# 30MM HAZARDOUS PILOT DEVICES



## SERIES 30 PRODUCT PROFILE

c3controls 30mm Hazardous Pilot Devices are designed for your most demanding hazardous duty applications and include a wide range of push buttons, pilot lights, and selector switches. Full-voltage, resistor, and dual input operators are available from 6V-480V AC/DC.

## **LEADING THE INDUSTRY** WITH OUR INNOVATIVE AND RUGGED DESIGN

<b>√</b> Easy to Install	Our contact blocks snap-on for secure assembly and are color coded for quick circuit identification.
✓ Class 1, Division 2	Leading the industry with the largest selection of Class 1, Div. 2 hermetically sealed reed contact blocks and factory sealed contact blocks.
Simple Customization	Our light modules come with various lens color options for appropriate operator interface and are available in incandescent, neon, or our LED lamps with leakage protection.
✓ Visible Certifications	Our product certifications and electrical ratings are clearly marked on the outside of the contact blocks for easy reference during installation.
<b>√</b> Heavy Duty	Polyester construction provides superior durability, corrosion resistance, moisture rejection and electrical insulation. For added protection, metal parts are nickel-plated.
✓ Convenient	Reduce inventory with our interchangeable modular design, providing endless options for appropriate operator interface.
✓ 100% Reliability	Hermetically sealed and factory sealed contact blocks are manufactured with all stainless steel hardware for use in harsh environments.
<b>√</b> Added Security	All 30mm hazardous location operators come with a screw tightened mounting bracket to ensure contact blocks remain snug against operator.
Environmentally Secure	With 4/4X and IP65 ratings, our 30mm line of pilot devices are built to last and withstand dust, corrosion, ice, and rain.
Limited Lifetime Warranty*	Every product is backed by our limited lifetime warranty— unmatched in the industry—bringing you quality components that perform in the most demanding applications.
Guaranteed Same-Day Shipping*	Product availability reduces inventory, and improves cashflow—saving you money. With c3controls any order for standard catalog items received by 6:00pm ET is guaranteed to ship same-day.
✓ Advantage Pricing	Our approach to product development, manufacturing, and focus on servicing the OEM and Electrical Equipment Builder reduces cost. The result—the best value in the industry.



## **UNIQUE FEATURES**

#### Metal on the inside-where it counts!

• c3controls 30mm Push-Twist-Release Emergency Stop devices feature a nickel-plated detent mechanism with stainless steel ball, and our Push-Pull operators contain a solid stainless steel detent mechanism. These features ensure reliable operation in emergency stop applications and provide safe interruption of circuits and longer life.

#### **U-Cup Seal**

• Our revolutionary U-Cup seal is infused with a Teflon coating to eliminate cracking when exposed to harsh conditions and keeps water, oils, and dust away from the contact blocks.

### **Internal Self-Lubricant**

· All frictional parts are molded with an internal self-lubricant to provide outstanding wear without troublesome greases used by others.

#### One Cam Design

• Our single cam design eliminates the need for multiple cam and selector switch configurations, reducing inventory and saves you labor time and costs.

#### Rubber Boots

• Our state-of-the-art Fluorosilicone rubber boots protect both the operators and the circuits behind them from harsh chemicals and climates. They feature a nickel-plated brass thread ring that is molded into a special thermoset compound guaranteed to out perform Hypalon boots.

<sup>\*</sup>See c3controls Terms & Conditions





## 30MM HAZARDOUS PILOT DEVICES

## **SPECIFICATIONS**

### **DIELECTRIC STRENGTH (MECHANICAL CONTACTS)** 2200V for 1 Minute **FACTORY SEALED CONTACT BLOCK - CBFS/CBFSR**

Class I Div. 2 Gr. B, C, & D/Zone 2 Gr. IIB +H2

	Utilization Category				
	IEC	UL	Make Rating	Break Rating	Ith Thermal Current
AC	AC-15	A600	7200VA	720VA	10A
DC	DC-13	P300	138VA	138VA	5A

NOTE: For AC voltage below 72V AC (28V DC) the max. allowed switching current is 10A=lth (5A=lth) For switching applications below 24V/40mA, Hermetic Reed contacts are recommended.

