KEYSTONE EPI-2 ELECTRIC ACTUATORS

The EPI-2 series are compact, intelligent quarter-turn electric actuators for the accurate control of valves with torques from 35 to 2000 Nm / 308 to 17,700 lb.in.



FEATURES

- Low or high voltage single phase DC or AC power supply with 3-phase option
- Multiple adjustable stroking times to suit specific applications
- Interchangeable base plate and range of shaft inserts enable simple connection to any valve type
- Intelligent control unit prevents overheating
- Epicyclical gearing ensures reliable and smooth operation
- Top-mounted position indicator
- Constantly-engaged, hand wheel-operated manual override in case of power failure
- Bluetooth™ wireless connectivity for non-intrusive configuration, operation and diagnostics
- Optional local control panel for manual valve operation with additional open/close indicator
- Simple upgrade options for modulating control and network communication via DeviceNet or Profibus DP protocols
- Latched-type output contacts for fully open/fully close remote indication. Output contacts for monitor and blinker/local selector indication are also available

Bluetooth™ is a trademark of Bluetooth SIG. Inc, USA

GENERAL APPLICATION

The EPI-2 is available in six sizes and is designed for on/off or modulating control of butterfly, ball, rotary plug valves or dampers in a wide range of heavy industrial, chemical and petrochemical plants on and offshore.

TECHNICAL DATA

Power supply:	Single phase from 24 to 48 V DC or AC at 50/60 Hz Single phase from 100 to 240 V DC or AC at 50/60 Hz 3-phase from 208-240 V AC, 380-480 V AC and 500-575 V AC
Voltage fluctuations:	+/-10%
Frequency:	+/- 5%
Torque output:	From 35 to 2000 Nm / 308 to 17,700 lb.in.
Ambient temperature	
Standard range:	-25°C to +70°C / -13°F to 158°F
Low temp range:	-40°C to +70°C / -40°F to 158°F
Conduit entry:	M25/1" NPT

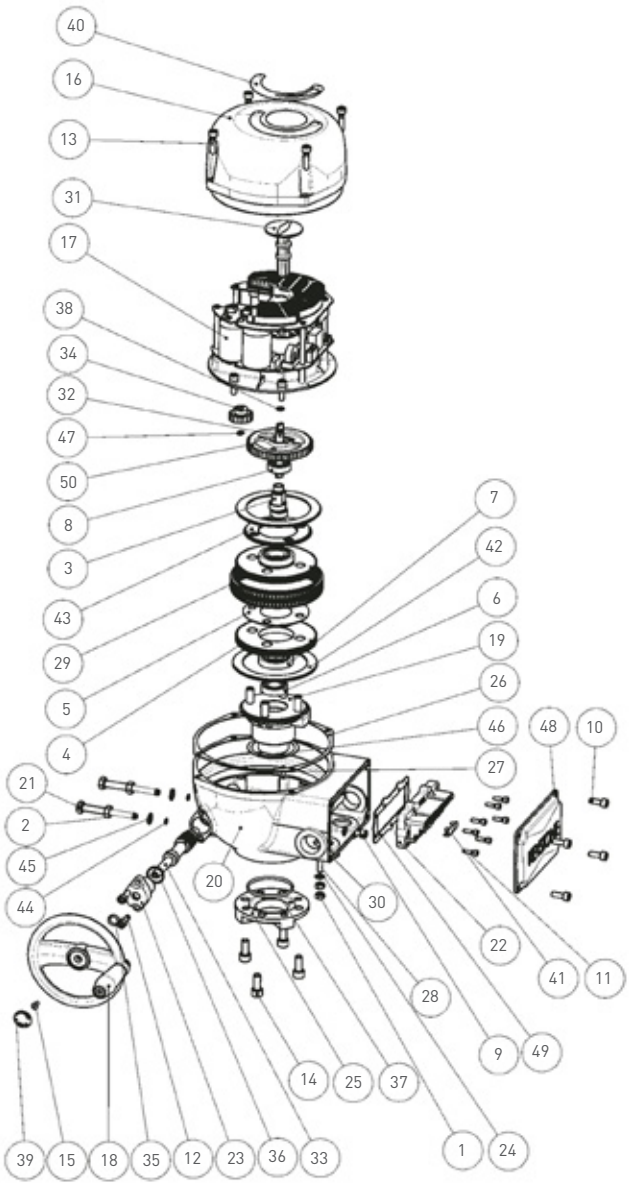
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KEYSTONE EPI-2 ELECTRIC ACTUATORS

COMPONENT PARTS - MODELS 063/E006-125/E013-250/E025-500/E051-1000/E091

Part	Description	Quantity
1	Nut UNI5588 M6	2
2	Nut UNI5588 M8	2
3	Eccentric	1
4	Planocentric gear	2
5	Spacer	1
6	Ball bearing type 16002	1
7	Ball bearing type 16004	2
8	Ball bearing type 6001	1
9	ESH screw UNI5931- M6x8	1
10	HSHC screw UNI5931- M6x16	4
11	HSHC screw UNI5931- M4x14	7
12	HSHC screw UNI5931- M6x18	2
13	HSHC screw UNI5931- M6x25	4
14	HSHC screw UNI5931- M8x20	4
15	HSSC screw UNI5933- M4x10	1
16	Cover assembly	1
17	Drive and control unit	1
18	Handwheel	1
19	Output drive assembly	1
20	Standard housing	1
21	Stopper	2
22	Terminal block	1
23	Worm shaft flange	1
24	Anti-loosening washer UNI 8842-J6	1
25	Base plate ISO 5211 / F05-F07	1
26	Cover gasket	1*
27	Dowel pin UNI EN 22338	1
28	Earth stud	1
29	Fixed anulus	1
30	Gasket	1*
31	Indicator	1
32	Indicator shaft	1
33	Manual worm shaft	1
34	Motor pinion	1
35	O-ring Di=10.77/W=2.62	1*
36	O-ring Di=18.77/W=1.78	1*
37	O-ring Di=52.07/W=2.62	1*
38	O-ring Di=6.07/W=1.78	1*
39	Plug	1
40	Position label	1
41	Power clamps protection	1
42	Ring	2
43	Ring for pins alignement	1
44	Ring RW 7 UNI7433	2
45	Seal washer 8.3	2
46	Sliding ring	1
47	Snap ring for shaft D.6	1
48	Terminal block cover	1
49	Terminal board gasket	1*
50	Wheel	1

