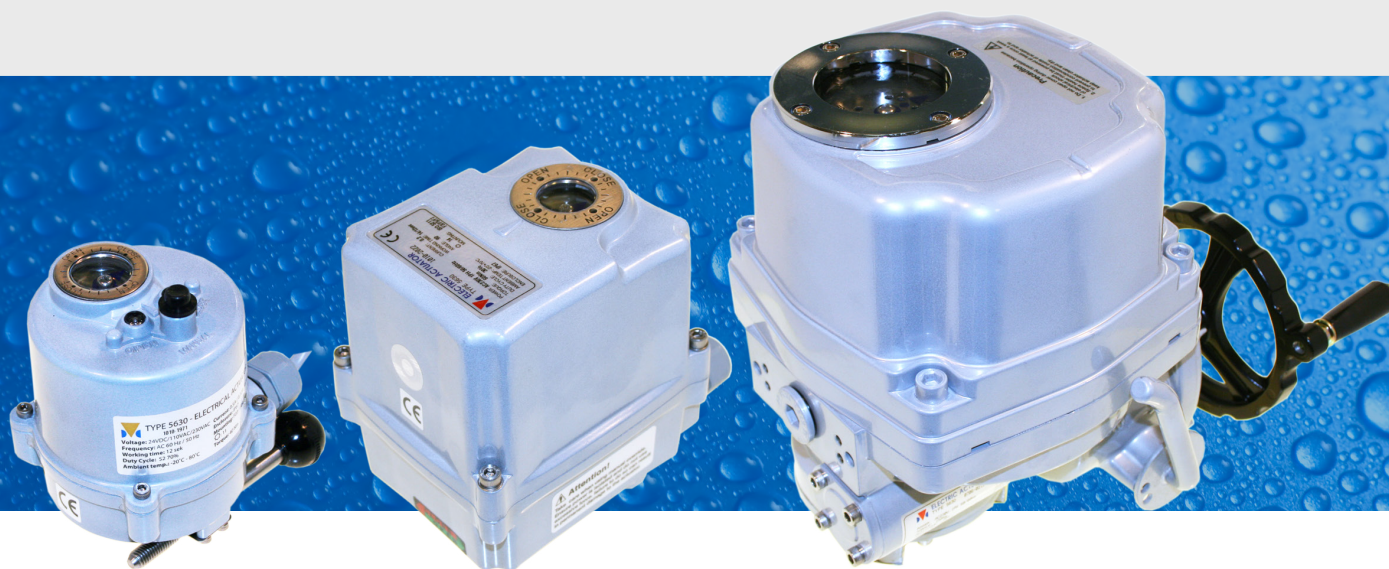




Know-how makes the difference

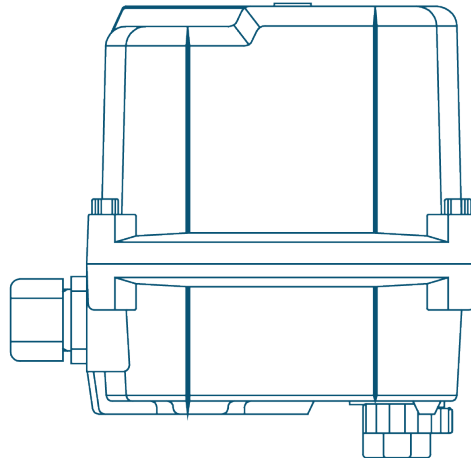


Electrical Actuators



With Dansk Ventil Center as your business partner, you are always guaranteed a wide and well sorted product range and a unique technical know-how

Product development is a key factor for DVC, ensuring you the best products at any time

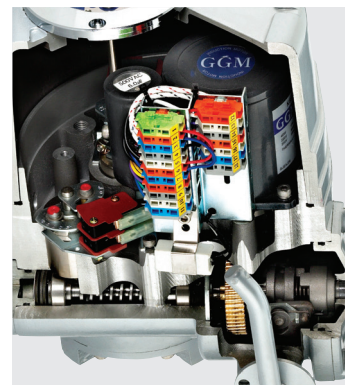
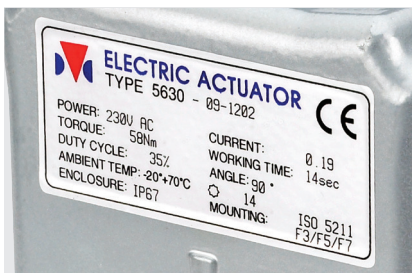
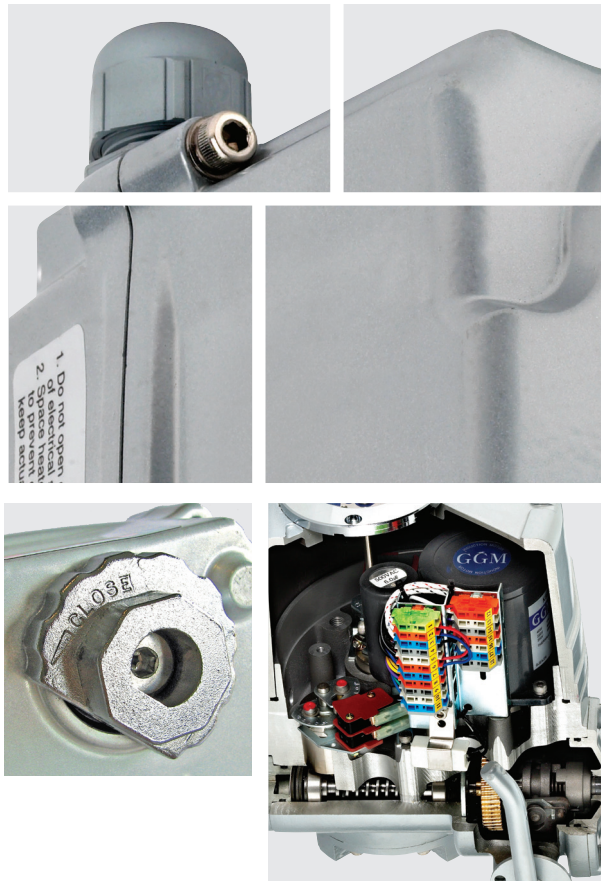


CE approved
Long Service
Large Program
Load Shedding
Value for Money
Versatile & Easy Mounting
Protection against Condensation

What is important to you, when you buy Electrical Actuators? What about: CE-approved? Long service? Large program? Load shedding? Value for money? Versatile & easy mounting? Prevention against condensation?

Electrical Actuators from DVC are characterized by their heavy-duty construction and easy mounting.

