IDEC

Enabling Safe Automation Solutions

PRODUCT
GUIDE

APEM
an IDEC company
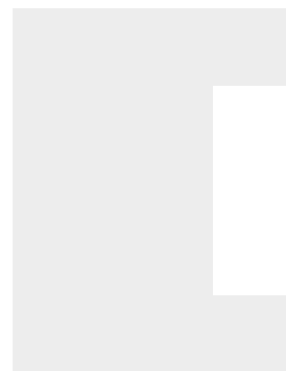
FOR MORE THAN 75 YEARS, IDEC HAS DESIGNED AND MANUFACTURED HIGH QUALITY PRODUCTS. SINCE 1976, IDEC HAS SERVED THE COMPETITIVE EUROPEAN MARKET BY PROVIDING THE VERY BEST PRODUCTS AND SERVICES THAT SATISFY THE MARKET NEEDS, THAT NEVER CEASE CHANGING AND EVOLVING.

EUROPEAN **NETWORK**

FRANCE
UNITED KINGDOM
GERMANY
BENELUX
ITALY
SWEDEN

Together, IDEC and its well established European subsidiary APEM are now one of the world's largest manufacturers of human machine interface (HMI) components, panels and systems.

With more than €565 million in total sales, the combined entity has a broad portfolio of HMI, Safety and Automation products designed for a variety of Industrial applications, and access to markets across Europe, North America and Asia.

APEM
an IDEC company

IDEC

CONTENT

IDEC SAFETY DNA
With decades of experience, we focus on safe environments for humans interacting with machines, and to that end we develop solutions maximizing your safety and productivity. We provide our customers with both efficient solutions and reliable expertise, supplying cutting-edge safety and automation solutions as well as one-to-one support.

OUR EXPERTISE, OUR CAPABILITIES

IDEC'S RELIABILITY

For more than 75 years, IDEC has designed and manufactured high quality products. We offer a wide variety of innovative solutions that help businesses overcome work challenges across the globe. With a decades long history in safety and automation paired with tenacious forwardthinking, our tools are what you need for not only today, but tomorrow as well.

OFFERING THE BEST SOLUTION FOR EACH CUSTOMER THROUGH A WIDE VARIETY OF TECHNOLOGIES.

RT (ROBOTICS TECHNOLOGY)
Having developed the world's first Robot Control Cell Production System, we continue to be the driving force of the cutting-edge Robotics Technology.

AT (AUTOMATION TECHNOLOGY)
Automation Technology, including mold production, precision parts processing, precision tool, programming, robot application, automatic assembly, control equipment, and control safety technology, plays the key role of manufacturing.
All of these various technologies are vertically integrated, and our products are manufactured in-house from parts processing to finishing.

ET (ENGINEERING TECHNOLOGY)
In addition to the research and development of control equipment, we combine and systemize laser marking, image processing, and RFID technologies to achieve the traceability system, and drive the development of advanced Engineering Technology.

ST (SAFETY TECHNOLOGY)
The safety concept at IDEC is shifting from "zero accident" to the globally-recognized "zero hazard." IDEC has always led the industry in safety technology development, and with our goal to "Reduce industrial accidents" as our CSR, we comply with the international standards of Machine Safety, Functional Safety, and Explosion Proof Safety and stay at the forefront in the development of safety technologies.

MT (MECHANICAL TECHNOLOGY)
Through the development of switches, relays, circuit protectors and other high quality, highly reliable control equipment, we have accumulated precision and electromagnetic mechanism technologies. For further advancing such core competence technologies, we strive to be fully creative at Mechanical Technology development.

PT (PHOTONICS TECHNOLOGY)
For the creation of new applications of cutting-edge photonics device technologies such as LED, laser, opical fiber, quantum dot, and new optical element, IDEC has set up a satellite office in the Photonics Advanced Research Center (PARC) at Osaka University as a member of business-academia collaboration project. A PARC office is also located in IDEC, to foster close cooperation and to promote the advancement of Photonics Technology.

IT (IDENTIFICATION TECHNOLOGY)
Identification Technology to detect objects without failure is powerfully promoted at IDEC. Sensing technologies with semiconductor laser for water detection and plastic material sorting, and automatic recognition technology such as RFID and image recognition, are developed.

CT (CONTROL TECHNOLOGY)
As a manufacturer of control equipment with accumulated knowledge of various control technologies such as computer, software, and network communication, we will further make effort to develop the most advanced Control Technology.

SOLUTIONS BY INDUSTRY

Our knowledge
and skills related to factory
automation accumulated
over the years provide
solutions for various
manufacturing sites across
different industries.

IDEC

MACHINE TOOLS

Solutions for issues relating to compliance with safety standards, compact designs, and improvement of maintenance effectiveness.

MATERIAL HANDLING

To create a safe system for continuous operation.

ROBOTICS

For the safe interface of human and robots.

AUTOMOTIVE

For manufacturing sites that require both a high level of productivity and safety.

FOOD AND PACKAGING

For food and packaging equipment and manufacturing sites, where food safety and reliability are required.

AUTOMATIC WAREHOUSE

For safe and efficient distribution systems to meet the demands of a developing global supply chain.

ELECTRONICS AND SEMICONDUCTOR

For minimising manufacturing footprint and maximising throughput.

ELEVATORS

For complying with legislation and standards, and introducing new technologies required by the changes in our society.

SPECIAL VEHICLES

For high performance and enhanced robustness, ensuring continuous operation in various environments delivering enhanced productivity.

MACHINE TOOLS

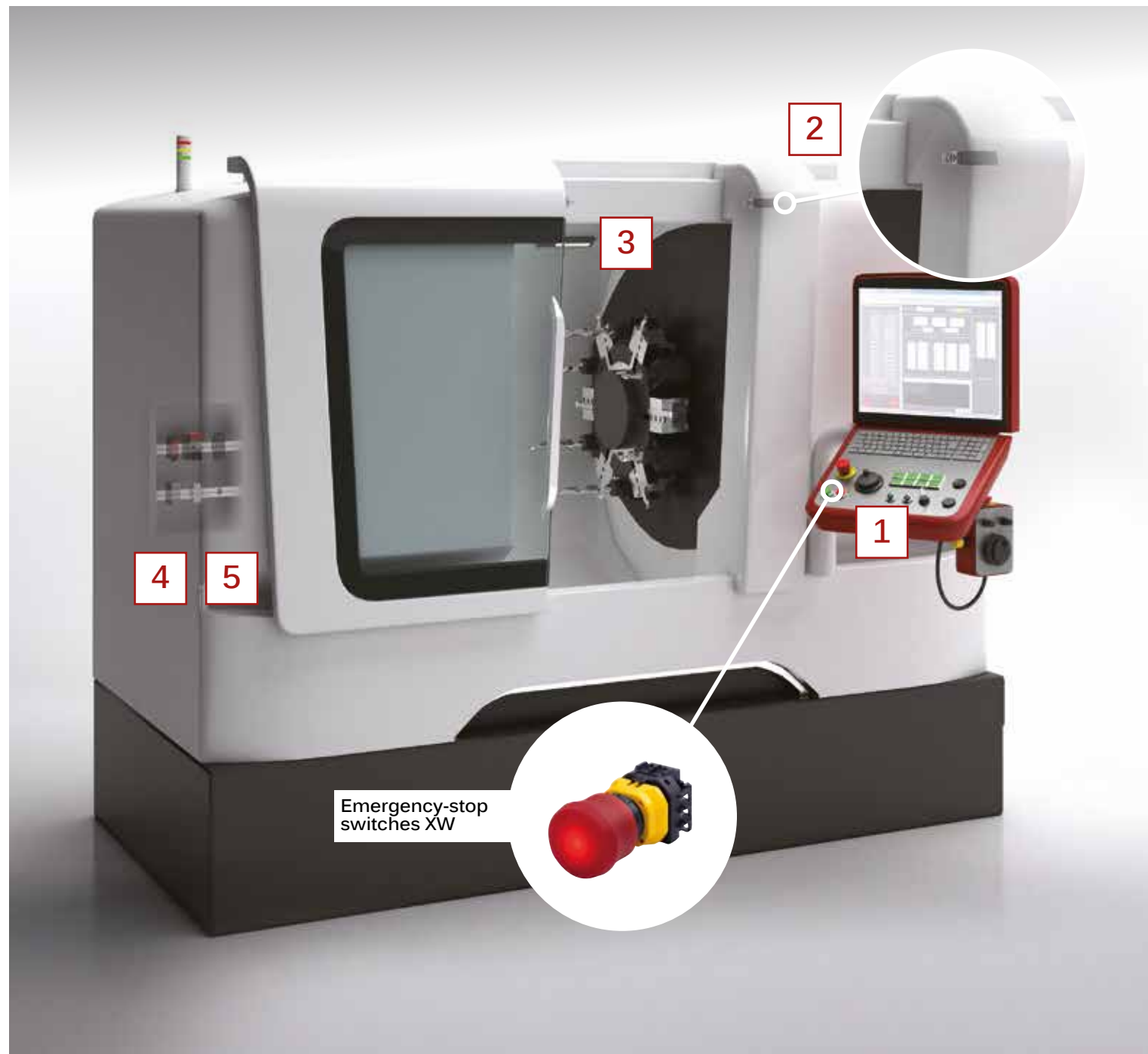In addition to compliance with safety standards, machine tool manufacturers have been seeking to downsize their products and to improve maintenance efficiency in recent years.
IDEC satisfies your wide variety of needs with our various products and the best suited solutions.

