



Technical data

Model	Duty mode	Power Supply type	Self-lock	Motor type	Force	Fastest full traveling time	Control Unit	Rated Power	Rated Current	Weight
EME50	Modulating	3PH,380VAC	Yes	S2	37 ft-lb	66s	Control A or B	15W	0.05A	22lb
EOE50	On/Off	3PH,380VAC	Yes	S2	37 ft-lb	22s	Control A or B	20W	0.07A	22lb

Model	Duty mode	Power Supply type	Self-lock	Motor type	Force	Fastest full traveling time	Control Unit	Rated Power	Rated Current	Weight
EME50	Modulating	1PH,220VAC	Yes	S2	37 ft-lb	66s	Control A or B	15W	0.05A	22lb
EOE50	On/Off	1PH,220VAC	Yes	S2	37 ft-lb	22s	Control A or B	20W	0.16A	22lb

Model	Duty mode	Power Supply type	Self-lock	Motor type	Force	Fastest full traveling time	Control Unit	Rated Power	Rated Current	Weight
EME50	Modulating	24VDC / Wide voltage up to 500VAC	Yes	S2	37 ft-lb	34s	Control B	30W	1.6A	22lb
EOE50	On/Off	24VDC/Wide voltage up to 500VAC	Yes	S2	37 ft-lb	34s	Control B	30W	1.6A	22lb

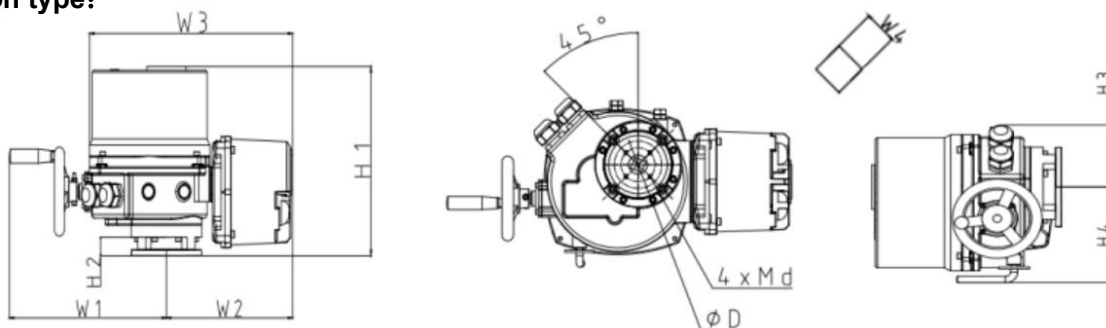


General Mechanical Dimensions-Integrated type (Unit: inch)

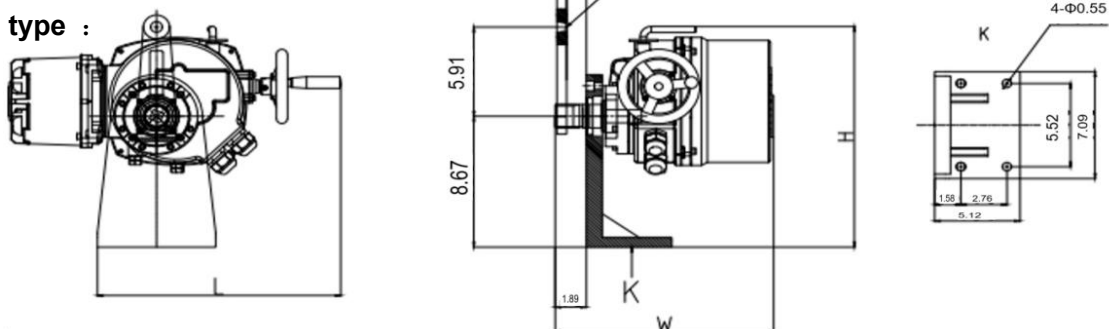
Mode	Direct Connection														Base and Level			
	W1	W2	W3	W4	H1	H2	H3	H4	Φ D		Md		Flang e	W eig ht lb	L	W	H	Weight lb
									ISO 5211	MSS SP-101	ISO 5211	MSS SP-101						
Unit: inch								Unit: inch										
EOE50	11.06	8.86	15.24	0.43x0.43	10.4	1.69	3.86	5.95	Φ1.97	Φ2	M6	1/4-20	FA05	22	-	-	-	-
EME50	11.06	8.86	15.24	0.43x0.43	10.4	1.69	3.86	5.95	Φ1.97	Φ2	M6	1/4-20	FA05	22	14.61	13.43	14.61	35