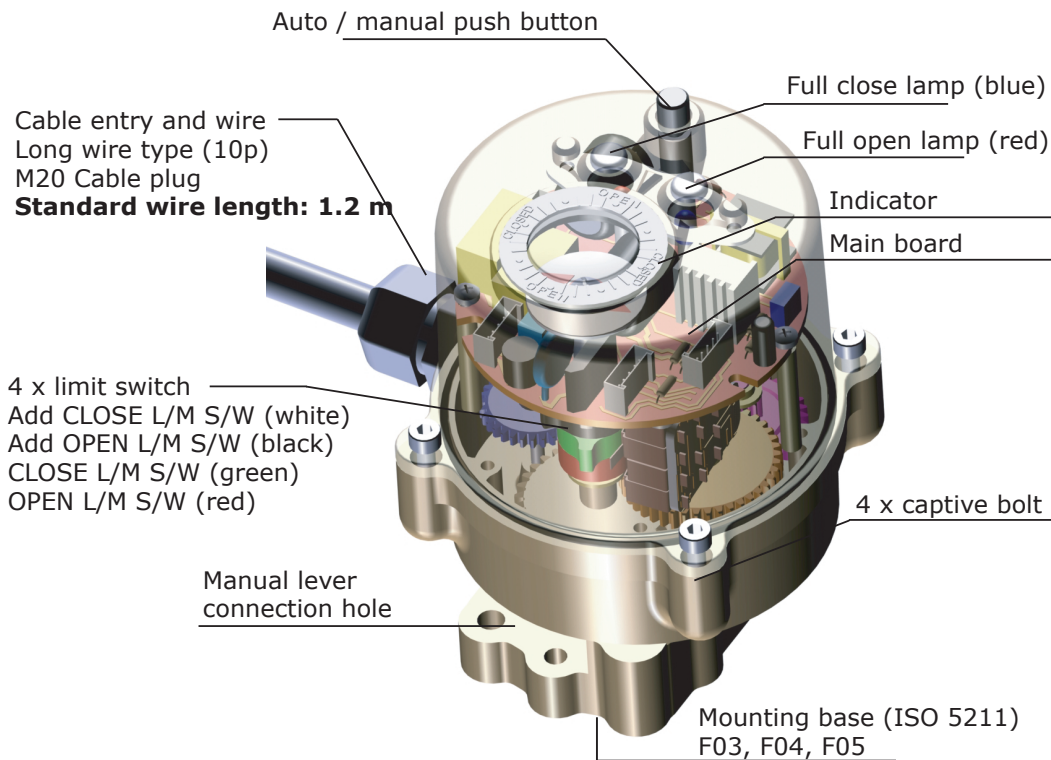
The Electrical Actuators are available in a wide range of dimensions and at very competitive prices.



Description - 004

The 004 electrical actuator from DVC International is specially designed for small size quarter turn valve operation such as ball valves, butterfly valves, plug valves, dampers and similar usages.

Construction - 004

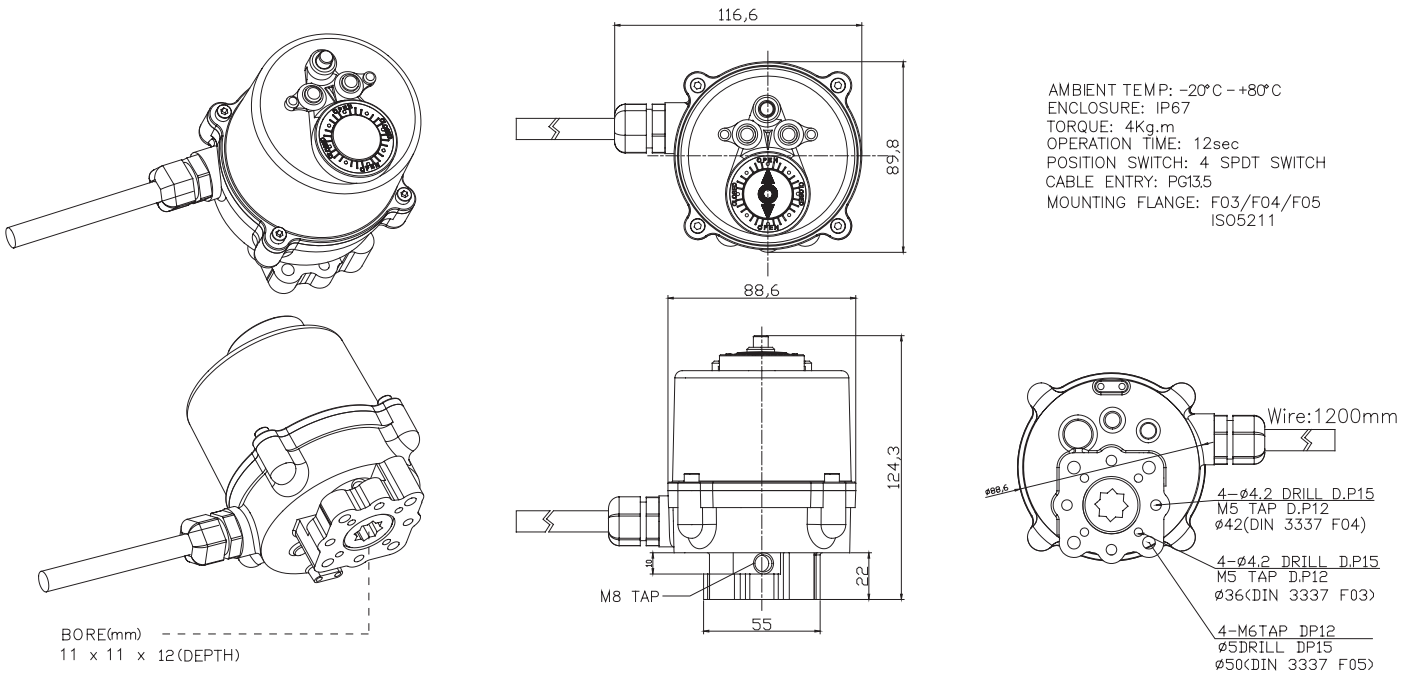


Features - 004

- Compact and light weight
- High corrosion resistance
- Multi-voltage (AC85~265V / 1PH, 24V DC)
- Standard space heater (0.5W)
- Weather proof IP67
- Push button and manual lever
- Mounting base - standard ISO 5211 (F03, F04, F05)
- Standard 4 limit switches
- Captive cover bolts
- Mechanical position indicator
- and LED lamp indicators (open / close)
- Lead type cable wires.



