

Description

The general purpose Bulletin 800Z Zero-Force Touch Buttons are designed for use by machine control systems requiring the use of two hands. An interlinked sensor surface weaves two capacitive sensors in offset planes for superior product sensitivity.

The 800Z touch buttons are ergonomically designed for ease of operation. No force is required to operate the switch; simply touching the surface of the switch will initiate an output. The 800Z can detect the hand though most industrial gloves.

The contour of the 800Z touch buttons serves two purposes; it easily conforms to the shape of the hand while helping prevent defeatability when two-hand control is needed.

Two bi-coloured diagnostic LEDs provide guidance during operation. The power/fault LED blinks at different rates to provide diagnostic information to the user. The 800Z detects the presence of a hand during power-up, noise, and conductive film build-up over time.

Features

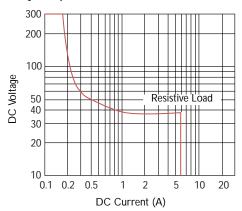
- Zero Force to operate
- Ergonomic design
- EMC protection
- Diagnostic LEDs

Specifications

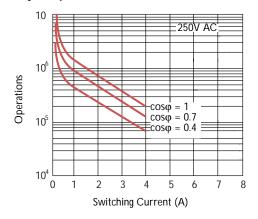
Standards	EN574, EN954-1, IEC/EN60947-5-1,	
Staridards	IEC/EN60204-1	
Approvals	cULus, C-Tick, and CE marked for all	
, tpp: ovais	applicable directives	
Power Supply	applicable all collections	
Relay Output	10-40V DC, 20-30V AC, or 85-264V AC	
Transistor Output	10-30V DC	
Power Consumption		
Relay Output	1.44W, 19.2VA	
Transistor Output	100mA at 24V DC = 2.23W (no load)	
Outputs	,	
Relay Output	1 N.O. & 1 N.C.	
Transistor Output	PNP or NPN	
Output Ratings		
Relay Output	See Load Life Curves	
Transistor Output	150mA	
Min. Switched Current/	8mA/5V DC	
Voltage (Relay Output)		
Pollution Degree	2	
Operating Temperature	-25°C to +55°C (-13° to +131°F)	
Humidity	95% RH	
Enclosure Protection	IP66 (NEMA 4/4X/13), 1200 psi	
	washdown	
Material		
Housing/Guard	Valox [®] 357	
Gaskets	BUNA-N	
Relay Contacts	AgSnO	
Mounting	Any position	
Cable	5 wire (single common)	
	4 wire (single common)	
Electrical Life	-	
EM-Relay inductive load	See Load Life Curves	
Vibration	1.5mm (0.06in) 10-55Hz	
Shock	100g,11ms half-sine	

Load Life Curves for General Purpose Product Line

Relay Output—Maximum DC Load Breaking Capacity



Relay Output—Electrical Endurance



Product Selection

Mounting Hole	Input Voltage Range and		Catalogue Number		
Size	Output Type	Guard	6ft Cabled—5-Wire	5-Pin Mini QD	5-Pin Micro QD
	85264V AC Input	No Guard	800Z-GF3065	800Z-GF3Q5	
30.5 mm	Relay Output	Black Guard	800Z-GF3065B	800Z-GF3Q5B	
Mounting Hole 104	1040V DC and 2030V AC Input	No Guard	800Z-GL3065	800Z-GL3Q5	
	Relay Output	Black Guard	800Z-GL3065B	800Z-GL3Q5B	
	85264V AC Input Relay Output	No Guard	800Z-GF2065		800Z-GF2Q5
22.5 mm		Black Guard	800Z-GF2065B		800Z-GF2Q5B
Mounting Hole	1040V DC and 2030V AC Input	No Guard	800Z-GL2065		800Z-GL2Q5
	Relay Output	Black Guard	800Z-GL2065B		800Z-GL2Q5B
Recommended standard cordset, 2m (6.5ft). See pages 15-12 and 15-10 for additional lengths				889N-F5AE-6F	889D-F5AC-2

Use the configurator below to build an 800Z touch button to suit your application.

