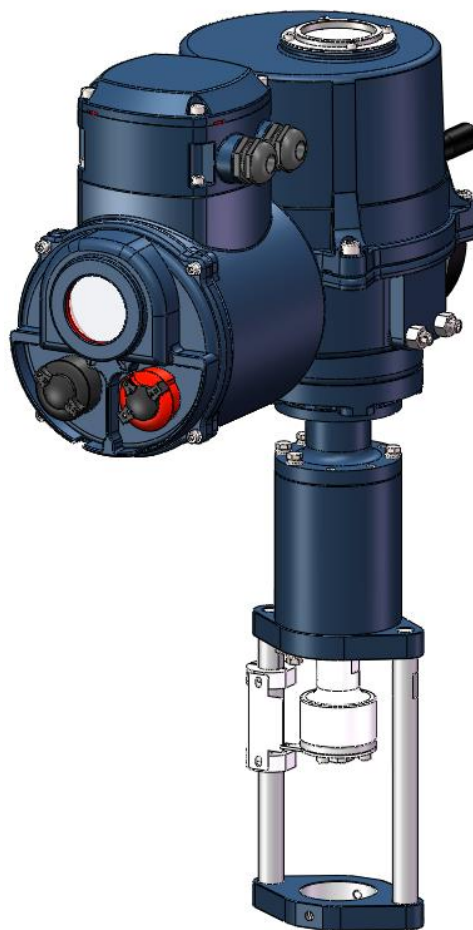


Date	2025/8/11
Ver	A3



VTMLT-ICM Series Linear Electric Actuator



Linear Electric Actuator

Use Quarter Turn Electric Actuator in conjunction with Lifter Design

Compact design to meet space requirements

Wide range of sizes and thrust outputs

For On-Off or Modulating Control

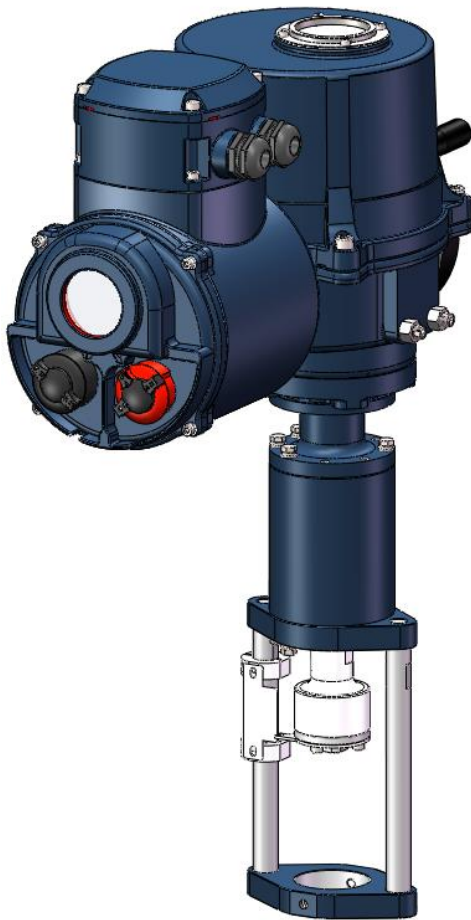
V-TORK®

VTMLT-ICM Series Linear Electric Actuator

Overview, Dimensional Drawing, Explosion diagram, Wiring diagram

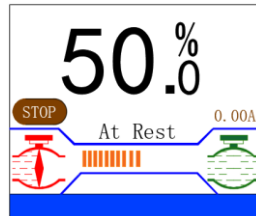


VTMLT-ICM

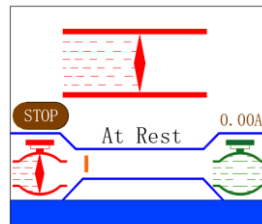


Overview

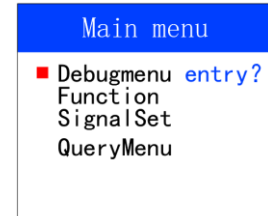
- Linear electric actuator;
- Insulation level:F
- Optional voltages: 24VDC, 85VAC~240VAC, (ICM control type only: 380VAC, 400VAC, 440VAC) ;
- Moisture resistance: able to withstand 90% of the maximum relative humidity (without condensation);
- Protection level: IP 67;
- Temperature resistance: ON/OFF control type : -20 °C~+60 °C, Modulating type: -20 °C~+55 °C, ICM control type: -20 °C~+50 °C;
- Seismic resistance: XYZ10g. 0.2-34Hz, 30mins;
- ICM control type: The product can be controlled using 4-20mA or dry connection signals, with passive contact feedback for valve position, product mode, and faults;
- Other optional communications: MODBUS , HART (with 4~20mA input)