* Indicates recommended spare parts

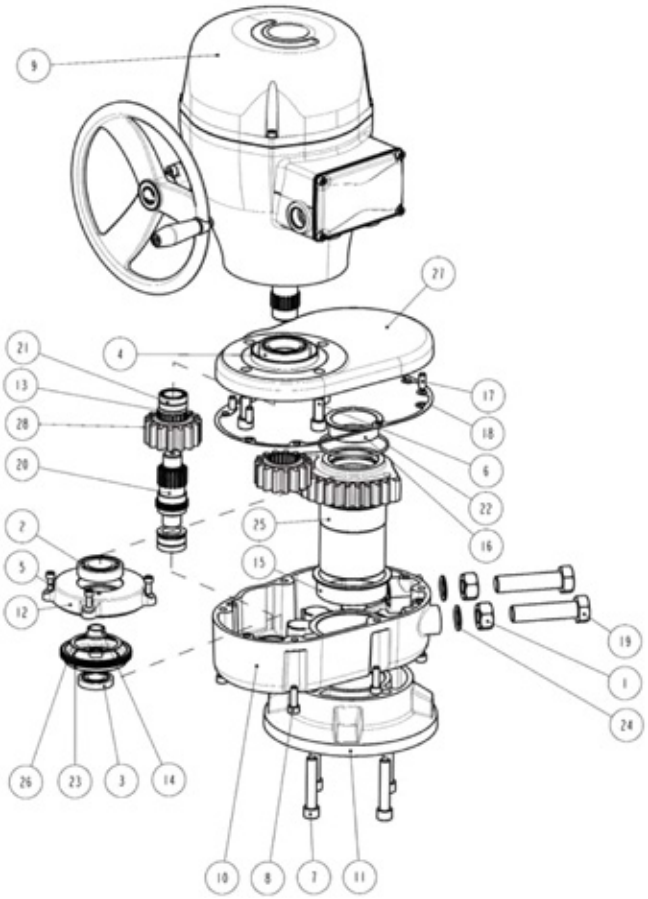


KEYSTONE EPI-2 ELECTRIC ACTUATORS

COMPONENT PARTS - MODEL 2000/E171

Part	Description	Quantity
1	Nut M20 ISO 4032 EN 24032	2
2	Ball bearing type 6006	1
3	Ball bearing type 16004	1
4	Ball bearing type 61908	1
5	HSHC screw UNI5931- M6x16	3
6	HSHC screw UNI5931- M12x30	4
7	HSHC screw UNI5931- M12x65	4
8	HSHC screw UNI5931- M8x25 A4-70	6
9	EPI-2 actuator	1
10	Base housing	1
11	Base plate ISO 5211 / F12-F16	1
12	Bearing support	1
13	Bushing	2
14	Bushing	1
15	Bushing	1
16	Bushing	1
17	Dowel pin UNI EN 22338 D 8x20 type B	4
18	Gasket	1*
19	Hex head screw M20x80 UNI EN 24017	2
20	Idle wheel shaft	1
21	Needle bearing type NKI 22/16	2
22	O-ring Di=82.22/W=2.62	1*
23	Position wheel	1
24	Seal washer 20.3	2
25	Selector gear	1
26	Sliding ring	1
27	Upper vover	1
28	Wheel	2

* Indicates recommended spare parts



Mechanical connection to the valve
EPI-2 actuators feature a multi drilled base plate and a range of drive inserts to allow direct mounting to almost all valve types according the EN ISO 5211 and other manufacturers' standards.

Power supply
EPI-2 can simply be connected to the local power supply. It accepts any single phase input voltages (from 24 to 48 V DC or AC and 100 to 240 V DC or AC). Alternatively 3 phase voltages from 208-240 V AC, 380-480 V AC and 500-575 V AC are also available

Electric motor thermostat
A thermostat to protect the motor temperature in hot applications is included as standard in the control circuit of the electric actuator.

Heater
A heater is standard available within the unit and is powered from the motor power supply. It is automatically activated when the temperature drops below 10°C in order to prevent condensation.

Actuator service
The standard actuator is suitable for open/close and modulating applications.

Compact and light design
EPI-2 actuators are very compact and balanced for easy installation to small valves minimizing pipe work stress or loads to the valve shaft.

Actuator configuration
Each actuator is equipped with 2 rotary switches on the logic board to configure each function and parameter like position, torque, open/close speed and output contacts. Additionally each optional module has its own additional switches for its specific configuration.

Local manual override
A constantly engaged manual override (not rotating during motor operation) is fitted to all EPI-2 actuators.

Torque and sizing
The EPI-2 range comprises of six models, for operating torques of up to 2000 Nm / 17,700 lb.in. with a configurable operation time from 15 to 180 seconds. The nominal output torque value is constant along the entire stroke.

Non-intrusive configuration
With Bluetooth® wireless technology enabled on your PDA or PC all configuration requirements can be undertaken without opening the unit. Direct access to the EPI-2 is then available for configuration and predictive/preventative maintenance information, including valve position, actuator speed, output torque, alarm and status.

Position monitoring
The EPI-2 provides a local mechanical position indication. For remote indication the position is detected by a non-contact sensor. The open and close position are configured via the electronic control card.

Electronic controls
Internal drive to reverse the actuator rotation direction via remote control signals with internal 24 V DC or external 24 V DC/AC up to 120 V DC/AC power supply.

Output contacts
4 latched-type output contacts for fully open/ fully close remote indication; 1 output contact for monitor (loss of power, torque alarm, high temperature alarm, travel alarm, position sensor, hardware malfunction, local interface malfunction, local selector in LOCAL); 1 output contact for blinker/local selector indication (local selector feature only with OM3 installed).

OPTIONAL MODULES

OM1 I/0 additional module
Analog position INPUT 4-20 mA or 0-10 V DC
Analog position OUTPUT 4-20 mA or 0-10 V DC
4 additional SPST output contacts
Optional Bluetooth interface

Monitor relay
Information about loss of input signal and Bluetooth failure are available on monitor relay output contact.

