

Peckwomy



Peckwomy International Industry GMBH

Add. Schlachte 12-13 28195 Bremen

Tel. +49 421 3677 335

Fax. +49 421 3677 336

E-mail: peckwomy@hotmail.com

Website: <http://www.peckwomy.com>

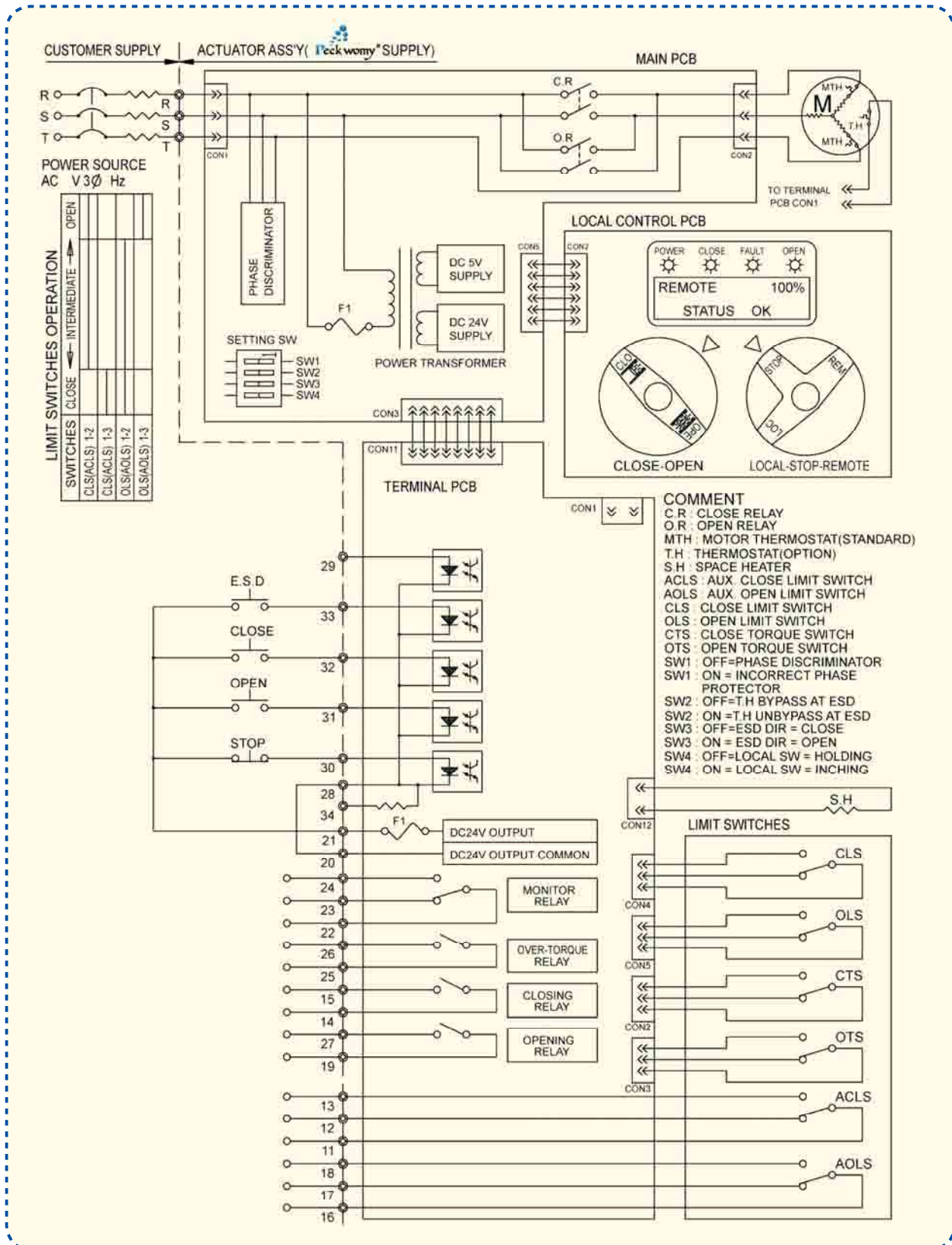
LEVER

OP

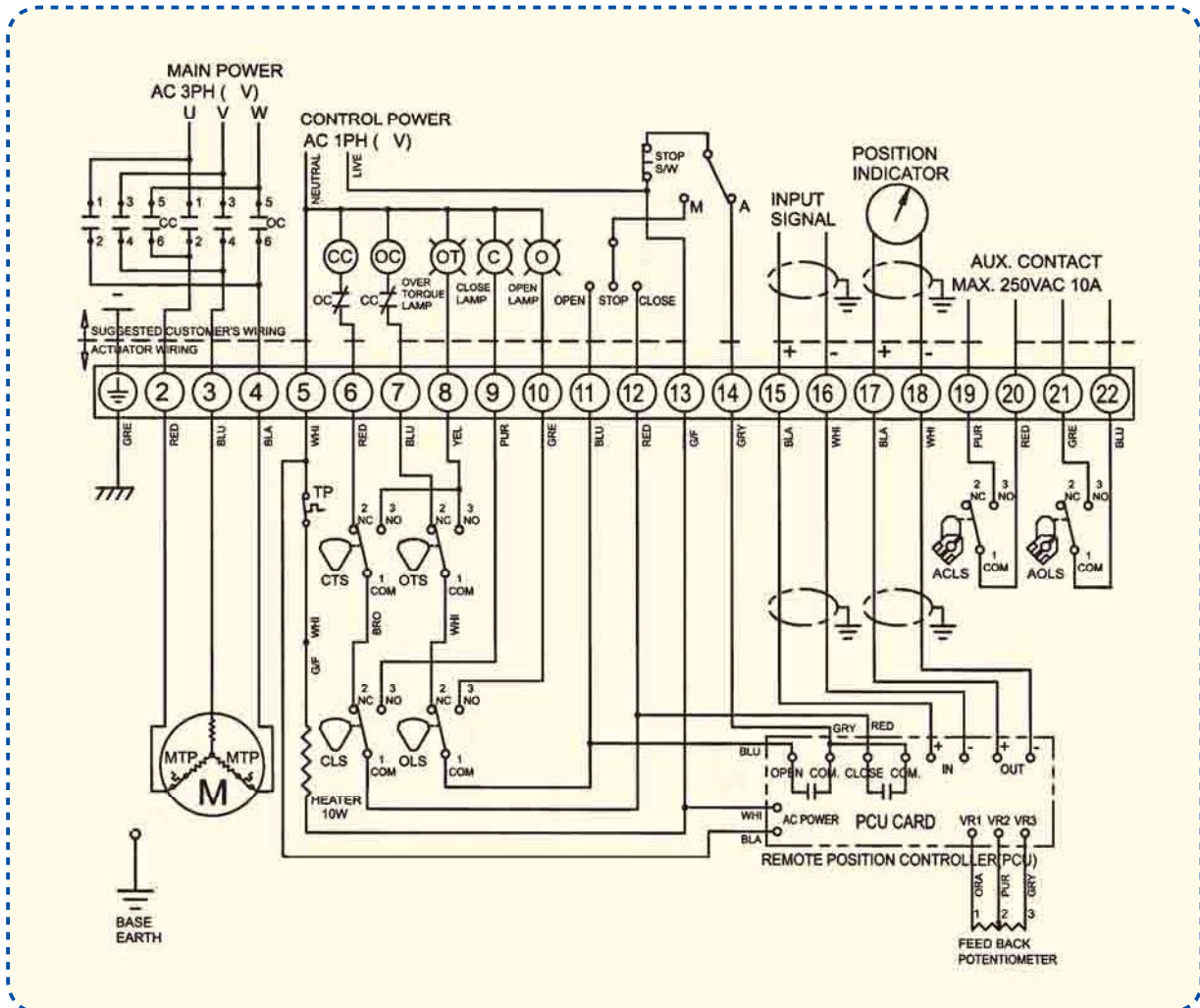


Peckwomy International Industry GMBH is a Specialized company which devotes to the fluid control system's research and development, the sales service. Main business PECKWOMY brand of electric actuators, pneumatic actuators, positioners, solenoid valves, limit switches etc. And other well-known German manufacturers' ball valves, butterfly valves to serve new and old customers