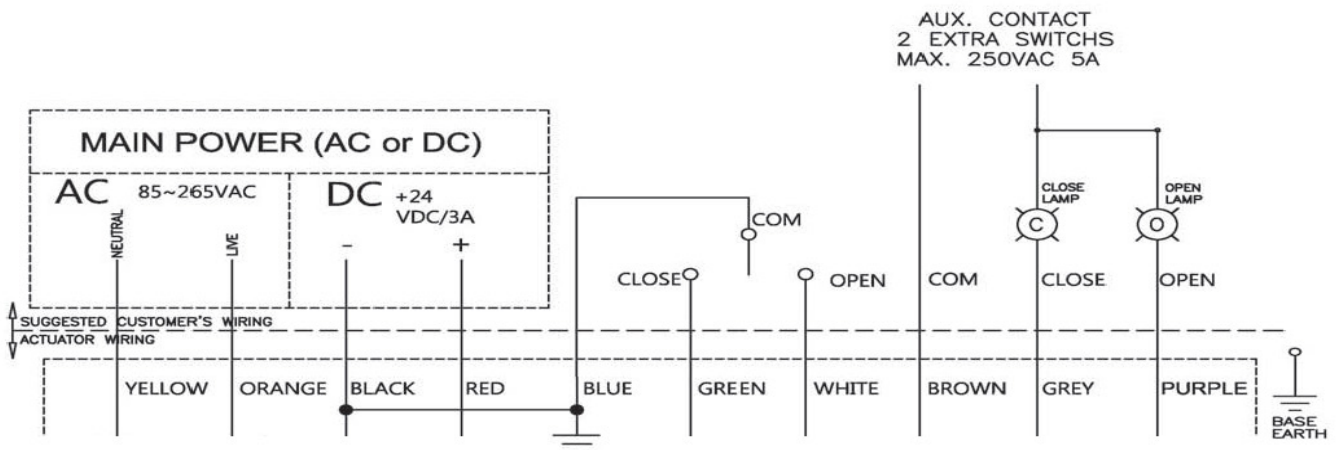
■ Dimensions - 004



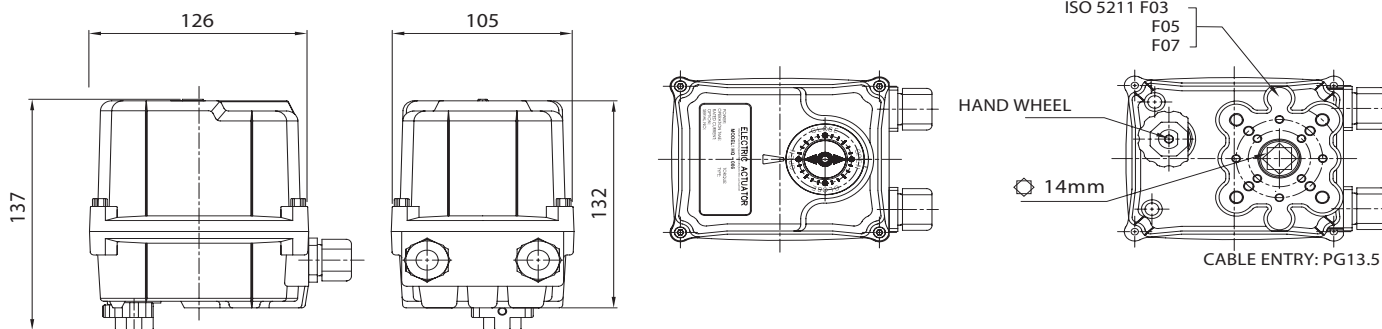
■ Performance - 004

Type	Max. output torque		Operating time 60/50 Hz	Mounting size	Electric motor stop	Rated current (A) 60 Hz			Duty cycle IEC 34-1	Manual lever angle	Weight
	Kg.m	N.m				AC 1PH. 50/60HZ		DC			
			90°	ISO 5211	A	110V	230V		24V	S2(min)	Degree
004	4	40	12 sec.	F03 / F04 / F05	2A	0.12A	0.06A	0.5A	70	90° ± 5°	1.2

■ Wiring Diagram - 004



■ Dimensions - 006



■ Performance - 006

Type	Max. output torque		Operating time 60/50 Hz	Mounting size	Rated current (A) 60 Hz			Duty cycle IEC 34-1	Number of handle turn	Weight
	Kg.m	N.m			AC 1PH. 50/60HZ		DC			
			90°	110V	230V	24V		S2(min)	N	Kg
006	6	58	12 / 14 sec.	F03 / F05 / F07	0.4 / 0.39	0.2 / 0.19	0.2	30	8	3

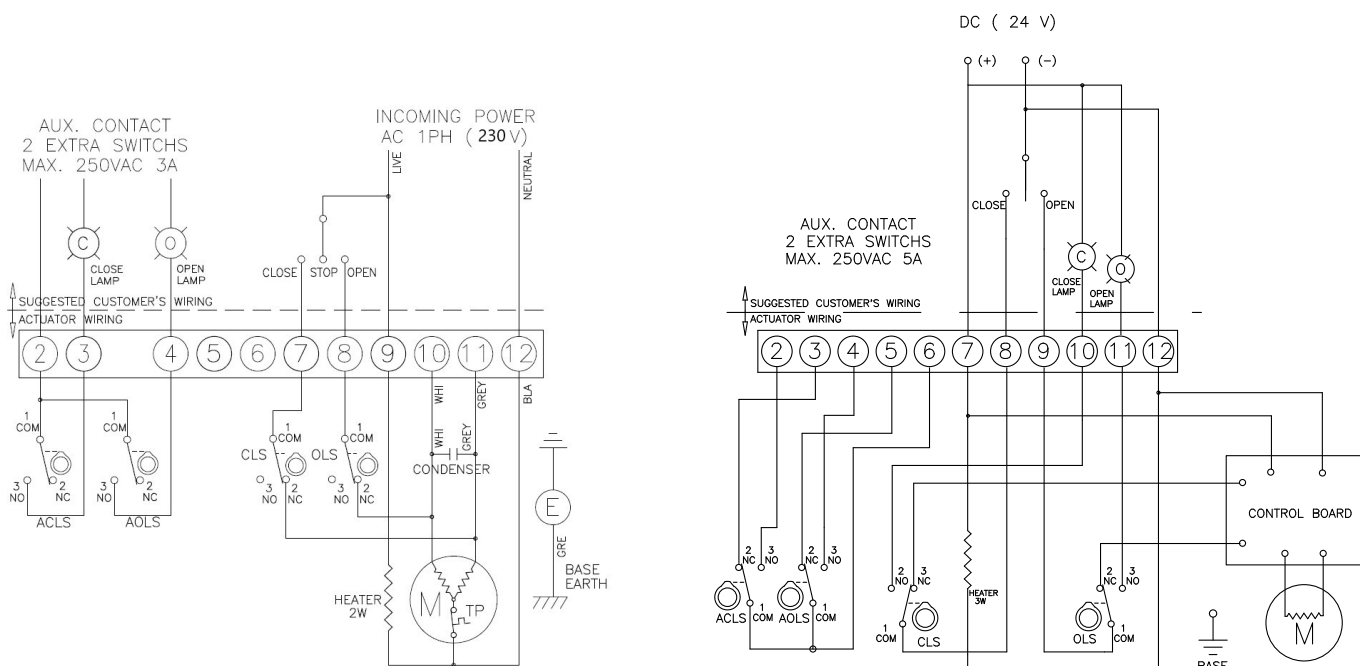
■ Standard Specifications

Enclosure	IP 67
Power supply	230V AC 1PH, 50 / 60 Hz, ± 10%
Duty cycle (on-off duty)	S2, 30 min.
Travel	Reversible travel
Limit switches	Open / close, SPDT, 250V AC 10A rating
Additional limit switches	Open / close, SPDT, 250V AC 10A rating
Space heater	2W (220V AC) Anti-condensation
Manual override	Hand wheel (hexagon design)
Cable entries	2 x M20 (option: NPT 1/2", PT 1/2", PF 1/2")
Movement angle	90° standard
Ambient temperature	-20° C. - 70° C.
External coating	Anodizing treatment before dry powder, polyester, Munsell no. 5R 3.5/12