OM3 local interface
Local/remote selector
OP/CL pushbuttons
2 LEDs for local indication
Available in WP version

OM13 3-wire module
110/240 V AC
3-wire control module for open/close

Bus communication – network interfaces
OM9) Profibus DP V0/V1
OM11) DeviceNet

OPTIONAL MODULES SELECTION TABLE

Order code	OM1 I/O additional module	OM3 local interface	Bluetooth component	OM9 PDP V0/V1	OM11 DeviceNet	OM13 3-wires module
P1	✓					
PA	✓	✓	✓			
P6	✓	✓				
P7	✓		✓			
P3		✓				
5P			✓	✓		
6P		✓	✓	✓		
5D			✓		✓	
6D		✓	✓		✓	
PG						✓

NOTES

1. Each optional module (OMx) will be provided with its own installation and maintenance instructions.
2. All modules except OM13 are available for both single phase and 3-phase voltage versions.
3. Bluetooth component is integrated in the OM1, OM9 and OM11 card: not available for integration by local organizations, as a stand alone unit.
4. OM13 is not available with 3-phase supply and for LV version (single phase voltage from 24 to 48 V DC/V AC).

OPERATING TIMES

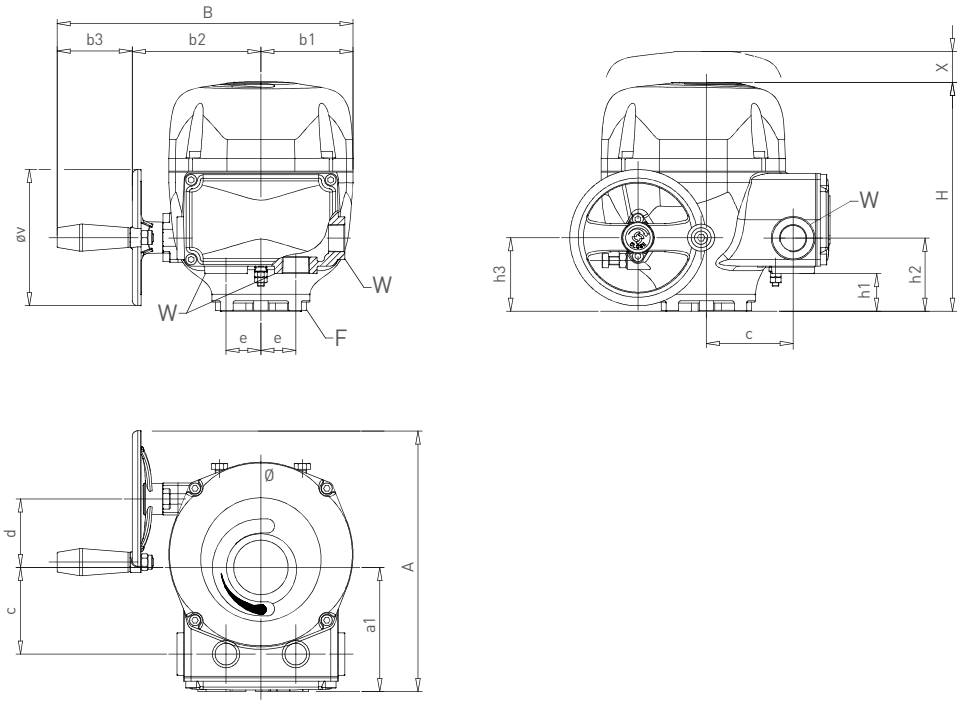
	Nominal torque	Operating time (secs 90°) at selected step		
Model	**(Nm / lb.in.)**	**8**	**6**	**4**
063/E006	63/600	15	28	48
125/E013	125/1300	15	28	48
250/E025	250/2500	15	28	48
500/E051	500/5100	15	28	48
1000/E091	1000/9100	24	45	80
2000/E171	2000/17700	53	100	180

Times are guaranteed with a tolerance of ±10% on the 90° stroke

Approvals	
Waterproof	IP66/68 or NEMA 4/4X/6 (NEMA ICS6/NEMA 250)
Painting	ESPC for 1000 hrs salt spray resistance (ASTM D 2247-02 and ASTM B117-97)
Vibration and noise	1 to 500 Hz with 2 g peak acceleration (IEC60068-2-6-appendix B) 65 dB (grade A) (EN 21680)

KEYSTONE EPI-2 ELECTRIC ACTUATORS

OVERALL DIMENSIONS - MODELS 063/E006-125/E013-250/E025-500/E051-1000/E091



NOTES

W = Nr. 4 cable entries M25x1.5 acc. to ISO 724/965-1 (others available as special versions)

X = Space for cover removal

F = ISO 5211 Standard flange (others available)

EPI-2 BASE UNIT MODELS 063/E006 TO 1000/E091 - METRIC (mm / kg)