in China. To undertake the sales and engineering combined. And may provide Instrument Design and Selection as well as the Engineering project installment service debugging and so on omni-directional service

(LD2 for 3 phase)wiring diagram



PWMOK524016—300
380/440VAC/50/60Hz,3PH(PCU)



TORQUE AND LIMIT SWITCHES OPERATION

SWITCH CLOSE←INTERMEDIATE→OPEN

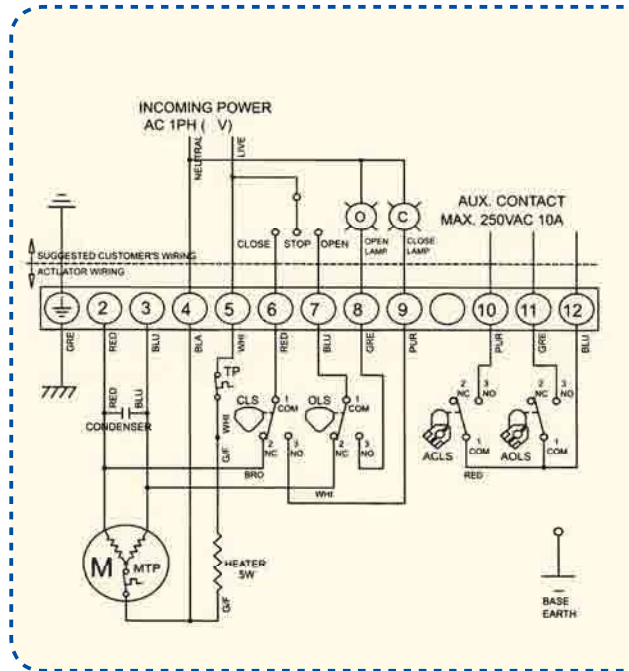
CLS1-2		-----	
CLS1-3	-----		
OLS1-2		-----	
OLS1-3			-----
CTS1-3	*CLOSING TORQUE SWITCH INTERRUPTS CONTROL IF MECHANICAL OVERLOAD OCCURS DURING CLOSING CYCLE		
CTS1-3	*OPENING TORQUE SWITCH INTERRUPTS CONTROL IF MECHANICAL OVERLOAD OCCURS DURING CLOSING CYCLE		

