

BBACCARA®

A U T O M A T I O N & C O N T R O L



(Quarter turn)

ELECTRIC ACTUATOR



GQ – 001, 002, 004

High Speed Operating Time (3-7 sec)
Simple Position Indicator
Smart & Compact Design
With Manual Lever
Weatherproof(IP67)
3-Wire Type
4-Wire Type

DESCRIPTION

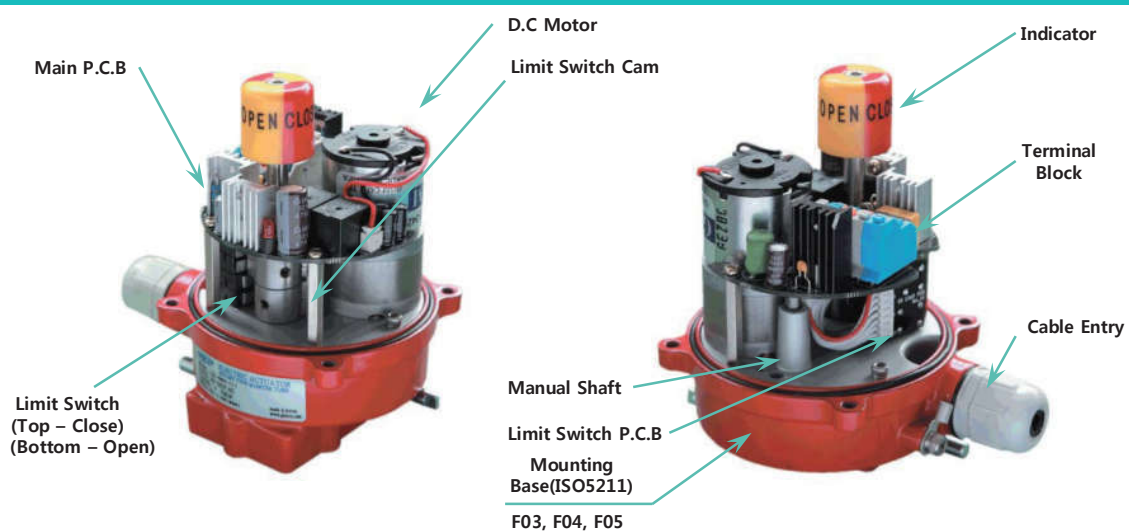
Electric actuator is specially designed for small size quarter turn valve operation such as ball valves / small dampers and similar usages

FEATURES

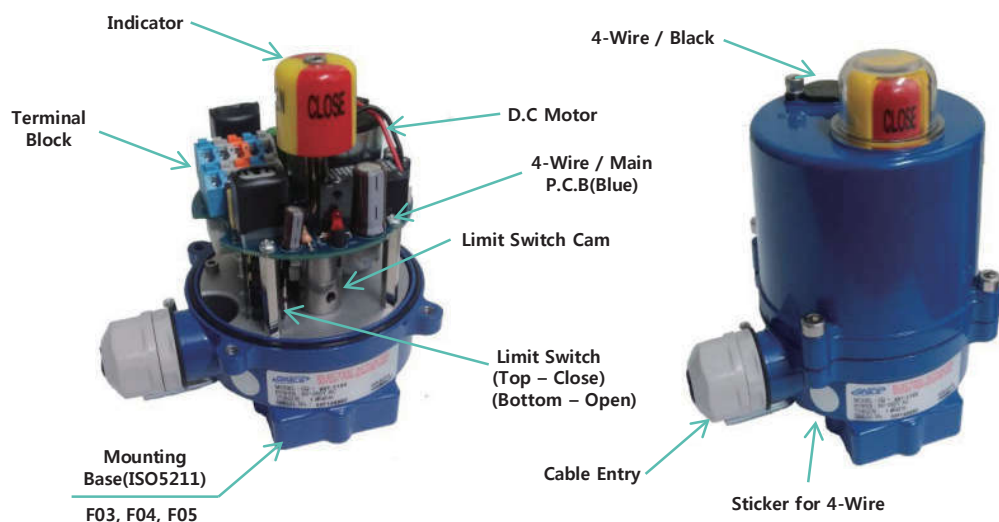
- Free-Voltage : (95~245VAC / 1PH)
(24VAC / DC) (12VAC / DC)
- Weatherproof (IP67)
- Manual lever
- Mounting base : Standard ISO5211 (F03/F04/F05)