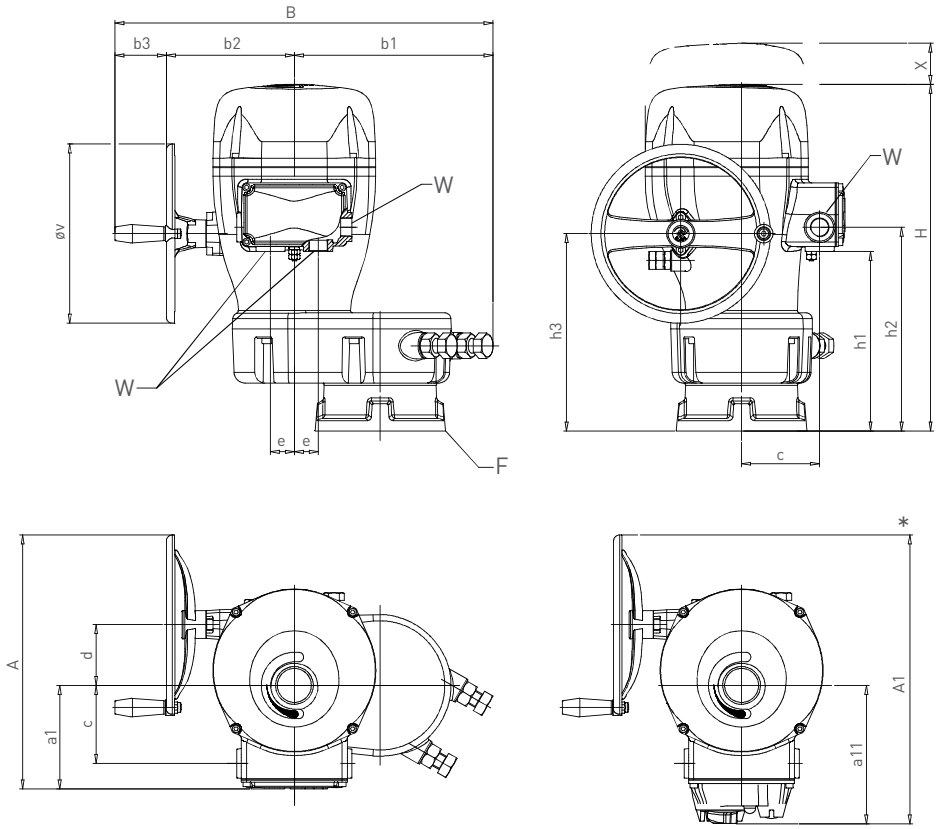
Model	A	B	H	a1	b1	b2	b3	c	d	e	h1	h2	h3	øv	x	F	kg
063/E006	239	272	210	114.0	85	118	69	80.0	63	32	35.5	67.0	67.5	125	175	F07	7.5
125/E013	239	272	230	114.0	85	118	69	80.0	63	32	53.5	86.0	86.5	125	175	F10	9.5
250/E025	295	332	287	129.0	109	154	69	95.0	76	32	63.5	95.0	92.0	180	230	F12	16.5
500/E051	295	332	287	129.0	109	154	69	95.0	76	32	63.5	95.0	92.0	180	230	F12	18.0
1000/E091	340	349	364	138.5	109	171	69	104.5	81	32	140.0	172.5	164.0	240	230	F16	26.0

EPI-2 BASE UNIT MODELS 063/E006 TO 1000/E091 - IMPERIAL (in / lb)

Model	A	B	H	a1	b1	b2	b3	c	d	e	h1	h2	h3	øv	x	F	lb
063/E006	9.4	10.7	8.3	4.5	3.3	4.6	2.7	3.1	2.5	1.3	1.4	2.6	2.7	4.9	6.9	F07	17
125/E013	9.4	10.7	9.1	4.5	3.3	4.6	2.7	3.1	2.5	1.3	2.1	3.4	3.4	4.9	6.9	F10	21
250/E025	11.6	13.1	11.3	5.1	4.3	6.1	2.7	3.7	3.0	1.3	2.5	3.7	3.6	7.1	9.1	F12	36
500/E051	11.6	13.1	11.3	5.1	4.3	6.1	2.7	3.7	3.0	1.3	2.5	3.7	3.6	7.1	9.1	F12	40
1000/E091	13.4	13.7	14.3	5.5	4.3	6.7	2.7	4.1	3.2	1.3	5.5	6.8	6.5	9.4	9.1	F16	57

KEYSTONE EPI-2 ELECTRIC ACTUATORS

OVERALL DIMENSIONS - MODEL 2000/E171



NOTES

W = Nr. 4 cable entries M25x1.5 acc. to ISO 724/965-1 (others available as special versions)

X = Space for cover removal

F = ISO 5211 Standard flange (others available)

EPI-2 MODEL 2000/E171 - METRIC (mm / kg)

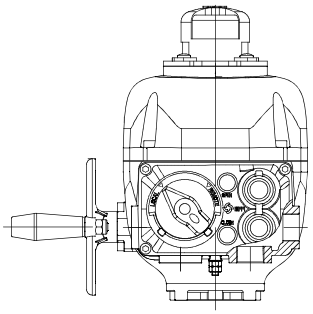
Model	A	A1	B	H	a1	a11	b1	b2	b3	c	d	e	h1	h2	h3	øv	x	F	kg
2000/E171	340	387	506	464	138.5	185.5	266	171	69	104.5	81	32	240	272.5	264	240	230	F10-F14	45.0
2000/E171	340	387	506	464	138.5	185.5	266	171	69	104.5	81	32	240	272.5	264	240	230	F12-F16	46.5

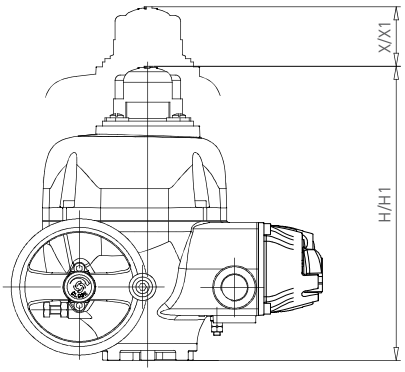
EPI-2 MODEL 2000/E171 - IMPERIAL (in / lb)

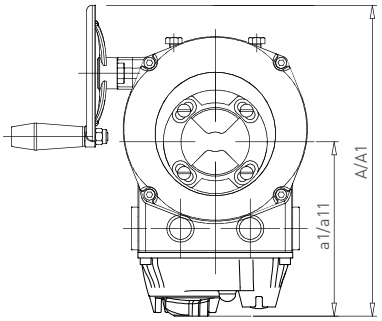
Model	A	A1	B	H	a1	a11	b1	b2	b3	c	d	e	h1	h2	h3	øv	x	F	lb
2000/E171	13.4	15.2	19.9	18.3	5.5	7.3	10.5	6.7	2.7	4.1	3.2	1.3	9.4	10.7	10.4	9.4	9.1	F10-F14	99
2000/E171	13.4	15.2	19.9	18.3	5.5	7.3	10.5	6.7	2.7	4.1	3.2	1.3	9.4	10.7	10.4	9.4	9.1	F12-F16	103

KEYSTONE EPI-2 ELECTRIC ACTUATORS

OVERALL DIMENSIONS - OPTIONAL MODULES







NOTES

1. Dimensions a1 and A are for the standard unit.
2. Dimensions a11 and A1 are for the standard unit plus a local interface option.
3. Dimensions H and X are for the standard unit.
4. Dimensions H1 and X1 are for the standard unit plus a Beacon type indicator.
5. X / X1 indicates the space for cover removal.
6. All other dimensions are as the standard unit.