- ALS:Auxiliary limit switch
 - AOLS:Auxiliary Open limit switch(Dry contact)
 - ACLS:Auxiliary Close limit switch(Dry contact)
 - O:Indicator(open)
 - C:Indicator(Close)
 - OT:Over torque lamp
 - CLS:close limit switches(250VAC 10A)
 - OLS:open limit switches(250VAC 10A)
 - CTS:Close Torque switch
 - OTS:Open Torque switch
 - CC:Close magnetic coil
 - OC:Open magnetic coil
 - M:motor
 - TP:Thermal protector switches(250VAC 15A option)
 - MTP:Motor Thermal Protection(250VAC 15A option)
- For application 3 phase electric actuators,before powering up, please move the electric actuator to middle part

(10)Wiring diagram

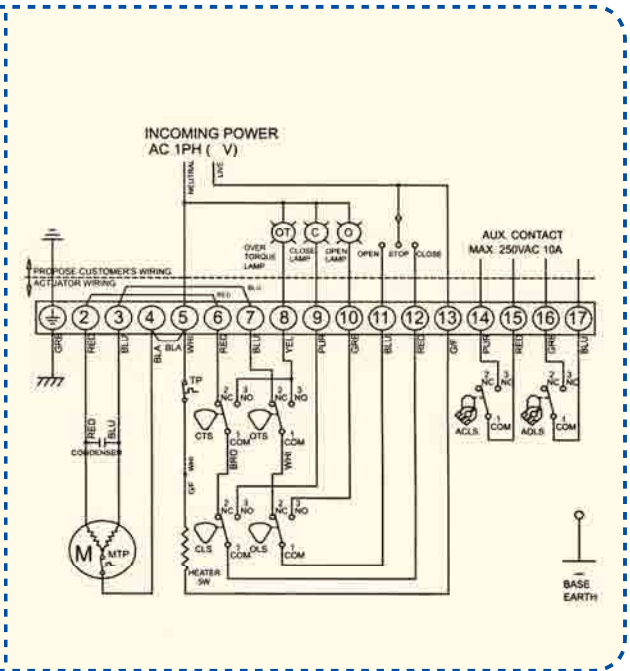
PWMOK524010

110/220VAC/50/60Hz, 1PH(On-Off)



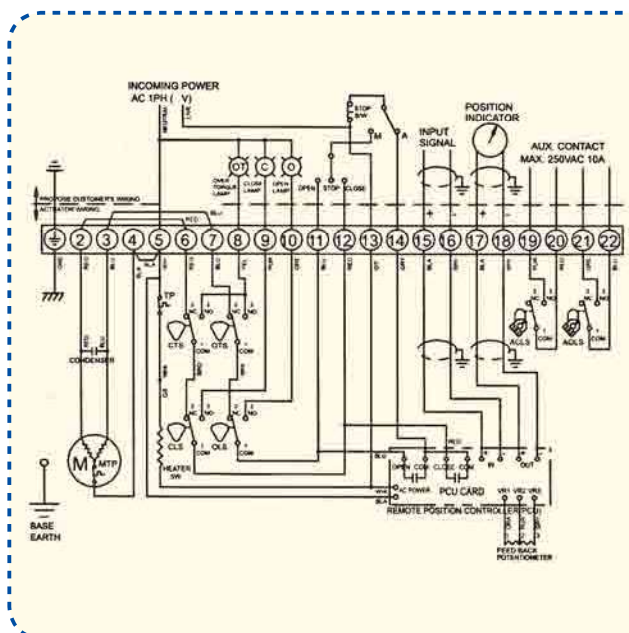
PWMOK524016—300

110/220VAC/50/60Hz, 1PH(On-Off)



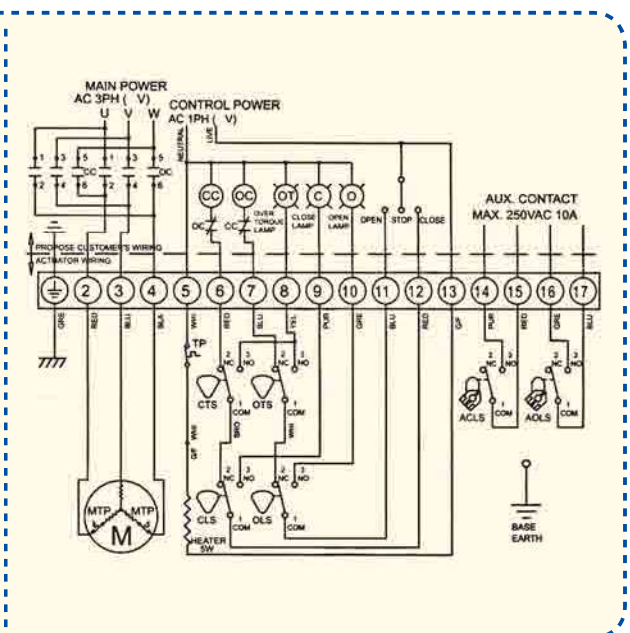
PWMOK524010

110/220VAC/50/60Hz, 1PH(PCU)