CONSTRUCTION

Actuator Appearance (INSIDE) – 3Wire



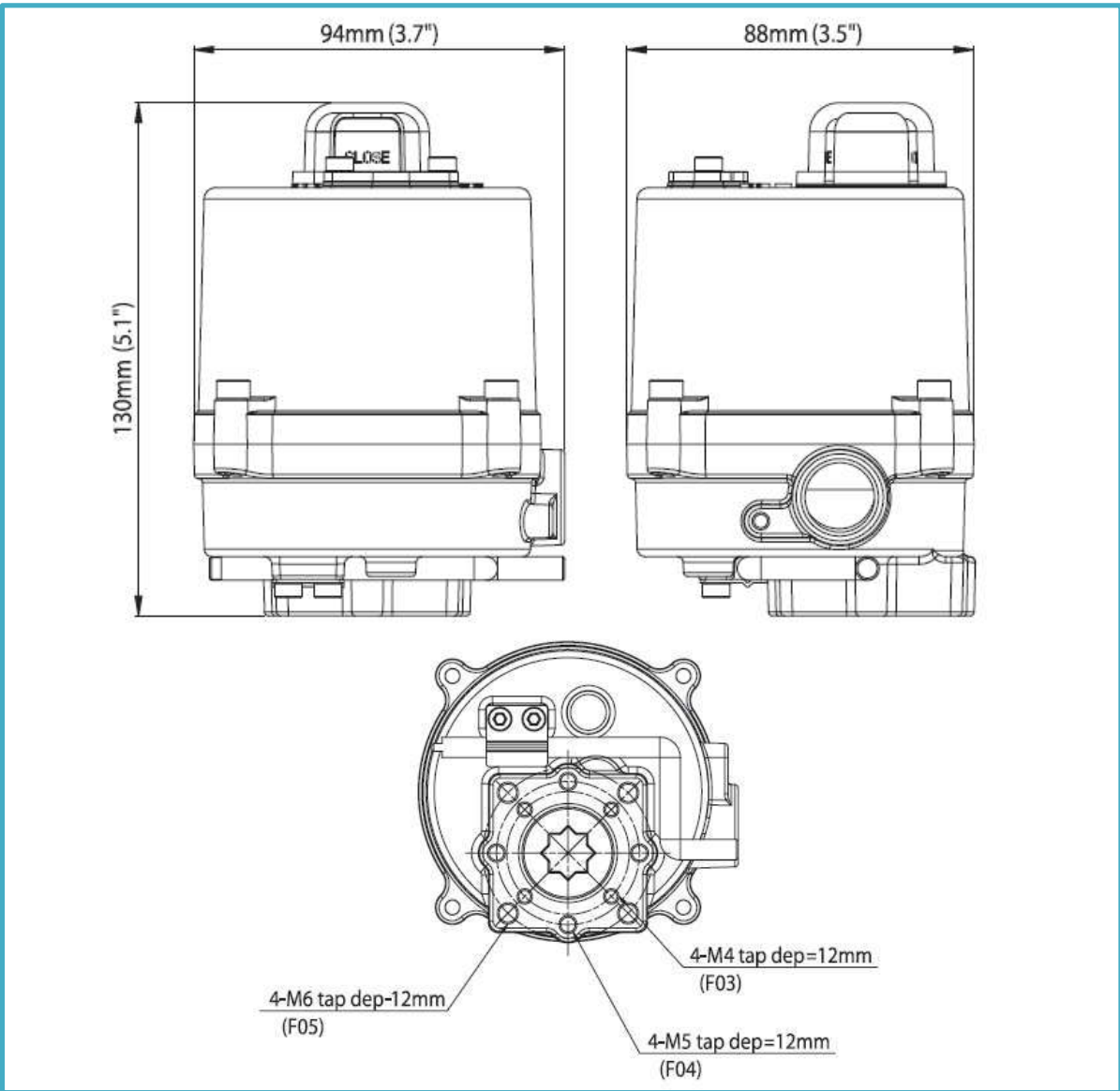
Actuator Appearance (INSIDE) – 4Wire



PERFORMANCE

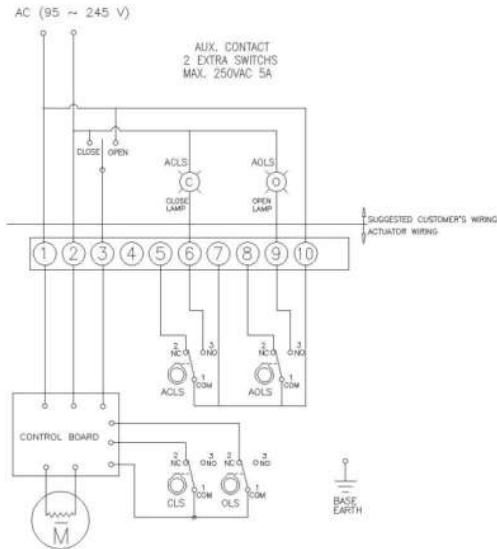
Model	Output Torque		Operating Time 50/60Hz	Supplying Power (50/60Hz, 1 phase)	Duty Cycle IEC 34-1	Electric Motor IEC 34-1	Mounting (ISO 5211)	Bottom Bore (mm)	Weight
	Kg.m	N.m	90°						
GQ – 001	1.5	15	3 sec	V1=95V~245VAC (free) V2=24V AC/DC V3=12V AC/DC	S2 50%	2A	F03, F04, F05	11 x 11	1.2Kg
