

Nuclear Qualified Products

Limit Switches/ Receptacle Assembly... For Nuclear Environments

Features:

- Qualified to IEEE Standards 344-1975, 323-1974, and 382-1972.
- Manufactured to a quality assurance program designed to meet the requirements of 10CFR50, Appendix B, and ANSI N45.2, as applicable.
- · Die-cast bronze housing.
- Stainless steel top cover and fasteners.
- Gold-plated contacts.
- High temperature components throughout.
- High temperature lubricants.
- Seismic and vibration resistant.
- · Resists chemical spray.
- Three mounting styles.
- EA 180 has a positive lever latching mechanism.

Technical Data:

- Two normally open and two normally closed, NEMA form Z contact arrangement.
- Enclosure meets NEMA 1, 4 and 13 requirements for dust-tight, water-tight and oil-tight applications.
- Operating lever is adjustable in 7°30' increments through 173°.
- Adequate wiring space for nine conductors.
- Operating temperature 0° to 90°C.
- Short term exposure to 175°C.
- EA 180-302/402 has 10° or 6½ ° pre-travel, maximum travel 37°.
- Weight EA 180-302: 4.5 lbs.; EA 180-402: 5.5 lbs.
- DBE maximum test parameters temperature 340°F, pressure 70 PSIG, radiation 204 megarads gamma.

Continuous Current Rating 75-100% Power Factor*

125 VAC	20 AMPS*
250 VAC	15 AMPS*
480 VAC	10 AMPS*
600 VAC	5 AMPS*
125 VDC	5 AMPS
250 VDC	1.5 AMPS

Receptacle Data

- · Qualified receptacle sealed in place.
- Qualified ring tongue terminal applied to leads.
- · Every assembly tested before shipment.
- · Qualified lead wires.
- · Receptacle keyed for proper alignment of connector.
- · All circuits wired.
- Circuits of receptacle identified the same as limit switch A, B, C, D, etc.



FOR INSIDE CONTAINMENT AREAS SWITCHES SHOULD BE SPECIFIED AS FOLLOWS:

EA180 Series*

Sorios	Omeration	Standard	Wide	Long	
Series Operation		EA180-			
	CW	11302	21302	31302	
EA180 Standard	CCW	12302	22302	32302	
Otaridara	Maint.	13302	23302	33302	
EA180	CW	14302	24302	34302	
Short	CCW	15302	25302	35302	
Travel	Maint.	16302	26302	36302	

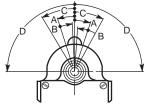
^{*} For inside containment — see catalog EA170-XX302.

EA180 Series with Receptacle**

Series Operation	Operation	Standard	Wide	Long
	Operation	EA180-		
	CW	11402	21402	31402
EA180 Standard	CCW	12402	22402	32402
Otandard	Maint.	13402	23402	33402
EA180	CW	14402	24402	34402
Short	CCW	15402	25402	35402
Travel	Maint.	16402	26402	36402

^{**} For outside containment — see catalog EA170-XX402. Male Receptacle Assemblies may be ordered separately. Please order part number EC290-19001.

Operational Data



RETURN SPRING MOUNTED ON THIS SIDE OF SWITCH FOR "CCW" OPERATION. RETURN SPRING MOUNTED ON THIS SIDE OF SWITCH FOR "CCW" OPERATION.

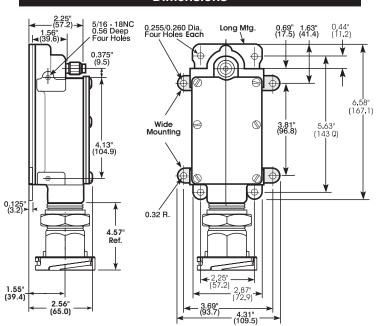
Series EA180 - Standard Direction of Rotation

A. Trip Travel	10°
B. Reset Travel	8°
C. Recommended Travel	13°
D. Total Travel	37°
E. Torque to Trip (inch Lbs.)	21

Series EA180 - Short Travel

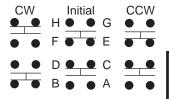
A. Trip Travel	3°30'
B. Reset Travel	4°
C. Recommended Travel	7°
D. TotalTravel	36°
E. Torque to Trip (Inch Lbs.)	32

Dimensions



Contact Configuration:

For CW Switch



For CCW Switch

CW	Initial H • • G	CCW
• •	F ● ● E	• •
• •	D <u>● •</u> C	• •
• •	В • А	• •

PLUG-IN CABLES: Cable lengths for the above Switch/ Receptacle Assemblies should be ordered with specific cable lengths as follows . . .

Plug-In Cables		
Length	EC290-	
20 Ft.	29020	
25 Ft.	29025	
30 Ft.	29030	
35 Ft.	29035	
50 Ft.	29050	
100 Ft.	29100	

LEVERS: For use inside containment area, levers with bronze arms and beryllium copper rollers are recommended.

Note: Levers must be ordered as separate item. For information request Lever Bulletin EL.

ADAPTORS: Straight and elbow adapters are available for direct mounting into limit switches. See CD/EH700 Series Bulletin.