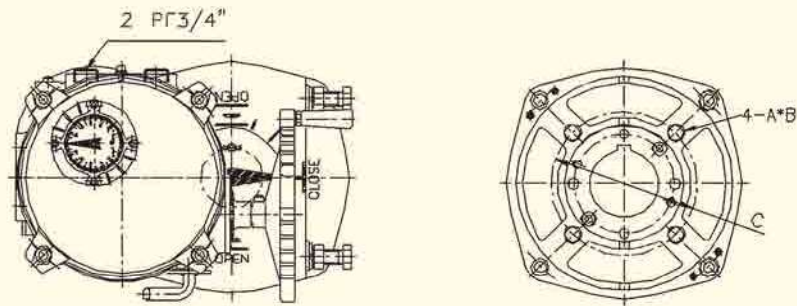


PWMOK524016—300

380/440VAC/50/60Hz, 3PH(On-Off)



(3)

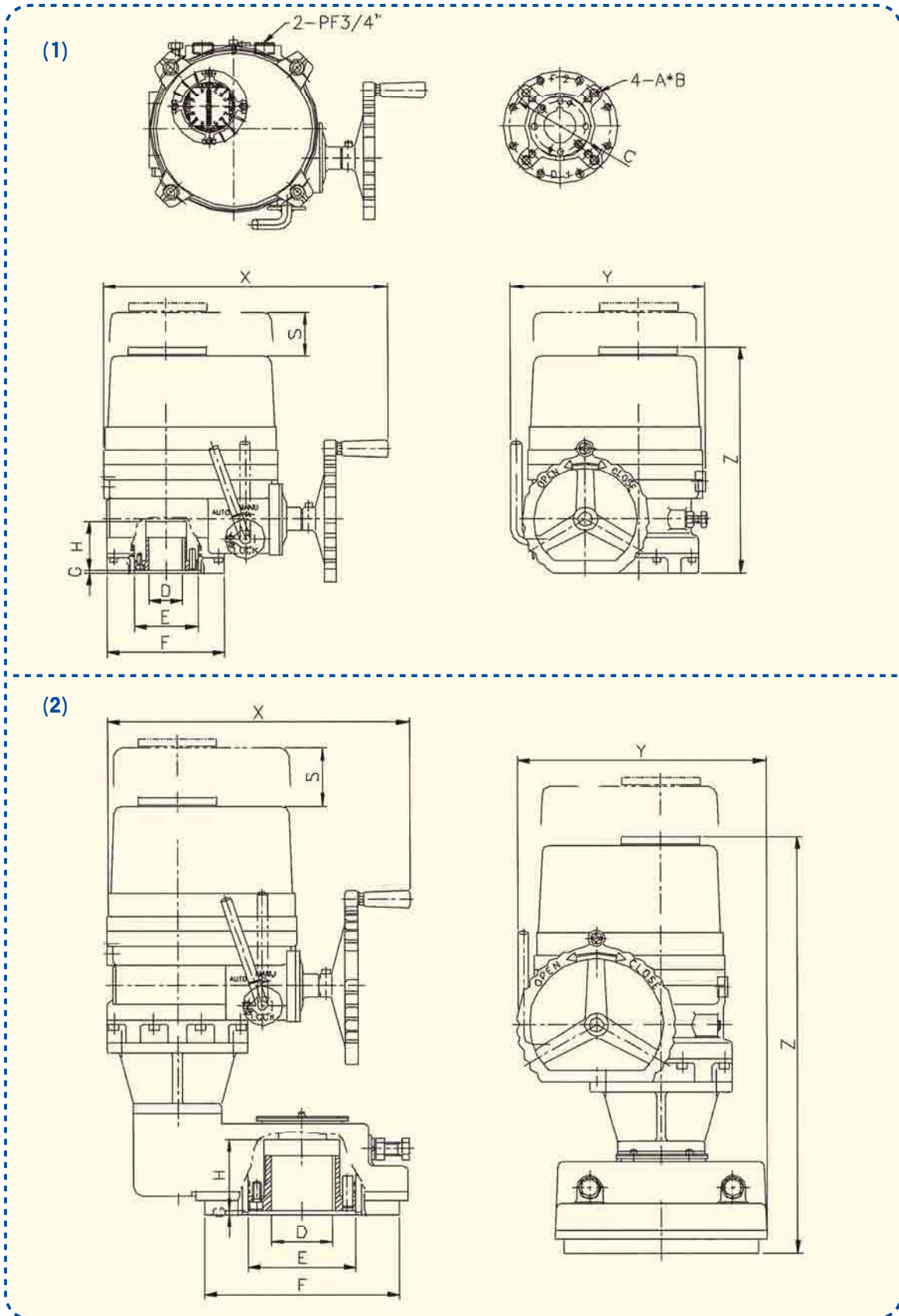


WITH GEARBOX

Type	PWMOK 524010	PWMOK 524016	PWMOK 524024	PWMOK 524035	PWMOK 524050	PWMOK 524080	PWMOK 524110
Flange	F07	F07	F07	F10	F10	F12	F12
ISO5211		F10	F10	F12	F12	F14	F14
C	Φ70	Φ70	Φ70	Φ70	Φ70	Φ125	Φ125
		Φ102	Φ102	Φ125	Φ125	Φ140	Φ140
A	M8	M8/M10	M8/M10	M10/M12	M10/M12	M12/M16	M12/M16
B	14	14/17	14/17	17/21	17/21	20/25	20/25
D(key)	Φ22	Φ25	Φ25	Φ40	Φ40	Φ48	Φ48