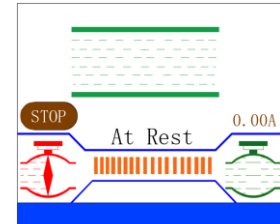
ICM control main page



Fully close display



Setting Menu

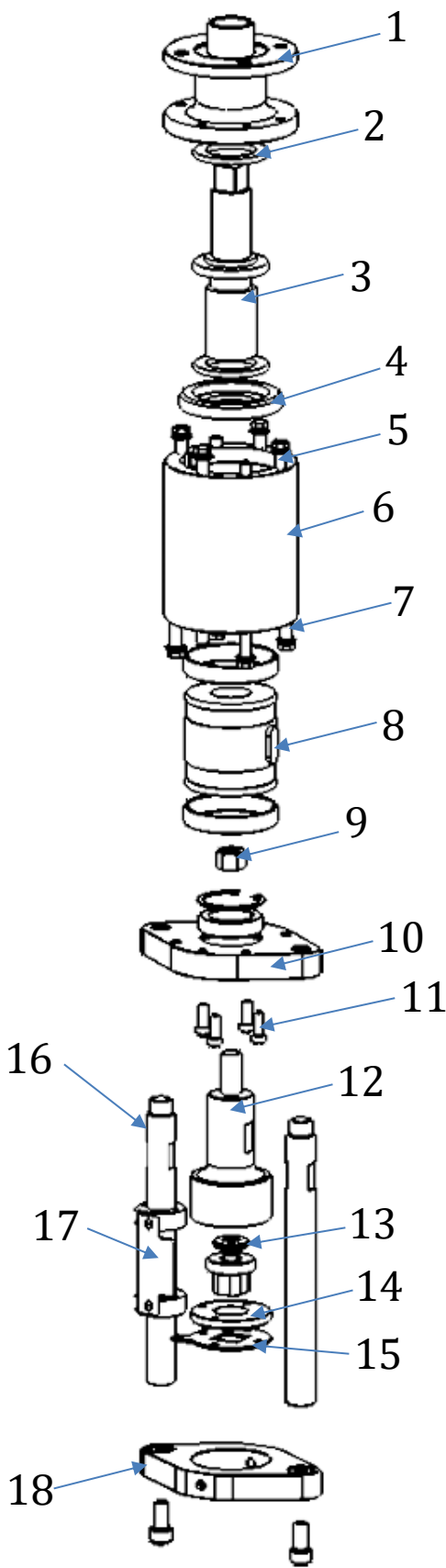


Fully open display

Basic specifications

Model	Actuator torque	Lifter Model	Lifter thrust	Stroke	Work Speed	Rated Power	DC rated current (unit: A)	AC rated current at 50Hz (unit: A)					Manual Device
								Basic control type			ICM control type only		
	N.m		KN	mm	Sec	W	24VDC	110VAC	220VAC	380VAC	400VAC	440VAC	
VTM2H	35	LT-1	2	25	8	10	1.3	0.3	0.16	0.1	0.09	0.09	Push in hand Wheel
	70	LT-1	3	25	8	40	4.5	0.9	0.5	0.28	0.36	0.22	
	100	LT-1	4.5	25	8	80	4.0	0.87	0.43	0.27	0.36	0.21	
VTM3	200	LT-2	8	50	30	40	3.5	0.84	0.43	0.25	0.23	0.21	Clutch less Hand Wheel
	300	LT-2	12	50	30	60	5.5	1.26	0.63	0.37	0.35	0.32	
	450	LT-2	18	50	30	80	7.2	1.66	0.83	0.48	0.45	0.41	
VTM4	600	LT-3	25	80	48	90	7.2	1.65	0.85	0.47	0.45	0.4	
	800	LT-3	35	80	48	120	8.0	1.84	0.92	0.53	0.5	0.46	
VTM5	1000	LT-3	45	80	48	200	12	2.5	1.25	0.72	0.69	0.63	

Explosion diagram:



