# New Products 



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- IDEC's innovative "safe break action" ensures all NC contacts open if the contact block is separated from the operator
- Push-to-lock, Pull and Turn-to-reset function built into same unit
- The depth behind the panel is only 48.7 mm for 4 contacts (XW Series)
- Direct opening action mechanism (IEC60947-5-5, 5.2, IEC60947-5-1, Annex K)
- Safety lock mechanism (IEC60947-5-5, 6.2)
- Degree of protection IP65 (IEC60529)
- Solder or PCB terminal options (XA Series)
- Screw terminal is finger-safe (IP20) with optional cover (XW Series)
- Two button sizes: 40 mm and 60mm (XW Series)
- UL, c-UL approved, EN compliant
- Part numbers \& list prices on back page
- For more information, contact Technical Support at 800-262-IDEC (press 2) or email support@idec.com


## World's Safest Switches - the XA and XW Series E-Stops!

IDEC is very excited to announce two new Emergency Stop switches, the XA and XW. These two series of E-Stops exceed international safety standards, employ innovative technology and have several unique features that make them the world's safest switch!

The emergency stop button is a critical component on any machine because its failure can have severe implications. A malfunction can cause equipment damage, personal injury, down time, etc., and may even lead to catastrophic failures like fires and life-threatening accidents. Malfunctions caused by dislocation of the contact blocks can occur due to improper installation of the switch, accidental removal of the contact block, improper wiring, and even from vibration during transportation of the finished product.

## Safety Standards

To reduce the risk of potential disaster, IDEC has designed the XA and XW series E-Stop switches. They reduce the impact of these failures, and not only comply with recent international safety standards (ISO13850 and EN60947-5-5), but actually exceed the safety standards by automatically turning off when a part fails or the contact block and the actuator are improperly installed.


Item \# XW9Y-B100-0
Note: Accessory part numbers in brochure (page 10) have been corrected on the back page of this product announcement.

## Revolutionary Technology

The two new IDEC Emergency Stop switches, the XA and XW series, include revolutionary new technology that will change the way E-Stop switches are designed. This "safe break action" concept provides greater levels of human safety and is the first of its kind in the world!

Conventional E-Stop switches are designed with spring pressure on the Normally Closed (NC) contacts, keeping them in the closed position and allowing the machine to operate. Improper installation or excessive force to the stop button in an emergency may break or dislodge a vital part, causing the spring loaded contact to stay closed. This situation renders the E-Stop incapable of stopping the machine, and can lead to catastrophic events, personal injury and possible loss of life.

## Dangerous

If the E-stop is installed incorrectly or shifts in shipment, the contacts and switch can separate, which cause the NC contacts to remain closed during an emergency and the machine to continue running!


OR
Safe
With IDEC's revolutionary "safe break action," the NC contacts will automatically open when the contacts are removed from the operator. This feature places the machine in a nonoperational state.



This one-of-a-kind "safe break action" design, found only in the IDEC XA and XW series, reverses the energy direction and uses the spring-pressure to assure that the NC contacts will open if the emergency switch is damaged or the contact blocks separate due to excessive force. The NC contacts will reliably open, even if they are welded, and stop the machine. Both the XA and XW switches include up to four contacts in a very compact package. In today's automated world, more customers are requiring E-Stop switches with at least three contacts. (Two of the contacts trip the power and the third contact is used to alert a safety-monitoring relay.) Both the XA and XW series switches offer up to four "safe-break" contacts with a depth behind the panel that is half the size of conventional E Stop switches. This means that there is an additional contact available and the switches can be used in Level 4 safety category applications.

IDEC's new E-Stop switches are secured from the rear of the control panel so that the E-Stop cannot be removed from the front. Another unique feature of the XA and XW E-Stop switches is that either a push-turn or push-pull reset method can be used to reset the switches. This eliminates any possible confusion for operators when resetting the switch. The durability and quality of these new E-Stop switches make them extremely reliable. They can withstand the highest stress caused by panic or a reaction to an emergency situation.

## Market \& Competition

## E-Stop Market

The USA 22mm E-Stop market is estimated at around $\$ 9$ Million for the year 2003, approximately $16 \%$ of the overall 22 mm pushbutton market. Trends observed over the last several months speculate 5-7\% growth in the 22 mm pushbutton products as OEM's drive new demand with the revamp of old projects and development of new ventures.

## Selling Strategies

Human safety has no dollar value and many OEM's, in particular Machine Tool manufacturers, are willing to use products that demonstrate innovation and increased levels of safety in order to help decrease liability as a result of human tragedies when operating dangerous machinery.

Competitively priced with traditional E-stops, XA and XW E-Stops are a quick and easy solution to OEMs that need to improve their machine safety. Distributors that carry IDEC inventory will benefit from sales growth in both the E-Stops and other standard pushbuttons by selling IDEC innovation and quality products. IDEC E-Stop sales brochure, XW9Y-B100-0, demonstrates all the newest technologies and the variety IDEC has to offer.

## Competition

IDEC's innovative XA 16 mm and XW 22mm Series of E-Stops have no equivalent competitors in the world! Any traditional 16 mm or 22 mm E-Stop can be replaced with an XA or XW E -Stop to provide additional safety and sense of security. For a partial list of part numbers from traditional E-Stop competitors, see the table below.