D(Squ.)	□20	□23	□23	□34	□34	□40	□40
e	Φ50	Φ58.5	Φ58.5	Φ80	Φ80	Φ95	Φ95
f	Φ88	Φ125	Φ125	Φ148	Φ148	Φ178	Φ178
g	3	3	3	3	3	3	3
h	37	57	57	62	62	67	67
s	100	115	115	145	145	170	170
x	258	338	338	357	357	380	380
y	172	229	229	244	244	287	287
z	220	259	259	288	288	313	313

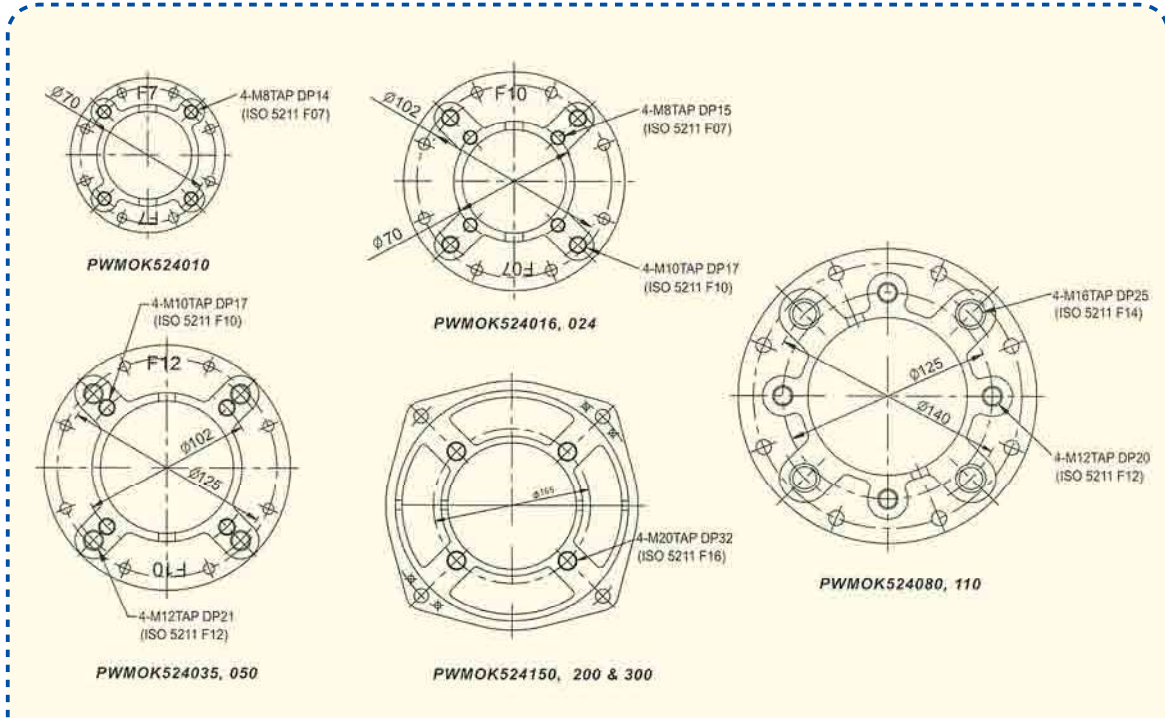
PWMOK 524150	PWMOK 524200	PWMOK 524300
F16	F16	F16
Φ165	Φ165	Φ165
M20	M20	M20
32	32	32
Φ75	Φ75	Φ75
□64	□64	□64
Φ135	Φ135	Φ135
Φ245	Φ245	Φ245
5	5	5
90	90	90
145	17	17
368	380	380
293	312	312
506	531	531