Emergency-stop switches XW

1
Increase added value with sophisticated interface design

Flush silhouette switches LB/LBW

Single-board panels

2
Increase your efficiency with and lower product wastage with robust safety interlocks
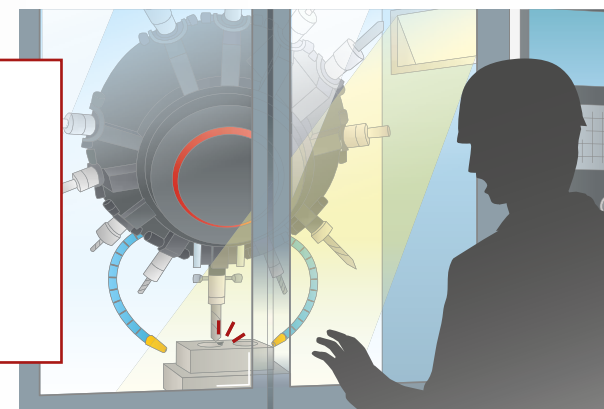
Plastic Slide Handle Actuator for HS5 Series
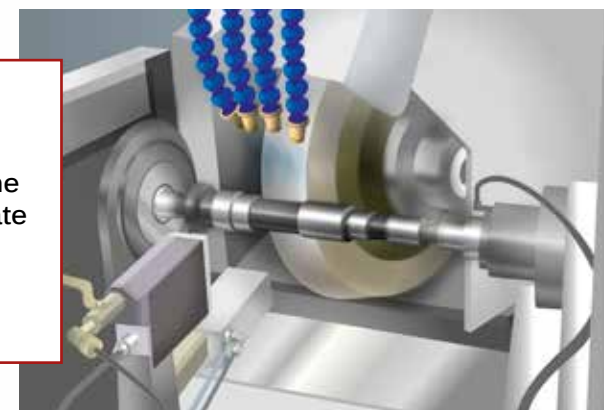
Interlock switches HS5L / HS1T

3
Use flat LEDs to make chatter surface visible in early stage
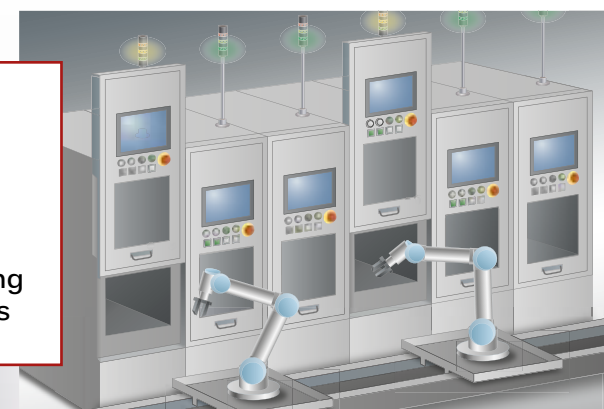
LED units LF1D & LF3D

4
Improve machine up time with State of the Art power supplies

Power supplies PS5R-V

5
Compact components contribute to the downsizing of machine tools

Interface relays RV8H
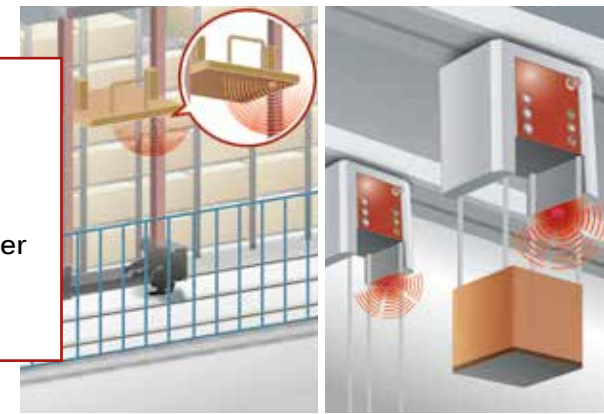
SOLUTIONS BY INDUSTRY
MATERIAL HANDLING

Material handling technology that streamlines and automates the distribution of goods plays a major role in corporate logistics and productivity improvement. IDEC, with our various products developed with cutting-edge technology, helps you solve your material handing problems.

1
Reduce accident risks while maintaining production efficiency

Safety laser scanners SE2L

New!

ez-Wheel® industrial wheel drive solutions, for heavy load handling and intralogistics automation

2
Reduce the risk of injury from overhead transfer systems

Illuminated buzzers HW1Z

3
Provide product to build low profile AGVs and ensure safety at production sites

Safety edge switches E30BK1 & E22BK1

ez-Wheel® Safety Wheel Drive SWD 125
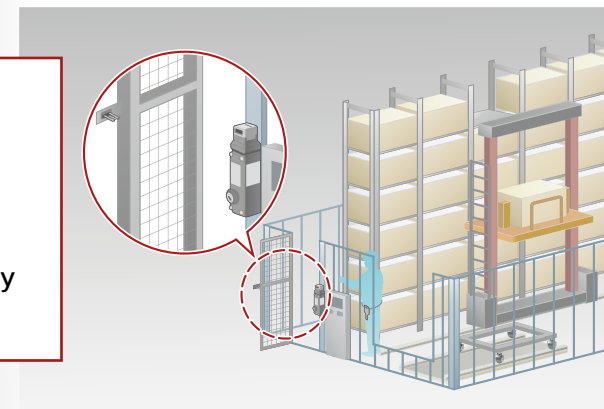
Operator Interfaces HG2J

Safety laser scanners SE2L

4
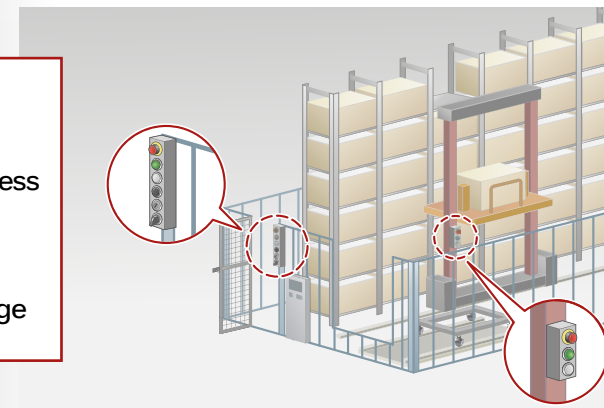Reduce risk by controlling the hazard at the point of entry

Key interlock switches HS5E-K

Key selector switches HW

5
Reduce total process time and cost for manufacturing switch boxes for automated storage
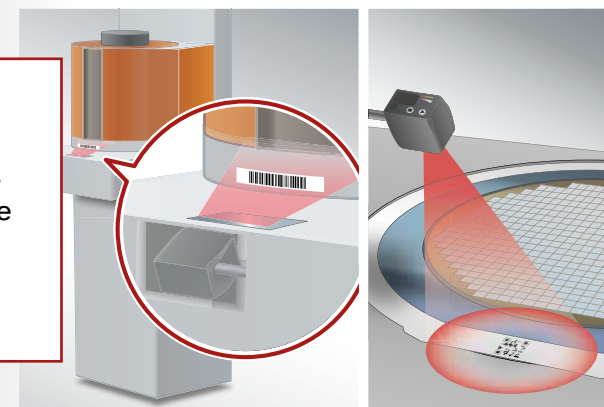
Control boxes FB

Single-board panels

6
Improve traceability and reduce cost at the same time

Bar code readers WB1F

ROBOTICS

Production lines with collaborative robots, enable the coexistence of workers and machines, and are common place in industry today. IDEC safety products permit safe slow speed interaction, combined with seamless switching back to full speed. We are here to assist you in achieving compliance to the ever widening landscape of safety standards with our team of safety and automation specialist.

