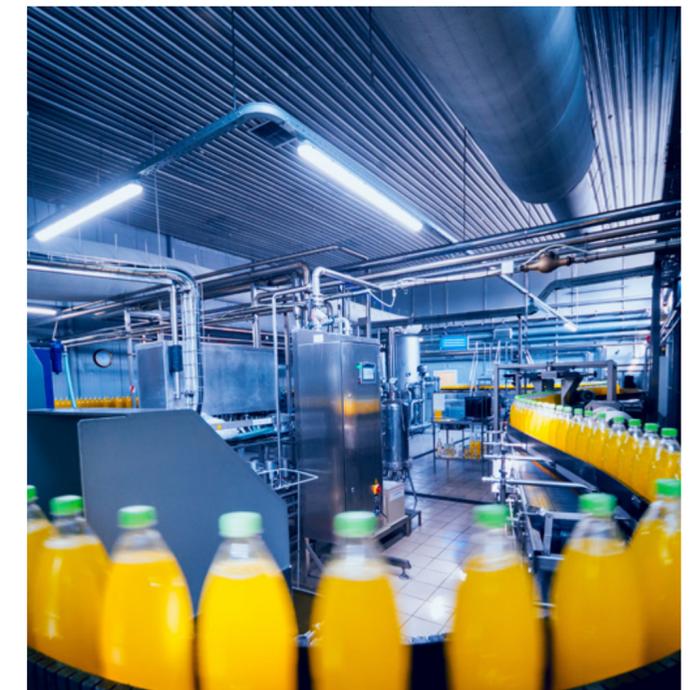


Pushbutton

Pushbutton applications

Pushbuttons are used to start, stop, or change a machine status. They are also used in applications where workers need to track the machine stage.

- Assembly lines
- Stand-alone machines such as industrial air compressors, drills, and saws
- Car washes
- Airline passenger boarding bridges



Product type Pushbuttons, selector switches, and pilot lights

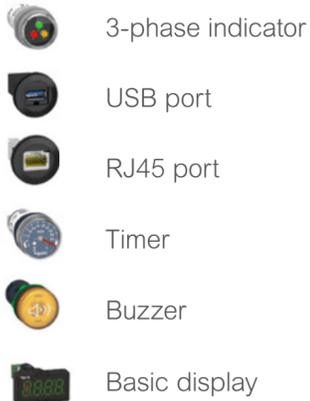


Component name and description	XVL 8 and 12 mm, pushbutton	XB6 16 mm, pushbutton	XB4 22 mm, metal pushbutton	XB5 22 mm, plastic pushbutton	XB7 22 mm, monolithic pushbutton
--------------------------------	--	--	--	--	---

Typical applications	<ul style="list-style-type: none"> • Small or shallow- depth control panels • Where a large number of signaling units are required on a control panel 	<ul style="list-style-type: none"> • Designed for small machines and control panels 	<ul style="list-style-type: none"> • High-vibration environment • High-temperature applications • Hazardous environments 	<ul style="list-style-type: none"> • Hazardous environments 	<ul style="list-style-type: none"> • Designed for use in the industrial and building sectors
----------------------	---	--	---	--	---

Features and benefits	<ul style="list-style-type: none"> • Long operating life • Low maintenance costs • Highly resistant to shocks, vibrations, and overvoltage • Low power consumption 	<ul style="list-style-type: none"> • Flexible design • Quick and easy installation • Clip-together component system (head, body, contact blocks, and LED) • Available with solder pins or Faston connectors 	<ul style="list-style-type: none"> • Simple installation • Flexible design • Robust build • Sealing effectiveness rated up to IP66, IP67, IP68, IP69, IP69K, and UL Type 4X • High impact resistance up to IK06 rating • Operating temperature ranging from -40 to +158 °F • High electrical performance, contacts, and heads designed to prevent vibration • Long lifecycle: Designed to perform up to 10 million operations r • Variety of contact block options, including spring clamp, Faston, high current rated, etc. 	<ul style="list-style-type: none"> • Competitive price compared to XB4 and XB5, • Fully assembled product for easy stocking and installation
-----------------------	--	---	---	--

Product type	30mm pushbuttons, selector switches, and pilot lights	Biometric switches	Wireless and batteryless pushbuttons	Specialty products
--------------	---	--------------------	--------------------------------------	--------------------