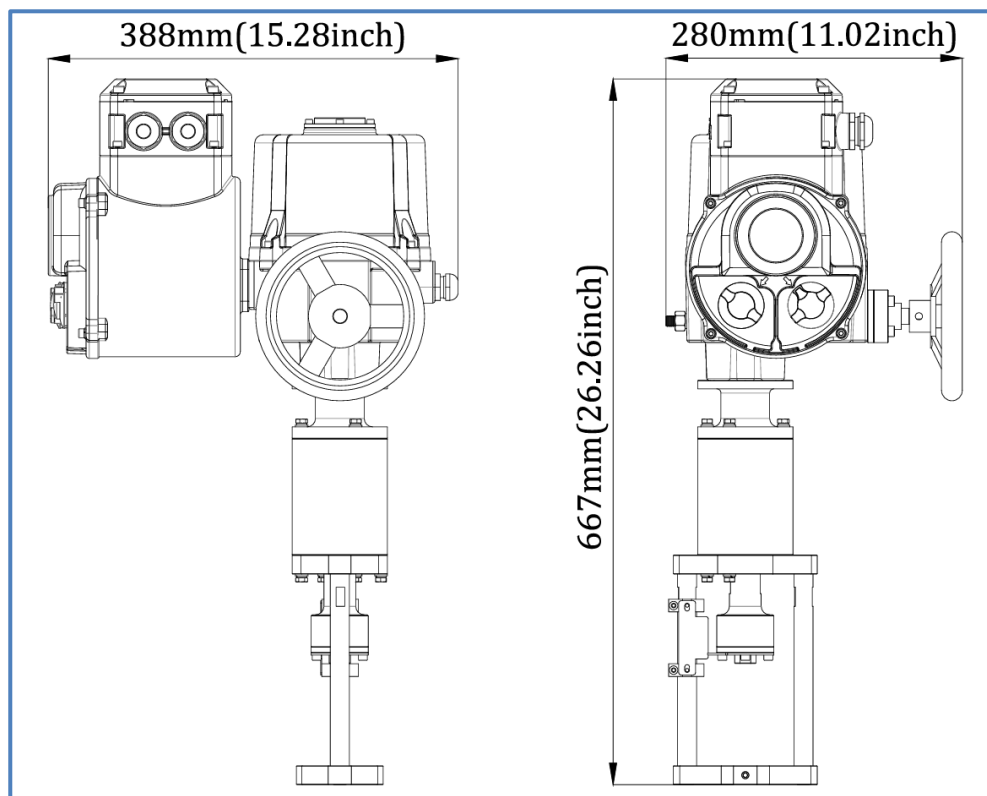
Serial number	Name
1	Upper cover
2	Bearing
3	Transmission shaft
4	Support plate
5	Setscrew
6	Casing
7	Setscrew
8	Transmission slider
9	Nut
10	Lower cover plate
11	Setscrew
12	Output shaft
13	Disc spring
14	Connecting head cover
15	Pointer
16	Guide pillar
17	Scale
18	Connecting flange