1
Safety measures to enhance the potential of collaborative robots
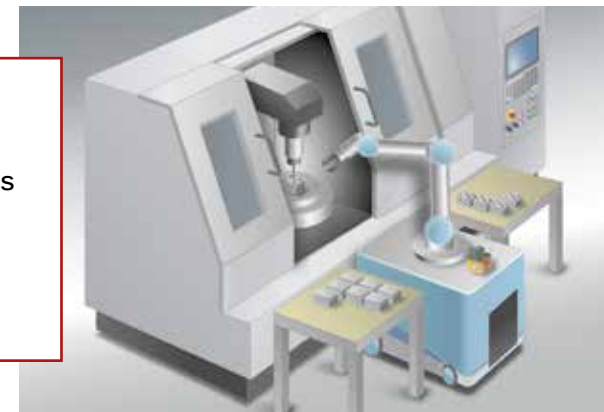
Safety laser scanners
SE2L

2
Make human-robot collaboration safer and more efficient

Remote control pendants HG1P, IDEC Safety Commander™ HT3P, HT4P

3 positions Enabling switches

Safety controllers FS1B

3
Prevent accidents by hazard identification and machine status

Surface mount signaling lights LH1D

4
Accessible and recognizable means of stopping in an emergency

Emergency- stop switches XW

5
Improve visibility for more safety
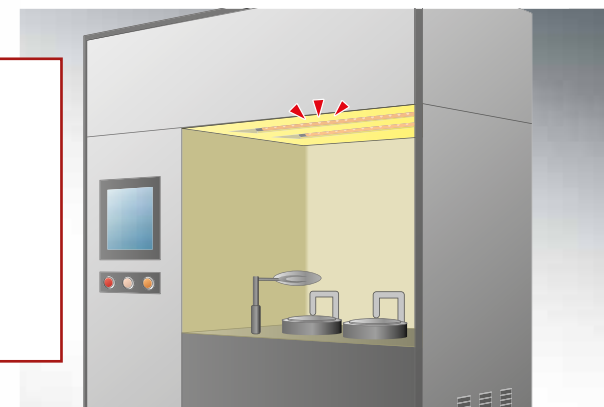
LED units
LF2B
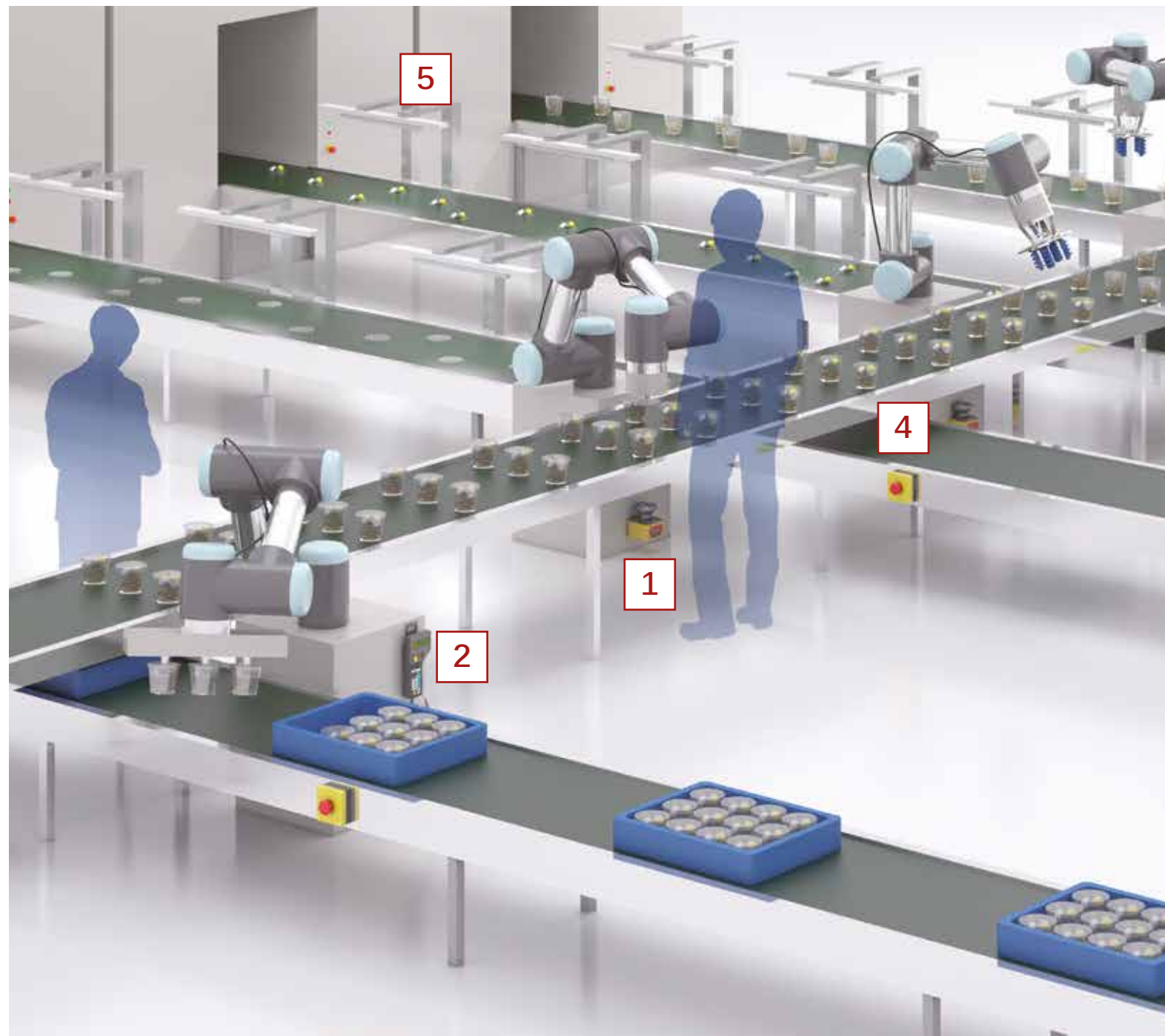
FOOD AND PACKAGING

Recent concerns on food safety and reliability has changed the trends and demands of the food and packaging industry. IDEC, with our various products developed with cutting-edge technology, helps you solve your problems with food machines and production sites.

Photoelectric switches SA2E

LED units LF2B

Safety relay modules HR5S / HR6S

2

1

4

Smart RFID readers KW2D for traceability and access control

1

Reduce work hours and costs required for building systems
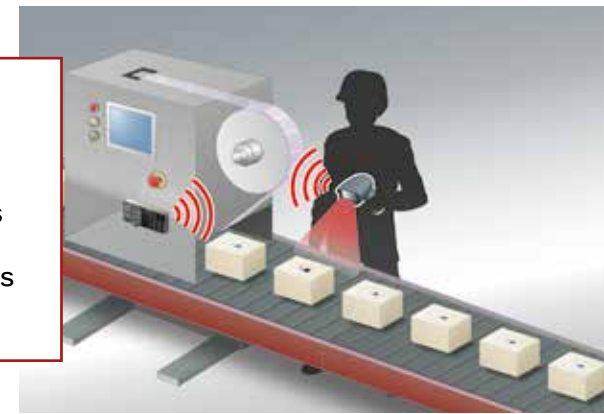
Remote I/O couplers SX8R

PLCs FC6A

2

New benchmark for small display devices

Operator Interfaces HG2J

3

How to easily change the control panel of food processing machines that need to be washed

Piezo switches PBA (APEM)

Operator Interfaces HG1J

4

Prevent repetitive strain injury (RSI) with light action pendent control
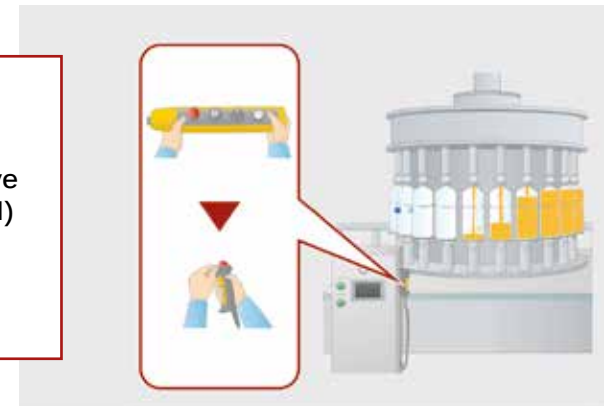
Grip switches HE2G

5

Reduce panel space and inventory with the integration of HMI and PLC in to one platform
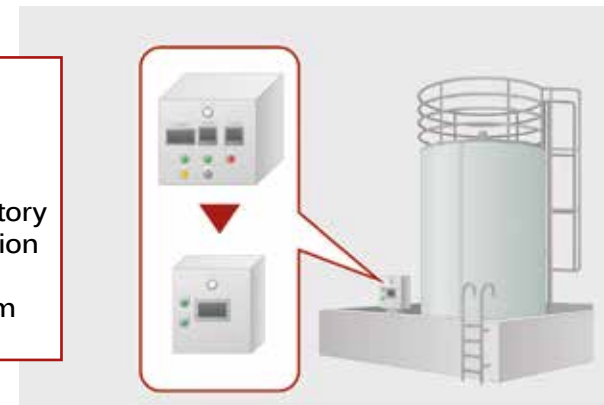
PLC+HMI operator interfaces FT1J

Integrated programmable display controllers FT2J

AUTOMATIC WAREHOUSE

There is a growing need for safer and more efficient distribution systems as global supply chains expand in the manufacturing industry. IDEC provides solutions for improving both safety and productivity with the latest technology.