(9)Parameter table

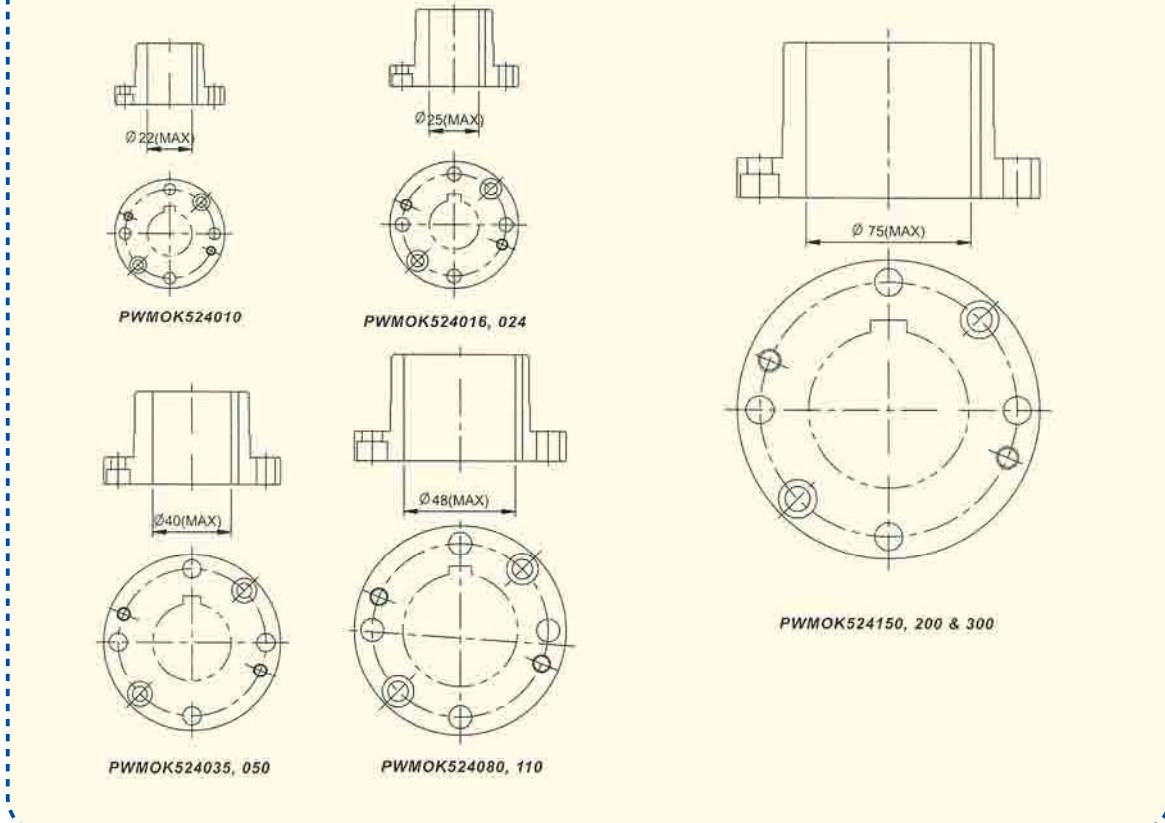


(8) Installation dimension graph

Mounting base according to ISO5211 standard



driving bushing



(7)Parameter Table

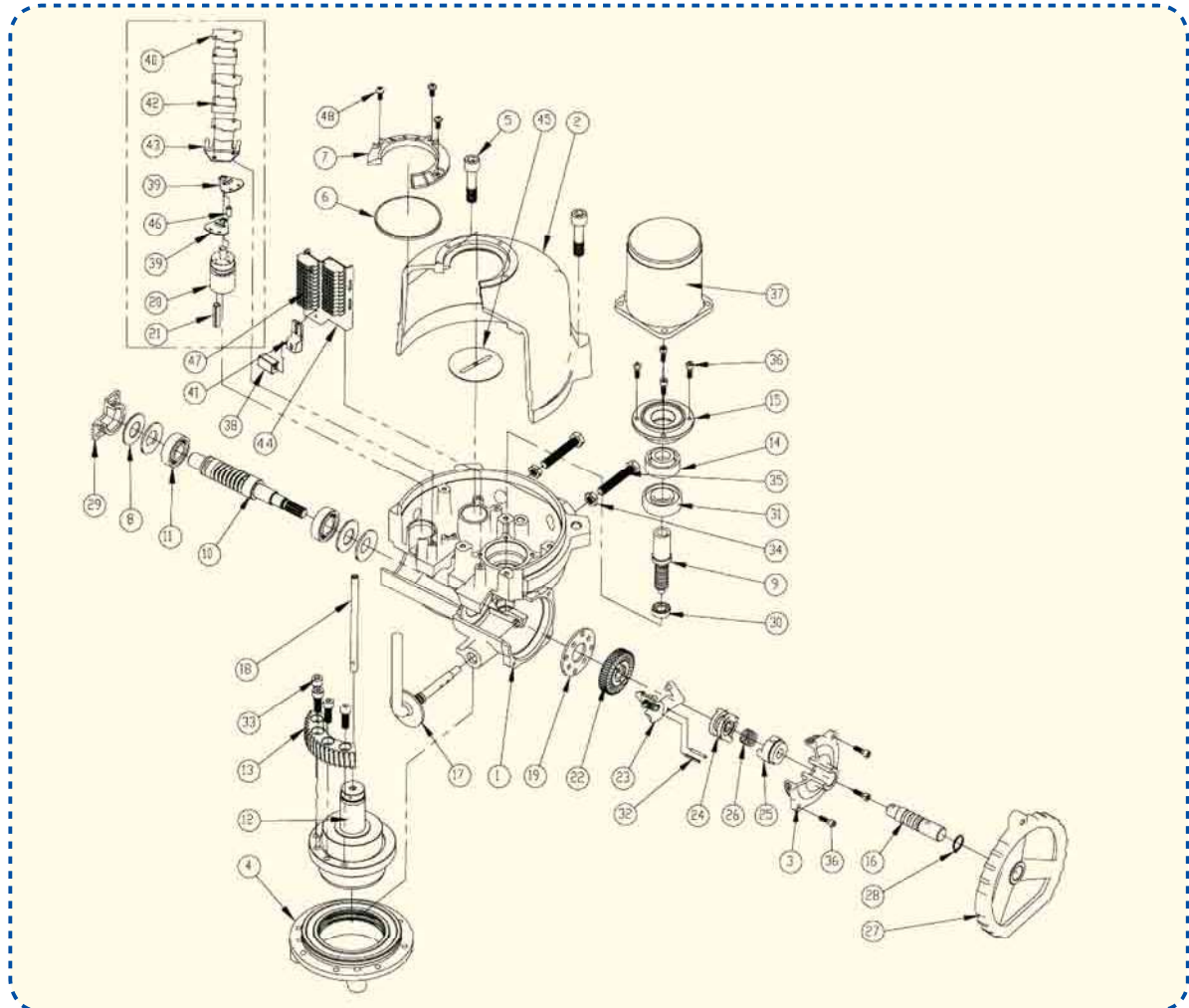
Type	PWMOK 524010	PWMOK 524016	PWMOK 524024	PWMOK 524035	PWMOK 524050	PWMOK 524080	PWMOK 524110	PWMOK 524150	PWMOK 524200	PWMOK 524300
Torque(NM)	100	160	240	350	500	800	1100	1500	2000	3000
Duty Cycle(%)	40	30	30	30	30	30	30	30	30	30
Operating	50Hz	21	26	26	31	31	39	39	93	117
	60Hz	18	22	22	26	26	32	32	78	97
Max bore(mm)	bey type(Φ)	22	25	25	40	40	48	48	75	75
	square type(\varnothing)	20	23	23	34	34	40	40	64	64
Rated current(A)										
1Phase/110V	50Hz	0.98	1.60	1.62	1.72	3.60	3.90	3.90	3.60	3.80
	60Hz	1.10	1.70	1.72	1080	3.90	4.20	4.30	3.90	4.20
1Phase/220V	50Hz	0.52	0.85	0.87	0.92	1.50	2.05	2.15	1.50	2.05
	60Hz	0.58	0.90	0.90	0.95	1.60	2.20	2.30	1.60	2.20
3Phase/380V	50Hz	0.43	0.30	0.32	0.32	0.52	0.82	0.84	0.52	0.82
	60Hz	0.33	0.30	0.32	0.32	0.56	0.88	0.90	0.56	0.88
3Phase/440V	50Hz	0.59	0.30	0.32	0.32	0.55	0.82	0.84	0.55	0.82
	60Hz	0.42	0.32	0.35	0.35	0.58	0.88	0.88	0.58	0.88
Motor insula-tion class	F	F	F	F	F	F	F	F	F	F
Motor class	15W	40W	40W	40W	90W	180W	180W	180W	180W	180W