EPI-2 WITH OPTIONAL MODULES - METRIC (mm / kg)

Model	A	A1	a1	a11	H	H1	X	X1	kg[1]	kg[2]
063/E006	239	285	114.0	160.0	210	270	175	265	7.5	8.0
125/E013	239	285	114.0	160.0	230	290	175	265	9.5	10.0
250/E025	295	341	129.0	175.0	287	347	230	330	15.5	16.0
500/E051	295	341	129.0	175.0	287	347	230	330	17.0	17.5
1000/E091	340	387	138.5	185.5	364	425	230	330	23.0	26.5

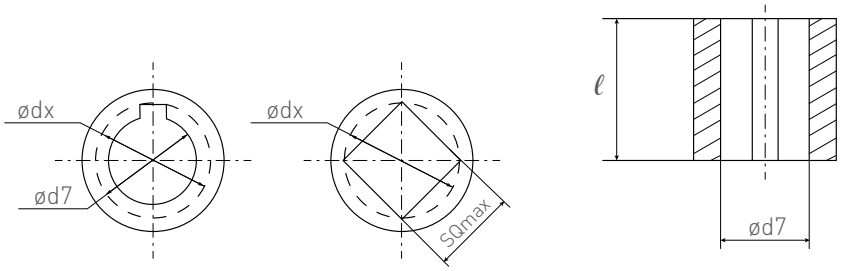
EPI-2 WITH OPTIONAL MODULES - IMPERIAL (in / lb)

Model	A	A1	a1	a11	H	H1	X	X1	lb[1]	lb[2]
063/E006	9.4	11.2	4.5	6.3	8.3	10.6	6.9	10.4	17	18
125/E013	9.4	11.2	4.5	6.3	9.1	11.4	6.9	10.4	21	22
250/E025	11.6	13.4	5.1	6.9	11.3	13.7	9.1	13.0	34	35
500/E051	11.6	13.4	5.1	6.9	11.3	13.7	9.1	13.0	37	39
1000/E091	13.4	15.2	5.5	7.3	14.3	16.7	9.1	13.0	51	58

1. Weight with Beacon option module
2. Weight with local interface module

KEYSTONE EPI-2 ELECTRIC ACTUATORS

OUTPUT DRIVE DIMENSIONS



NOTES

1. Insert bush supplied with unmachined bore.
   Largest bore can be supplied with solid piece bush.
2. Fixing bolts or rods supplied only on request.
3. dx: the maximum accepted diameter described by key, square or flat machining.
4. Position of the shaft with the valve closed.

OUTPUT DRIVE EN ISO 5211 STANDARD

	EN ISO 5211	Output drive dimensions (mm/in)		Order	Output drive dimensions (mm/in)				Order
Model	flange	Style square	l*	code	Flat	Bore diameter	Key	l*	code
063/E006	F05-F07	17/0.66	35/1.36	D4	14xD20 / 0.55xD0.78	-	-	35/1.36	E3
125/E013	F07-F10	22/0.86	54/2.11	D5	22xD30 / 0.86xD1.18	-	-	54/2.10	E5
250/E025	F07-F10-F12	22/0.86	54/2.11	D5	22xD30 / 0.86xD1.18	-	-	54/2.11	E5
500/E051	F10-F12	27/1.05	62/2.42	D6	-	D35 / D1.37	10x8 / 0.39x0.31	62/2.42	E6
1000/E091	F10-F14	36/1.41	40/1.56	D7	-	-	-	-	-
1000/E091	F12-F16	36/1.41	40/1.56	DA	-	D50 / D1.96	14x9 / 0.55x0.35	80/3.12	E9
2000/E171	F10-F14	36/1.41	40/1.56	D7	-	-	-	-	-
2000/E171	F12-F16	36/1.41	40/1.56	DA	-	D50 / D1.96	14x9 / 0.55x0.35	80/3.12	E9

* Insert length (mm/in)

OUTPUT DRIVE K TYPE NON-ISO FLANGES

		Output drive dimensions (mm/in)				
Model	K flange	Flat	Bore diameter	Key	l*	Order code
063/E006	44.45-82.55 / 1.75-3.25	12.7xD19 / 0.5xD0.74	-	-	35/1.36	U4
125/E013	82.55 / 3.25	-	D28.7 / D1.12	6.35x6.35 / 0.25x0.25	54/2.11	U8
250/E025	82.55-127 / 3.25-5	-	D28.7 / D1.12	6.35x6.35 / 0.25x0.25	54/2.11	U8
500/E051	82.55-127 / 3.25-5	-	D41.38 / D1.62	9.53x9.53 / 0.375x0.375	62/2.42	UA
1000/E091	127-165 / 5-6.5	-	D47.73 / D1.87	12.7x12.7 / 0.5x0.5	108/4.21	UC
2000/E171	127-165 / 5-6.5	-	D47.73 / D1.87	12.7x12.7 / 0.5x0.5	108/4.21	UC

* Insert length (mm/in)