Control the hazard and reduce risks

2	3	4	21
Safety Laser Scanners SE2L	Safety Switches HS5L/HS5L-K	Safety controllers FS1B	Safety edge switches HK2H/HK2L & E22BK1

Products to enhance efficiency in automation

11 Flush Silhouette Switches CW Series

12 Push-in Switches & Pilot Lights YW Series

**13** Illuminated Buzzer Pilot Lights HW1Z

14 Pilot Lights LH1D/Q Series

15 Pushbuttons LB/LBW/AV/I/ES Series

16 RFID readers KW2D series

17 Miniature Joysticks TS/NV Series

18 IDEC Safety Commander™ HT4P

19 Programmable Controllers FC6A

20 Operator Interfaces HG Series

8 ez-Wheel® Safety Wheel Drive SWD 125 for AGVAMR

1 Tablet Mount Safety Devices IDEC Safety Commander™ HT3P & HT4P

10 Emergency-Stop Switches XA/X6/XW/XN Series

8 ez-Wheel® Safety Wheel Drive SWD 125

9 Slim Relays /Universal Relays RJ/RU/RV8

Safety Products that ensure the Safety of Workers

5 Operator Interfaces Handheld Model HG1P

6 Enabling Switches HE*B

7 LED SignaLight Towers LD6A

TECHNOLOGIES & INNOVATION

By continually integrating new technologies and developing solutions that improve worker safety and fficiency, IDEC is positioning itself as an indispensable player in the innovation of products that combine safety and ease of use. The products and services are thus always adapted to the needs of the market and can even anticipate the current requirements.

THE WORLD'S SAFEST EMERGENCY-STOP SWITCHES

By automatically turning off the machine when the contact block or actuator are improperly installed or damaged, all IDEC E-stops meet or exceed International safety **standards (ISO 13850 and EN60947-5-5).**

IDEC X-series switches use Safe Break Action, a unique feature which reverses the energy direction and uses spring-pressure to guarantee that the NC contacts will open if the emergency switch is damaged or the contact blocks separate due to excessive force (patented design).

FAIL-SAFE DESIGN
Normally Closed contacts are in the open state if the contact block is not properly attached to the switch.

| 1 | 2 | 3 |

NC Contact Closed (On)   NC Contact Open (Off)
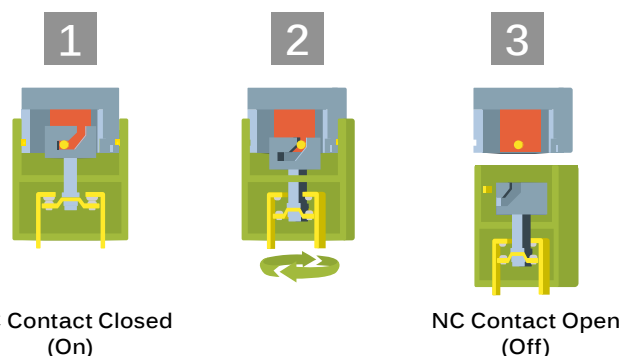
A COMPLETE RANGE OF E-STOPS FOR ALL YOUR APPLICATIONS

| X6 series | XA1E | XA | XW | XN1E/XN5E |

A selection of fifty part numbers with guaranteed safety performance and availability*.

*All item available Ex-stock and dispatched in 48 hours. Subject to geographical location (Europe) and order quantity.

E-STOP 50

ELEVATING SAFETY STANDARDS: IDEC'S SOLUTIONS FOR ISO 10218 COMPLIANCE

The introduction of ISO 10218-1:2025 standard has affected OEM and system integrators, with higher requirements on safety and workers' protection from injury.

IDEC has solutions to help you comply with the revised standard. As the world leader in enabling switches, we can equip you with all kinds of 3-position enabling switches, whatever your application. What's more, we have developed all-in-one solutions, such as the HT3P or HT4P IDEC Safety Commander™. These devices allow tablets to be used in industrial automation applications, in full safety.

THE LARGEST PORTFOLIO OF ENABLING SWITCHES

Also known as "Operator presence detection" or "3-position safety" switches, the enabling switches allow the operator to work safely on a machine without disabling operation. The use of an enabling switch stops the device in the event of a catastrophic failure or unforeseen problem.

Generally speaking, 3-position safety switches are more especially recommended for critical situations where the user's full attention is vital for the task he is carrying out.

As the leading producer on the market for 3-position safety switches, IDEC have contributed to developing international safety standards, especially for the IEC 60947-5-8(2008) norm, and, benefitting from all firm's experience in the field, the HE*B, HE2G, and HE1G-L series are perfectly compatible with the highest safety and performance requirements.

A PRODUCT ADAPTED TO HUMAN BEHAVIOUR

IDEC safety solutions have been designed for adapting themselves to the different types of reaction a user may have in the face of danger and emergencies. If some users let go of their control grips, others tend to clench them tightly. This is why operator presence switches have been developed with three possible positions:

> **Position 1:** no contact, the machine doesn't run.
> **Position 2:** light pressure maintained by the user, the machine runs.
> **Position 3:** heavy pressure, a "stop" signal is sent and the machine stops running.

| HE2B | HE3B | HE5B | HE6B |

SAFETY AT YOUR FINGERTIPS: HT3P AND HT4P SERIES

By choosing IDEC's new HT3P and HT4P "IDEC Safety Commander™", you are choosing a tablet holder that can be adapted to most tablets on the market while guaranteeing foolproof safety.

The HT3P and HT4P deliver safety, information and control in the palm of your hand. Incorporating IDEC's HE5B (for HT3P) and HE6B (for HT4P) enabling switches and XA1E Emergency-stop switch, safety is a given!

The use of a tablet provides you with greater information for improved efficiency, increased hardware utilisation and so much more.

PUSH-IN TERMINATION TECHNOLOGY: SAVE TIME, SAVE MONEY

Reduce your wiring time by up to 55% with our PUSH-IN technology. Terminals equipped with this technology are easy to handle and ensure a safe & secure connection. This guarantees excellent contact safety, even in demanding applications.

HOW DOES IT WORK?

This technology is particularly user-friendly: take a stripped solid or fine-stranded conductor with a crimped ferrule, insert it into the clamping point as far as it will go, and your safe & secure connection is already complete. Alternatively, when connecting stranded wire, insert the wire while holding down the pusher with a flat-blade screwdriver. As easy as that.

Connecting

1	2
Push the wire straight in as far as it will go.	Connection is completed. Pull lightly to make sure it is firmly in place.

Removing

3	4
Hold down the pusher with a flat-blade screwdriver.	While holding down the pusher, pull out the wire. Release the flat-blade screwdriver.

This option is available on the YW and HW series, which are your "standard industrial style switches" and the CW series (aesthetic flush mount switch series).

CW4B-M1P   HW1L-M3P   YW4L-M2R

MOTORIZED SYSTEMS FOR INDUSTRIAL MOBILITY

ez-wheel
The Electric Wheel

The compactness of technology and incredible capability of ez-Wheel® products make the integration of a wheel drive on intralogistics considerably easier and faster than conventional solutions: fewer components, greater freedom of integration.

MOTORIZATION FOR AUTOMATION

Drives with integrated safety offer the simplest mobile robot architecture on the market.

SWD Safety Wheel Drive   **SWD** Safety Wheel Drive
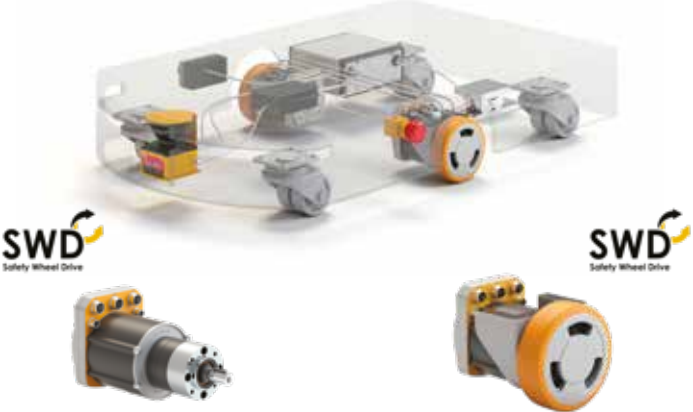
Safety gear motor SWD® Core   Safety wheel drive SWD® 125

MOTORIZED ASSISTANCE

Powered wheel drives provide a quick electrical assistance to any manual handling equipment.