ISO 5211 mounting flange	F07	F07/F10	F07/F10	F10/F12	F10/F12	F12/F14	F12/F14	F16	F16	F16
Kgs	7	15	15	20	20	25	25	65	75	75
No.of handwheel turns	10	12	12	14	14	17	17	65	70	70

Selection Introductions:

Please supply power,torque,control type(ON-OFF/Modulating)
Exposion-proof etc basic selection parameter

For example:220VAC.50HZ.160NM..EX, So type:PWMOK524016-PCU/EX

(6) Operating Principle and Size



Coding	Part Name	Count	Coding	Part Name	Count	Coding	Part Name	Count
1	Body	1	17	Lever	1	33	Bolt	4
2	Cover	1	18	Point shaft	1	34	Nut	2
3	Handle cover	1	19	Thrust cover	1	35	Bolt	2
4	Base	1	20	Torque shaft	1	36	Bolt	8
5	Bolt	4	21	Spring pin	1	37	Motor	1
6	Window	1	22	Hellca gear	1	38	Heater	1
7	Window cover	1	23	York ass'y	1	39	Cam	2
8	Spring gasket	4	24	Cluch A	1	40	Separator	3
9	Driving shaft	1	25	Cluch B	1	41	Sensor B/K	1
10	Driving shaft	1	26	Spring	1	42	Switch	2
11	Bearing	2	27	Handle wheel	1	43	Switch plate	1
12	Output shaft	1	28	Gasket	1	44	Terminal block B/K	1
13	Second-level worm gear	1	29	End cover	1	45	Indicator	1
14	Disc	1	30	Bearing	1	46	Pipe	1
15	Disc cover	1	31	Bearing	1	47	Terminal block	2
16	Handle shaft	1	32	Spring pin	2	48	Screw	4