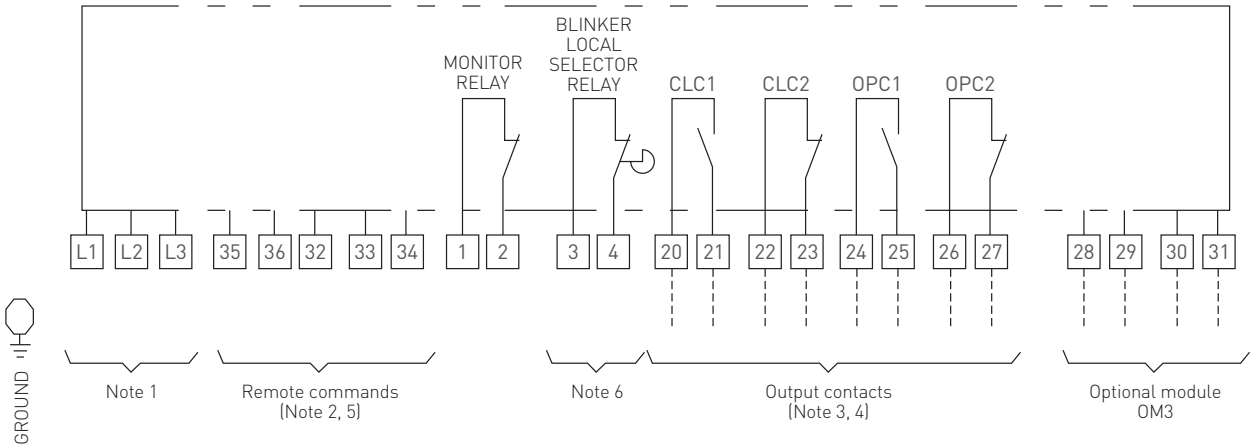
OUTPUT DRIVE NON-STANDARD

	Output drive dimensions (mm/in)			
Model	Ø d7 max	Ø dx max	SQ max	l*
063/E006	17/0.66	23/0.90	17/0.66	35/1.36
125/E013	22/0.89	29/1.13	22/0.89	54/2.11
250/E025	28/1.09	37/1,44	27/1.05	54/2.11
500/E051	28/1.09	37/1,44	27/1.05	62/2.42
1000/E091	40/1.56	49/1.91	36/1.41	108/4.21
2000/E171	40/1.56	49/1.91	36/1.41	108/4.21

* Insert length (mm/in)

KEYSTONE EPI-2 ELECTRIC ACTUATORS

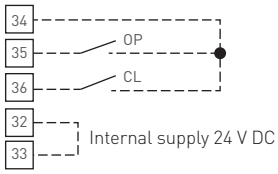
WIRING DIAGRAM - BASE VERSION



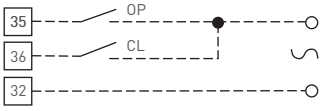
NOTES

1. Power connection L1-L2 for V DC or V AC single phase motor supply from 24 V to 48 V or from 100 V to 240 V.
   Power connection L1-L2-L3 for 3 phase motor supply from 208 V to 575 V (check the actuator label for the correct voltage to be applied).

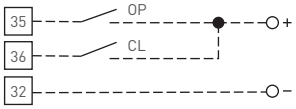
2. Remote command options.



Internal supply 24 V DC



External supply 24 / 120 V AC



External supply 24 / 120 V DC

3. Contacts shown in intermediate position CLC1-CLC2 end of travel signaling in closing.
   Contacts shown in intermediate position OPC1-OPC2 end of travel signaling in opening.

4. Output contact rating 240 V AC / 5 A ; 30 V DC / 5A ; 120 V DC / 0.5 A.

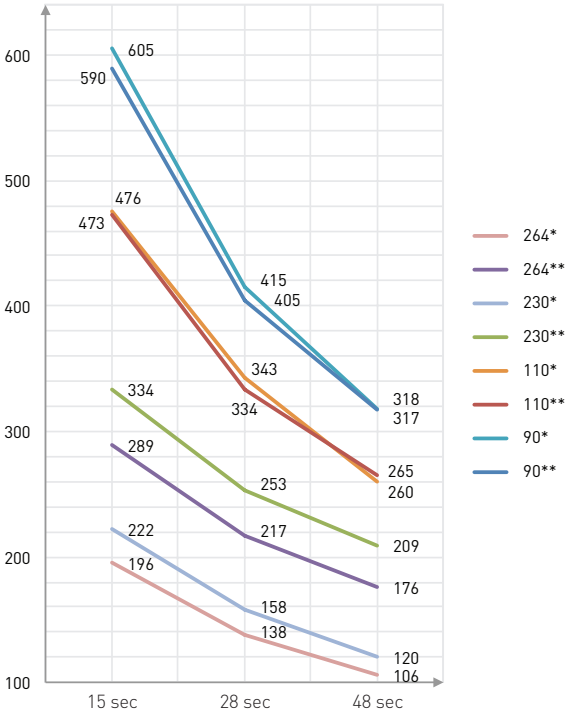
5. Control command rating 24 to 120 V AC or DC.

6. Blinker or local selector monitoring function (when OM3 is present) to be configured.

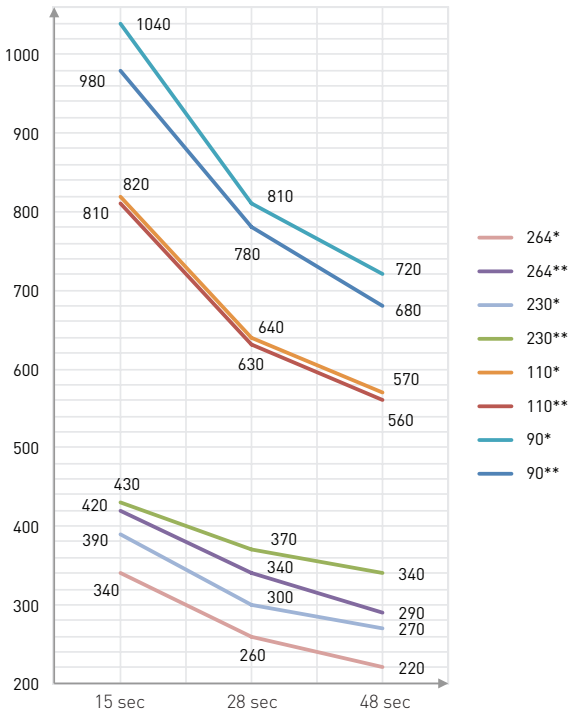
KEYSTONE EPI-2 ELECTRIC ACTUATORS

CURRENT ABSORPTION - SINGLE PHASE HIGH VOLTAGE (100-240 V)