AWD Assist Wheel Drive   **AWD** Assist Wheel Drive

Electric wheel AWD® 150   Electric wheel AWD® 160

IDEC'S INNOVATIONS

KW2D SERIES
SMART, STAND-ALONE RFID READER

The KW2D series is the ideal product for managing the "mode of safe operation" as specified in the ISO 16090:

- Accurate data collation and reliable data transmission
- High level of reliability thanks to an embedded collating system
- Self-diagnostic for checking the memory status every time the product is switched on
- When communicating with the host device, the data is double-checked using checksumm

With this new IDEC product, you now have the ultimate adaptive solution for accessing control or permission and traceability using RFID technology. The KW2D series has a slick design with 4 LED indicators that are visible even from the side of the product and an auxiliary buzzer for a better user experience thanks to visible and audible feedback on operation status.

FT2J SERIES
CONTROLLER WITH OPERATOR INTERFACE

The FT2J is an integrated automation solution combining a controller and operator interface in a compact design, ideal for space-constrained environments. This unit offers a 7.0-inch display, 40% less power consumption than separate units, and a battery-free design.

- Built-in analog I/O with 12-bit resolution for controlling 0 to 10V DC & 4-20mA signals,
- PID control for precise temperature, flow, or pressure management,
- dual CPU setup for simultaneous high-speed processing and HMI functionality,
- up to 2 digital/analog I/O cartridges, allowing for easy expansion of up to 8 digital and 4 analog I/O,
- 22 I/O as standard, expandable to 30 I/O,
- wide range of protocol support including Serial (RS232C & RS485), Modbus, Ethernet I/P and MQTT.

The FT2J is environmentally robust, with a wide temperature operating range and high water resistance. Its glass PCAP touchscreen is durable, hygienic, and multi-touch capable, resistant to water and glove interactions. Connectivity options include RS232C, RS422/485, Ethernet, and USB-A ports, facilitating diverse device integration and Iot functionalities.
Definitely cost-effective and space-saving, the FT2J is versatile and efficient for various industrial applications.

FLUSH SWITCHES

The IDEC commitment to assuring safety in all operating environments has resulted in stylish, compact and space-saving switches and pilot devices. Flush mount switches offer a streamlined package, perfect for applications requiring a hygienic surface.

	CW	CW	LB flush	LB flush
TYPE	Pushbutton / indicator	Keylock / selector	Pushbutton / indicator	Keylock / selector
APPROVALS	UL, CE, CCC	UL, CE, CCC	UL, CSA, TUV, CE, CCC	UL, CSA, TUV, CE, CCC
POLES	Up to 6	Up to 6	Up to 3	Up to 3
SEALING	IP65	IP65, IP67	IP65	IP65
ILLUMINATED	Yes	No	Yes	Yes
PANEL CUT-OUT	22 mm	22 mm	18 mm	18 mm
TERMINAL	Screw or push-in	Screw or push-in	Solder/tab or PCB	Solder/tab or PCB
CONTACT TYPE	Modular product	Modular product	Separable blocks	Separable blocks
RATING	Heavy duty (up to 10 Amps)		Light duty (gold-plated or silver contacts, up to 5 Amps)	

IDEC EXCLUSIVE

LBW SERIES
COUNTLESS DESIGN POSSIBILITIES, WITH A SLEEK AND REFINED STYLE!

FLUSH SILHOUETTE SWITCHES: ONLY 2 MM ABOVE THE PANEL

FULLY QUALIFIED AND CERTIFIED

• COMPACT PRODUCTS, EASY TO ASSEMBLE THANKS TO THE DETACHABLE CONTACTS

• COMPREHENSIVE DESIGN: 3 DIFFERENT SHAPES AND 8 DIFFERENT FUNCTIONS

• EASY MAINTENANCE, BUILT-IN PROTECTIVE CIRCUIT FOR LEDS

• INCREDIBLE MECHANICAL LIFE, UP TO 2,000,000 CYCLES FOR MOMENTARY PUSHBUTTONS!

	LBW	LBW	LW flush	LW flush
TYPE	Pushbutton / indicator	Keylock / selector	Pushbutton / indicator	Keylock / selector
APPROVALS	UL, CSA, TUV, CE, CCC	UL, CSA, TUV, CE, CCC	UL, CSA, TUV, CE, CCC	UL, CSA, TUV, CE, CCC
POLES	Up to 3	Up to 3	Up to 3	Up to 3
SEALING	IP65	IP65	IP65	IP65
ILLUMINATED	Yes	No	Yes	Yes
PANEL CUT-OUT	22 mm	22 mm	25 mm	25 mm
TERMINAL	Solder/tab or PCB	Solder/tab or PCB	Solder/tab or PCB or screw	Solder/tab or PCB or screw
CONTACT TYPE	Separable blocks	Separable blocks	Separable blocks	Separable blocks
RATING	Light duty (gold-plated or silver contacts, up to 5 Amps)		Light duty (gold-plated or silver contacts, up to 3 Amps)	

INDUSTRIAL & HARSH ENVIRONMENT SWITCHES

We have an industrial switch for almost any application. Many models offer the flexibility of modular construction, which allows to change contacts, lamp voltages or button colors easily.

IDEC EXCLUSIVE

YW SERIES
A STAPLE OF INDUSTRIAL AUTOMATION

STURDY, HEAVY-DUTY RUGGED CONSTRUCTION WITH SEPARABLE CONTACT BLOCK

- EFFICIENT, STRAIGHTFORWARD PRODUCT, EFFORTLESS MAINTENANCE
- A FLEXIBLE MODULAR CONSTRUCTION
- RESISTANT TO DEMANDING ENVIRONMENT
- PUSH-IN TERMINALS: CONSISTENT AND RELIABLE CONNECTIONS

	YW	YW	MW	LW	LW
TYPE	Pushbutton / indicator	Keylock / selector	Pushbutton / selector	Pushbutton / indicator	Keylock / selector
APPROVALS	UL, CE, CCC, TUV	UL, CE, CCC, TUV	CE, CCC	UL, CSA, TUV, CE, CCC	UL, CSA, TUV, CE, CCC
POLES	Up to 6	Up to 6	Up to 2	Up to 3	Up to 3
SEALING	IP65	IP65	IP65, IP66	IP65	IP65
ILLUMINATED	Yes	No	No	Yes	Yes
PANEL CUT-OUT	22 mm	22 mm	18 mm	22 mm	22 mm
TERMINAL	Screw or push-in	Screw or push-in	Solder/tab or screw	Solder/tab or PCB or screw	Solder/tab or PCB or screw
CONTACT TYPE	Modular product	Modular product	Monobloc	Separable blocks	Separable blocks
RATING	Heavy duty (up to 10 Amps)		Heavy duty (up to 10 Amps)	Light duty (gold-plated or silver contacts, up to 5 Amps)	

	HW7D	HW1R	HW1M	TW	TW
TYPE	Dual pushbutton	Pushbutton selector	Mono-lever	Pushbutton / indicator	Keylock / selector
APPROVALS	UL, CSA, TUV, CE, CCC	UL, CSA, CE, TUV, CCC	UL, CSA, CE, TUV, CCC	UL, CSA, TUV, CE, CCC	UL, CSA, TUV, CE, CCC
POLES	Up to 4	Up to 4	Up to 4	Up to 4	Up to 4
SEALING	IP65	IP65	IP65	IP65	IP65
ILLUMINATED	Yes	No	No	Yes	Yes
PANEL CUT-OUT	22 mm	22 mm	22 mm	22, 25, 30 mm	22, 25, 30 mm
TERMINAL	Screw or push-in Screw or push-in	Screw or push-in	Screw or push-in	Screw	Screw
CONTACT TYPE	Modular product	Modular product	Modular product	Modular product	odular product
RATING	Heavy duty (up to 10 Amps)			Heavy duty (up to 10 Amps)	

MINIATURE & COMPACT SWITCHES

Our miniature and compact switches add style and safety to any application in a space saving package.

IDEC EXCLUSIVE

A SERIES
FITS ALL APPLICATIONS!