Note: "-" means Not available

Direct connection type:



Base and level type :



**Crank Arm Position, 360°
Adjustable Bracket Type**

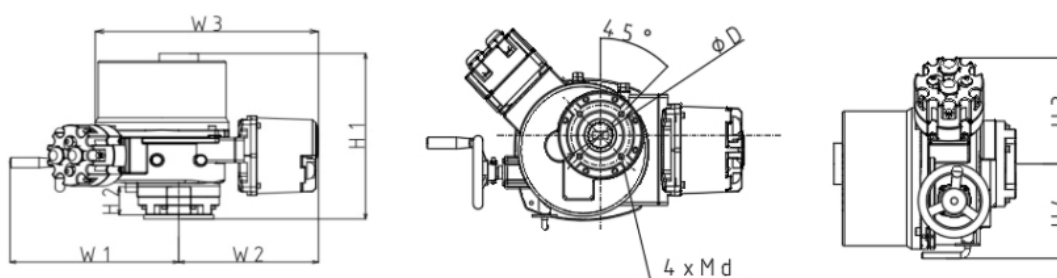


EXPLOSIVE Mechanical Dimensions-Integrated type (Unit: inch)

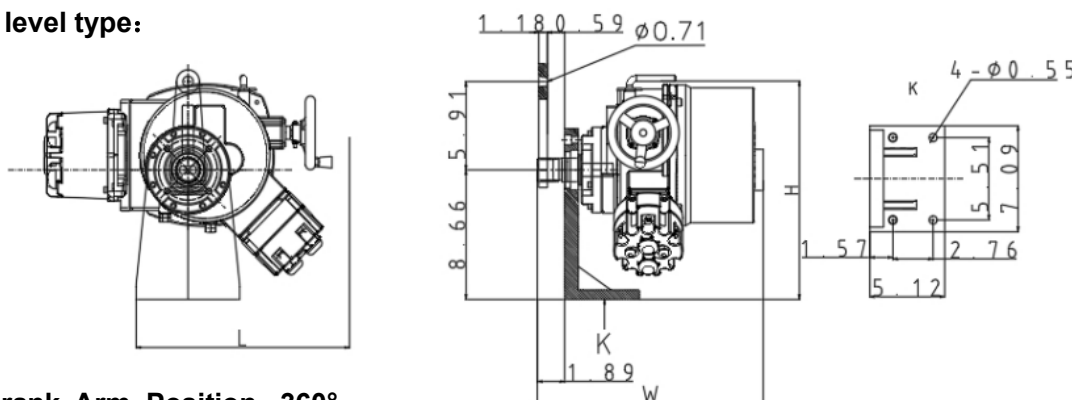
Mode	Direct Connection														Base and Level			
	W1	W2	W3	W4	H1	H2	H3	H4	Φ D		Md		Flange	Weight lb	L	W	H	Weight lb
	Unit: inch								ISO 5211	MSS SP-101	ISO 5211	MSS SP-101			Unit: inch			
EOE50	11.06	8.86	15.24	0.43x0.43	10.4	1.69	3.86	5.95	Φ1.97	Φ2.00	M6	1/4-20	FA05	22	-	-	-	-
EME50	11.06	8.86	15.24	0.43x0.43	10.4	1.69	3.86	5.95	Φ1.97	Φ2.00	M6	1/4-20	FA05	22	14.61	13.43	14.61	35