GQ – 002	2	20	4 sec		S2 50%	2A	F03, F04, F05	14 x 14	1.2Kg
GQ - 004	4	40	7 sec		S2 50%	2A	F03, F04, F05	14 x 14	1,2Kg

DIMENSION

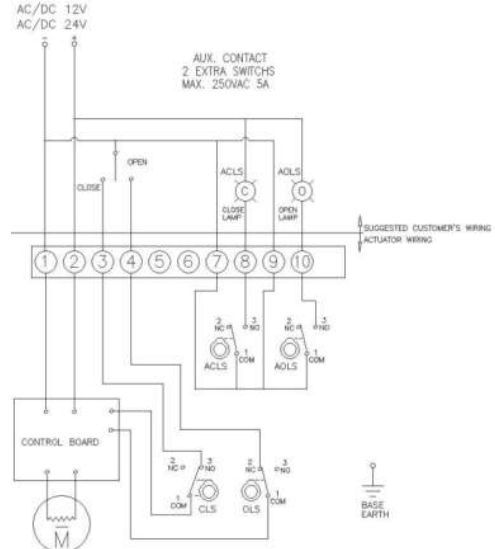


CONNECTION WIRING

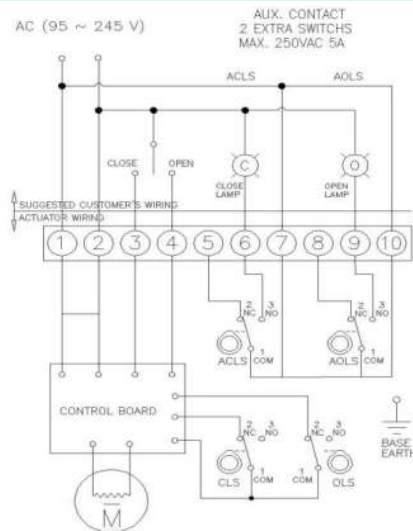
AC ON-OFF (3wire)



AC/DC ON-OFF



AC ON-OFF (4wire)



ORDERING SPECIFICATION

GQ – X X X – X X X X

001 : 1.5Kg.m
002 : 2Kg.m
004 : 4Kg.m

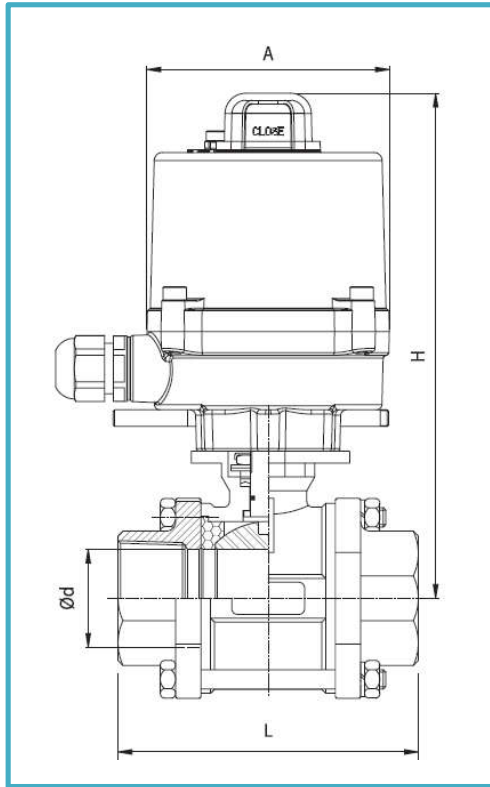
1 : 11x11
2 : 14x14

1 : ON-OFF(3-Wire)
2 : ON-OFF(4-Wire)