Component name and description	9001K, 9001SK 30 mm pushbutton	XB5S 22 mm biometric switch	XB5R, XB4R 22 mm wireless and Batteryless pushbutton	XB5 22 mm specialty product
--------------------------------	---	--	---	--

Typical applications	<ul style="list-style-type: none"> • Used in traditional NEMA segments • Oil and gas • Water and wastewater • Metal, mining, and minerals • Maintenance, repair, and operations 	<ul style="list-style-type: none"> • Limited machine use • Room or area access limited to authorized personnel 	<ul style="list-style-type: none"> • High-vibration environment • High-temperature applications • Hazardous environments 	<ul style="list-style-type: none"> • Hazardous environments
----------------------	--	--	---	--

Features and benefits	<ul style="list-style-type: none"> • Quick Installation • Single screw contact block mounting • Self-grounding • Color-coded contact blocks • Finger-safe contact blocks • Robust build can withstand oil, dust, and water • Metal, chromium-plated (9001K) • Plastic, double-insulated (9001SK) 	<ul style="list-style-type: none"> • Easily configured as standalone or through PC or HMI database • Mounts in single 22mm hole • Controls access to critical machines and areas using fingerprint recognition • Available in standalone, PC connected, or HMI connected versions 	<ul style="list-style-type: none"> • Batteryless wireless pushbuttons using ZigBee technology • Integrate with single receivers • Harmony hub connects up to 60 devices and can be connected to communications network • Eliminates a significant amount of traditional operator wiring • Increases operator mobility and flexibility 	<ul style="list-style-type: none"> • Monolithic design • Only requires single 22mm hole • Allows user to receive status of power, control system, and critical processes without opening door
-----------------------	--	---	--	--

Product type Pushbuttons, selector switches, and pilot lights Customized pushbuttons and legend panels E-stops with illuminated rings



Component name and description [XB4F, XB5F](#)
22 mm flush pushbutton [XB4 GEX, XB5 GEX](#)
22 mm hazardous location pushbutton [XB5, ZB5 and ZBY](#)
22 mm customized pushbuttons [XB5, ZB5 and ZBY](#)
22 mm illuminated e-stop pushbuttons

Typical applications • Machines with protruding devices
• Locations that require frequent cleaning • Hazardous environments
• Locations with combustible dust or fibers • Custom OEM equipment
• Equipment needing visibility of contact information or QR codes on the front of the panel. • Process lines with multiple e-stops
• Conveyor systems with multiple e-stops
• Dimly lit work areas

Features and benefits • Clean and modern design
• Flush operators are less likely to be damaged by passing equipment or personnel
• Works in existing 30mm holes, eliminating need to redesign panel layout • The first and only 22mm hazardous location pushbutton available
• Triple-rated for explosive gas, dust / fiber standards. • Customizable names, markings, and instructions
• Design a legend panel that eliminates the need for legend plates • Enables machine operator and maintenance personnel to quickly find e-stop
• Illumination viewable from 180 degrees

Product type Pendant control stations Remote control stations Control stations and enclosures



Component name and description	XAC 22 mm medium duty	9001 BW and 9001 SKYP 30mm rugged-duty	ZART Remote control stations	XAL / XAP 22mm control stations	9001B and 9001KY / SKY 30mm control stations
--------------------------------	--	---	---	--	---

Typical applications	<ul style="list-style-type: none"> Crane and hoist applications with up to 12 operators 	<ul style="list-style-type: none"> BW model is for 2-function crane and hoist operation SKYP is available for applications with up to 10 operators 	<ul style="list-style-type: none"> eXLhoist standard and eXLhoist compact are used for wireless crane and hoist or any wireless machine operation Harmony Pocket provides simple wireless machine control with up to 10 buttons in light industrial environments 	<ul style="list-style-type: none"> Motor and machine control from stationary control station Baler for recycling cardboard 	<ul style="list-style-type: none"> 9001B are fully assembled for control of motor starters 9001KY/SKY available in multiple configurations and hole counts for various applications
----------------------	--	--	--	--	---