Note: "-" means Not available

Direct connection type:



Base and level type:

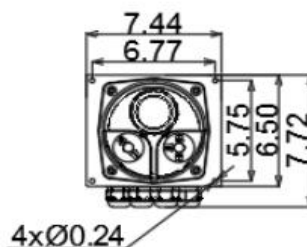
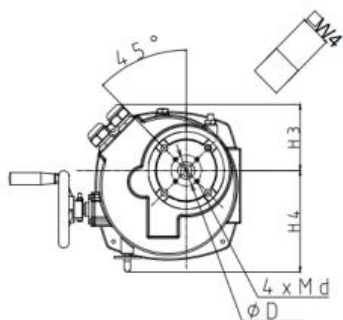
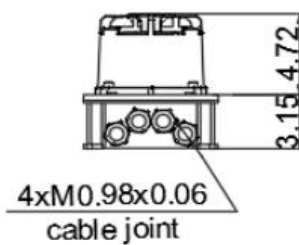
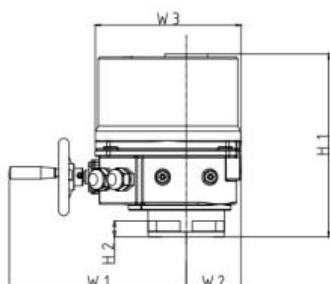
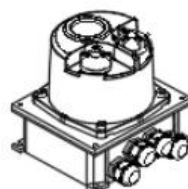
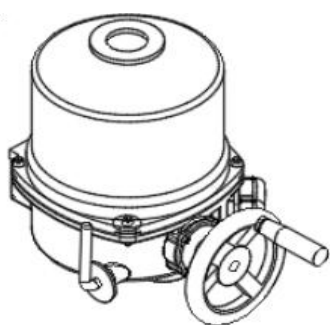


**Crank Arm Position, 360°
Adjustable Bracket Type**



Mechanical Dimensions-Split type (Unit: inch)

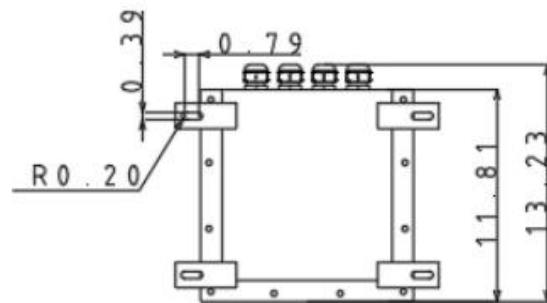
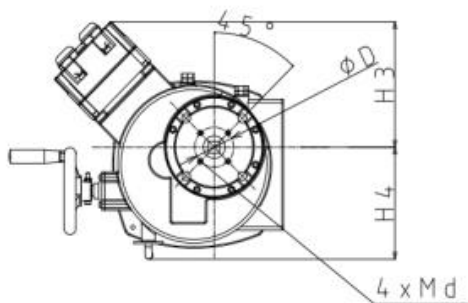
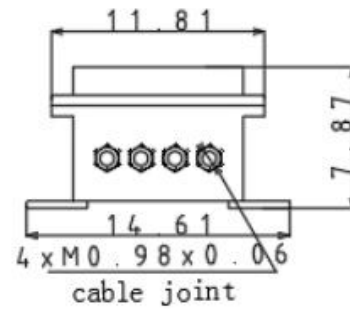
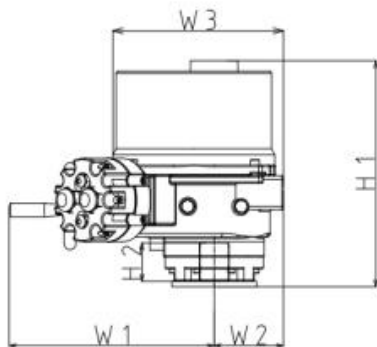
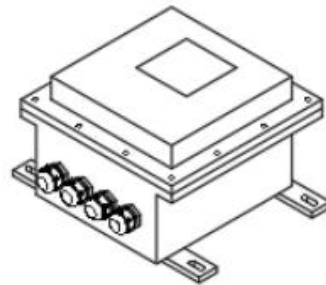
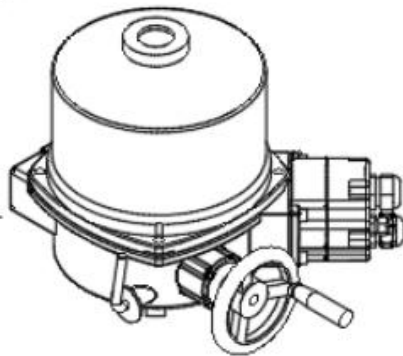
Model	W1	W2	W3	W4	H1	H2	H3	H4	ΦD		Md		Flange
	Unit : inch								ENISO 5211	MSS SP-101	ENISO 5211	MSS SP-101	
EOE50	11.06	8.86	15.24	0.43x0.43	10.4	1.69	3.86	5.95	$\Phi 1.97$	$\Phi 2.00$	M6	1/4-20	FA05
EME50	11.06	8.86	15.24	0.43x0.43	10.4	1.69	3.86	5.95	$\Phi 1.97$	$\Phi 2.00$	M6	1/4-20	FA05





