

EPI2 Quarter-Turn Electric Actuator

Base and OM1 Card



Base Card

EPI2 Quarter-Turn Electric Actuator

Configurations	Rotary Switch Settings		SW3	Confirm by SW5	Red LED	SW3
	Move switch SW4 to position indicated in each row	Move switch SW6 to position indicated in each row				
CLOSE LIMIT by position	2	1 (*)	Enter set up configuration moving SW3 to ON	PUSH	LED lights up once	Exit set up configuration moving SW3 to 1 (Run Setting)
	0	0			LED lights up once	
OPEN LIMIT by position	3	1 (*)			LED lights up once	
	1	0			Operate the actuator to direction by local/remote control and wait until it stops by torque	
CLOSE LIMIT by torque	2	0 (*)			LED lights up once	
OPEN LIMIT by torque	3	0 (*)				
CLOSING speed	4	4 6 (*)				
OPENING speed	5	8				
% CLOSING torque	6	2 = 50% 5 = 75% 9 = 100% (*)				
% OPENING torque	7					
CW/CCW	8	0 = CW (*) 1 = CCW				
Blinker/local selector	4	0 = off (*) 1 = Blinker 2 = Loc. Sel.				

Note:
(*) Factory

PRE-INSTALLATION: See VCIOM-02881 INSTALLATION AND MAINTENANCE INSTRUCTIONS. Not performing the following procedures will invalidate the product warranty.

INSTALLATION: To assemble the actuator onto the valve proceed as follows:

- Verify proper mounting hardware.
- Verify proper electrical service to the actuator
- Lubricate the valve stem with oil or grease to make the assembly easier; pay attention not to contaminate with lubricant the flange surfaces which transmit the actuator torque.
- Clean the valve flange and remove anything that might prevent a perfect adherence to the actuator flange and especially all traces of grease.
- Install the actuator onto the valve so that the shaft out put drive enters the groove of the stem extension. This coupling must take place without forcing and only with the weight of the actuator.
- Ensure actuator and valve are in same orientation when bolting together.
- With the handwheel, operate the actuator to verify it moves the valve smoothly.

WARNING

The configuration must be done while the actuator is powered on. As a consequence, all configuration operations must be carried out by specifically qualified personnel for operations on powered electronic cards. Hazardous voltages may be present. Before connecting power to the actuator, check that the voltages are correct and according to the nameplate data. Improper power supply will cause permanent damage to the electrical components. Actuator configuration programming requires removal of the actuator cover. Refer to VCIOM-02881 IOM for instructions.

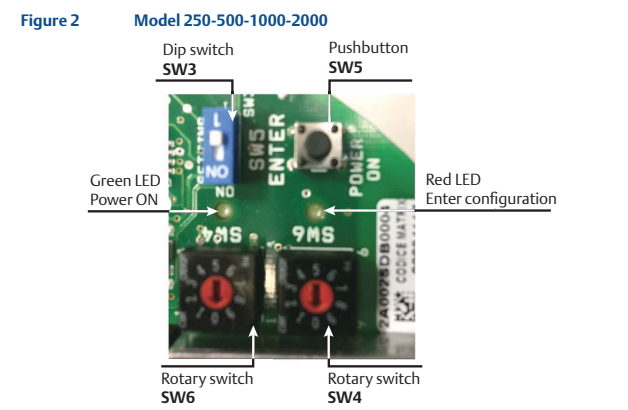
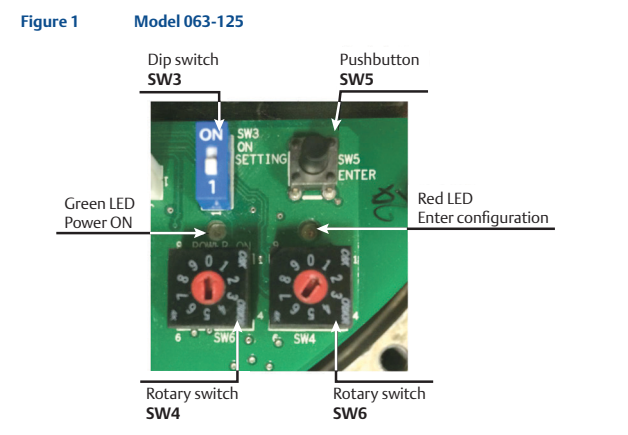


Table 1.

Model	Nominal torque (Nm / lb-ft)	Operating time (secs 90°) at selected step		
		8	6	4
063	63 / 46	15	28	48
125	125 / 92	15	28	48
250	250 / 184	15	28	48
500	500 / 369	15	28	48
1000	1000 / 738	24	45	80
2000	2000 / 1475	53	100	180