COMPACT, WITH UNCOMPROMISING MECHANICAL LIFE

- 4 DIFFERENT BUSHING DIAMETERS IN 1 SERIES
- COMPREHENSIVE DESIGN
- WATERTIGHT PRODUCTS

|	LB	LB	A6	A6
TYPE	Pushbutton / indicator	Keylock / selector	Pushbutton / indicator	Keylock / selector
APPROVALS	UL, CSA, TUV, CE, CCC	UL, CSA, TUV, CE, CCC	UL, CSA, CE, CCC	UL, CSA, CE, CCC
POLES	Up to 3	Up to 3	Up to 2	Up to 2
SEALING	IP65	IP65	IP65 or IP40	IP65 or IP40
ILLUMINATED	Yes	Yes	Yes	No
PANEL CUT-OUT	16 mm	16 mm	16 mm	16 mm
TERMINAL	Solder/tab or PCB	Solder/tab or PCB	Solder/tab or PCB	Solder
CONTACT TYPE	Separable blocks	Separable blocks	Monobloc	Monobloc
RATING	Light duty (gold-plated or silver contacts, up to 5 Amps)		Light duty, up to 1 Amp	Light duty, up to 1 Amp

	A2	A1	A8
TYPE	Pushbutton / indicator	Pushbutton / indicator	Pushbutton / indicator
APPROVALS	UL, CSA, CCC	UL, CSA, CCC	UL, CSA, CCC
POLES	Up to 2	1	1
SEALING	IP65 or IP40	IP40	IP40
ILLUMINATED	Yes	Yes	Yes
PANEL CUT-OUT	12 mm	10 mm	8 mm
TERMINAL	Solder	Solder	Solder
CONTACT TYPE	Monobloc	Monobloc	Monobloc
RATING	Light duty, up to 1 Amp	Light duty, up to 1 Amp	Light duty, up to 1 Amp

EMERGENCY STOP SWITCHES

For more than 70 years, IDEC has produced reliable and high-quality emergency-stops, making the point of contact between humans and machines easy, safe and secure.
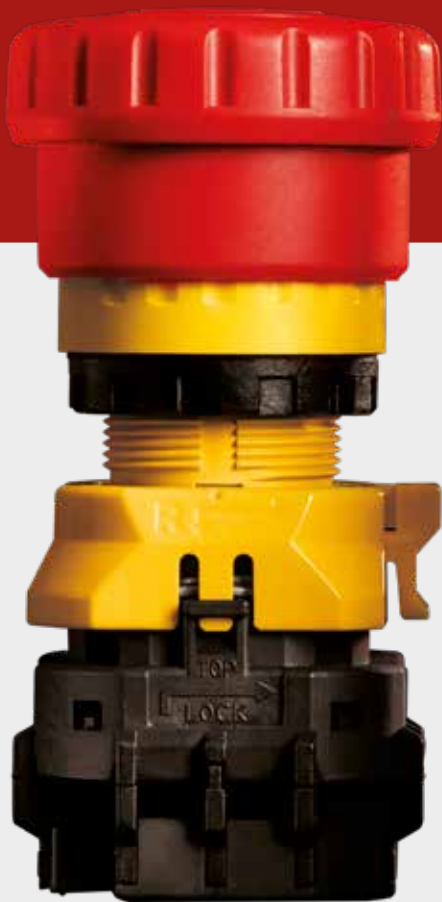
IDEC EXCLUSIVE

XW SERIES,
THE ULTIMATE IN SAFETY

- FAIL-SAFE DESIGN WITH SAFE BREAK TECHNOLOGY
- 2 WAYS OF RESETTING: PULLING OR TURNING

- ILLUMINATION AVAILABLE, ALWAYS-ON OR PUSH-ON FOR INCREASED VISIBILITY
- SPACE-SAVING DESIGN: SAME DIMENSION FROM 1 TO 4 CONTACTS AND ILLUMINATION!
- SPECIFIC DESIGN TO SUIT ALL APPLICATIONS: SMOOTH HEADS FOR INCREASED HYGIENE, GREEN VISUAL INDICATOR

	X6	XA AND XW UNIBODY	XA	YW
	Smooth head			
SAFE BREAK TECHNOLOGY	Yes	Yes	Yes	No
PANEL HOLE SIZE	16 mm panel hole	16 mm for XA 22 mm for XW	16 mm panel hole	22 mm panel hole
OPERATOR SIZES	Ø 30 mm, Ø 40 mm	Ø 29 mm	Ø 29 mm, Ø 40 mm	Ø 40 mm
NUMBER OF CONTACTS	up to 2 NC: 1,2 / NO: 0	up to 3 NC 1 or 2 / NO 1	up to 4 NC: 1,2,3,4 / NO: 0,1	up to 2 (ill.), 3 (non-ill.) NC: 1,2,3 / NO: 0,1
TERMINAL CONNECTION	solder/tab, solder	solder/tab, solder	solder, PCB	screw, push-in
OPERATION	Push to lock, turn or pull to reset			
ILLUMINATION		Yes/colour-changing	Yes	Yes
CERTIFICATIONS				

	HW	XW	XN1E	XN4E	EU2B
		Green visual indicator		Built-in padlock	Hazardous Location
SAFE BREAK TECHNOLOGY	No	Yes	Yes	Yes	No
PANEL HOLE SIZE	22 mm panel hole	22 mm panel hole	30 mm panel hole	30 mm panel hole	30 mm panel hole
OPERATOR SIZES	Ø 29 mm, Ø 40 mm, Ø 60 mm	Ø 38 mm, 40 mm, Ø 60 mm	Ø 40 mm, Ø 60 mm	Ø 44 mm	Ø 40 mm
NUMBER OF CONTACTS	up to 4 NC: 1,2/ NO: 0,1,2	up to 4 NC: 1,2,3,4 / NO: 0,1	up to 4 NC: 1,2,3,4 / NO: 0,1	up to 4 NC: 1,2,3,4 / NO: 0,1	up to 3 NC: 1,2,3 / NO: 0,1
TERMINAL CONNECTION	screw, push-in	screw, solder, PCB	screw	screw	screw
OPERATION	Push to lock; pull, turn or key to reset	Push to lock, turn or pull to reset		Push to lock, turn to reset	Push to lock, turn or pull to reset
ILLUMINATION		Yes Push on illumination	Yes Push on illumination	Yes Push on illumination	
CERTIFICATIONS					

ENABLING SWITCHES

The IDEC range of safety enabling switches and new safety control devices: combining confidence and reliabilty with your productivity needs
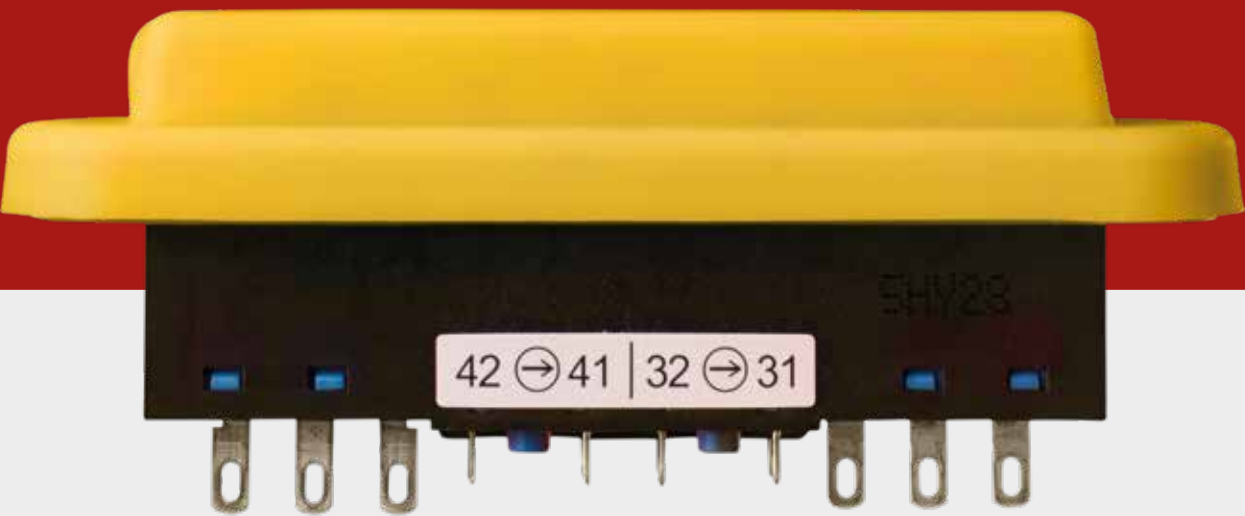
IDEC EXCLUSIVE

HE2B SERIES,
ENHANCED SAFETY

THE WORLD'S NUMBER ONE 3-POSITION SWITCH

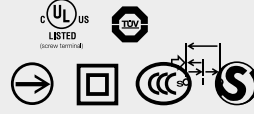EXCEPTIONAL TACTILE FEELING AND ERGONOMICS

- DUAL CHANNEL
- DUPLICATED CONTACTS TO MEET THE HIGHEST SAFETY STANDARDS
- FULL RANGE OF ENABLING AND GRIP-STYLE ENABLING SWITCHES
- ADDITIONAL MONITOR SWITCH TO COORDINATE SEVERAL ENABLING SWITCHES ON A SAME DEVICE

	HE2B	HE3B	HE5B	HE6B
NUMBER OF 3-POSITION CONTACTS	2	2	2	2
EXTRA MONITORING CONTACT	0, 1 or 2	0	0	1 or 2
PANEL CUT-OUT	70 x 12.2 mm + 2 x Ø 3.2 holes	Ø 16.2 mm + 1 x Ø 3.2 hole	Ø 16.2 mm	29.4 x 16.2 mm + 2 x Ø 3.2 holes
IP RATING WITHOUT RUBBER BOOT	IP40	IP40	Not applicable	Not applicable
IP RATING WITH RUBBER BOOT	IP65	IP65	IP65	IP65
ACTUATING FORCE* POSITION 1 -> 2	4 N	Approx. 4 N	3 N	4 N
ACTUATING FORCE* POSITION 2 -> 3	30 N	Approx. 20 N	17 N	17 N
RUBBER BOOT	●●●	●●●	●●●	●● Please contact us
CERTIFICATIONS				

*Approximate force, without the rubber boot.