(3) Standard Specification

Enclosure	Weatherproof IP67,NAMUR 4 and 6,(IP68 option)O-ring sealed
Main power supply	110/220VAC/1Ph/50/60Hz,380/440/VAC/3Ph/50/60Hz ±10%
Control power supply	110/220VAC/1Ph/50/60Hz ±10%
Duty Cycle(on-off)	S2:10Min~30min/S4:20~50%
Duty cycle(modulating)	S4; 30~50%,300~1200 cycles/hour
Motor	Squirrel Caged induction motor Class F
Limit Switches	2 each for open and close (SPDT 250VAC/10A rating)
Torque Switches	1 each for open and close (SPDT 250VAC/10A rating)
Stall protection/set temperature	Built in Thermal protection,open 150°C±5°C,Close 97°C±15°C
Travel angle	90°±5°(0°~100°)
Position indicator	Continuous mechanical indicator
Handwheel	yes
Self locking	Provided by double worm gearing(no brake)
Mechanical stopper	1each for each travel end(open and close),external adjustable
Heater	5W(110/220VAC)
Cable entries	2x PF 3/4"
Ambient temperature	Basic type:-20°C~+70°C option:-40°C~+100°C
Ambient humidity	10%RH Min,100% RH Max,Non-Condensing
Anti vibration	XYZ10g 0.2~34Hz,minutes

(4) Option

Symbol	Description	Remark
EX	Explosion-proof(Ex d II BT4,BT6,CT4,CT6)	TüV authentication
WT	Watertight(IP68)	7M Head 72 hours
ALS	Auxiliary limit switches	Max for each travel end
ATS	Auxiliary torque switches	Max for each travel end
EXT	multi-process	120°,135°,180°,270°
SV	Variation in torque and operating speed	Pls consult before ordering

I.PWMOK Series(Quarter Turn Electric Actuator)

(1)Introduction

PECKWOMY company design and produce high quality electric actuator,which provide the most reasonable solutions in the field of valve automatically area.PECKWOMY series electric actuator is our research fruit for many years in the field of valve and actuator automatically area. It owns compact shape, firm structure, exquisite appearance, reliable performance and various additive functions,our company will provide high quality products and perfect service.



(2)Features

- (1) **Summary:** PECKWOMY series electric actuator is designed for the 90 degree turn application,such as ball valve,butterfly valve,damper and other equipments.
- (2) Wide range of torque variation from min 40Nm to max 3000Nm,control designs,produces and provides high quality actuators and quality service related to valve automation
- (3) **Housing:** hard-anodized AL alloy and external coating of epoxy powder is suitable for the severe condition especially against the corrosion,Housing is designed in accordance with standard of Explosion-proof and IP67.and also we can offer PECKWOMY with IP68 for option
- (4) **Sealing:** sealing provided by double O-ring system
- (5) **Handwheel:** just by pulling over the lever,operating mode is switched to manual,then just supplying electrical power to actuator,clutch is automatically disengaged from manual and operating mode is switched to electric operation,The size of hand wheel is designed according to required torque to move the actuator,so that operator can easily move the actuator by hand
- (6) **Gear& self locking:** 2nd staged double worm gearing prevents movement caused by backward force transferred from valve and it provides the exact and stable position of actuator and valve when the power is off,high efficiency,high output torque.low noise level are another advantages
- (7) **Motor:** specially designed with squirrel caged induction motor to generate high starting torque and high efficiency equipped with thermal protector to prevent damage from over heating,it has several features such as high output power,high efficiency and lower noise
- (8) **Limit Switches:** directly engaged with driving shaft to set accurate position of valve,Torque switches:to protect actuator from damage caused by over torque from the driven valve over the whole travel
- (9) **Anti-condensation space heater:** the switch is open when the temperature is around 20+ 3°C to prevent condensation,the switch is close when the temperature is over 30+ 3°C to prevent over heating
- (10) **Stopper bolt:** stopper bolt installed both close and open direction prevents actuator's travel over the limit during manual operation and also protects internal gearing from its breakaway
- (11) **Indicator:** through the large size indicator window provides better position indication from a distance
- (12) **Terminal block:** it is easy to add the number of strip for additional connection,spring loaded terminal stripe is very strong against vibration
- (13) **Wiring:** the inside wiring is so simple and easy to connect
- (14) **Driving bushing:** the driving bushing is removable to process, mounting base is designed according to ISO5211,it is convenient to adapt with valve
- (15) **Lubrication:** all the gears and shafts use CIATM221 type Grease Moly ,it is not necessary to refill lubricant for 5 years
- (16)**Others:** All the electric actuator provided by Peckwomy company guaranty high performance and stable quality product throughout severe test and inspection,we can provide advanced intelligent model with different models for options



WINDOW & INDICATOR

TOP COVER BOLTS

Electric Actuator



EN ISO 9001:2000