# IDEM Zero Force Touch Switch For Two-Hand Control





IDEM Zero Force Touch Switch				
Part Number	<u>2H-240021</u>			
Price	\$187.00			
Description	IDEM touch switch, IP65, 30mm, zero force, LED illuminated, (1) N.O./(1) N.C. contact(s), black, mushroom, 68mm, round.			
Mounting Diameter	30mm [1.18 in]			
Actuating Stroke	Zero stroke (touch sensitive)			
Pushbutton Material	Polyester			
Front Panel Thickness	2 to 9 mm [0.08 to 0.35 in]			
Weight	139g [0.31 lb]			
Mounting Screws Tightening Torque	1.0 N•m [0.74 lb•ft]			
Ambient Temperature	-20°C to +40°C [-4°F to +104°F]			
Ingress Protection Rating	IP65			
Standards	ISO 13851; UL File E258676			
Drawing	PDF			

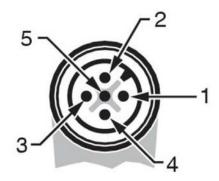
The IDEM Zero Force Touch Switch is activated when touched. The switch does not require any force to activate. It was designed to eliminate hand or wrist stresses associated with frequent repetitive machine operations. It features solid state construction as well as high-visibility LED status indication (red when the button is not being touched, as shown at left, or green when the button is being touched).

This touch switch is supplied with a 250mm [9.84 in] flying lead with a 5-pin M12 male plug. The plug makes it easy to connect to the PCB connection board which is part of IDEM's two-hand control stations.

Note that if gloves must be worn by the operator, mechanical pushbuttons (such as 2H-240022) should be used instead.

## **Cable Connections**

5-Pin M12 Connections				
1	+24VDC			
2	NC contact			
3	0 VDC			
4	NO contact			
5	Common			





IDEM TouchSafe Two-Hand Control Panels are an all-in-one-box solution that is ergonomic, easy to set up, and easy to use. These panels take the guesswork out of two-hand pushbutton spacing and provide straightforward mounting options.



### **Applications**

Two-hand control panels are designed for use in combination with a two-hand control monitoring device and require an operator to use both hands at the same time when initiating a hazardous operation. This forces operators to have their hands on the twohand control actuator elements and out of the danger zone while the system is actuated.

#### Safety Design

These panels are designed with guard hoods over the actuator elements, which prevent individuals from circumventing the protection function using just one hand or other body parts. For additional safety, these two-hand control panels have been designed so that it is not possible to operate them from the back side of a panel. The two-hand control station is a complementary device designed to ensure that the operator's hands remain away from a hazard. Additional safety measures – for example, guarding – may be needed to ensure operator safety.



#### **Features**

- Pre-installed two-hand pushbuttons for ease of installation
- Five additional pre-drilled M22 holes (ships with hole covers installed)
- Ergonomic operation
- Two-part enclosure
- Die-cast aluminum enclosure
- Ability to be wall mounted
- · Guard hoods over the actuator elements
- Safety yellow and black finish
- Optional empty enclosure
- Convenient terminal block inside the enclosure



IDEM Two-Hand Control Panel Selection Guide						
Part Number	Price	Type of Pushbutton	Pushbutton Contacts	Ingress Protection	Weight (kg [lb])	Drawing
Control Panel Versions With Pushbuttons						
<u>2H-240001</u>	\$724.00	Zero Force touch switch with LED indication	2 (1 NO, 1 NC)	IP65	5.4 [11.92]	PDF
2H-240002	\$593.00	Mechanical momentary pushbuttons	2 (1 NO, 1 NC)	IP65	5.5 [12.19]	PDF

Control Panel Without Pushbuttons Selection Guide						
Part Number	Price	Type of Pushbutton	Pushbutton Contacts	Ingress Protection	Weight (kg [lb])	Drawing
<u>2H-240000</u>	\$406.00	Aluminum die-cast, powder coated	Two 30mm holes (for two-hand control buttons) and five 22mm holes for additional buttons or lamps	IP65	5.2 [11.40]	PDF



## IDEM TouchSafe Two-Hand Control Panels – Connections

The enclosure features an internal connection PCB. This board makes it very simple to change out a pubbutton or a light, reducing the overall cost of ownership. The PCB has two M12 5-pin connectors for connection to either of IDEM's pushbuttons (the <u>2H-240021</u> Zero Force pushbutton or the <u>2H-240022</u> mechanically activated pushbutton) for two-hand control. In addition, the board provides four V+ terminals, four V- terminals, and eight pairs of pass-through terminals for end-user use.

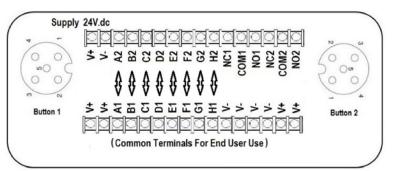
### **PCB Connections**

#### IDEM TouchSafe Two Hand Control Panels PCB Terminals Wiring Connections

Top-Row Terminals			
Terminal	Connects to Description		
V+	DC supply	Required when using Zero Force type buttons	
<i>v</i> -	DC supply	Required when using Zero Force type buttons	
NC1	Button 1	Normally closed (NC) circuit	
COM1	Button 1	Common	
NO1	Button 1	Normally open (NO) circuit	
NC2	Button 2	Normally closed (NC) circuit	
СОМ2	Button 2	Common	
NO2	Button 2	Normally open (NO) circuit	

Pass-Through Terminals			
Terminal	Connects to	Description	
A1	A2	Common connection for end user use	
B1	B2	Common connection for end user use	
C1	C2	Common connection for end user use	
D1	D2	Common connection for end user use	
E1	E2	Common connection for end user use	
F1	F2	Common connection for end user use	
G1	G2	Common connection for end user use	
H1	H2	Common connection for end user use	

Bottom-Row Common Terminals			
Terminal	Connects to	Description	
All V+	Internally connected	Common connection for end user use	
All V-	Internally connected	Common connection for end user use	



## **Safety Products**



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