EXPLOSIVE Mechanical Dimensions-Split type (Unit: inch)

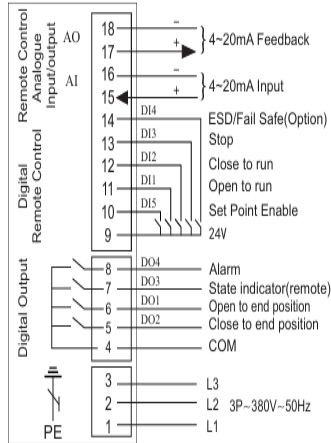
Model	W1	W2	W3	W4	H1	H2	H3	H4	ΦD		Md		Flange
	Unit : inch								ENISO 5211	MSS SP-101	ENISO 5211	MSS SP-101	
EME50	11.06	8.86	15.24	0.43x0.43	10.4	1.69	3.86	5.95	$\Phi 1.97$	$\Phi 2.00$	M6	1/4-20	FA05
EOE50	11.06	8.86	15.24	0.43x0.43	10.4	1.69	3.86	5.95	$\Phi 1.97$	$\Phi 2.00$	M6	1/4-20	FA05



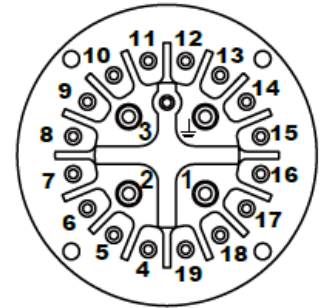
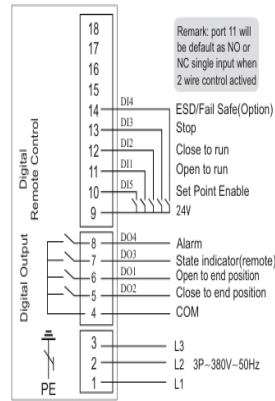


INTELLIGENT TYPE WIRING DIAGRAMS

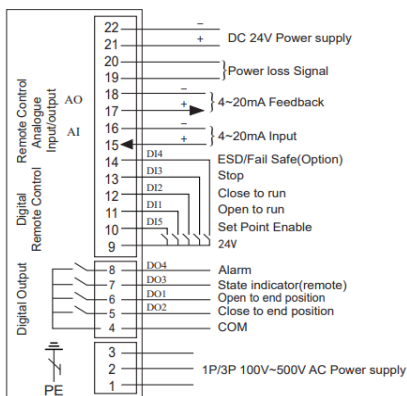
3-phase AC, 380V (Modulating)



