

Specifications ①

Electrical Ratings	
Contact Ratings	Refer to the Contact Ratings tables below.
Dielectric Strength	1600V for one minute 1300V for one minute (Logic Reed)
Electrical Design Life Cycles	750,000 at maximum rated load 200,000 at maximum rated load (Logic Reed)
Mechanical Ratings	
Vibration	10...2000 Hz 1.52 mm displacement (peak-to-peak) Max./10 G Max. (except Logic Reed)
Shock	1/2 cycle sine wave for 11 milliseconds \geq 25 G (contact fragility) and no damage at 100 G
Degree of Protection	Type 13; 44 IP65 Oiltight
Mechanical Design Life Cycles	
Push Buttons	1,000,000 minimum
Potentiometers	100,000 minimum
All other devices	200,000 minimum
Contact Operation	Contact blocks with Bifurcated spanner: Slow make and break, simple break. Logic Reed Contact Blocks: Snap-action
Typical Operating Forces	
Operators without contact blocks	2.45 lbs (10.8 N)
Push-Pull Units	8 lbs (35.3 N) push to in position 4 lbs (17.7 N) maximum pull to out position
Contact Blocks	Standard 1.5 lbs (6.7 N) Logic Reed 0.616 lbs (2.6 N)
Environment	
Temperature Range	Operating +32...+131°F (0...+55°C) Storage -40...+185°F (-40...+85°C)
Note: Operating temperatures at +32°F (0°C) are based on the absence of freezing moisture and liquids.	
Humidity	50% at +104°F (+40°C)
Panel Thickness Requirements	1/16...1/4" (1.6...6.4 mm)

① Performance Data — See Page Important-2.

Standard Contact Ratings

(IEC 337-1) (NEMA ICS 2-125) Maximum continuous current I_{th} 10 A. Bulletin 800MR units have control circuit ratings with 800M contact blocks as follows:

Maximum Operational Volts Ue	Utilization Category		Rated Operational Currents		
	IEC	NEMA	Volts Ue	Make	Break
AC 300	AC-II	A300	120...300	7200 VA	720 VA
			72...120	720 VA	720 VA
			24...72 ②	10 A	10 A

② For applications below 24V and 24 mA, Logic Reed contacts are recommended.

Logic Reed Contact Ratings

Maximum: 150V AC, 0.15 A, 8 VA and 30V DC, 0.06 A, 1.8 VA. Should only be used with resistive loads.

Approvals

UL Listed —File: E14840, E10314
 Guide: NKCR, NOIV
 CSA Certified: LR1234, LR11924
 IEC Compliance, IEC 529

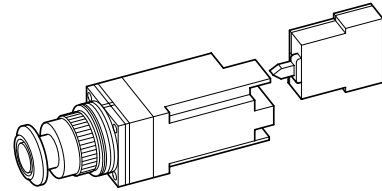
Wire Capacity

Stab Termination Contact Blocks —
 Accept 2 (two) 0.110" x 0.032" push-on connectors or 1 (one) 0.250" x 0.032" push-on connector.
 Small Screw Contact Blocks —
 Accept 1 (one) #14 or 2 (two) #16 AWG solid or stranded wires.
 Large Screw Termination Contact Blocks —
 Accept 2 (two) #12 AWG solid or stranded wires.

2-Position Push-Pull and Push-Pull/Twist Release and 3-Position Push-Pull Units, Non-Illuminated

800MR – FX T 6 A (2-Position)
a b c d e

800MR – FX N 6 A (3-Position)
a b₁ c d e






a

Operator Type	
Code	Description
FX	Push-Pull Unit

b

Operator Function	
2-Position	
Code	Description
Blank	Maintained (Push-Pull)
T	Twist-Release

b₁

Operator Function			
3-Position ①			
Code	Operator Position		
	 Out	 Center	 In
N	Momentary	Maintained	Momentary

c

Color Cap	
Code	Color
Blank	No Cap
1	Green
2	Black
3	Orange
4	Gray
5	White
6	Red
7	Blue
9	Yellow

d






Contact Blocks	
Standard	
Code	Description
Blank	No contacts
D1	1 N.O.
D2	1 N.C.
A	1 N.O. - 1 N.C.
A2	2 N.O.
A4	2 N.C.
A7	1 N.C.L.B. - 1 N.C.
B	2 N.O. - 2 N.C.
B6	2 N.C.L.B. - 2 N.C.
Logic Reed (Stab Terminals)	
Code	Description
D1R	1 N.O.
D2R	1 N.C.
AR	1 N.O. - 1 N.C.
A2R	2 N.O.
A4R	2 N.C.
BR	2 N.O. - 2 N.C.

Note: See Table 1 for Target description.

e

Contact Block Termination Type	
Code	Description
Blank	Stab Terminals
K	Large Screw ②
S	Small Screw ②

Table 1. Target Selection

Code	2-Position		Contact Description	3-Position			Code
	 Out	 In		 Out	 Center	 In	
Blank	—	—	No Contacts	—	—	—	Blank
D1/D1R	O	X	N.O.	—	—	—	—
D2/D2R	X	O	N.C.	—	—	—	—
A/AR	O X	X O	N.O. - N.C.	O X	O O	X O	A/AR
A2/A2R	O O	X X	N.O. - N.O.	O O	O O	X X	A2/A2R
A4/A4R	X X	O O	N.C. - N.C.	X X	O O	O O	A4/A4R
—	—	—	N.C. - N.C.L.B.	X X	O X	O O	A7
B/BR	O X O X	X O X O	N.O. - N.C. N.O. - N.C.	O X O X	O O O O	X O X O	B/BR
B6	X X X X	O O O O	N.C. - N.C.L.B. N.C. - N.C.L.B.	X X X X	O X O X	O O O O	B6

Note: X = Closed/O = Open

- ① Not available in twist release.
- ② Not available with Logic Reed contact blocks.