## Cross Reference Information

| AB | Cutier-Hammer | EAO | Square D 9001 | GE |
| :---: | :---: | :---: | :---: | :---: |
| 800EB-MP2 | E22ED | 704.075 | XB4BS | O800RER |
| 800EB-MT | E22EG | 61.344 | XB4BT | 0800TER |
| 800EM-MP2 | E22LL | 44-710 | XB5AS | 080RER |
| 800EM-MT | E22LP | 44-712 | XB5AT | 080TER |
| 800EP-MP2 | E22LT |  | XB6AS | 080XRER |
| 800EP-MT |  |  |  | 080XTER |
| 800ES-MP2 |  |  |  | P9MER4 |
| 800ES-MT |  |  |  | P9MET4 |
| 800FB-MP2 |  |  |  | P9SER4 |
| 800FB-MT |  |  |  | P9SET4 |
| 800FM-MP2 |  |  |  | PgXER4 |
| 800FM-MT |  |  |  | P9XET4 |
| 800FP-MP2 |  |  |  |  |
| 800FP-MT |  |  |  |  |
| 800FS-MP2 |  |  |  |  |
| 800FS-MT |  |  |  |  |
| 800MR-FX |  |  |  |  |

Part Numbers and List Prices

XA 16mm 40mm Mushroom
Button with PCB Terminals

| NO <br> Contacts | NC <br> Contacts | Part <br> Numbers | List <br> Prices |
| :---: | :---: | :---: | :---: |
| 1 | 1 | XA1E-BV411V-R | $\$ 30.00$ |
| - | 2 | XA1E-BV402V-R | $\$ 30.00$ |
| 1 | 3 | XA1E-BV413V-R | $\$ 40.00$ |
| - | 4 | XA1E-BV404V-R | $\$ 40.00$ |

XW 22mm LED Illuminated* 40mm Mushroom Button with Screw Terminals

| NO <br> Contacts | NC <br> Contacts | Part <br> Numbers | List <br> Prices |
| :---: | :---: | :---: | :---: |
| 1 | 1 | XW1E-LV41104M-R | $\$ 65.00$ |
| - | 2 | XW1E-LV40204M-R | $\$ 65.00$ |
| 1 | 3 | XW1E-LV41304M-R | $\$ 75.00$ |
| - | 4 | XW1E-LV40404M-R | $\$ 75.00$ |

* Illumination is with built-in 24V AC/DC LED
XA 16 mm 40 mm Mushroom Button with Solder Terminals

| NO <br> Contacts | NC <br> Contacts | Part <br> Numbers | List <br> Prices |
| :---: | :---: | :---: | :---: |
| 1 | 1 | XA1E-BV411-R | $\$ 30.00$ |
| - | 2 | XA1E-BV402-R | $\$ 30.00$ |
| 1 | 3 | XA1E-BV413-R | $\$ 40.00$ |
| - | 4 | XA1E-BV404-R | $\$ 40.00$ |


| XW 22mm 40mm Mushroom <br> Button with Screw Terminals |  |  |  |
| :---: | :---: | :---: | :---: |
| NO <br> Contacts | NC <br> Contacts | Part <br> Numbers | List <br> Prices |
| 1 | 1 | XW1E-BV411M-R | $\$ 50.00$ |
| - | 2 | XW1E-BV402M-R | $\$ 50.00$ |
| 1 | 3 | XW1E-BV413M-R | $\$ 60.00$ |
| - | 4 | XW1E-BV404M-R | $\$ 60.00$ |

mm 40 mm Mushroom Button with Screw Terminals

XW 22mm 60mm Jumbo Mushroom Button with Screw Terminals

| NO Contacts | NC Contacts | Part Numbers | List Prices |
| :---: | :---: | :---: | :---: |
| 1a | 1b | XW1E-BV511M-R | $\$ 62.00$ |
| - | 2b | XW1E-BV502M-R | $\$ 62.00$ |
| 1a | 3b | XW1E-BV513M-R | $\$ 72.00$ |
| - | 4b | XW1E-BV504M-R | $\$ 72.00$ |

Accessories: Shrouds

|  |  | Part Numbers | List Prices |
| :---: | :---: | :---: | :---: |
|  | A | HW9Z-KG1-TK2120 | $\$ 21.00$ |
| B | B | HW9Z-KG2-TK2120 | $\$ 21.00$ |

Accessories: Terminal Covers

| Part Numbers |  | List Prices |
| :--- | :--- | :---: |
| XW9Z-VL2MF | XW IP20 Finger-safe terminal cover | $\$ 4.00$ |
| XW9Z-VL2M | XW Terminal cover compatible with <br> ring terminal | $\$ 4.00$ |
| XW9Z-VL2 | XA Terminal Cover | $\$ 4.00$ |

Accessories: Nameplates

| Size \& Style | Part Number | Inner Ø | Outer Ø | List Prices |
| :--- | :--- | :--- | :---: | :---: |
| 16 mm Blank Ø60mm | HAAV4-0 | 16 mm | 60 mm | $\$ 6.00$ |
| 16 mm "Emergency Stop" Ø60mm | HAAV4-27 | 16 mm | 60 mm | $\$ 6.00$ |
| 22 mm Blank Ø60mm | HWAV-0 | 22 mm | 60 mm | $\$ 6.00$ |
| 22 mm "Emergency Stop" Ø60mm | HWAV-27 | 22 mm | 60 mm | $\$ 6.00$ |
| 22 mm "Emergency Stop" Ø80mm For Jumbo Mushroom | HWAV5-27 | 22 mm | 80 mm | $\$ 6.00$ |

For more information call IDEC at:
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