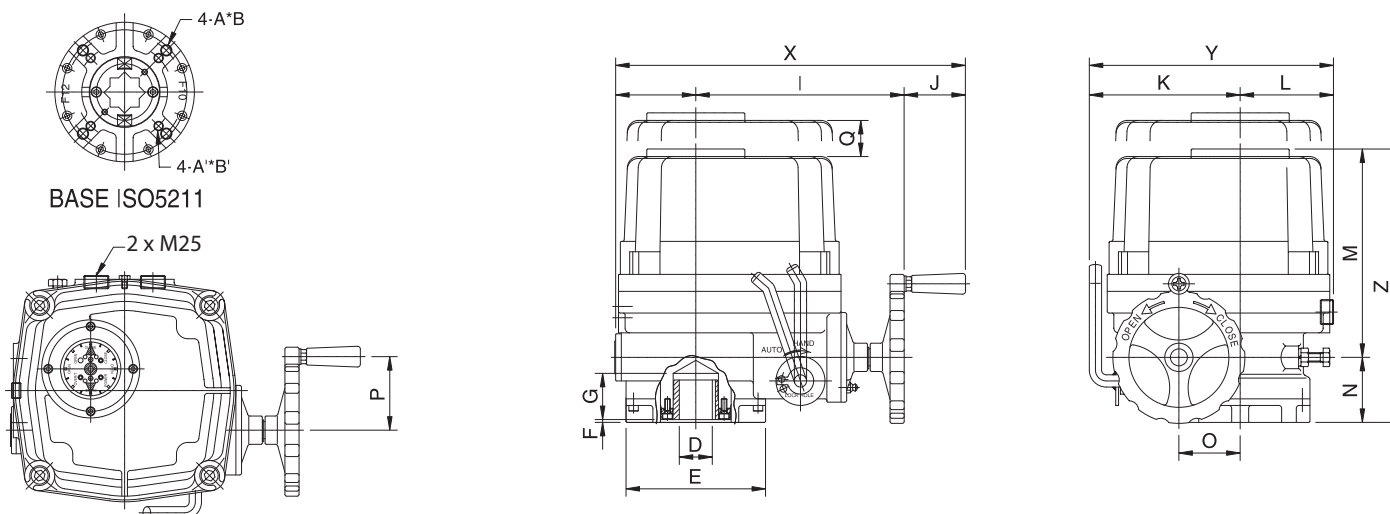
■ Optional Specifications

PIU	Potentiometer Unit (0 - 1 KΩ)
PCU	Proportional Control Unit (in / out: 0 - 10V, 4 - 20 mA DC)
CPT	Current Position Transmitter (Output 4 - 20 mA DC)
ADCM	Multi (24V AC / DC)
DCM	DC motor (24V DC)
LCU	Local Control Unit - remote / local - open / stop / close

■ Wiring Diagram



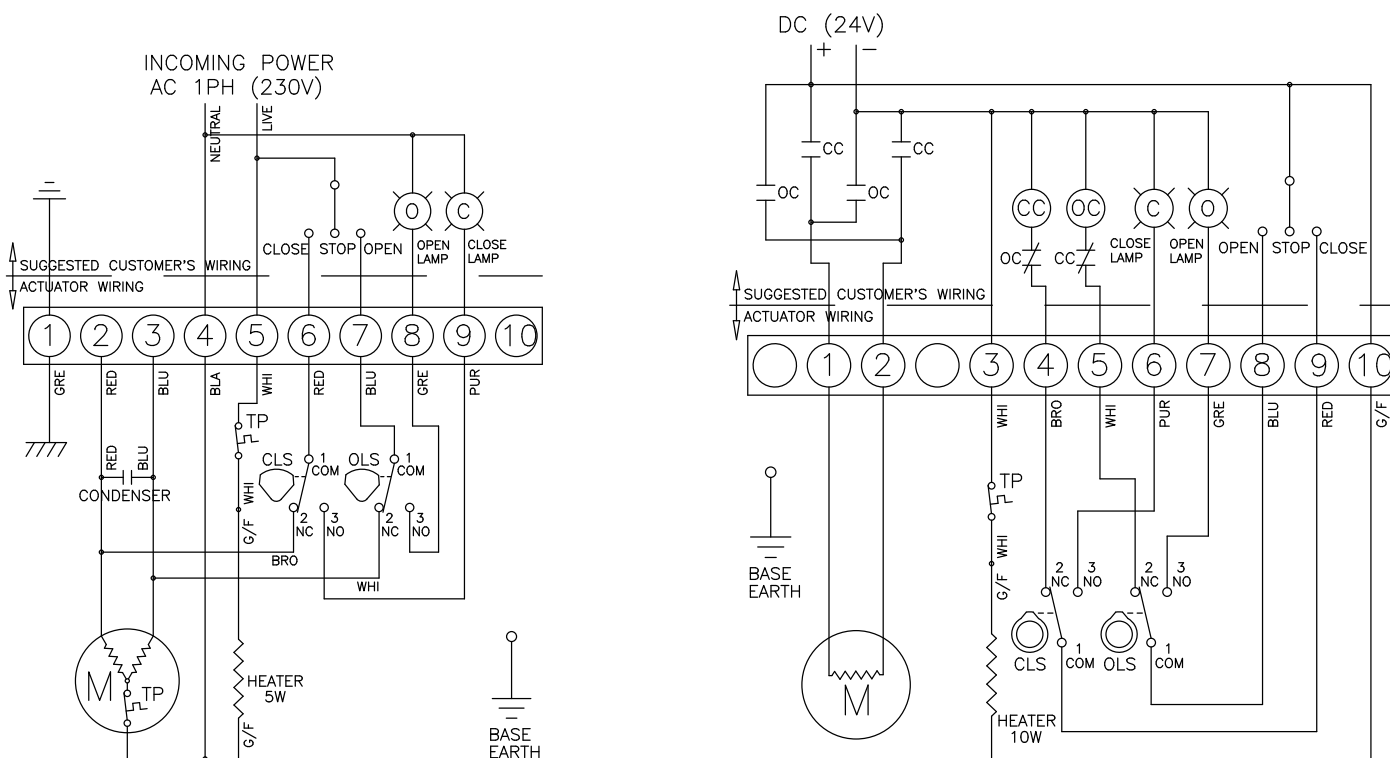
■ Dimensions - 008, 010, 015, 020, 030, 050, 060, 080, 120



