1. R60-D2 Driver function introduction

R60-D2 is a special motion control driver customized for customers by Rtelligent.

R60-D2 is a dual-axis synchronous driver, and the control mode is pulse plus direction.

Micro-stepping subdivision setting: three DIP switches SW6-SW8 are used to select and set 8-level micro-step subdivision. When setting subdivision, the driver should be stopped first. The upper limit of pulse frequency acceptance is 12KHz.

Output current setting: four DIP switches SW1-SW4 are used to select and set 16-level output current.

Automatic half-flow function: SW5 is used to set the automatic half flow function of the driver. OFF means that the static current is set to half of the operating current, and ON means that the static current is the same as the operating current. In general use, SW5 should be set to OFF, so that the heating of the motor and the driver is reduced, and the reliability is improved. About 0.4 seconds after the pulse train stops, the current will be halved automatically.

Signal interface: OPTO is connected with 5V positive common terminal (or 5V switching power supply), DIR- is connected to the negative signal of the PLC direction, and ENA- is connected to the negative signal of the PLC pulse.

Power interface: the power interface adopts DC power supply, and the recommended working voltage range of R60-D2 is 24-50VDC.

2. Control signal wiring

The driver terminals are defined as follows:

Function	Grade	Definition
Power supply input port	V+	Input DC power positive
	V-	Input DC power negative
Motor 1 terminal	A+	Connect both ends of Phase A winding of motor 1
	A-	
	B+	Connect both ends of Phase B winding of motor 1
	B-	
Motor 2 terminal	A+	Connect both ends of Phase A winding of motor 2
	A-	
	B+	Connect both ends of Phase B winding of motor 2
	B-	
Starting and reversing	OPTO	5V power supply positive terminal
	DIR-	Direction negative terminal
	ENA-	Pulse negative terminal

3. The setting of DIP switches and operating parameters

3.1 The setting of current

Peak Current	SW1	SW2	SW3	SW4	Remarks
0.3	on	on	on	on	
0.5	off	on	on	on	
0.7	on	off	on	on	
1.0	off	off	on	on	
1.3	on	on	off	on	
1.6	off	on	off	on	
1.9	on	off	off	on	
2.2	off	off	off	on	Other current
2.5	on	on	on	off	values can be
2.8	off	on	on	off	customized.
3.2	on	off	on	off	
3.6	off	off	on	off	
4.0	on	on	off	off	
4.4	off	on	off	off	
5.0	on	off	off	off	
5.6	off	off	off	off	

3.2 Micro-stepping level setting

Step/revolution	SW6	SW7	SW8	Remarks
200	on	on	on	
400	off	on	on	
800	on	off	on	
1600	off	off	on	Other micro-stepping
3200	on	on	off	level can be customized.
6400	off	on	off	
12800	on	off	off	
25600	off	off	off	

4. Dimension