	HE1G-L	HE2G	HE9Z
STYLE	Palm-grip	Palm-grip	Thumb-grip
CONTACT			
EXTRA MONITORING CONTACT	Optional, 1	1	No
E-STOP	Optional, 2NC	Optional, 2NC	No
ADDITIONAL SWITCH	Optional, 1	Optional, max 2 switches, DPDT	No
ADDITIONAL PILOT LIGHT	No	Optional (green)	No
ADDITIONAL KEY SELECTOR	No	Optional (2 position, DPDT)	No
INTERLOCK SWITCHES**	HS5	HS5	No
ACCESSORIES			
A CABLE GLAND	Included	Included	Included
HANDSTRAP	No	Optional, HG9Z-PS1	No
MOUNTING BRACKET	Optional, HE9Z-GH1	No	Optional, HE9Z-GH1
CERTIFICATIONS			

**Possibility to combine an interlock switch to have an automatic/manual mode - see HS5 series datasheet.

SAFETY PRODUCTS

In Human Machine Interface (HMI) environment, ensuring the safety of operators and machines is given the top priority. Our safety products assure that a safe machine environment is established per the requirements of the machine designer.

IDEC EXCLUSIVE

SE2L ADVANCED SERIES
SAFETY LASER SCANNER

- DISTANCE 5 M, SENSING ANGLE 270 DEGREES
- MASTER & SLAVE CONNECTIVITY (UP TO 4 DEVICES AND ETHERNET CONNECTIVITY)
- SMALLEST SIZE (85MM X 85MM X 95MM)
- MAXIMUM OF 128 AREA PATTERNS
- SUPERIOR RESISTANCE TO DUST, UV RADIATION AND SPLASHES

INTERLOCK SWITCHES

HS6E/6B
Small and thinnest solenoid interlock switch with five poles and solenoid. HS6B: World-class compactness with three poles of contacts.

HS5D
Compact and robust miniature safety interlocks with Plastic or stainless steel heads. Design includes a fail safe tamper detection head.

HS Locking switches
IDEC range of safety locking switches, ranging from 500 N to the new HS1T 5000N locking switch. Ideal for use in injection moulding, food machines and robotic applications.

SAFETY CONTROLLERS | SAFETY RELAY MODULES | FORCE-GUIDED RELAYS

FS1B
No programming requi red—just turn on a logic switch to complete configuration of a safety circuit. Pre-programmed logics are compliant with international standards.

HR5S and HR6S Safety Relays
The new HR5S range of Single channel safety relays with true Category 2 architecture up to PLd providing test and annunciation channels. Introducing the new range of HR6S dual channel digital safety relays with full status indications and pulse train status outputs.

RF1-RF2
Compact and EN compliant or 2-pole force guided relays. Contact configuration: Built-in LED indicator model and counterelectromotive force diode model. Two terminal styles: socket mounting and PC board mounting.

NON-CONTACT INTERLOCK SWITCHES | SAFETY EDGE SWITCHES

HS7A
Compact size and easy positioning.

HS3A
RFID non-contact interlock switch, Category 4 and PLe compliant.

HK2H/HK2L & E22BK1
Low-profile and oil-resistant pressure sensitive sensors to keep operators safe.

ACTUATORS | SAFETY LASER SCANNER

Door Handle
Locks rattling doors smoothly and securely.

Slide Handle
Shock-resistant metal slide handle actuators ensure safety of operators.

SE2L
The smallest Safety Laser Scanner in the world. Up to four SE2L can be connected together which is ideal for detection of four sides on AGVs.

SENSING PRODUCTS

IDEC offers a standard line of photoelectric sensors for reliable object detection, and unique contrast detection and proximity sensors.

IDEC EXCLUSIVE

KW2D SERIES
STAND-ALONE RFID READER

- FOR ACCESSING CONTROL OR PERMISSION AND TRACEABILITY
- SLICK AND REFINED DESIGN WITH 4 LED INDICATORS
- INTEGRATED COLLATION FUNCTION
- PUSH-IN TERMINALS, ETHERNET PORT
- TAG HOLDER AVAILABLE

SA2E

Simple, compact design for world-wide usage with six sensing methods.

SA1E-L

Class 1 laser with fastest response in its class. Reliably detects fastmoving objects.

SA1E-X

Coaxial optical structure and narrow beam ensure stable detection; unaffected by constriction, inclination or shaking of a bottle.

SA1U

Universal voltage types operate on 24-240 V AC and 12-240 V DC. DC power types operate on 12-24 V DC. Four sensing methods (through-beam, polarizedretroreflective, diffuse-reflective, and background suppression).

CODE SCANNERS

SA1N

Compact design with high accuracy, featuring a built-in amplifier, flexible installation, adjustable sensitivity, and IP67-rated protection.

WB1F

1D CCD scanner with convenient modes, such as test mode. Compact and can be installed on small equipment.

RFID TAG READERS

KW2D

Compatible with contactless cards such as employee IDs (ISO/IEC14443 Type A, ISO/IEC18092,JIS X6319-4, ISO/IEC15693) or Keyfob tags (ISO/IEC14443 Type A). Connection: Ethernet port. Communication protocols: Modbus TCP; planned: EtherNet/IP and CC-Link.

LED LIGHTING & SIGNALLING

Immediate indication of process status is a must in any application. Our indicator lights and buzzers are reliable and long-lasting to give the customers peace of mind.

IDEC EXCLUSIVE

LH1D SERIES
IDEC SURFACE MOUNT INDICATOR

• LED FLAT OR DOME SURFACE MOUNT INDICATORS

• IP67 (IEC60529) RATED, CAN BE USED IN ENVIRONMENTS SUBJECT TO WASH DOWN

• NEMA TYPE 4X AND IP67 DEGREE OF PROTECTION

• SINGLE COLOUR, TWO COLOUR (BI-COLOUR) AND THREE COLOUR (TRI-COLOUR) VERSIONS AVAILABLE

• MARKING FILM CAN BE INSERTED INTO FLAT INDICATOR

	LD6A	HW1Z	LH1D	HW1P-5Q4G
	Design meets functionality. Stylish oval shape with separated indicators for clear visibility.	Waterproof combination buzzer and pilot light. Meets the requirement of the elevator standard EN81-20/50.	Innovative indicators with IP67 protection. Directly mountable on equipment and aluminium frames.	With clear status recognition from a distance as well as the side, this pilot light is more prominent than traditional units but still fits into a Ø22 mm cut out.
	Machine tools Control panels Production lines.	Elevators Production lines Control panels Material Handling.	Robot manufacturers Machine tools Reception rooms.	Automotive machine production lines Control panels.
RATED INSULATION VOLTAGE	60 V	30 V	32 V	
OPERATING VOLTAGE	24 V AC/DC	12 to 24 V DC	24 V AC/DC	24 V AC/DC
RATED CURRENT	20 to 30 mA per Tier	18 mA (24V DC) 8 mA (12V DC)	17 mA	15 mA
ILLUMINATION	LED	LED	LED	LED
FLASHING	X	X		
SOUND PRESSURE	70 to 90 dB	90 dB Min at 0.1 m (24 V) 84 dB min at 0.1 m (12 V)		
MOUNTING OPTIONS				
MOUNTING	5	1	1	1
SURFACE	X		X	
BUSHING DIAMETER		22 mm		22 mm
TERMINAL OPTIONS				
SCREW				X
PUSH-IN TERMINALS		X		
WIRE	UL1007		UL20276	
SEALING	Steady: IP65 Steady/Flashing/Alarm: IP54 Pole mount: (w/o L-shaped bracket) IP54 (with L-shaped bracket) IP23	Panel Front: IP65 (IEC 60529) Terminal: IP40 (IEC 60529) With boot: IP54 (IEC 60529)	IP67	IP65
STANDARDS				
CE	X	X	X	X
UL	X	X	X	X
TUV			X	X

LED LIGHTING & SIGNALLING

Our LUMIFA LED industrial task and machine lights provide bright, long-lasting illumination for a wide variety of applications.