1 : 95~245VAC 1PH
2 : AC/DC 24V
3 : AC/DC 12V

1: IP 67

ELECTRIC BALL VALVE(2-WAY) : (3-PIECE)



Dimensions (3-Piece)

(Unit : mm)

SIZE		Ød	L	H	A	Body/Actuator	Stem (mm)	ISO5211 (PCD)	WT (Kg)	TORQUE (N.m)
Inch	mm									
1/4"	8A	11.6	63.5	166.9	94	GV23-08/GQ-004	9	F03, 05	2.4	4
3/8"	10A	12.8	63.5	166.9	94	GV23-10/GQ-004	9	F03, 05	2.4	4
1/2"	15A	15	63.5	166.9	94	GV23-15/GQ-004	9	F03, 05	2.3	4
3/4"	20A	20	72.5	175	94	GV23-20/GQ-004	9	F03, 05	2.5	6
1"	25A	25	81	183.4	94	GV23-25/GQ-004	11	F03, 05	3.5	9.8
1-1/4"	32A	32	94.5	188.9	94	GV23-32/GQ-004	11	F03, 05	4.0	16.4
1-1/2"	40A	38	108	204.7	94	GV23-40/GQ-004	11	F03, 07	4.6	18.3
2"	50A	50	121.5	213.5	94	GV23-50/GQ-004	14	F03, 07	6.5	25.8

※ 3-PIECE BODY-Max. Pressure:70kg/cm², Max. Temperature : 160°C, Material : A351-CF8M, Seat : PTFE

SIZE		Ød	L	H	A	Body/Actuator	Stem (mm)	ISO5211 (PCD)	WT (Kg)	TORQUE (N.m)
Inch	mm									
1/4"	8A	11.6	63.5	166.9	94	GV23-08/GQ-002	9	F03, 05	2.4	4
3/8"	10A	12.8	63.5	166.9	94	GV23-10/GQ-002	9	F03, 05	2.4	4
1/2"	15A	15	63.5	166.9	94	GV23-15/GQ-002	9	F03, 05	2.3	4
3/4"	20A	20	72.5	175	94	GV23-20/GQ-002	9	F03, 05	2.5	6
1"	25A	25	81	183.4	94	GV23-25/GQ-002	11	F03, 05	3.5	9.8
1-1/4"	32A	32	94.5	188.9	94	GV23-32/GQ-002	11	F03, 05	4.0	16.4

SIZE		Ød	L	H	A	Body/Actuator	Stem (mm)	ISO5211 (PCD)	WT (Kg)	TORQUE (N.m)
Inch	mm									
1/4"	8A	11.6	63.5	166.9	94	GV23-08/GQ-001	9	F03, 05	2.4	4
3/8"	10A	12.8	63.5	166.9	94	GV23-10/GQ-001	9	F03, 05	2.4	4
1/2"	15A	15	63.5	166.9	94	GV23-15/GQ-001	9	F03, 05	2.3	4
3/4"	20A	20	72.5	175	94	GV23-20/GQ-001	9	F03, 05	2.5	6
1"	25A	25	81	183.4	94	GV23-25/GQ-001	11	F03, 05	3.5	9.8

※ Model : GV23 (2 : 2-Way Ball Valve, 3 : 3-Piece)