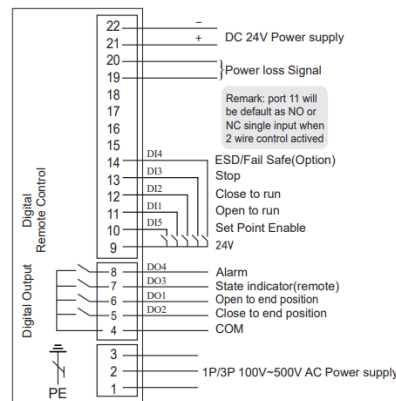
3-phase AC, 380V (on-off)



1/3-phase AC 100-500V((Modulating)

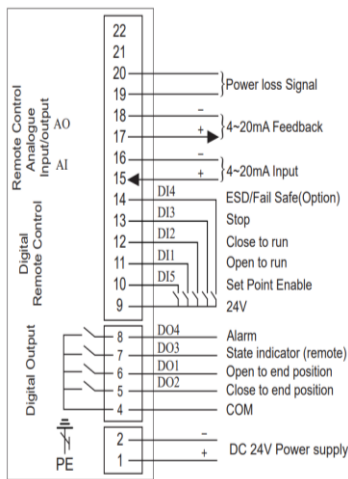


1/3-phase AC 100-500V (on-off)

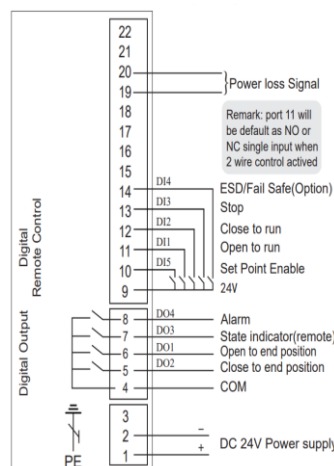


Explosion-proof
IP68 double seal

DC,24V(Modulating)

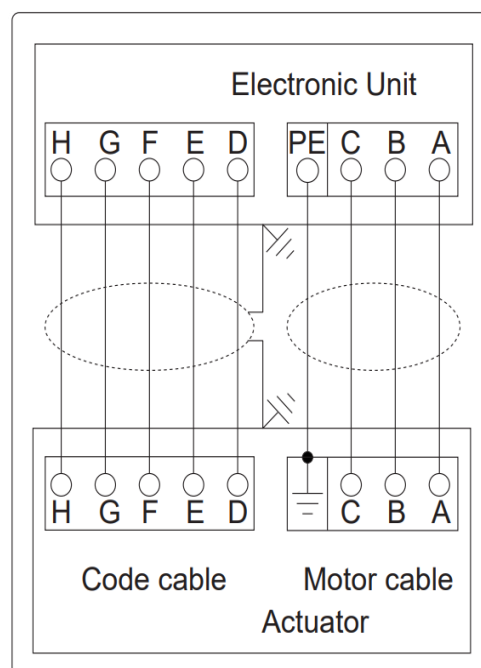
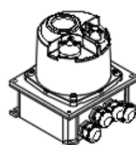
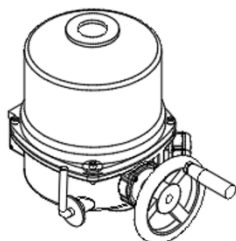
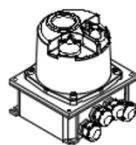
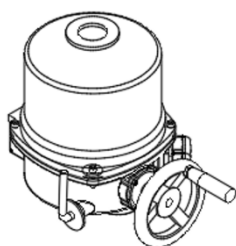


DC,24V(on-off)