Features and benefits	<ul style="list-style-type: none"> A available in pistol grip High impact thermoplastic enclosure with self-extinguishing flammability rating 	<ul style="list-style-type: none"> BW has contoured grip High-impact thermoplastic 	<ul style="list-style-type: none"> eXLHoist standard and compact available with SIL3 compliant e-stop Customizable legend for Harmony Pocket Large amount of configurable control 	<ul style="list-style-type: none"> XAL: available as customizable or complete plastic enclosures XAP: die cast metal enclosures for more rugged environments 	<ul style="list-style-type: none"> Available in painted steel or stainless steel Built to withstand harsh industrial environments
-----------------------	---	--	--	--	---



Relays

A relay is an electrically operated switch. Relays use an electromagnet to control a switching mechanism.

Relays are used:

- To control a circuit by a low-power signal with complete electrical isolation between the control and the controlled circuits
- To control several circuits with one signal

How relays work

A relay uses an electromagnet (coil) to pull in a plunger attached to a switch contact or set of switch contacts.

Relay applications

Relays are used to control the high-voltage, high-current circuit with a low-voltage, low available current power supply.

- To control electric motor starters
- Automatic stabilizers
- Traffic signal controllers
- Temperature controllers
- Pumping systems
- HVAC equipment
- Lighting control



Product type	Interface relays	General purpose relays	Power relays	Solid state relays	Timing and monitoring relays
--------------	------------------	------------------------	--------------	--------------------	------------------------------



Component name and description	RSL, RSB, RXG	RXM/792, RPM/780, RUM/750/788 Class 1/ DIV 2: 8501/RS34/750H	300/389F, RPF/92/725, 199	SSP/6000, SSL/861/SSM/SSRDIN	REXL/RE48/TDR782/TDRPRO, 820/RE17/RE22/RENF22
--------------------------------	-------------------------------	---	---	--	---

Typical applications	<ul style="list-style-type: none"> Used with PLC logic outputs Act as interposing relays, giving more contact closures at higher ampacities 	<ul style="list-style-type: none"> Used for hardwired relay logic Interposing relays to multiply and replicate circuit actions Class 1, Div 2 relays capable of being used in combustible environments 	<ul style="list-style-type: none"> Primarily used for switching large current loads Solenoids Small motors Dampers Heaters Actuators 	<ul style="list-style-type: none"> Primarily used in instances where large amounts of current is not available to pull in traditional relay coils PLC logic outputs Heaters EMI / RFI sensitive areas and applications Applications where switching speeds need to be faster than traditional relay coils 	<ul style="list-style-type: none"> Process timing Cycle timing for pump and other motor sequencing Monitoring of power system Monitoring of process variables such as speed and temperature Various types of timing required for relay logic in complex relay based control systems
----------------------	---	---	--	--	--

Features and benefits	<ul style="list-style-type: none"> Space-saving 6mm width 6-amp load rating Reinforced PCB pins (relay) Preambled option Universal AC / DC socket with built-in surge protection and LED indicator DIN rail mounting Lever for easy locking and removal of the relay Rated for -40°C to +55°C ambient. 	<ul style="list-style-type: none"> Test button with removable lock-down door for testing the contacts (depending on model) Green LED indication of relay status (depending on model) Mechanical indication of relay status Optional protection modules to protect against electrical spikes 	<ul style="list-style-type: none"> Applications up to 30 A UL listed Sealed construction Motor load ratings: 1 hp @ 120 Vac / 3 hp @ 240 Vac (N/ O contacts only) DIN rail and panel mounting capability Short circuit rating of 5,000 A rms @ 3 hp, 240 Vac (N/O contacts only) 	<ul style="list-style-type: none"> Zelio SSL solid state relays offer the advantages of several input and output configurations for both AC and DC switching Compact size and modular design reduces space and allows easy mounting on the socket Socket with reverse polarity protection circuit and LED indicator for easy identification of control status 	<ul style="list-style-type: none"> Variety of configurations allowing for easy setup Clear covers to protect form inadvertent changes to settings Easy to read switches and dials Some models available with multiple functions available
-----------------------	--	---	--	--	---

Life Is On



Discover our entire portfolio of industrial automation control products and solutions.

[explore more options](#)

Schneider Electric
Boston ONE Campus
800 Federal Street
Andover, MA 01810 USA