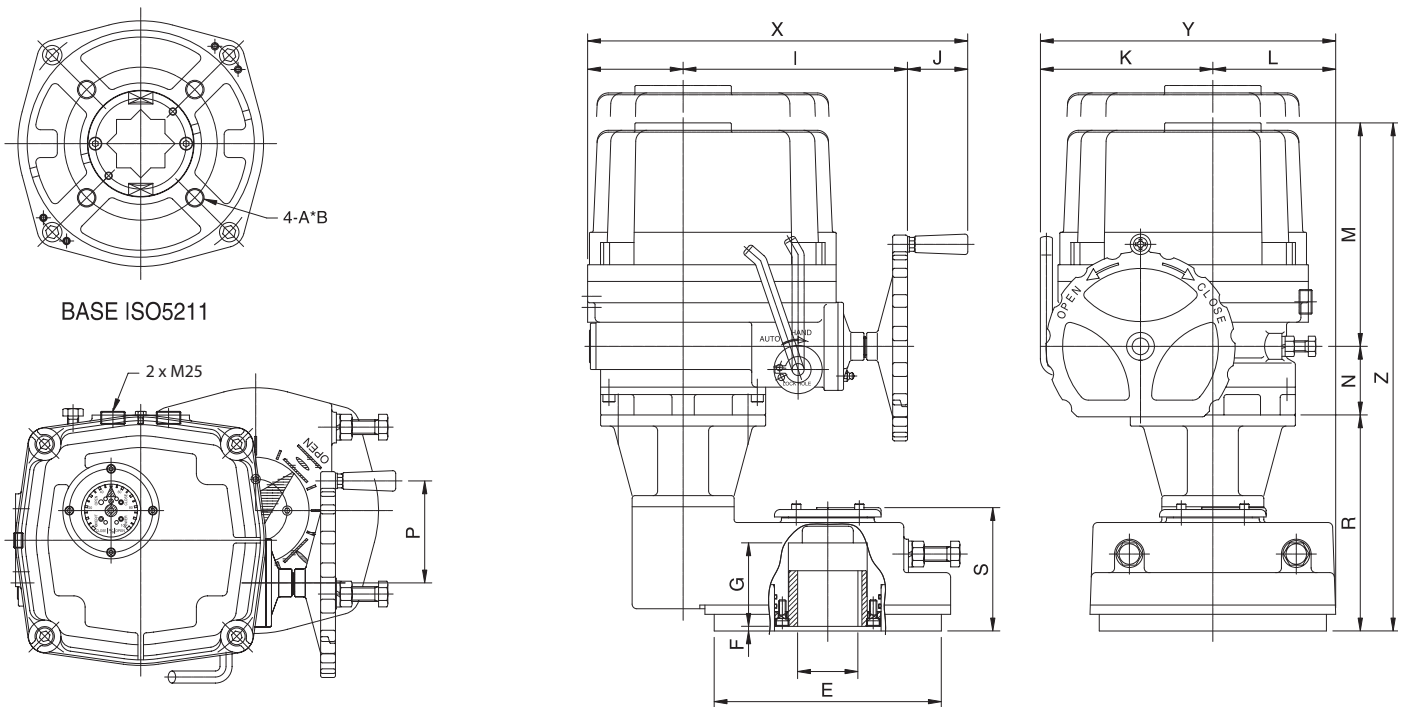
Model	ISO 5211	A	øD	E	F	G	H	I	J	K	L	M	N	O	P	Q	X	Y	Z
008	F07	M8	20	88	3	32	50	157	51	100	70	182	53	40	60	120	258	170	235
010	F07	M8	20	88	3	32	50	157	51	100	70	182	53	40	60	120	258	170	235
015	F07 / F10	M8 / M10	22	125	3	42	73	200	65	142	87	200	68	54	78	160	338	229	268
020	F07 / F10	M8 / M10	22	125	3	42	73	200	65	142	87	200	68	54	78	160	338	229	268
030	F10 / F12	M10 / M12	35	148	3	49	82	221	65	160	99	235	69	65	78	180	368	259	304
050	F10 / F12	M10 / M12	35	148	3	49	82	221	65	160	99	235	69	65	78	180	368	259	304
060	F10 / F12	M10 / M12	35	148	3	49	82	221	65	160	99	235	69	65	78	180	368	259	304
080	F12 / F14	M12 / M16	45	178	3	57	103	242	65	186	111	256	74	78	110	210	410	297	330
120	F12 / F14	M12 / M16	45	178	3	57	103	242	65	186	111	256	74	78	110	210	410	297	330

Size 015 has a 17 mm x 17 mm square

■ Wiring Diagram (008 and 010)