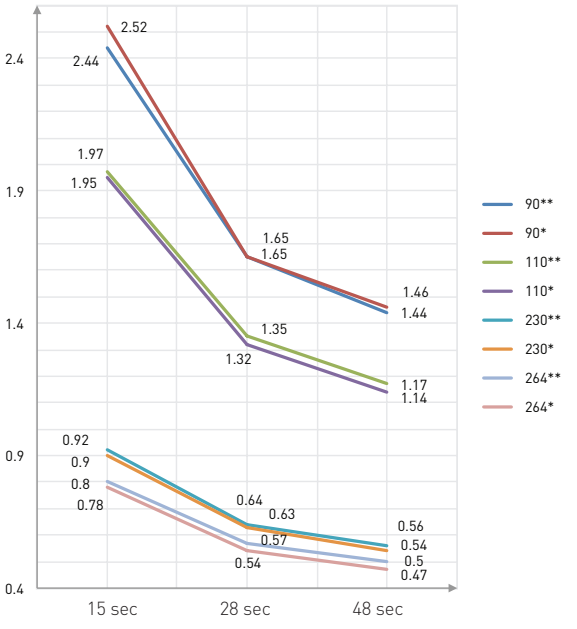
MODEL 63/E006 - ABSORPTION (mA)



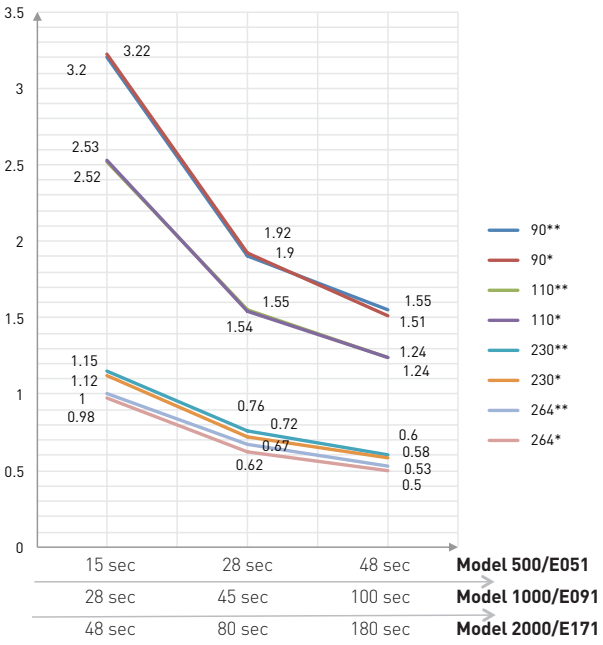
MODEL 125/E013 - ABSORPTION (mA)



MODEL 250/E025 - ABSORPTION (A)



MODELS 500/E051-1000/E091-2000/E171 - ABSORPTION (A)



NOTES

* V DC

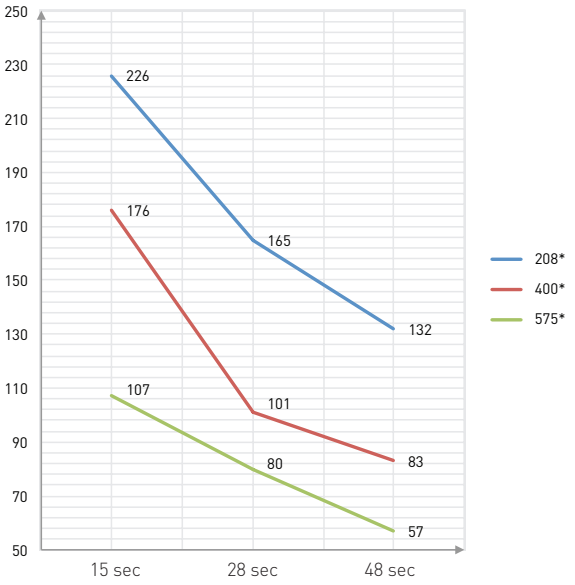
** V AC

1. A = absorbed current (Amp) at nominal conditions (output torque 100%)
2. Max current (Amp) at stall conditions = 2xA
3. Power factor for V AC supply = 0.60
4. Peak current: max 8xIn
5. Peak current duration: less than 0.1 sec

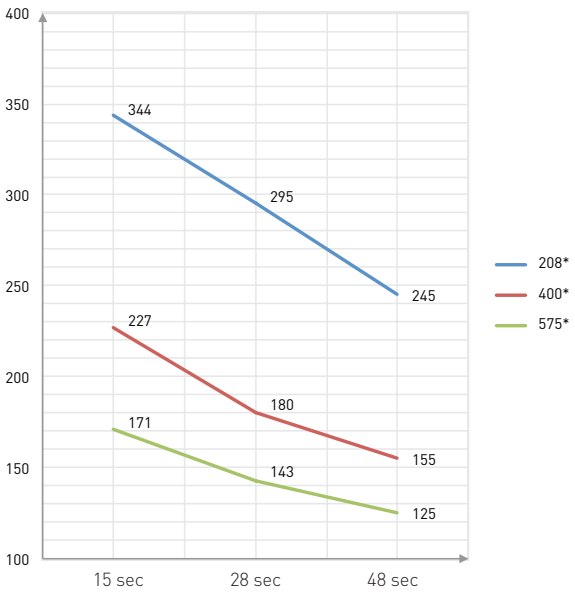
KEYSTONE EPI-2 ELECTRIC ACTUATORS

CURRENT ABSORPTION - THREE PHASE VOLTAGE

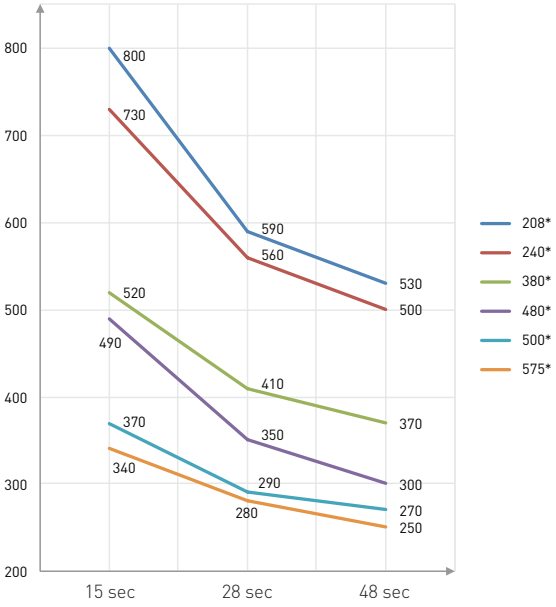
MODEL 063/E006 - ABSORPTION (mA)



