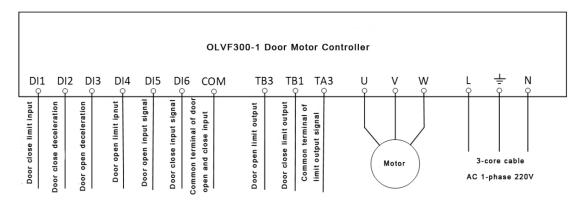
Asynchronous Debug Specification

1. Wiring Diagram



2. Product Exterior Overview



Note: Description of each part on the diagram

Opened: Light on when door is opened. Convertor outputs signal of door opened Closed: Light on when door is closed. Convertor outputs signal of door closed

Fault detection: Light on when fault occurred.

Power indicator: Light on when power supply works normally.

Open: Light on when there is open signal.

Close: Light on when there is close signal.

Enabled indicator: Light on when current outputted.

SW1-SW2 dial switches: Switches for function selection of learning current coefficient, learning motor parameters, normal operation and test operation.

SW3 dial switches: Switch door speed fine adjustment.

SW4 dial switches: Motor power selection.

Trial run button and Self-learn button: Buttons for functions of learning current coefficient, learning motor parameters, normal operation and test operation.

Knob of door opening speed: divided into Gear 1 to Gear 4 and switch the door open speed

Knob of door closing speed: divided into Gear 1 to Gear 4 and switch the door close speed

Torque holding speed: keep the door open and close holding torque through switching the knob

Torque knob of door re-opening: switch the door re-opening torque through switching the knob

3. Procedure of debugging

Note: The parameters have been set in default in manufacturing. The door can be opened and closed smoothly when the installation of door-motor has been finished.

3.1 Motor power selection

In the non-leveling zone, the DIP switch SW3 performs power selection according to the actual motor power, and re-powers after the selection is completed.

3.2 Current coefficient self-learning

In the non-leveling zone, switch SW (1) ON and SW (2) OFF, select the current parameter self-learning mode, press the self-learning button and the enabled indicator turns on. Move to the next step when the enabled indicator turns off.

3.3 Parameter self-learning of motor

In the non-leveling zone, switch SW (1) ON, SW (2) ON, select the motor parameter self-learning mode, press the self-learning button and the enabled indicator turns on. Move to the next step when the enabled indicator turns off.

Note: step 3.2 and 3.3 have been done in manufacturing and can be omitted at spot.

3.4 Trial run

Connect the signals of door close to limit, door close deceleration, door open deceleration and door open to limit to DI1 DI4. Switch SW (1) OFF, SW (2) ON, shortly connect to DI5 and COM and then door opens. When the door opens to the limit the

lights on the panel will be on; Shortly connect to DI6 and COM and then door closes. When the door closes to the limit the lights on the panel will be on. If the trail run direction goes against to the description, please exchange any two of the power lines.

4. Factory state

When the test is finished, place the door open speed on Gear 3, door close speed on Gear 3, holding torque in the middle place and the door re-open torque in the middle place.

5. Alarm indicator display

Alarm Code	OC	Ph1	LU	OL	EC	EH	0S
Indicator code	D5	D1 D3 D4 D5	D3 D5	D1 D3 D5	D5 D6	D2 D5	D1 D2 D5
Alarm Code	LE	dE	anE	Act	Pol	HU	0C2
Indicator code	D2 D3 D5	D1 D2 D3 D5	D4 D5	D1 D4 D5	D3 D4 D5	D1 D5	D2 D4 D5

6. Alarms Troubleshooting

Alarm Code	Fault Name	Operation state	Possible Causes	Solutions	
0S	Over-speed	Emerged	Drive circuit error drive	replace drive	
		during drive energizing	Encoder error	Replace door motor	
		Emerged in	Encoder default angle error	Learning default angle again	
		motor	Motor U,V,W phase sequence error	Check and make sure it has been wired correctly	
		start-ups	Encoder leads error	been wired correctly	
		Emerged	Encoder error	Replace door motor	
		during motor operation	Mis-adjustment of door motor system parameters cause overshoot	Reset the gain parameters of regulator.	
	Main circuit overvoltage Main circuit power failure	Emerged during energizing	Internal circuit board of drive error	Replace door motor drive	
HU/POL			Power is overvoltage	Check if supplied power is excessive	
		Emerged during motor operation	Internal braking transistor of drive is damaged	Replace door motor drive	
		Emerged during main circuit power failure	Report POL in normal circumstances		

Main circuit under-voltage Emerged during energizing Emerged during and nas low voltage Momentary outage longer than 20ms Check power supply				Loose connection of main	Check if lines are connected	
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damaged or phase Replace drive				external disturbance	Grounding correctly	
				Internal circuit of drive		
shortage				damaged or phase	Replace drive	
				shortage		

0C2	Overcurrent2	Emerged during motor operation	Drive error	Replace drive	
PHL			Protective tube of bus line fused	Replace protective tub	
	Phase shortage		Phase-shortage of UVW	Check connection of power	
			power line	line	
			Abnormal motor	Replace motor	
		Emerged during motor operation	Protective tube of bus line fused	Replace protective tub	
			Phase-shortage of UVW	Check connection of power	
			power line	line	
		Emerged during door	door motor operation path hindered	Clear hindrance and restart self-learning function	
		width self-learning	Abnormal motor	Replace motor	
DE Door wid	Door width error		Wrong door width data	Check if door width parameter PN20 is proper, restart self-learning function	
			door motor	Clear hindrance and restart	
			Abnormal motor	Replace motor	
			overload	Reduce load and restart	
	Defectly angle	Emerged	Operation path hindered	Clear hindrance and restart	
AnE	Default angle error	during default	and motor blocked		
	enoi	angle learning	Abnormal motor and encoder	Replace motor	
		Emerged during door open	Operation path hindered	Cut off the power and check	
				hindrance. Clear hindrance	
Act				and restart the operation	
	Door open			with power on.	
	action failed		Wrong door width data	Cut off the power and check	
				hindrance. Restart door	
				width self-learning function	
				with power on	
	Without	The motor is	The drive does not run	Re-angle self-learning and	
LE	self-learning	just running	directly through angle	door width self-learning	
	failure	, , , , , , , , , , , , , , , , , ,	self-learning		