800 Z –	G	L	3	065	В	-	
		а	b	С	d		е

а			С		d
lı	nput Voltage and Output Type		Electrical Connection		Guard Option
Code	Description	Code Description		Code	Description
Relay Output		Sinking/Sourcing Output 0		Blank	No Guard
	Input: 1040V DC and 2030V AC	Q4	4-Pin QD	В	Black Guard
L	Output: Relay	064	6 ft (1.8 m) Cabled	Y	Yellow Guard
F	Input: 85264V AC Output: Relay	124	12 ft (3.6 m) Cabled	е	
	Transistor Output	244 24 ft (7.2 m) Cabled		Kit Option 	
Ν	1030V DC; NPN (Sinking) Output		Relay Output ❷	Code	Description
Р	1030V DC; PNP (Sourcing) Output	Q5	5-Pin QD	Blank	No Kit
b		065	1.8m (6ft) Cabled	K1	24V AC/DC Relay Kit
	Mounting Hole Size	125	3.6m (12ft) Cabled	K2	120V AC Relay Kit
Code	Description	245	7.2m (24ft) Cabled	K3	240V AC Relay Kit
2	22.5mm (0.88in)				
3	30.5mm (1.20in)				

^{3 30.5}mm (1.20in)

● These devices are transistor outputs.

● These devices have separate N.O. and N.C. output relays with a shared common.

● Safety relays should be used in two-hand control applications. Kits not available for solid-state (transistor output) devices. Kits include two identical touch buttons and one MSR125HP safety relay with removeable terminals.

Zero-Force™ Touch Buttons 800Z General Purpose

Accessories

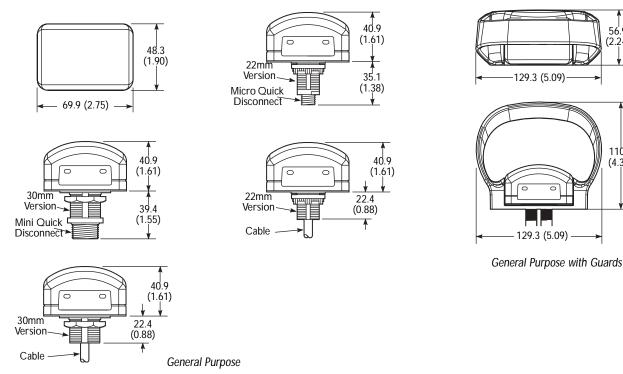
	Description	Colour	Catalogue Number
	These guards prevent accidental activation of the touch	Yellow	800Z-G3AG1
Guards	button surface and protect it from damage. Can be used for both the 22.5mm and 30.5mm mounting products.	Black	800Z-G3AG2
Plastic Mounting Kit	Mounting Ring Nut for 22.5mm holes. Used on 22.5mm devices.	Plastic	800Z-G2AH1
Plastic Mounting Kit	Mounting Ring Nut for 30.5mm holes. Used on 30.5mm devices.	Plastic	800Z-G3AH1
Swivel Assembly	30.5mm Swivel/Tilt Mounting Assembly This bracket allows you to orient the touch button in any	57mm (2.25in) Extension	60-2681
	position. It can be mounted on any vertical or horizontal surface. Compatible with 30.5mm mounting only.	29mm (1.15in) Extension	60-2439
OF	30.5mm to 22.5mm Hole Size Adaptor	Shiny Metal	800E-AHA1
Adaptor	This adaptor allows a 22.5mm push button operator to be installed in a panel with existing 30.5mm mounting holes.	Black Metal	800E-AHA2

(2.24)

110.3

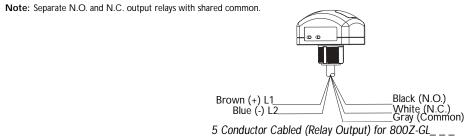
(4.34)

Approximate Dimensions—mm (inches)

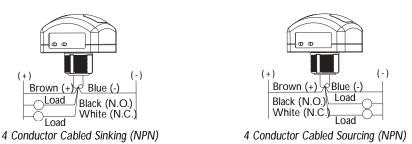


Typical Wiring Diagram

Electrical Connections: 10...40V DC and 20...30V AC Input Voltage (Relay Output); 85...264V AC Input Voltage (Relay Output)



Electrical Connections: 10...30V DC Input Voltage (Transistor Output); 150mA max. per circuit output



Applications Details

LED Blink Rate	Diagnostic	Description
** ** **	Power Up	Device touched during power-up. Device will resume 10 seconds after removal of hand.
*** ***	Noise Detection	Device detected an unacceptable level of noise (>20V/m). Device will resume once noise subsides.
**** ****	Margin Detection	A conductive film is building up on the sensing surface. Device will resume once cleared.