EAO – Your Expert Partner for
Human Machine Interfaces

EAO Configurable HMI Panel

EAO, the expert for Human Machine Interface Components and Systems, now offers the EAO Configurable HMI Panel. The EAO Configurable HMI Panel provides a modular and uniquely customizable approach to implementing an HMI control panel in your machine control or fabrication equipment. Applications could be in electronics, medical technology, aerospace, transportation, and CNC machinery.

This configurable panel allows customers to quickly, easily, and inexpensively bring industrial PC control to their equipment. The panel combines standard components with the ability to customize the layout with adaptable switch cut-outs. The panel incorporates durable membrane buttons, an integrated Sharp display, resistive touchscreen, and integration of electromechanical pushbuttons and components.

Main Features:

- Affordable HMI interface design;
- Up to 8 possible auxiliary discrete functions;
- Keylock and emergency stop switch for safety and security;
- Plug-and-play USB interface;
- Illuminated animated buttons and engravable lenses;
- “Easy-label” slide-in legends for function keys;
- Factory configurable illumination sequences;
- Display sizes including 5.7”, 10.4”, or 12.1”;
- Ability to integrate a Sharp display into the panel;
- Individually constructed housing for controller requirements;
- Independent operator PC board for pushbuttons;
- Single board computer integration available;
- Low cost, rapid prototyping.

The EAO Configurable HMI Panel features a standard 5.7” display (10.4” or 12.1” optional), optional resistive touchscreen, and 43 keys. The overall size is 14” x 7” and the front panel is applied to an aluminum plate, ensuring maximum stability.

Front Panel

Overall Size:	14” x 7”/355.6 mm x 177.8 mm
Material:	Polyester PVS-G on Aluminum
Printing:	2 colors, printed on the reverse
Embossing:	All keys embossed
EasyLabel:	Several EasyLabel slide-in pockets for individual labeling of keys

Display

Visible Size:	4.65” x 3.52”/118.2 mm x 89.4 mm
Material:	Acrylic glass S000
Thickness:	0.08”/2.0 mm
Coating:	Non-reflexing, A1

Keys

Number:	43 keys
Operations:	1 million operations/key
Pressure/key:	3 N per key on contact spring
Material:	Gold on silver polymer

Resistive Touchscreen (optional)

Size:	5.7”
Type:	DMC AST 057, resistive
Connector:	USB
Controller:	Integrated

EAO Configurable HMI Panel

Electrical Specifications

Voltage:	5V
Connector:	USB (cable included)
EMC shielding:	None
LED's:	10 LED's, yellow

User specified for auxiliary discrete pushbuttons and indicators

Mechanical Specifications

Material:	Aluminum
Thickness:	0.12"/3.0 mm
Surface:	Natural anodized
Mounting:	6 stud bolts FH-832-10 (UNC thread)

Emergency Stop switch

Actuator:	Maintained with twist-to-release
Contact:	1NO/1NC SM contact, solder/plug-in terminals
Max rating:	3A/250VAC
Front protection:	IP 65 as per EN IEC 60529

This device complies with:
EN IEC 60947-5-1, EN IEC 60947-5-5, and ISO 13850

Keylock

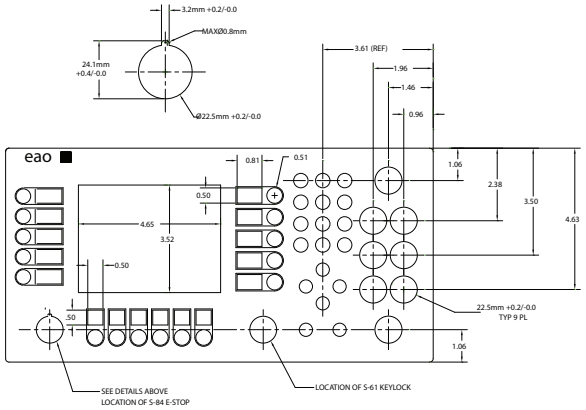
Actuator:	Flush mount 2 position maintained,
Key:	Removable in "A" position
Contact:	1NO/1NC SA contact, solder/plug-in terminals
Max rating:	5A/250VAC
Front protection:	IP 65
Mechanical life:	50,000 cycles of operations

Illuminated Pushbuttons

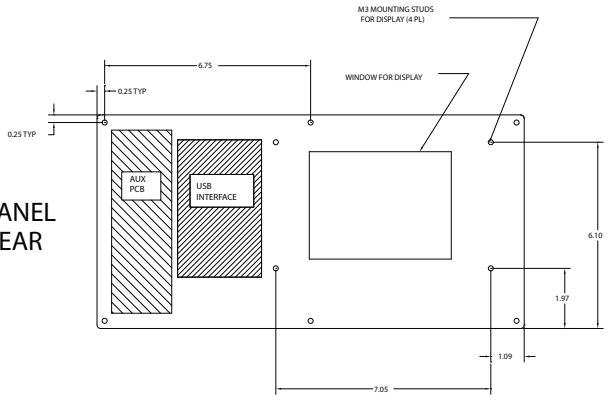
Actuator:	Flush momentary action
Contact:	1NO, Max rating: 100mA/42V
Front protection:	IP 65

Mechanical lifetime: ≥ 1 million cycles of operations
Customer defined animation sequence:
Illumination created by 8 SMT LEDs

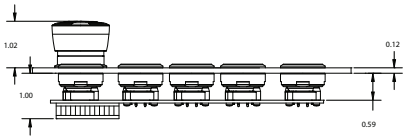
FRONT FACE



PANEL REAR



PANEL SIDE



Switch Position	1	1	2	2	3	3	4	4
Terminal – P1 (top)	1	2	3	4	5	6	7	8

Switch Position	5	5	6	6	7	7	8	8
Terminal – P2	1	2	3	4	5	6	7	8

1. EUS-C-HMI-06-AGL-EK8 .....(5.7" window, acrylic glass lens, no display, E-Stop, keylock, 8 discrete pushbuttons)
2. EUS-C-HMI-06-AGLD-EK8 ...(5.7" window, acrylic glass lens, with display, E-Stop, keylock, 8 discrete pushbuttons)
3. EUS-C-HMI-06-RTS-EK8 .....(5.7" window, acrylic glass lens, resistive touch screen, no display, E-Stop, keylock, 8 discrete pushbuttons)
4. EUS-C-HMI-06-RTSD-EK8 ....(5.7" window, acrylic glass lens, resistive touch screen, with display, E-Stop, keylock, 8 discrete pushbuttons)