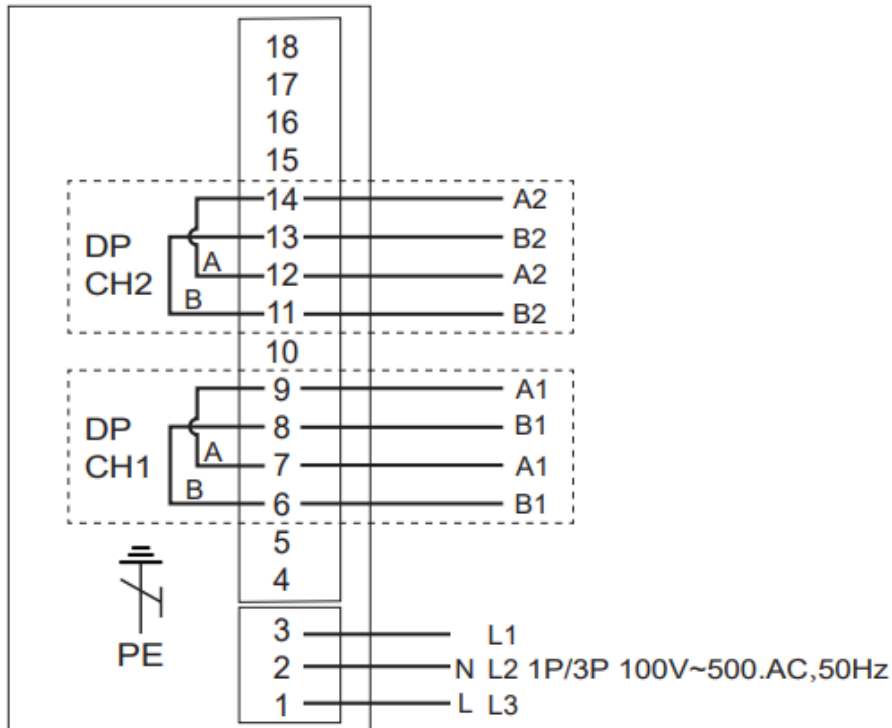
Split-type Electrical Wiring



1. The sensor signal cable shall be 5-core cable with shield; The sectional area of the line shall be minimum 0.5mm², and the length of the line shall be within 5m, not exceeding 10m, otherwise please contact factory;
2. The motor cable shall be 4-core cable with shield; The sectional area of the line shall be minimum 2.5mm², and the length of the line shall be within 5m, not exceeding 10m, otherwise please contact factory
3. For cable selection, we recommend you to choose the size that fit glands provided as your power and signal cables. Using gland adopter to fit different size of each side where applies. Please make sure the glands are fully tightened after wiring to ensure IP68 sealing.
4. Cable conforming to the national standard IEC 60227 and IEC 60245 shall be preferred.
5. If used in high temperature environment, please choose right temperature rating cable, cable protection shell, etc. that meet the requirements;
6. This wiring diagram is only between the electronic unit and the actuator. For control wiring, please refer to the wiring diagram of conventional products in Easytrac operational manual



Profibus DP Wiring Diagram 286 board



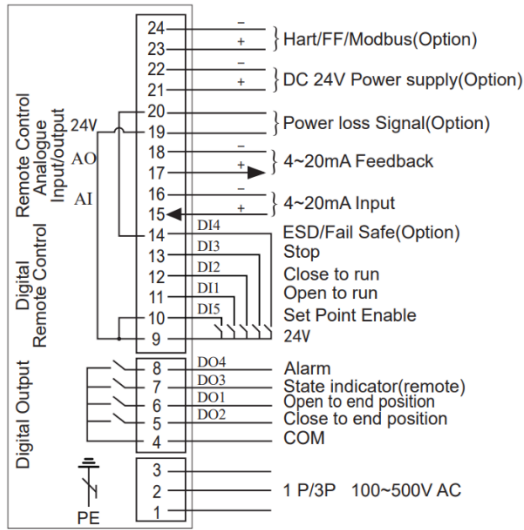
Ontrac electric actuators can optionally support