TABLE OF AVAILABLE VALVE SIZE FOR GQ-ACTUATOR

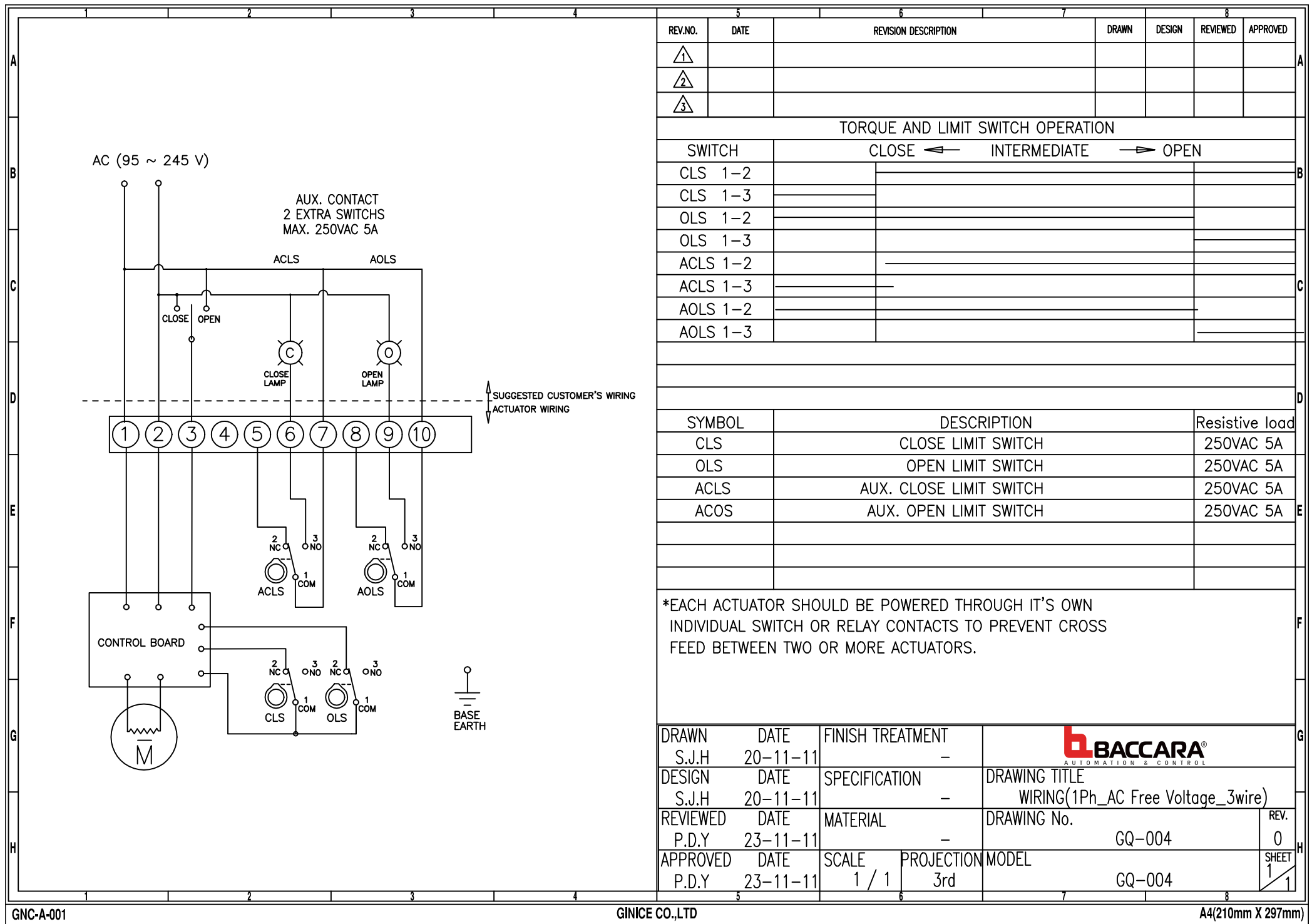
Valve Actuator	Actuator Torque (N.m)	2-Way Ball Valve 10K, ANSI 150#	Operating Time	3-Way Ball Valve 10K, ANSI 150#	Operating Time
GQ - 001	15	8A(1/4") ~ 25A(1")	3	8A(1/4") ~ 15A(1/2")	3
GQ - 002	20	8A(1/4") ~ 32A(1 1/4")	4	8A(1/4") ~ 25A(1")	4
GQ - 004	40	8A(1/4") ~ 50A(2")	7	8A(1/4") ~ 32A(1 1/4")	7