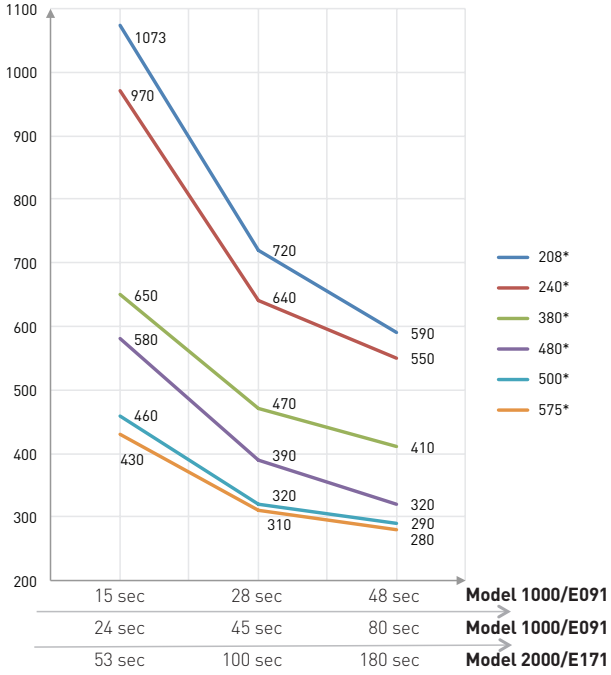
MODEL 125/E013 - ABSORPTION (mA)



MODEL 250/E025 - ABSORPTION (mA)



MODELS 500/E051-1000/E091-2000/E171 - ABSORPTION (mA)



NOTES

* V AC

1. 3-phases supply 50 or 60 Hz
2. A = absorbed current (Amp) at nominal conditions with output torque set at 100%
3. Power factor = 1 approx.
4. Starting current peak less than 10 microsecs

SELECTION GUIDE

Product

KPD	ISO 5211 with double star insert	KPB	ISO 5211 flange - insert not machined
KPE	ISO 5211 with flat or key insert	KPK	Key non-ISO flange - insert not machined
KPU	Non-ISO flange	KEU	(NPT) US version ISO 5211 flange with ISO insert, 4x 1"NPT entries

Models

063	Model 063/E006	06B	Model 063/E006 with Beacon
125	Model 125/E013	12B	Model 125/E013 with Beacon
250	Model 250/E025	25B	Model 250/E025 with Beacon
500	Model 500/E051	50B	Model 500/E051 with Beacon
1K0	Model 1000/E091	1KB	Model 1000/E091 with Beacon
2K0	Model 2000/E171	2KB	Model 2000/E171 with Beacon

Voltage

LV	1-phase voltage 24 to 48 V DC/V AC
HV	1-phase voltage 100 to 240 V DC/V AC
3A	3-phases from 208 to 240 V AC
3B	3-phases from 380 to 480 V AC
3C	3-phases from 500 to 575 V AC

Speed/Duty

PD	Standard speed range and standard duties for model 063/E006 to 500/E051
PE	Standard speed range and standard duties for model 1000/E091
PF	Standard speed range and standard duties for model 2000/E171

Optional modules

00	No optional modules
P1	OM1
PA	OM1/OM3/Bluetooth
P6	OM1/OM3
P7	OM1/Bluetooth
P3	OM3
5P	OM9/Bluetooth
6P	OM9/OM3/Bluetooth
5D	OM11/Bluetooth
6D	OM11/OM3/Bluetooth
PG	OM13

Approvals/Protections

0	Standard protection NEMA 4/4X/6 (IP66/68M) - CSA certificate T°amb from -40°C to +60°C / -40°F to +140°F
2	Standard protection NEMA 4/4X/6 (IP66/68M) T°amb from -25°C to +70°C / -13°F to +158°F
3	Standard protection NEMA 4/4X/6 (IP66/68M) T°amb from -40°C to +70°C / -40°F to +158°F

Flange/Insert

00	No flange insert	E3	Model 063/E006 ISO 5211 (KPE)
B4	Model 063/E006 flange ISO 5211/F05/F07 - insert not machined (KPB)	E5	Models 125/E013-250/E025 ISO 5211 (KPE)
B5	Model 125/E013 flange ISO 5211/F07/F10 - insert not machined (KPB)	E6	Model 500/E051 ISO 5211 (KPE)
B5	Model 250/E025 flange ISO 5211/F07/F10/F12 - insert not machined (KPB)	E9	Models 1000/E091-2000/E171 F12 to 16 ISO 5211 (KPE)
B6	Model 500/E051 flange ISO 5211/F10/F12 - insert not machined (KPB)	K4	Model 063/E006 flange key 44.45-82.6 - insert not machined (KPK)
B7	Model 1000/E091-2000/E171 flange ISO 5211/F10/F14 - insert not machined (KPB)	K8	Model 125/E025 flange key 82.6 - insert not machined (KPK)
BA	Model 1000/E091-2000/E171 flange ISO 5211/F12/F16 - insert not machined (KPB)	K8	Model 250/E025 flange key 82.6-127 - insert not machined (KPK)
D4	Model 063/E006 ISO 5211 (KPD)	KA	Model 500/E051 flange key 82.6-127 - insert not machined (KPK)
D5	Models 125/E013-250/E025 ISO 5211 (KPD)	KC	Model 1000/E091-2000/E171 flange key 127-165 - insert not machined (KPK)
D6	Model 500/E051 ISO 5211 (KPD)	U4	Model 063/E006 non-ISO (KPU)
D7	Models 1000/E091-2000/E171 F10 to F14 ISO 5211 (KPD)	U8	Models 125/E013-250/E025 non-ISO (KPU)
DA	Models 1000/E091-2000/E171 F12 to F16 ISO 5211 (KPD)	UA	Model 500/E051 non-ISO (KPU)
		UC	Models 1000/E091-2000/E171 non-ISO (KPU)

KPD	063	LV	PD	P1	2	D4	= Model number **KPD063LVPDP12D4**