- Profibus- DP fieldbus protocol with additional code of "286". A Profibus network segment can connect up to 32 Ontrac electric actuators. The transmission speed of Ontrac electric actuators can be 9.6kbps ~ 1500kbps
- Foundation fieldbus and is Foundation ITK inter-operability certified. It is fully compliant with IEC61158-2 standard.
- Modbus RTU protocol communications at a baud rate up to 38.4kbps/s. Our factory default speed is 9.6kbps/s giving a 1.5km maximum distance between nodes. We use a master / slave query response polling cycle with CRC (Cyclic Redundancy Check).
- HART Communication Protocol (Highway Addressable Remote Transducer) connectivity. HART allows use of conventional 4 – 20 mA wiring.

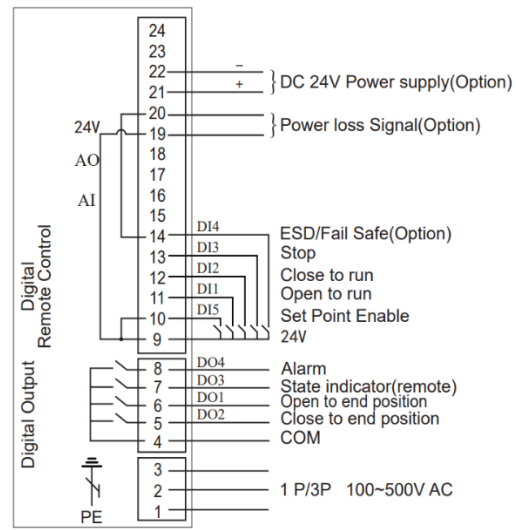


Modbus/Hart Wiring Diagram 288 board

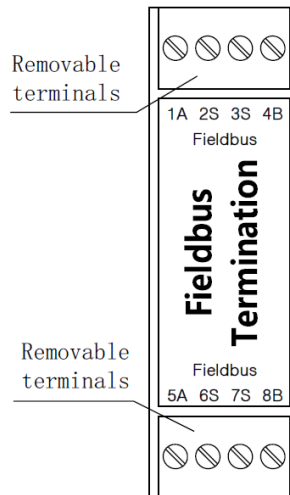
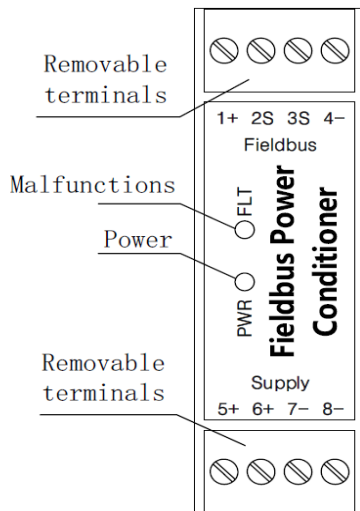
1P/3P 100~500V AC(Modulating duty)



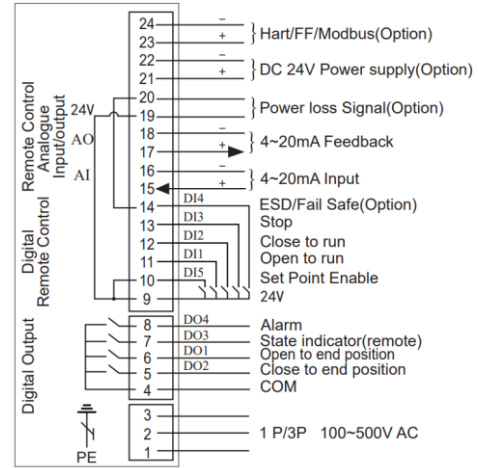
1P/3P 100~500V AC(on-off)



Foundation Fieldbus Wiring Diagram 290 board



1P/3P 100~500V AC(Modulating duty)