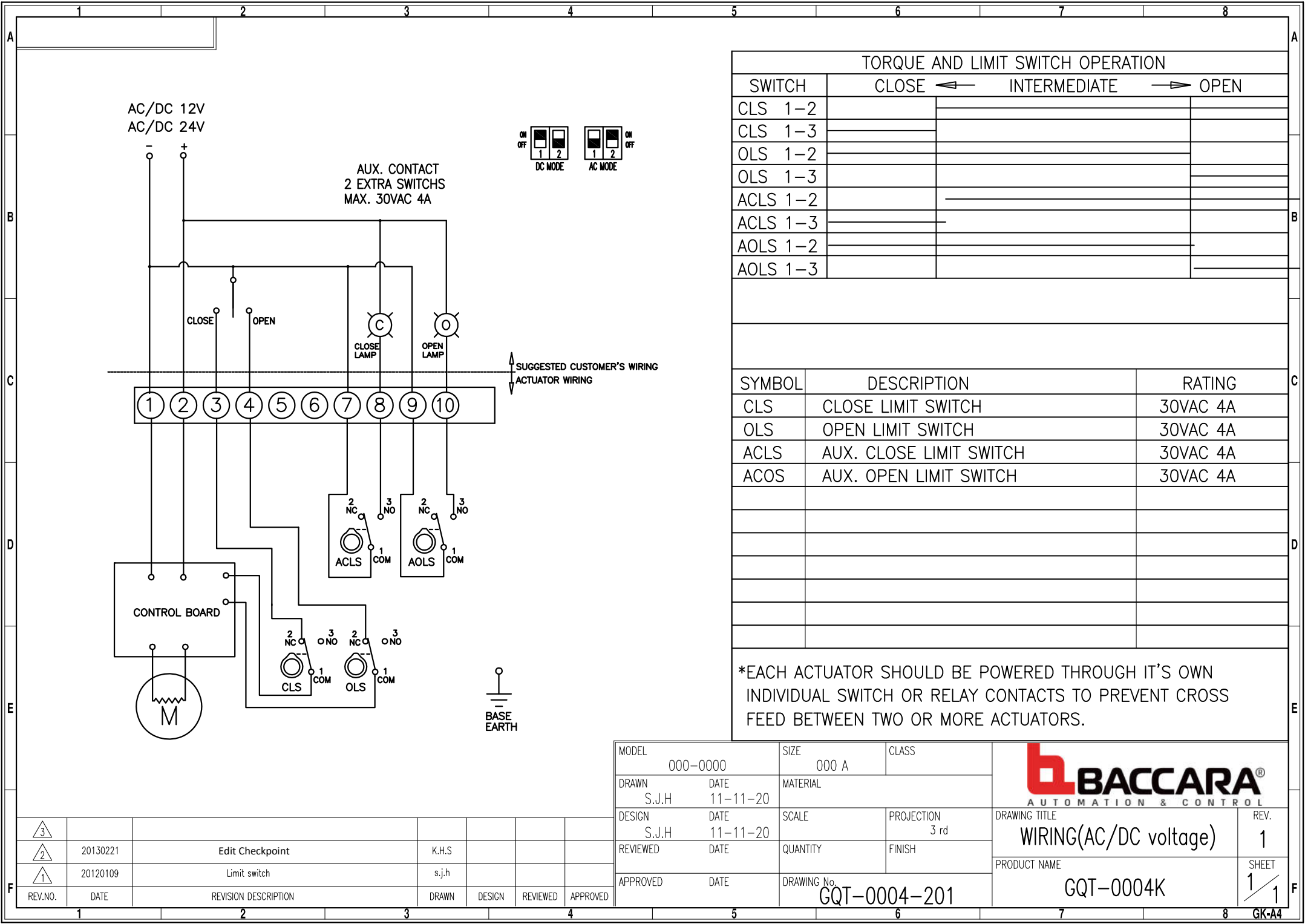
The above specification can be changed as difference torque per each valve manufacturer

STANDARD

STANDARD

Model	Phase	Voltage [V]	Hertz [Hz]	Power consumption [VA]
GQ - 001,002,004	-	12	-	7.56
		24	-	8.64
	1PH	110	50	39.6
		110	60	39.6
		220	50	79.2
		220	60	79.2





TORQUE AND LIMIT SWITCH OPERATION			
SWITCH	CLOSE	INTERMEDIATE	OPEN
CLS 1-2			
CLS 1-3			
OLS 1-2			
OLS 1-3			
ACLS 1-2			
ACLS 1-3			
AOLS 1-2			
AOLS 1-3			

