OPERATED HAZARDOUS FUNCTION LIMIT SWITCHES

# www.namcocontrols.com

# **Specifications**



1 N.O. - 1 N.C. 2 N.O. - 2 N.C. 3 N.O. - 3 N.C.

- 1. Enclosure meets NEMA Types 4, 4X, 6, 6P, 7, Class I, Groups C and D; and Type 9, Class II, Groups E, F, and G.
- 2. Contacts made of silver alloy. Contact shifting mechanism is locked in position by the latches until switch lever is actuated.
- 3. Standard Temperature Range: -20°C to +90°C.
- 4. Operating lever is adjustable to any required position.
- 5. Operating Lever Angles (travel either clockwise or counterclockwise) maximum degrees of trip travel, reset travel, as well as total lever travel, are determined by the cam selected.
- 6. Operating Torques -- Trip Torque varies from 15 to 35 lb. in.
- 7. Continuous Current Ratings -- Amperes

Volts	AC	DC
125	20	5
250	15	1.5
480	10	
600	5	

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75-100% Power Factor 8. Form Z contact arrangement.

- NEMA RATED FOR HAZARDOUS LOCATION
- 1 N.O. 1 N.C., 2 N.O. 2 N.C., 3 N.O. 3 N.C.
- BRONZE, OR ALUMINUM HOUSING
- GENEROUS OVERTRAVEL
- HEAVY DUTY CAM OPERATED
- FLEXIBILITY OF MOTION. CW AND CCW
- AMPLE WIRING SPACE

**SERVICE CONDITIONS** – The Series EA-800 hazardous location limit switches operate reliably where gases, vapors, and dust are potential explosion hazards. The switch bodies are carefully engineered to resist corrosion.

**RUGGED CONSTRUCTION** – Approved spark-proof bronze, or aluminum housings can withstand internal and external gas explosions. Silver alloy butt contact arrangement is standard. Wiring space is ample for up to size 12 wire.

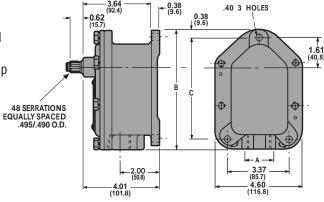
**PROVEN PERFORMANCE** – Cycle life is in the millions, when operated at the rated current, voltage, and temperature. Standard switches have maximum ambient temperature ratings of 90°C continuous. Switches can also be specially ordered with either -40°C or +150°C capabilities.

**LEVERS AVAILABLE** – A variety of levers for hazardous locations limit switches can be ordered from Namco Controls Series EL.

PLEASE NOTE: Only non-sparking levers should be used in hazardous locations. See Pages 68-75.

Not all models are UL approved.

	DIMENSIONS (in.)			
TYPE CONTACT	CONDUIT OPENING NPT		TOTAL HEIGHT (in.)	MOUNT HEIGHT (in.)
		Α	В	С
1 N.O 1 N.C.	3/4"	14	6.47	5.422
2 N.O 2 N.C.	1"	11 1/2	8.5	7.578
3 N.O 3 N.C.	1 1/4"	11 1/2	10.56	9.672



## OPTIONS AVAILABLE:

- Maintained and neutral position.
- High temperature (0° to + 150°C) components and lubricants.
- Low temperature (-40° to +90°C) components and lubricants.
- Belt mis-alignment.

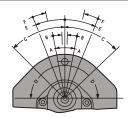


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# **Ordering Information**

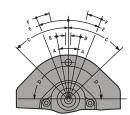
CW	CONTACTS CIRCUI	CIRCUITS	HOUSING	
OPERATION	CONTACTS CINCOTTS		BRONZE	ALUMINUM
ONLY	1 N.O.	CW INITIAL CCW	EA800-10040	EA800-10050
(Combinations	1 N.C.	D C C	WGT. 12 LB.	6 LB.
B-1/B-2 Cam) Contacts transfer when lever is operated CW. Lever can be operated CCW but contacts will not transfer.	2 N.O. 2 N.C.	CW INITIAL CCW	EA800-20040 WGT. 16 LB.	EA800-20050 7 LB.
	3 N.O. 3 N.C.	CW INITIAL CCW  M M O L O O  N K O S J  H O S S S S S S S S S S S S S S S S S S	EA800-30040 EGT. 19 LB.	EA800-30050 8 LB.

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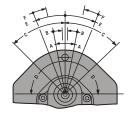
A.	Trip Travel		18°
C.	Recommended	l Travel	30°
D.	Maximum Trav	el Available	90°
	Torque	1 N.O 1 N.C	15
	(Inch Lbs.)	2 N.O 2 N.C	27
	,	3 N.O 3 N.C	

	CONTACTS CIRCUITS		HOUSING	
CCW	CONTACTS   CINCOTTS	BRONZE	ALUMINUM	
OPERATION (Combination B-1/B-2 Cam)	1 N.O. 1 N.C.	CW INITIAL CCW	EA800-10041 WGT. 12 LB.	EA800-10051 6 LB.
Contacts transfer when lever is operated CCW. Lever can be	2 N.O. 2 N.C.	CW INITIAL CCW  O H O G O O O O O O O O O O O O O O O O	EA800-20041 WGT. 16 LB.	EA800-20051 7 LB.
operated CW but contacts will not transfer.	3 N.O. 3 N.C.	CW INITIAL CCW    M	EA800-30041 WGT. 19 LB.	EA800-30051 8 LB.



Α.	Trip Travel		18°
В.	Reset Travel		14
C.	Recommende	d Travel	30°
D.	Maximum Tra	vel Available	90°
	Torque	1 N.O 1 N.C	15
	(Inch Lbs.)	2 N.O 2 N.C	27
	,	3 N.O 3 N.C.	33

	CONTACTS CIRCUITS		HOUSING	
	CONTACTS	CINCUITS	BRONZE	ALUMINUM
CW & CCW OPERATION	1 N.O. 1 N.C.	CW INITIAL CCW	EA800-10140 WGT. 12 LB.	EA800-10150 6 LB.
(Combination B-1/B-2 Cam) Contacts transfer when lever is	2 N.O. 2 N.C.	CW INITIAL CCW  H O G A  F O E	EA800-20140 WGT. 16 LB.	EA800-20450 7 LB.
operated CW or CCW.	3 N.O. 3 N.C.	CW INITIAL CCW  A M O OL STORM  O K O OL STORM  O F O OL STORM  O F O OL STORM  O OL STORM	EA800-30140 WGT. 19 LB.	EA800-30150 8 LB.



A.	Trip Travel		18°
B.	Reset Travel		14°
C.	Recommende	d Travel	30°
D.	Maximum Tra	vel Available	90°
	Torque	1 N.O 1 N.C	15
	(Inch Lbs.)	2 N.O 2 N.C	27
	( /	3 N O - 3 N C	33

# **Typical Cams**

### **B1 Single Action**

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Normally open to make (normally closed to break) IN ONE DIRECTION ONLY. Lever and cam are spring returned to staring position. Used on Single Action Switches only.

# **B2** Double Action



Normally open to make (normally closed to break) IN EITHER DIRECTION. Lever and cam are spring returned to starting position.

### Combination B1/B2 CAM

The following three operating sequences are built into the combination cam used in the standard EA800 switches: B1 Single Action CW, B1 Single Action CCW and B2 Double Action CW & CCW.

- The contacts function when the lever is operated clockwise. The lever can be operated counterclockwise but the contacts will not operate.
- The contacts function when the lever is operated counterclockwise. The lever can be operated clockwise but the contacts will not operate.
- 3. The contacts function when the lever is operated clockwise or counterclockwise.