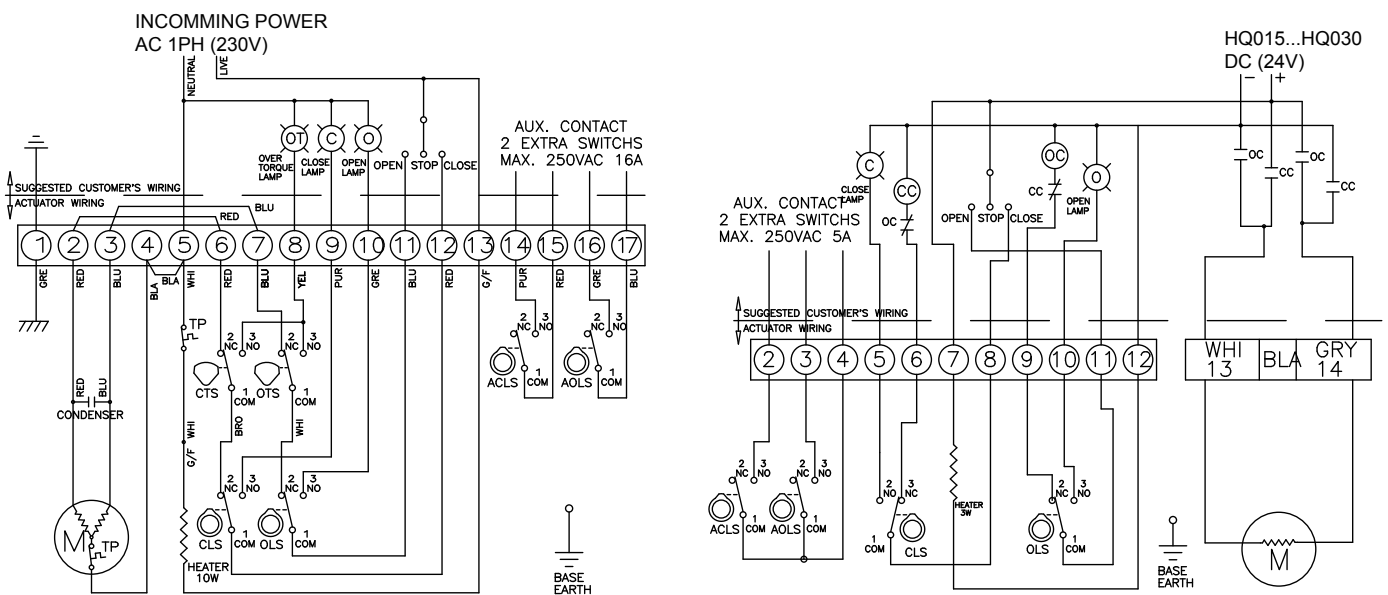


■ Dimensions - 200, 300



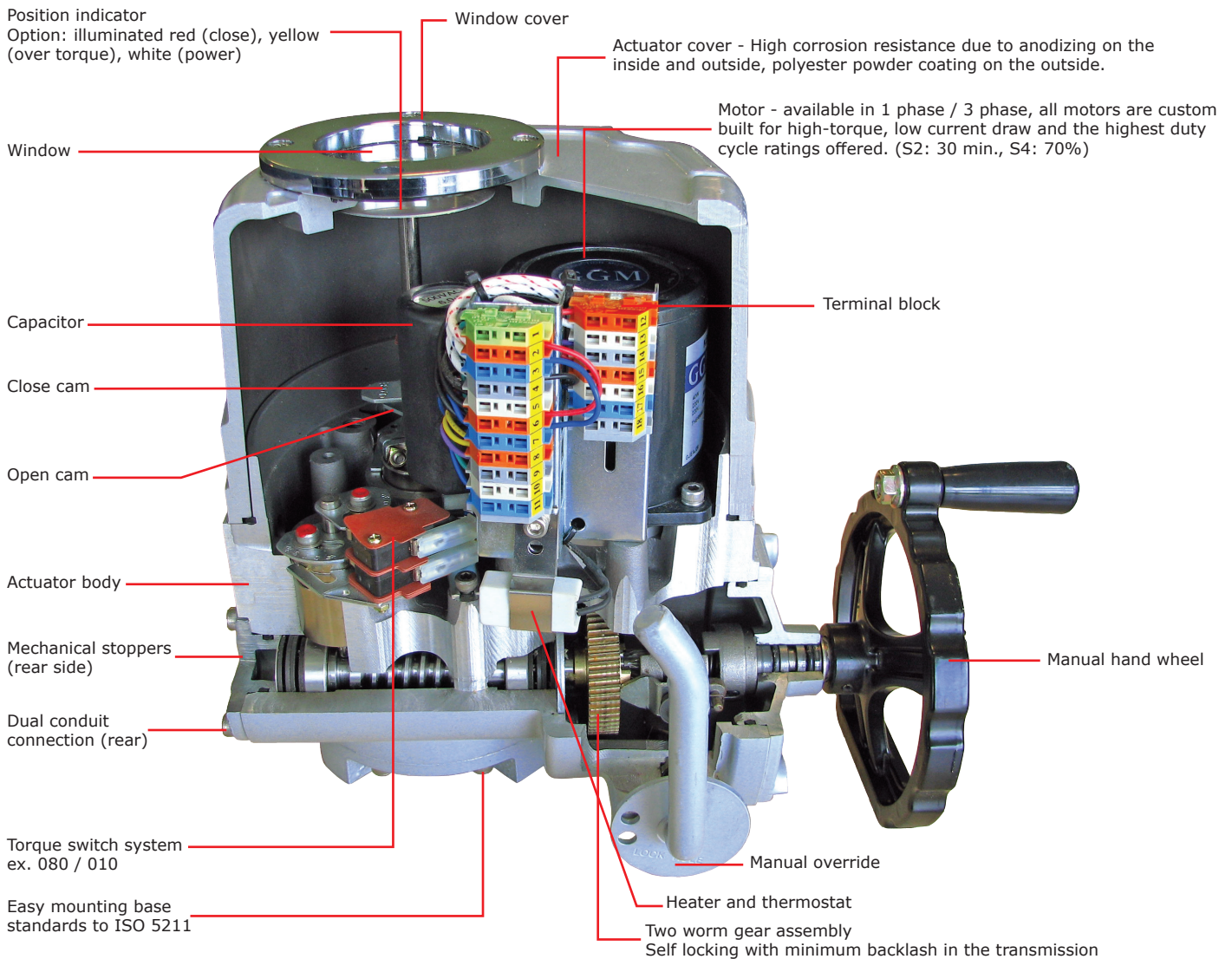
Model	ISO 5211	A	øD	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	X	Y	Z
200	F12 / F14	M16 / M20	65	245	5	90	103	242	65	186	133	256	74	78	110	210	233	133	410	319	563
300	F12 / F14	M16 / M20	65	245	5	90	103	242	65	186	133	256	74	78	110	210	233	133	410	319	563

■ Wiring Diagram (015, 020, 030, 050, 060, 080, 120, 200, 300)



Performance 008 - 300

Type	Max. output torque Kg.m	Operating time (sec.) 60/50 Hz 90°	Max. bore size mm	Rated current (A) 60 Hz				Duty cycle IEC 34-1 S2 (min)	Number of handle turn N	Weight Kg
				1 Phase		3 Phase				
				110V	230V	400V	440V			
008	8	13 / 16	Ø 20	0.96/0.97	0.47/0.46	N/A	N/A	30	10	7.4
010	10	16 / 20	Ø 20	0.96/0.97	0.47/0.46	N/A	N/A	30	10	7.4
015	15	21 / 25	Ø 22	1.51/1.62	0.72/0.84	0.35/0.27	0.55/0.34	30	11	16.6
020	20	21 / 25	Ø 22	1.51/1.62	0.72/0.84	0.35/0.27	0.55/0.34	30	11	16.6
030	30	26 / 31	Ø 35	1.37/1.67	0.68/0.81	0.33/0.27	0.43/0.30	30	13.5	22
050	50	26 / 31	Ø 35	4.27/3.56	1.37/1.27	0.51/0.42	0.66/0.46	30	13.5	23
060	60	26 / 31	Ø 35	4.27/3.56	1.37/1.27	0.51/0.42	0.66/0.46	30	13.5	23
080	80	31 / 37	Ø 45	3.47/4.45	1.81/2.32	0.83/0.61	1.10/0.73	30	16.5	29
120	120	31 / 37	Ø 45	3.47/4.45	1.81/2.32	0.83/0.61	1.10/0.73	30	16.5	29
200	200	93 / 112	Ø 65	3.47/4.45	1.81/2.32	0.83/0.61	1.10/0.73	30	49.5	75
300	300	93 / 112	Ø 65	3.47/4.45	1.81/2.32	0.83/0.61	1.10/0.73	30	49.5	75



■ Standard Specifications for size 008 - size 300

Enclosure	IP67, NEMA 4 and 6
Power supply	220V / 230V AC 1PH, 380 & 440V AC 3PH 50 / 60 Hz, ± 10%
Control power supply	220V / 230V AC 1PH, 50 / 60 Hz, ± 10%
Duty cycle (on-off duty)	S2, 30 min.
Duty cycle (modulating)	S4, 70% max. 300 - 1600 start / hour
Motor	Induction motor (reversible motor)
Limit switches	Open / close, SPDT, 250V AC 16A rating
Additional limit switches	Open / close, SPDT, 250V AC 16A rating
Torque switches	Open / close, SPDT, 250V AC 16A rating (except 008 and 010)
Stall protection / operating temp.	Built-in thermal protection, open 150° C. ± 5° C. / close 97° C. ± 15° C.
Travel angle	90° ± 10° (0° - 110°)
Indicator	Continuous position indicator
Manual override	Declutching mechanism
Self locking	Provided by double worm gearing
Mechanical stopper	2 x external adjustable screws
Space heater	10W (220V AC) Anti-condensation)
Cable entries	3 x PF 3/4" tap (standard type only)
Lubrication	Grease moly (EP type)
Terminal block	Spring loaded lever push type
Materials	Steel, Aluminium alloy, AI bronze, Polycarbonate
Ambient temperature	-20° C. - 70° C. (except option electronic board)
Ambient humidity	90% RH max. (non-condensing)
Anti vibration	X Y Z 10 g, 0.2 - 34 Hz, 30 min.
External coating	Anodizing treatment before dry powder, Polyester, Munsell no. 5R 3.5/12