#### HERMETICALLY SEALED POWER REED CONTACT BLOCK

Class I Div. 2 Gr. A. B. C. & D/Zone 2 Gr. IIC

	Utilization Category				
	IEC	UL	Make Rating	Break Rating	Ith Thermal Current
AC	AC-15	B300	3600VA	360VA	5A
	AC-15	C600	1800VA	180VA	2.5A
DC	DC-13	Q300	69VA	69VA	2.5A

NOTE: For AC voltage below 72V AC (28V DC) the max. allowed switching current is 5A=Ith (2.5A=Ith). Suitable for switching DRY circuits and Low Energy Circuits (Less than 24V-40mA).

#### HERMETICALLY SEALED MEDIUM-LOGIC REED CONTACT BLOCK

Class I Div. 2 Gr. A. B. C. & D/Zone 2 Gr. IIC

	Utilization Category				
	IEC	UL	Inductive	Resistive	Ith Thermal Current
AC	AC-12	250V Max.	40VA	100 Watt	3A

NOTE: Suitable for switching DRY circuits and Low Energy Circuits (Less than 24V-40mA).

#### HERMETICALLY SEALED MID-POWER REED CONTACT BLOCK

Class I Div. 2 Gr. A, B, C, & D/Zone 2 Gr. IIC

	Utilization Category				
	IEC	UL	Make Rating	Break Rating	Ith Thermal Current
AC	AC-15	C300	1800VA	180VA	2.5A
DC	DC-13	Q150	69VA	69VA	2.5A

NOTE: For AC voltage below 72V AC (28V DC) the max. allowed switching current is 2.5A=Ith (2.5A=Ith). Suitable for switching DRY circuits and Low Energy Circuits (Less than 24V-40mA).

#### HERMETICALLY SEALED LOGIC REED CONTACT BLOCK

Class I Div. 2 Gr. A, B, C, & D/Zone 2 Gr. IIC

	Utilization Category				
	IEC	UL	Inductive	Resistive	Ith Thermal Current
AC		220V Max.	N/A	40 Watt	2A

NOTE: Suitable for switching DRY circuits and Low Energy Circuits (Less than 24V-40mA).

INDICATING LIGHTS				
Light Unit	T-Code			
FV Incandescent Lights	T4A			
FV LED Lights	T6 (No marking required)			
Resistor Incandescent Lights	T3C			
Resistor LED Lights	T4A			

#### Multi-Voltage 20V-277V LED Lights **ENVIRONMENTAL RATINGS**

	Type 1, 2, 3, 3R, 4/4X, 12, 13, and IP65
Operating Temperature	-40° F to +131° F (-40° C to +55° C)
Storage Temperature	-40° F to +185° F (-40° C to +85° C)

#### **TERMINAL & WIRING CONSIDERATION**

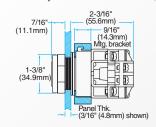
Wire: AWG 22 -12 CU (Copper only - Solid/Stranded) [.5  $\sim$  4mm $^2$ ] 1 or 2 wires permitted per termination. Recommended Torque

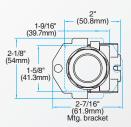
**ROHS COMPLIANCE** For RoHS compliance documentation by product, refer to www.c3controls.com

For complete ratings and detailed specifications refer to www.c3controls.com.

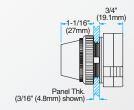
### DIMENSIONS

Non-Illuminated Operator (shown with Flush Cap & Factory Sealed Contact Block)



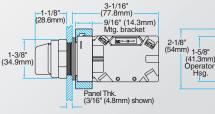


#### Full Voltage Pilot Light Operator (shown with PLL)





#### Selector Switch Operator (shown with Standard Handle)





## CERTIFICATIONS

#### **Conformity to Standards:**

PILOT DEVICES

UL 508, 698, 1604 & 2279

CSA C22.2 No. 0, 14, 25, 30M, 157 & 213 IEC 60947-1, 60947-5-1

MULTI-VOLTAGE PILOT LIGHTS UL 508, 1604

IEC 60947-1, 60947-5-1

#### Certifications:

UL File #: E157436 (Guide NOIV, NOIV2, NOIV7)

E68568 (Guide NKCR, NKCR7)

CSA File #: LR47446

CE Marked (per EU Low Voltage Directive 2006/95/EC and RoHS Directive 2011/65/EU)







UL File #: E68568 (Guide NKCR, NKCR7); E157436 (Guide NOIV)

CE Marked (per EU Low Voltage Directive 2006/95/EC and RoHS Directive 2011/65/EU)



Visit www.c3controls.com to download product certifications.













T4A