SYMBOL	DESCRIPTION	RATING
CLS	CLOSE LIMIT SWITCH	30VAC 4A
OLS	OPEN LIMIT SWITCH	30VAC 4A
ACLS	AUX. CLOSE LIMIT SWITCH	30VAC 4A
ACOS	AUX. OPEN LIMIT SWITCH	30VAC 4A

*EACH ACTUATOR SHOULD BE POWERED THROUGH IT'S OWN INDIVIDUAL SWITCH OR RELAY CONTACTS TO PREVENT CROSS FEED BETWEEN TWO OR MORE ACTUATORS.

3							
2	20130221	Edit Checkpoint	K.H.S				
1	20120109	Limit switch	s.j.h				
REV.NO.	DATE	REVISION DESCRIPTION	DRAWN	DESIGN	REVIEWED	APPROVED	

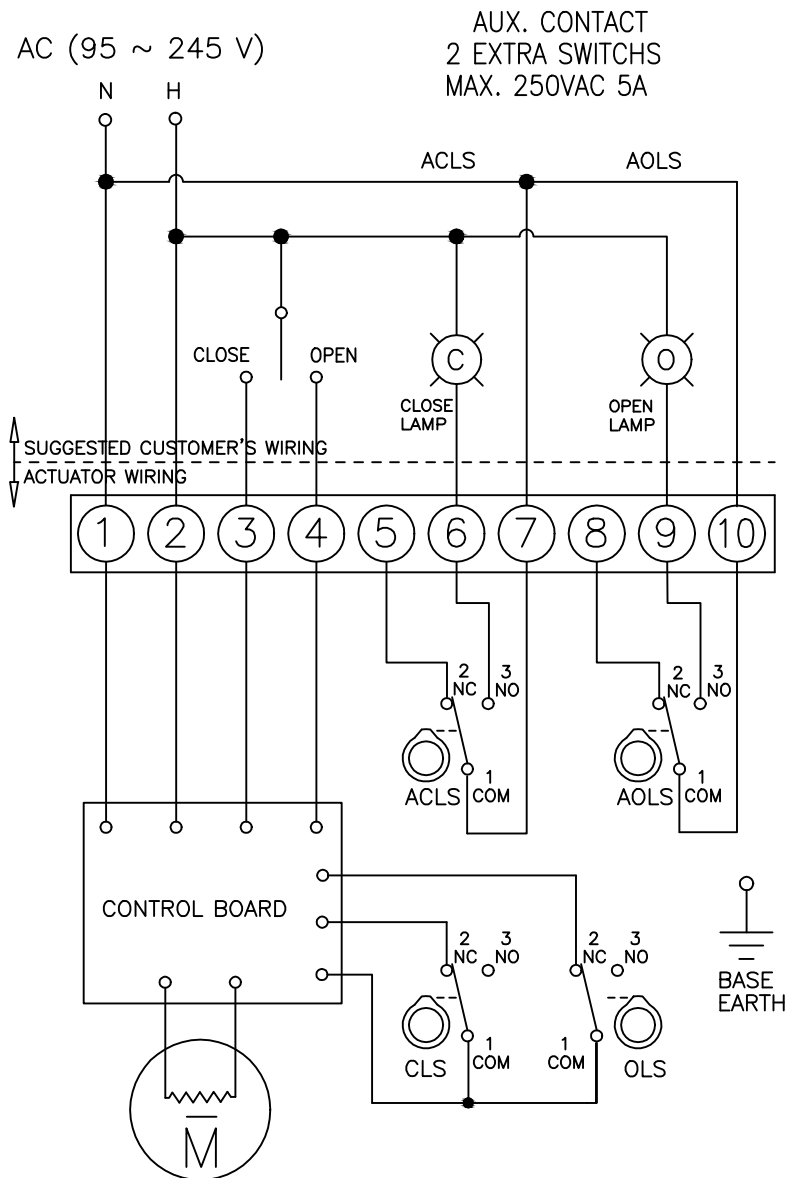
MODEL	000-0000	SIZE	000 A	CLASS	
DRAWN	S.J.H	DATE	11-11-20	MATERIAL	
DESIGN	S.J.H	DATE	11-11-20	SCALE	PROJECTION 3 rd
REVIEWED		DATE		QUANTITY	FINISH
APPROVED		DATE		DRAWING No.	