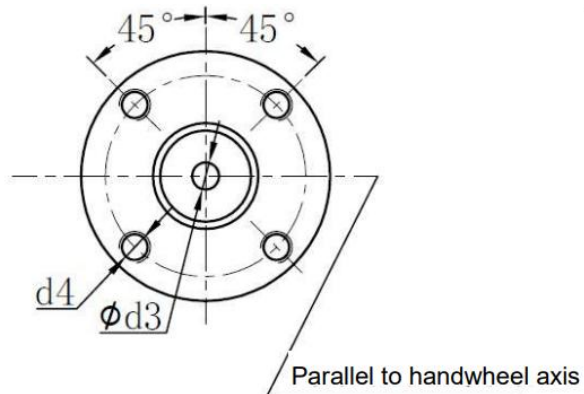
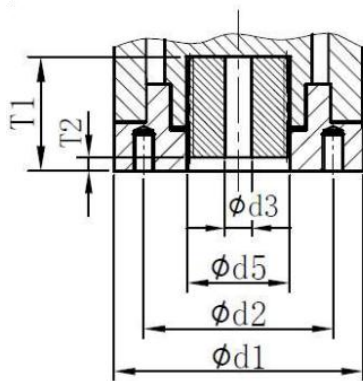
Output shaft

EME50/EOE50	Non-thrust	
Mechanical Interface type	Splined bore	Splined bore
Flange size (ISO 5211)	FA05	/
Maximum square spindle diameter (inch)	0.43x0.43	/

Flange structure and valve connection size (Unit: inch)

Model \ Code	Flange	d1	d2		d3		d5	T1	T2	d4
			Standard size	Factory default	Max stem Diameter (keyway)	Max stem Diameter (keyway)				
EME/EOE50	FA05	Ø2.56	Ø1.97	Ø1.97	Ø0.24	Ø 0.47(0.16)	Ø1.02	1.38	0.12	4-M6 deep 0.35in

Note: d2 and d3 parameters can be processed according to customer requirements before delivery





Specifications

Voltage supply	3-phase: 380±5%, 50/60Hz±5% 1-phase: 110/220V±10%, 50/60Hz±5% 100-500VAC (Wide voltage Optional) 24VDC
Duty mode	On-off and Inching (EOE Type) S2-15 min Modulating, EME Type S4-25%, 1200times/hr.
Motor specification	F Class DC motor and AC motor
Internal control power supply	24 VDC
Input Signal	24 VDC (Optional for 220/110VAC) for on-off 4-20 mA (Analogue Input) for modulating Profibus-DP or MODBUS, Ethernet, Foundation Fieldbus (all optional)
Output Signal	1.) 30VDC 5A or 220/110VAC 5A (Dry contact 4 SPST) Open/close, State indicator, Alarm 2.) 4-20 mA (Analogue Output) 3.) Profibus-DP or MODBUS, Hart, Ethernet, Foundation Fieldbus (all optional),
Intermediate position	Optional
Dead zone	0.5% (0.5 ~ 15% adjustable, default is 2%)
Enclosure protection	IP67 as standard IP68 (optional)
Explosive protection	Ex db eb IIC T4 Gb (optional)
Fail safe	Battery back (optional)
Safety Integrity level (optional)	SIL2&3 Electric actuators with configurable safety functions: Stay put or Emergency shut-down (ESD) open or close on demand.
Ambient conditions	1) Temperature: -20°C to 65°C, -40°C and -60°C optional 2) Humidity: in up to 100% humidity 3) Air media: corrosive, flammable and explosive gas, optional coating
Heater	Optional
Anticondensation	Anticondensation heater included
Coating	Double layer powder coating, C5-M (ISO12944 Marine Optional)
Color	RAL9005 is standard, available colors on request
CE standard  And others	1) EN 61000-6-4: 2007, EN 61000-6-2: 2005 2) EN 61000-3-2: 2006 +A1:2009+A2: 2009, EN 61000-3-3: 2008 3) EN 60204-1: 2006+A1: 2009 4) ATEX: SCA23ATEX209X,
Cable connection	2*M25 for cable Φ10-Φ16