OM1 Card

EPI2 Quarter-Turn Electric Actuator

Configurations	Move switch SW8 to position indicated in each row	Rotary Switch Settings			SW4	Confirm by SW2	Red LED	SW4
		Move switch SW7 to position indicated in each row	Move switch SW9 to position indicated in each row	Any position				
RELAYS LS3-LS5	7	0=break	Any position	See table 2	Enter set up configuration moving SW4 to ON	Push	LED lights up once	Exit set up configuration moving SW4 to 1 (Run Setting)
RELAYS LS4-LS6	8	1=make (*)	Any position					
POSITION Relays LS3	0	0 to 9 [0=(*)]	Any position					
POSITION Relays LS4	1	0 to 9 [3=(*)]	Any position					
POSITION Relays LS5	2	0 to 9 [7=(*)]	Any position					
POSITION Relays LS6	3	0 to 9 [9=(*)]	Any position					
SET Input as "4-20mA"	9	0=off 1=on (*)	4	Any position	Enter set up configuration moving SW4 to ON	Push	LED lights up once	Exit set up configuration moving SW4 to 1 (Run Setting)
SET 0% Input 4-20mA	4	0 = 4 mA (*)	Any position					
SET 100% Input 4-20mA	4	1 = 20 mA (*)	Any position					
SET Input as "0-10V"	9	0=off (*) 1=on	5	Any position	Enter set up configuration moving SW4 to ON	Push	LED lights up once	Exit set up configuration moving SW4 to 1 (Run Setting)
Feedback mA or V&C		2=mA (*) 3=Volt	1					
Modulation		0=off (*) 1=on	3					

Table 2.

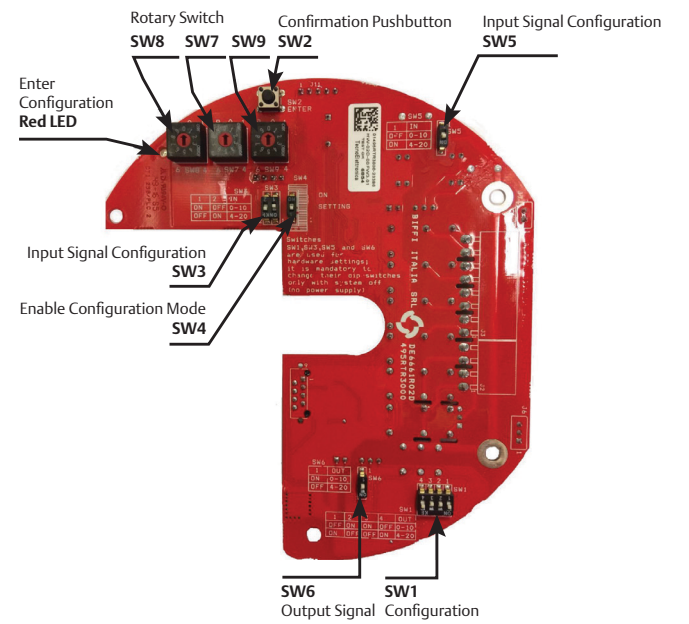
SW7	Position Relays	0	1	2	3	4	5	6	7	8	9
Description		Inactive	2%	12,50%	25%	37,50%	50%	62,50%	75%	87,50%	99%

Note:
(*) Factory default data

PRE-INSTALLATION: See the BASE CARD procedure.
INSTALLATION: See the BASE CARD procedures.

⚠ WARNING
For complete Instruction & Warning see the VCIOM-01494 INSTALLATION AND MAINTENANCE INSTRUCTIONS. **HARDWARE** configuration MUST be done with system OFF (NO power supply). SW3 and SW5 position in order to set the INPUT signal type. **HARDWARE** configuration (SW1/3/5/6): This configuration is an Hardware setting; it's mandatory to do it with power off (NO POWER SUPPLY).

Figure 3



Hardware Configuration					
	Input Signal				
	SW3	SW5			
	1	2	1		
0-10V	ON	OFF	OFF		
4-20mA	OFF	ON	ON		
Output Signal					
	SW1				SW6
	1	2	3	4	1
0-10V	OFF	ON	ON	OFF	ON
4-20mA	ON	OFF	OFF	ON	OFF

World Area Configuration Centers (WACC) offer sales support, service, inventory and commissioning to our global customers. Choose the WACC or sales office nearest you:

NORTH & SOUTH AMERICA

19200 Northwest Freeway
Houston TX 77065
USA
T +1 281 477 4100

Av. Hollingsworth
325 Iporanga Sorocaba
SP 18087-105
Brazil
T +55 15 3413 8888

ASIA PACIFIC

No. 9 Gul Road
#01-02 Singapore 629361
T +65 6777 8211

No. 1 Lai Yuan Road
Wuqing Development Area
Tianjin 301700
P. R. China
T +86 22 8212 3300

MIDDLE EAST & AFRICA

P. O. Box 17033
Jebel Ali Free Zone
Dubai
T +971 4 811 8100

P. O. Box 10305
Jubail 31961
Saudi Arabia
T +966 3 340 8650

24 Angus Crescent
Longmeadow Business Estate
East
P.O. Box 6908 Greenstone
1616 Modderfontein Extension 5
South Africa
T +27 11 451 3700

EUROPE

Holland Fazor 6
Székesfehérvár 8000
Hungary
T +36 22 53 09 50

Strada Biffi 165
29017 Fiorenzuola d'Arda (PC)
Italy
T +39 0523 944 411

For complete list of sales and manufacturing sites, please visit www.emerson.com/actuationtechnologieslocations
Or contact us at info.actuationtechnologies@emerson.com

www.emerson.com

VCIOM-08536-EN ©2021 Emerson. All rights reserved.

The Emerson logo is a trademark and service mark of Emerson Electric Co.

The contents of this publication are presented for information purposes only, and while every effort has been made to ensure their accuracy, they are not to be construed as warranties or guarantees, express or implied, regarding the products or services described herein or their use or applicability. All sales are governed by our terms and conditions, which are available on request. We reserve the right to modify or improve the designs or specifications of our products at any time without notice.