BACCARA
AUTOMATION & CONTROL

DRAWING TITLE	REV.
WIRING(AC/DC voltage)	1
PRODUCT NAME	SHEET
GQT-0004K	1/1

GQT-0004-201



REV.NO.	DATE	REVISION DESCRIPTION	DRAWN	DESIGN	REVIEWED	APPROVED
1						
2						
3						

TORQUE AND LIMIT SWITCH OPERATION

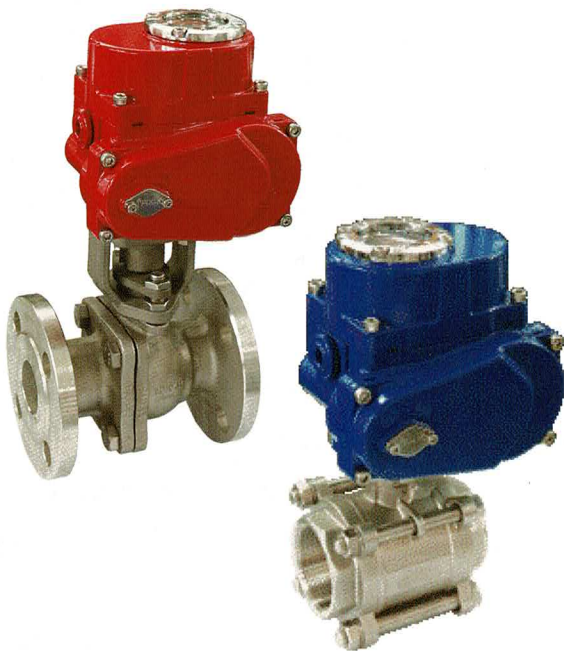
SWITCH	CLOSE ←	INTERMEDIATE	→ OPEN
CLS 1-2			
CLS 1-3			
OLS 1-2			
OLS 1-3			
ACLS 1-2			
ACLS 1-3			
AOLS 1-2			
AOLS 1-3			

SYMBOL	DESCRIPTION	Resistive load
CLS	CLOSE LIMIT SWITCH	250VAC 5A
OLS	OPEN LIMIT SWITCH	250VAC 5A
ACLS	AUX. CLOSE LIMIT SWITCH	250VAC 5A
AOLS	AUX. OPEN LIMIT SWITCH	250VAC 5A

*EACH ACTUATOR SHOULD BE POWERED THROUGH IT'S OWN INDIVIDUAL SWITCH OR RELAY CONTACTS TO PREVENT CROSS FEED BETWEEN TWO OR MORE ACTUATORS.

DRAWN S.J.H	DATE 20-11-11	FINISH TREATMENT -		
DESIGN S.J.H	DATE 20-11-11	SPECIFICATION -		
REVIEWED P.D.Y	DATE 23-11-11	MATERIAL -	DRAWING TITLE WIRING(1Ph_AC Free Voltage_4wire)	REV. 0
APPROVED P.D.Y	DATE 23-11-11	SCALE 1 / 1	PROJECTION 3rd	DRAWING No. GQ-004
				SHEET 1 / 1

Compact Electric Quarter -Turn Actuator GQ-006/008



► Features

- Suitable for Ball valve, Butterfly valve or Damper
- Electric power : 24VAC/DC, 110/220VAC
- Compact & Light design
- With Manual Lever
- Weather-proof (IP67)
- ISO5211 Mounting flange : F05/07
- Bottom bore : 14mm double square (14X11 square adaptor provided)
- Modulating, Potentiometer etc available
- Hard anodizing with powder coating for anti-corrosion

► Technical data

Item	GQ-04N	GQ-04P
Output torque	60Nm	80Nm
Operating time	15/17sec	15/17sec
Supplying power	24VAC or DC, 110 or 220VAC	
Limit switches	2 Limit switch for operation	
Additional limit switch	2 Additional limit switch for dry contact	
Manual operation	Manual lever	
Enclosure 	IP67	
Mounting base	F05/07 (ISO5211)	
Bottom bore	14 X 14	14 X 14
Conduit Entries	PF1/2 x 2EA	
Weight	3.5Kg	