VTMLT-ICM Series Linear Electric Actuator

Overview, Dimensional Drawing, Explosion diagram, Wiring diagram

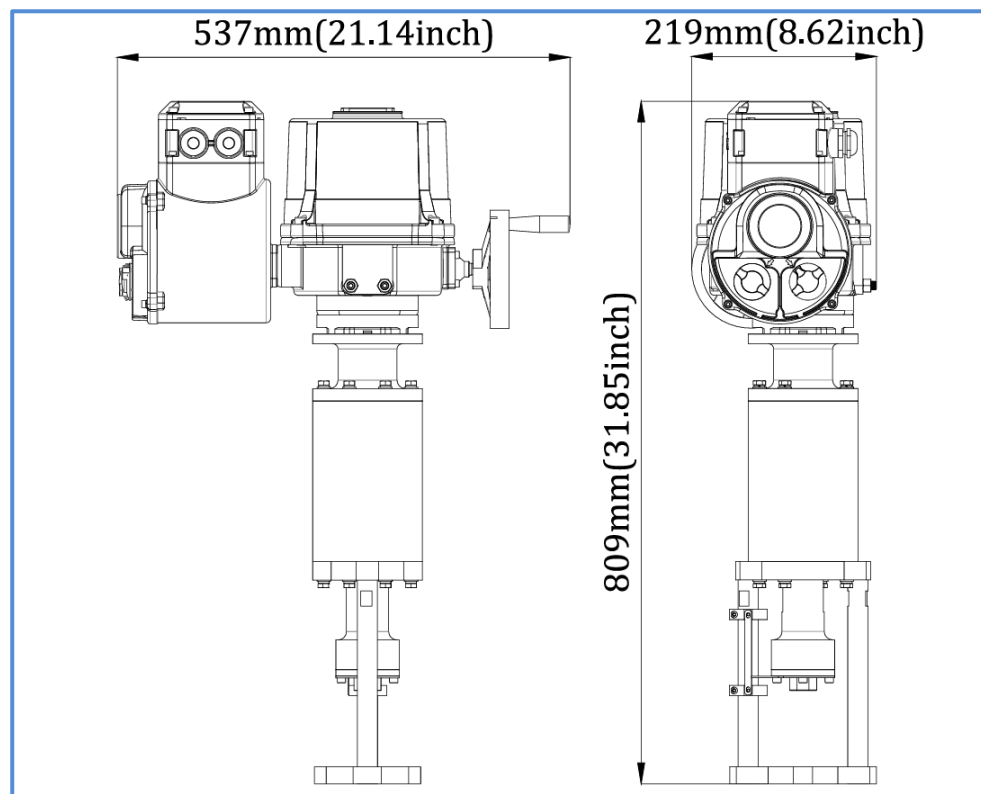


VTM2H-ICM+lifter Dimensional Drawing:



VTM2H-ICM+LT-1

VTM3-ICM+lifter Dimensional Drawing:



VTM3-ICM+LT-2

Vtork Technology USA INC • 3670 Westchase Drive • Houston, Texas 77042

• Phone: 346-571-8210 • Email: info@vtorkusa.net • Website: vtorkusa.net

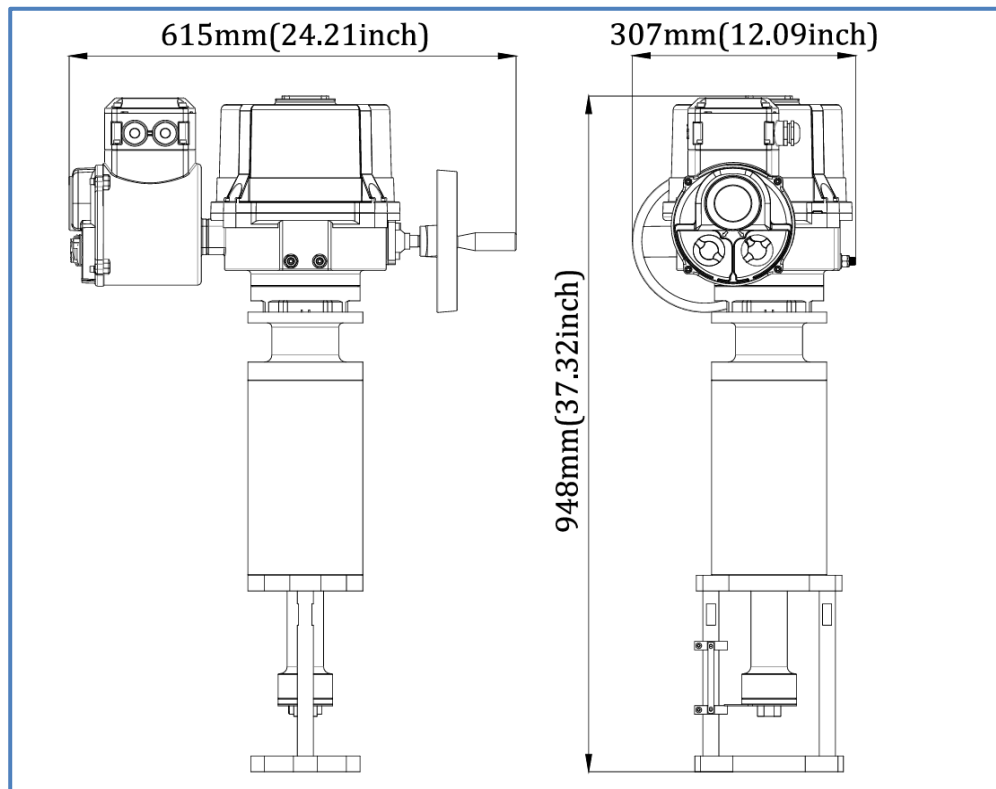


VTMLT-ICM Series Linear Electric Actuator

Overview, Dimensional Drawing, Explosion diagram, Wiring diagram

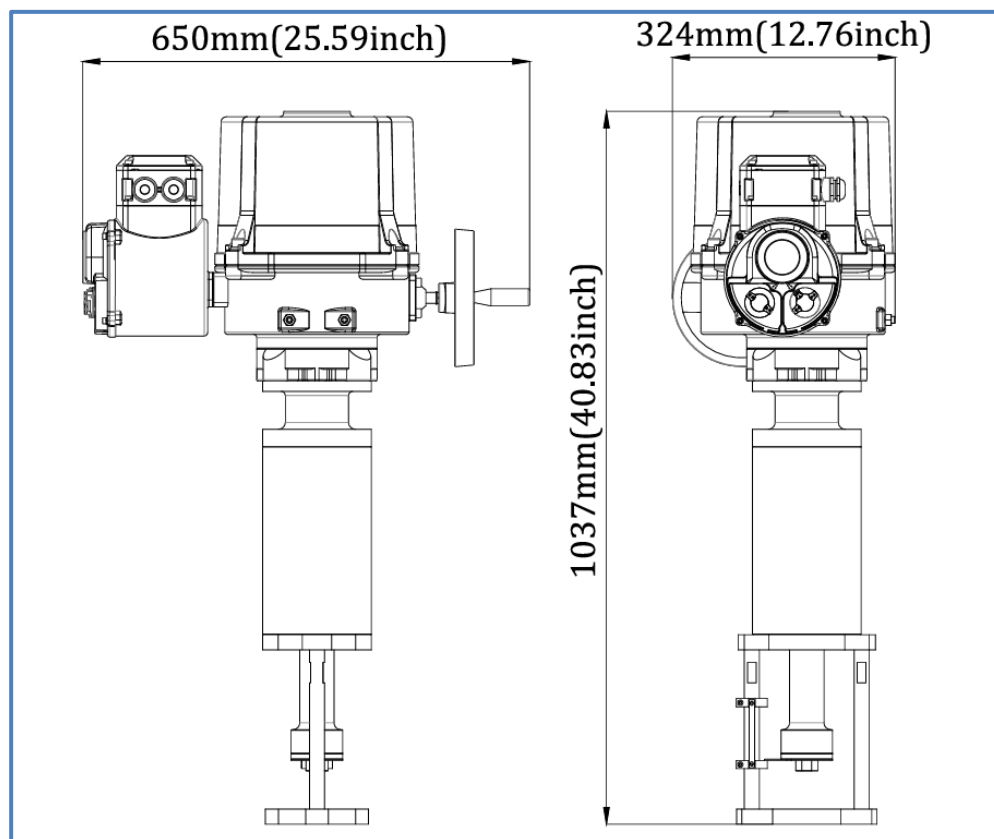


VTM4-ICM+lifter Dimensional Drawing:



VTM4-ICM+LT-3

VTM5-ICM+lifter Dimensional Drawing:



VTM5-ICM+LT-3

Vtork Technology USA INC • 3670 Westchase Drive • Houston, Texas 77042

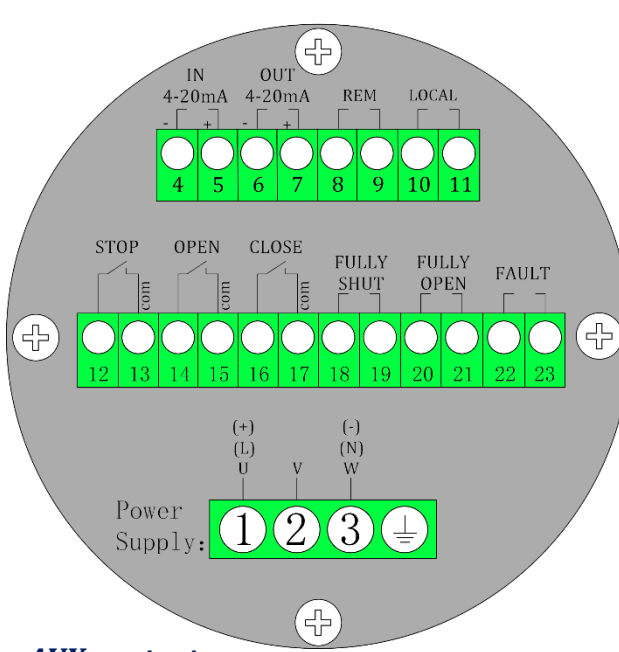
• Phone: 346-571-8210 • Email: info@vtorkusa.net • Website: vtorkusa.net



VTMLT-ICM Series Linear Electric Actuator

Overview,Dimensional Drawing, Explosion diagram,Wiring diagram

ICM Control Type Wiring diagram:



The diagram shows a circular terminal block with 23 pins. The top row (pins 4-11) is labeled IN 4-20mA, OUT 4-20mA, REM, and LOCAL. The middle row (pins 12-23) is labeled STOP, OPEN, CLOSE, FULLY SHUT, FULLY OPEN, and FAULT. The bottom row (pins 1-3) is labeled Power Supply (+), (-), and (N). The diagram also shows a TXD terminal block with pins A and B.