LF3D SERIES,
MAKES VISUAL INSPECTION EASY

- UNIFORM LIGHT DISTRIBUTION
- SURFACE OR RECESSED MOUNT OPTIONS
- CONNECTION TYPES - M12 REAR, M8 SIDE, REAR & SIDE CABLE EXIT
- IP67, IP67F, IP67G AND IP69K PROTECTION RATINGS
- WIDE OPERATING TEMPERATURE RANGE - UP TO 55°C

LF1B-N	LF2B	LF3D
Available in six lengths, two lens covers and six distinct colors, this range provides a flexible lighting solution for multiple applications.	Slim, compact surface mount LED units with universal input and excellent visibility.	Designed to be strong, reliable, and energy-efficient for machine tools applications.
Plant Equipment Test Equipment Food Processing Machines Show Cases Photosensitive Material Darkroom Experiments Advertising Displays Work Station and Task Lighting.	Control Panels Food and Packaging Pharmaceutical Plants Printing Various Machines and Systems Work Station and Task Lighting.	CNC Machine Tools Processing Machines Pharmaceutical/Chemical Production Systems Test Equipment.

	LF1B-N	LF2B	LF1D-C	LF3D-SB	LF3D-FB
PROTECTION CLASS	IP65	IP65	IP67 IP67F* IP69K	IP65, IP67, IP67G, IP69K	IP65, IP67, IP67G
ILLUMINATION COLOUR	3,000 K or 6,600 K	6,500 K	5,700 K	5,700 K	
COLOUR OPTIONS	Cool White Warm White Yellow	Cool White	Cool White	Cool White	
POWER CONSUMPTION	Between 1.0 W & 17.3 W	Between 2.2 W & 15.9 W	4.6 W	9.2W	9.2W
OPERATING VOLTAGE	24V DC	12/24V DC 100 to 240V AC	24V DC	24V DC	24V DC
REFERENCE ILLUMINATION	Between 10 lx & 1,350 lx	Between 10 lx & 1,350 lx	180 lx	1800 lx (standard distribution) 1000 lx (diffused distribution)	
DIMMING CAPABILITIES				X	X
MOUNTING					
SURFACE	X	X	X	X	
RECESS					X
COVER					
CLEAR	X	X			
WHITE	X	X			
LENS MATERIAL					
REINFORCED GLASS/CLEAR			X	X	X
POLYCARBONATE	X	X			
REINFORCED GLASS / DIFFUSED				X	X
UNIFORM				X	X

* Reinforced glass model

DIN-RAIL & PANEL PRODUCTS

Over the years, IDEC has introduced many new innovations to its family of DIN-rail and panel products.
Thanks to technological advances and creative engineering, our range has continued to set a new standard as we strive to meet the needs of our customers.

IDEC EXCLUSIVE

SJ SERIES
PUSH-IN RELAY SOCKETS

RELAY CONTACT TERMINALS ON UPPER SIDE AND COIL TERMINAL ON THE LOWER PROVIDE HIGHER SAFETY AND ALLOWS EASY WIRING

PUSH-IN STYLE CONNECTION ACHIEVES HIGH CONTACT RELIABILITY AND VIBRATION RESISTANCE REGARDLESS OF WIRE SIZE AND SHAPE

- IT IS INSTALLED EASILY ON A 35-MM-WIDE DIN-RAIL WITH A SNAP-ON ACTION
- AVAILABLE IN EITHER 1 POLE OR 2 POLE
- UL RECOGNISED, CSA CERTIFIED, EN COMPLIANT, FLAMEPROOF MATERIAL UL94 V-0

RELAYS

RV8H	RJ	RU	RL	RF2
Ultra-slim, 6 mm-wide interface relays suitable for high density mounting. Screw and spring clamp terminals. Release lever for easy locking and removal of relay.	Compact and rugged power relays. Large contact ratings.	Full featured environment-friendly, 2 Pole - 10 A, 4 Pole - 6 A relays. No lead or cadmium used.	This power relay ensures stable operation even when voltage drops momentarily. Single pole rated at 30A, double pole at 25A.	2-pole force guided relay to reduce cost and installation space. Two terminal styles - socket mounting and PC board mounting.

SOCKETS | TIMERS

SJ	SR/SH/SM SY/SU	GT3	GE1A
Slim and space-saving sockets with marking plate for RJ and RF2.	DIN-rail mount (standard, fingersafe, slim, spring-clamp), panel mount (solder, wire-wrap), and PC board mount.	Solid-state CMOS circuitry ensures high accuracy. Various operation modes available, such as off delay and star-delta.	Two different time ranges to cover a wide time range. Large clear knob for easy time range setting. ON Delay function, highly precise time control, instant monitoring of operation status by LED indicators.

SWITCHING POWER SUPPLIES | PUSH-IN TERMINALS

PS5R-V	
PS5R-V Space-saving DIN-rail switching power supplies. Can be installed in six mounting directions.	One step wiring for quick and highly reliable connection. Available for a wide range of IDEC panel products, including PS3V power supplies and SU/SJ relay sockets.

PLC/CONTROLLERS

AUTOMATION PRODUCTS

From powerful Programmable Logic Controllers (PLCs) that drive precision in industrial processes to intuitive Operator Interfaces that put control at your fingertips, and Remote Control Pendants that redefine accessibility in full safety, IDEC is your gateway to seamless automation.

FC6A Plus /All-in-One	FT1A-H24RA	SX8R	FT1J	FT2J
FC6A Plus is ideal for controlling not only large-size machines, but also entire small-size production lines. FC6A All-in-One has high performance and easy programming features.	10 A relay outputs, Ethernet, SD memory card, USB embedded. Independent dual-axis control and multistage control available.	Wide range of I/O modules (48 models) to build a highly efficient and suitable remote I/O system.	4.3 inch all-in-one automation solution combining a controller with an operator interface.	7 inch PLC / touchscreen combination, 22 I/O expandable to 30. Embedded ethernet and serial communications.

OPERATOR INTERFACES

HG5G (15")	HG4G (12.1")	HG3G (10" and 8")	HG2J (7")	HG1J (4.3")
Super bright, high resolution display with outstanding performance, visible from a distance and in well-lit surroundings. Display resolution: 1024 (W)×728 (H) View angle: right and left 80°, up 60°, down 80°.	Compact housing with a versatile interface. High performance operator interface with multimedia functions.	Excellent visibility by super-bright LED backlight. 700 cd/m² (10.4- inch), 600 cd/m² (8.4-inch).	High performance and feature rich touchscreen. Using PCAP touch techno-logy, this interface can be used even with gloves and is UV, scratch, water and chemicals resistant. The HG2J is IoT compatible.	Compact, rugged and IoT-ready operator interface with bright TFT color display. Its durable PCAP touchscreen and remote monitoring capabilities make it ideal for industrial applications.

FC6A / FC6A PLUS SERIES,
PLC/CONTROLLER

- POWER, PERFORMANCE & CONNECTIVITY
- IIOT THROUGH ETHERNET
- WIDE RANGE OF PROTOCOL SUPPORT INCLUDING ETHERNET I/P, SERIAL, MODBUS, MQTT, BACNET
- UP TO 32 PID LOOPS (PID, PIDD, AND PIDA)
- WIRELESS COMMUNICATION VIA BLUETOOTH CONNECTIVITY
- UP TO 2060 I/O
- FAST PROCESSING AND REFRESH RATE

	REMOTE CONTROL PENDANTS		ETHERNET SWITCHES AND CONNECTIVITY		IDEC SMARTRELAY

HT4P	HT3P	HG1P	SX5E	RJ45/ USB plugs	FL1F
A tablet holder that enables any industrial tablet to provide operation safety. It features wired LAN connection and mechanical switches or custom products like joysticks.	A tablet holder that can be adapted to any tablet on the market while guaranteeing foolproof safety. Incorporating IDEC's HE5B Enabling switch, and a XA1E Emergency-stop switch.	Hand-held operator interface with a 4.3" touch screen. Simple configuration using the IDEC Automation Organiser WindOI-NV4 programming software and Integrated Ethernet and Serial (RS232&RS485) communication.	Rugged design. Suitable for a range of applications. Unmanaged Ethernet switches equipped with various features.	Flush silhouette products with black or metal bezel. Design compatible with the CW series, Shielded products and cable. Cat 6, Class EA RJ45 port. IP65, IP67 with the accessories.	Equipped with convenience and high functionality. Multiple power supply variations.

IDEC

- 16 FACTORIES
- MORE THAN 75 YEARS OF EXPERIENCE
- 3,100 EMPLOYEES WORLDWIDE
- 100 000 + REFERENCES

ERGATE

ERGATE Automation s.r.o.
Klíny 35, 615 00 Brno
Tel.: +420 548 140 001
E-mail: office@ergate.eu