■ Optional Specifications for size 008 - size 300

EXA	Explosion proof enclosure actuator (E EX d IIB T4)	All
WTA	Watertight enclosure actuator (IP68 10M 72HR)	All
PIU	Potentiometer (0 - 1 KΩ)	All
PCU	Proportional Control Unit (input, output 0-10V DC, 4-20V mA DC)	All
ATS	Additional Torque Switches (SPDT x 3EA 250V AC 10A rating)	Except 008 / 010
SICU	Semi-Integral Control Unit (LCU + IMS + phase protect indicator)	Except 008 / 010
ICU	Intelligent Digital Control Unit (LCU + IMS + auto phase discriminator)	Except 008 / 010
CPT	Current Position Transmitter (output 4-20 mA DC)	All
EXT	Extension 120°, 180°, 270° turn	Except 200 / 300
RBP	Rechargeable Battery Backup	Except 008, 015, 020, 030
DCM	DC motor (24V DC)	Except 008, 015, 020, 030
ADCM	Multi AC / DC 24V (integral)	Except 008, 015, 020, 030
LPA	Lever Plate Actuator	Except 008 / 010
SLU	Signal Lamp Unit (white: power on, red: open, green: close, yellow: over torque)	Except 008 / 010
FPA1	Fire Proofing Actuator 1050 ± 5° C. / 50 min.	Engineering consult in advance
FPA2	Fire Proofing Actuator 250 ± 5° C. / 150 min.	Engineering consult in advance
Power Supply	110V	
Control Power Supply	110V	

PCU - POSITIONER CONTROLLED ELECTRICAL ACTUATOR

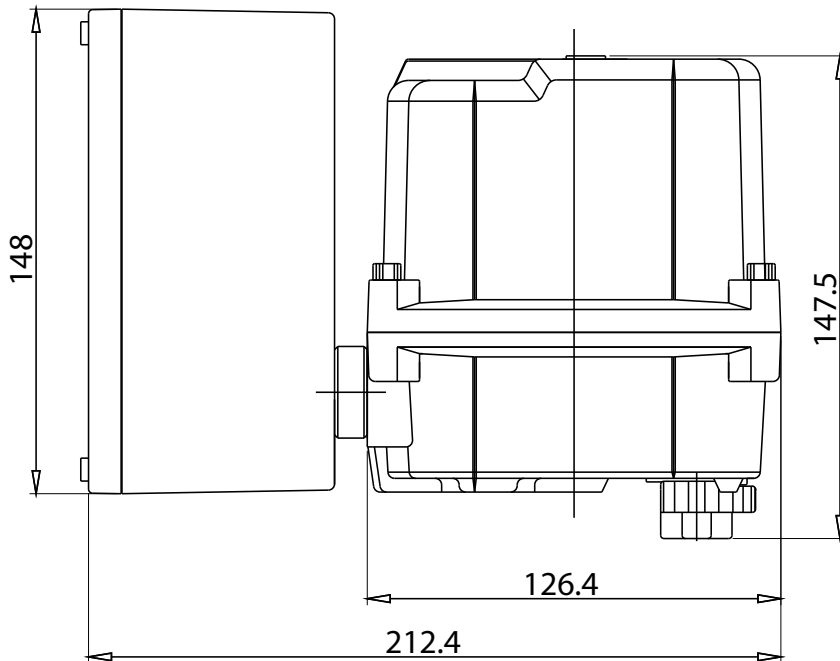


TYPE 5630 electrical actuator from Dansk Ventil Center, can be delivered with positioner control. Optional choice from 0-10V or 4-20mA trouble free position of you valve. 0-10V or 4-20mA feed back are included as standard.

TYPE 5630-PCU combined with DVC V-notch ball valve will give you a high performance control valve at low cost.

Only Size **HQ006** has externally mounted positioner control board. From HQ008 and bigger, the PCU-control board will be mounted inside the standard casing. *HQ-004 is currently not available with PCU.*

■ Dimensions - 006 with PCU



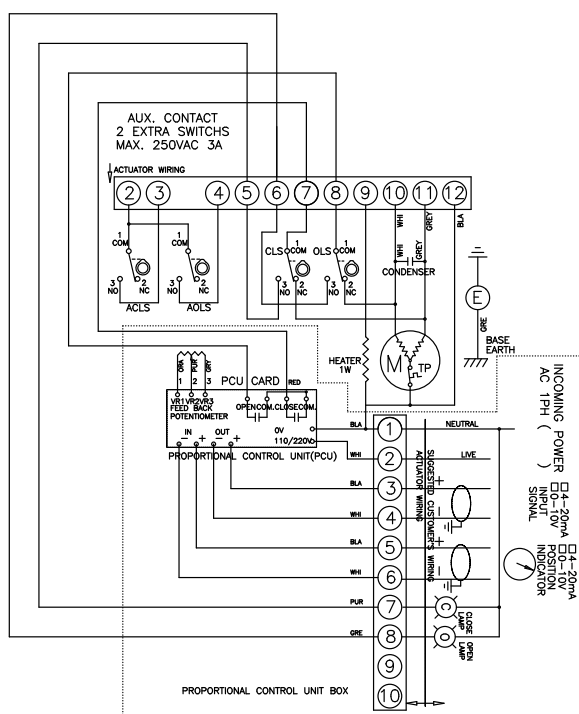
PCU - PROPORTIONAL CONTROL UNIT - STANDARD SPECIFICATIONS

POWER	85V~280V AC $\pm 10\%$ 50/60 Hz 4VA max.	
INPUT SIGNAL	4-20mA DC, 2~10V DC, 0~5V DC, 0~10V DC, 1~5V DC	
INPUT RESISTANCE	250 Ohm, Feed back signal: 100~10 Kohm	
EXACTION	2.3V DC	
OUTPUT SIGNAL	4~2-mA DC, 2~10V DC, 0~5V DC, 0~10V DC, 1~5V DC	
LOAD RESISTANCE	750 Ohm max.	
CONTROL OUTPUT	Relay contact 250VAC 10A MAX (Inductive load)	
NUMBER OF OUTPUT CONTACTS	2 pcs. (OPEN and CLOSED contacts)	
DELAY TIME ADJUSTMENT	0,5 ~ 7,5 sec (1 step 0.5 sec ~ 15step 7.5 sec)	
DEAD BAND ADJUSTMENT	0,5 ~ 7,5 % (1 step 0.5 % ~ 15step 7.5 %)	
RESOLUTION	Min. 1/1000	
POSITION CONVERSION ACCURACY	$\pm 0.5 \sim \pm 1.5\%$ (depending on installation)	
AMBIENT TEMPERATURE	-10 °C ~ +70 °C	
AMBIENT HUMIDITY	90% RH Max (NON-CONDENSATE)	
DIELECTRIC STRENGHT	1500V AC 1min (input to outpu, Power to ground)	
INSULATION RESISTANCE	Min. 500VDC 30Mohm	
VIBRATION AND SHOCK (X, Y, Z)	5G (Frequency: 0.2 ~ 34Hz, 30min)	
LED SIGNAL	Blue ON: Power on (AUTO) Blue Flicker: AUTO SETTING Green On: Close	Red ON: Open Yellow ON: Manual OPN. by card Yellow Flicker: Fault

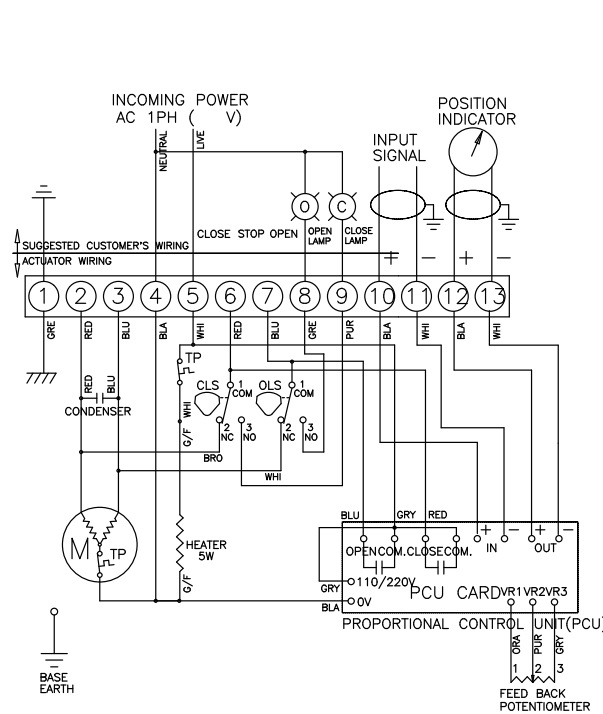
PCU - POSITIONER CONTROL WIRE DIAGRAM



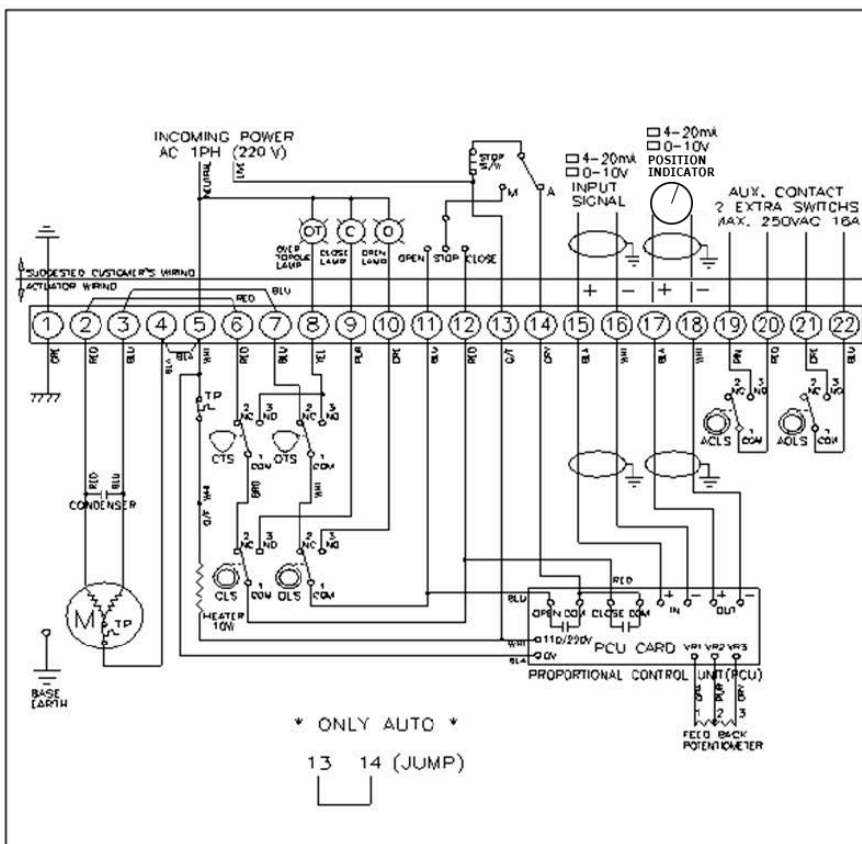
HQ-006 with PCU



HQ-008 with PCU



HQ-015-300 with CPU



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			
CTS 1-3	* CLOSING TORQUE SWITCH INTERRUPTS CONTROL IF MECHANICAL OVERLOAD OCCURS DURING CLOSING CYCLE		
OTS 1-3	* OPENING TORQUE SWITCH INTERRUPTS CONTROL IF MECHANICAL OVERLOAD OCCURS DURING OPENING CYCLE		
SYMBOL	DESCRIPTION	RATING	
CLS	CLOSE LIMIT SWITCH	250VAC 10A	
OLS	OPEN LIMIT SWITCH	250VAC 10A	
CTS	CLOSE TORQUE SWITCH	250VAC 10A	
OTS	OPEN TORQUE SWITCH	250VAC 10A	
ACLS	AUX. CLOSE LIMIT SWITCH	250VAC 16A	
AOLS	AUX. OPEN LIMIT SWITCH	250VAC 16A	
TP	THERMAL PROTECTOR	250VAC 15A	
EACH ACTUATOR SHOULD BE POWERED THROUGH IT'S OWN INDIVIDUAL SWITCH OR RELAY CONTACTS TO PREVENT CROSS FEED BETWEEN TWO OR MORE ACTUATORS.			
DRAW		CHECK	
DESIGN		APPR.	
PART NAME		1PH WIRING DIAGRAM PCU	
200	DWG. NO		
080	ISSU. DEPT. HADR	DATE 2001.05.10	
030			
015			
APPLICATION			



Know-how makes the difference

Dansk Ventil Center A/S

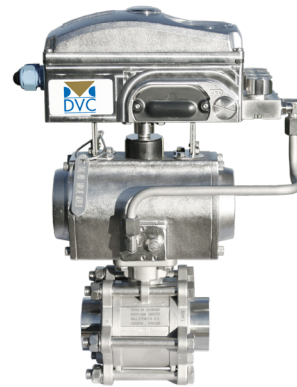
Product Range

- Ball Valves
- Butterfly Valves Soft Seated
- Butterfly Valves Metal Seated
- Angle Seat Valves
- Thin Wafer Check Valves
- Safety Valves
- Knife Gate Valves
- Pneumatic Actuators
- Electrical Actuators
- Brackets for Actuators
- Limit Switches
- Level Gauges - Reflex & Transparent
- Control Valves
- Pressure Reducing Valves

Dansk Ventil Center is committed to meeting the needs of customers in an environmentally sound and sustainable manner, through continuous improvements in environmental performance in all our activities.

Dansk Ventil Center is located in the northern part of Europe, in the heart of Denmark.

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...for very harsh environments DVC offers completely Stainless Steel assemblies.

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- Solenoid valve
- Electro Pneumatic positioner
- Pneumatic actuator
- Mechanical switch box
- Filter regulator

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