Power supply Port:

The power supply line sequence varies depending on the voltage of the purchased product

24V DC	Port 1 24VDC +,Port 3 24VDC-.
Single phase AC	Port 1 AC L,Port 3 AC N.
Three phase AC	Port 1 AC U,Port 2 AC V,Port 3 AC W.

Modulating Control (4~20mA) :

(Need to switch control mode in setting menu first)

Port 4 & Port 5:	This port(4 and 5) is used to input 4-20mA analog quantity control signal.
Port 6 & Port 7:	This port(6 and 7) is used to output 4-20mA analog signal.

ON/OFF Control:

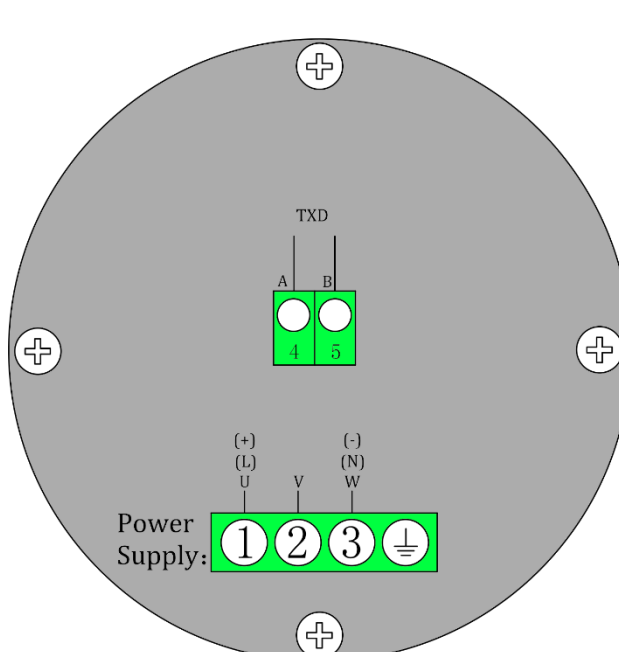
(Need to switch control mode in setting menu first)

Port 14 & Port 15:	Connect this port(14 and 15) to open the valve.
Port 16 & Port 17:	Connect this port(16 and 17) to close the valve.
Port 12 & Port 13:	When choose Switch mode,Connect this port (12 and 13) to stop valve.

AUX.contact:

Port 8 & Port9:	When product is in REMOTE mode,The normally open contact inside will close.
Port 10 & Port11:	When product is in LOCAL mode,The normally open contact inside will close.
Port 18 & Port19:	When product is in the fully close position,The normally open contact inside will close.
Port 20 & Port21:	When product is in the fully open position,The normally open contact inside will close.
Port 22 & Port23:	When product report errors,The normally open contact inside will close.

ICM Control Type-MODBUS Wiring diagram:



The diagram shows a circular terminal block with 23 pins. The top row (pins 4-5) is labeled TXD. The middle row (pins 12-23) is labeled STOP, OPEN, CLOSE, FULLY SHUT, FULLY OPEN, and FAULT. The bottom row (pins 1-3) is labeled Power Supply (+), (-), and (N). The diagram also shows a TXD terminal block with pins A and B.

Power supply Port:

The power supply line sequence varies depending on the voltage of the purchased product

24V DC	Port 1 24VDC +,Port 3 24VDC-.
Single phase AC	Port 1 AC L,Port 3 AC N.
Three phase AC	Port 1 AC U,Port 2 AC V,Port 3 AC W.

MODBUS Control:

Please confirm the communication address and baud rate before use. If they are incorrect, you can enter the settings menu to change them

Port 4 & Port 5:	This port(4 and 5) is used to connect MODBUS RS485 signal.
-----------------------------	--

VTMLT-ICM Series Linear Electric Actuator

Overview,Dimensional Drawing, Explosion diagram,Wiring diagram



ICM Control Type-Hart Wiring diagram:

