

# Eaton vs. C3 Controls



	<b>Eaton's 10250T Pushbuttons</b>	<b>C3 Controls' Series 30 Industrial Pushbuttons</b>
<b>Grounding</b>	Self-grounding nib allows for grounding without additional wiring or drilling	Plastic operators—no grounding to the panel required
<b>Illumination</b>	Much brighter LED Visible from front and side angles	Light units are very deep (with the exception of indicating lights) LED is very dim, and the indicating light lens does not view well, especially from the side No illuminated selector switches available
<b>Construction</b>	All metal construction, including bezel, mounting nut, and base plate	All plastic components except for some bezels and internal components (e.g., E-stops) Metal bezel still uses plastic threads
<b>Mounting</b>	Metal bezel with fine long threads allows for panel mounting with a wide variety of depths Bezel either fits around operator head or the head is removable Single gasket sealing	Uses multiple washers for correct panel depth because of small section of large threads Operator heads are integrated into bezel, which requires reinstallation when mounting; this is especially challenging with selector switch knobs
<b>Contact blocks</b>	Opaque or clear casings available Pressure or spade terminals Screw-on, stackable contact blocks Maximum of 12 circuits per operator Reliability nibs on the contacts ensure reliable switching Logic level contact blocks available	Opaque contact blocks have see-through covers, which are not visible when mounted side by side Screw terminals only Snap-on and stackable, but are only removable from one side Maximum of eight circuits per operator
<b>Miscellaneous</b>		Details about unit (e.g., voltage on a light unit) are on a printed sticker, making identification difficult if at all worn
<b>Ratings and certifications (may not apply to all operators)</b>	NEMA® 1, 2, 3, 3R, 3S, 4, 4X, 12, and 13 UL® 508 CSA® C22.2 No. 14 IEC 60947-5-1, 60947-5-5 (on select E-stops) IEC IP65	NEMA 4, 4X, 1, 2, 3, 3R, 12, and 13 UL 508, 1604 CSA C22.2 No. 14, 213 IEC 60947-5-1 IP65 on indicating light only
<b>Availability</b>	Eaton products are available at your local distributor	Factory-direct shipping required, limited local distributor stock

**Note:** The information contained in this feature comparison is based on a review of a cross section of C3 Controls product.

# EATON

Powering Business Worldwide



	<b>Eaton's M22 Pushbuttons</b>	<b>C3 Controls' Series 22 IEC Pushbuttons</b>
<b>Illumination</b>	M22 LEDs and lenses have consistent illumination over the entire lens surface	Very dull indicating light, especially from the sides, partly because LED lamp does not extend into the lens
	Universal voltages (12–30 Vac/Vdc and 85–264 Vac)	Lamp sits loose in the base
	Integrated LEDs	Light unit does not hold to the operator well and could be pulled off
<b>Product size</b>	See C3 note	Operators are significantly deeper in the panel than M22
<b>Miscellaneous</b>		Light units and contact blocks are wider and deeper than M22 components
		Details about unit (e.g., voltage on a light unit) are on a printed sticker, making identification difficult if at all worn
<b>Modularity</b>	Popular, complete devices are offered	Any product type configurable out of the options
	Operators can be ordered as component parts	Cannot order the components that make up the product
	Field-convertible maintained pushbuttons, selector switches, and keyed selector switches	No field convertibility
	Laser engraving options on buttons and lenses in addition to legend plates	Legend plate options
<b>Specialty operators</b>	Buzzer, bulkhead interface, four-way pushbutton and selector switch, joystick, potentiometer, through-the-door operator, ASI adapter module, palm switch, unibody operators ① (available April 2010)	Potentiometer, through-the-door operator, unibody pilot lights; no maintained pushbuttons
<b>Mounting</b>	All snap-on, easily removable with small screw driver	Realigning operator with latch-on (tool-less) adapter is difficult, especially when mounting in a panel
	Very secure when mounted	Snap-on light units do not fit tightly to adapter and can be pulled off
		Removal of contact blocks is difficult and inconsistent
<b>Ratings and certifications (may not apply to all operators)</b>	NEMA 4X/13	NEMA 4, 4X, 1, 2, 3, 3R, 12, and 13
	CCC, CE, CSA, GOST-R, and UL certified	UL 508, 1604
	IEC 60947-5-5	CSA C22.2 No. 14, 213
		IEC 60947-5-1
	Marina classifications: BV, DNV, GL, and LR approved	CE marked
	IP66 or IP67 and IP69K	IP65
		E-stops are not IEC 60947-5-5
<b>Availability</b>	Eaton products are available at your local distributor	Factory-direct shipping required

① Eaton will be offering an extensive line of unibody (monoblock) operators that will include pilot lights, selector switches, pushbuttons, and E-stops.

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