DINGS
Precision Motion Specialist

VER 1.2

Technical Manual

DS-CLS10-FRS4-1A

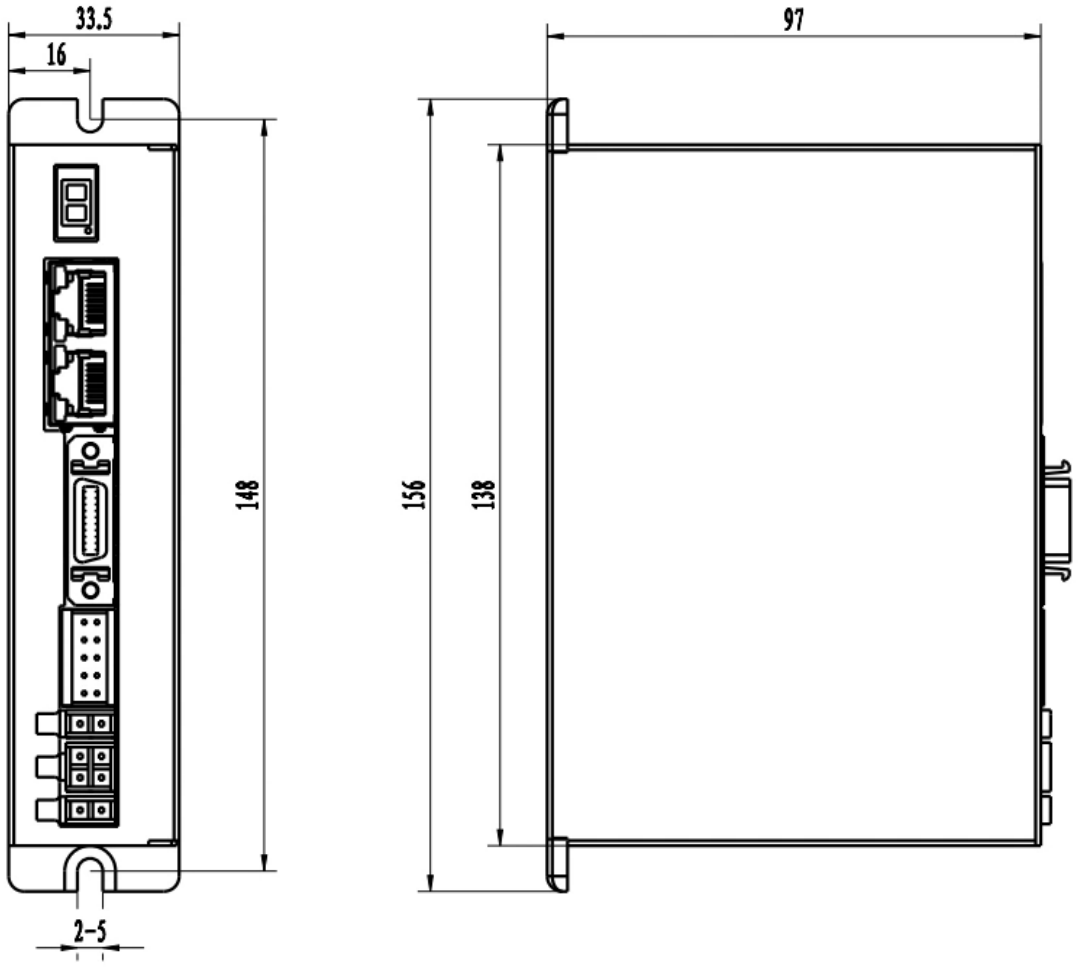
DINGS
Precision Motion Specialist

Table of Contents

1. Specifications

Listings	Content	Notes
Model	DS-CLS10-FRS4-1A	
Input power voltage	DC 24V~72V ±10%	
Output current	6.5A (0 - peak)	Continuing current
Encoder support	Supports ABS encoder (BiSS-C type, 16-bit single-turn / 16-bit multi-turn)	
Driving method	PWM constant current drive	
Communication interface	**Input** ・Pulse, directional input (configurable as digital input) ・7 digital inputs **Output** ・3 digital outputs	Input/output can be freely configured through communication
Detailed content of digital input	/SV ON (Servo On) /RESET (Alarm reset) /START (Motor start/stop) /JOG (Motor jog) /HOME (Zero return)	
Detailed content of digital output	/IN POTISION /ALARM	
LED	Status, Fault	
Communicate I/F	RS485，Up to 30 nodes	MODBUS RTU protocol, baud rate: 19200bps (preset)
Control methods	Position control mode	Based on pulse positioning and RS485 communication positioning
External dimensions (mm)	156 (L) × 97(W) × 33.5(H)	Excluding wiring terminals
Weight	About 500g	Excluding wiring terminals
Operating environment	0 ~ 45℃，under 85%RH	No condensation
Storage environment	0 ~ 85℃，under 85%RH	No condensation
Ambient gas	Prevent corrosive gases	

2. Dimensions (mm)



3. Schematic and Interface Description

Please make sure to perform the following tasks before connecting the power supply.

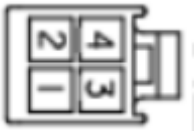
3.1 CN1 (Power supply)

Terminal number	Illustration	Pin.	Signal name
CN1		2	Power V+ (DC24V ~ 72V)
		1	Power GND

Pay attention to the polarity of the power supply when wiring

Wire specifications: AWG20~AWG16 (multi stranded wire)

3.2 CN2 (Motor)

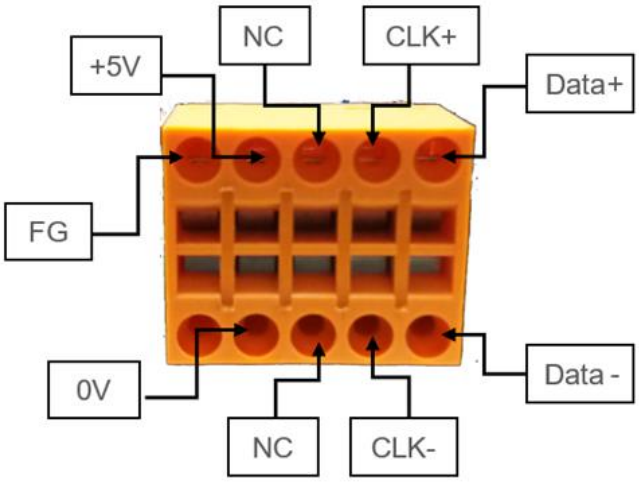
Terminal number	Illustration	Pin.	Signal name
CN2		4	Motor A+
		3	Motor B+
		2	Motor A-
		1	Motor B-

3.3 CN3 (Brake output)

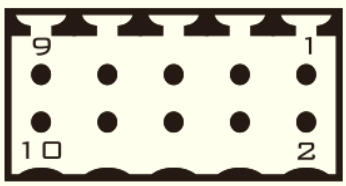
Terminal number	Illustration	Pin.	Signal name
CN3		2	BRK+ Positive Brake output
		1	BRK- Negative Brake output

3.4 CN4 (Absolute value encoder input)

Pin.	Signal name	Pin.	Signal name
1	Data+	2	Data-
3	CLK+	4	CLK-
5	NC	6	NC
7	+5V	8	0V
9	FG	10	FG



Sketch

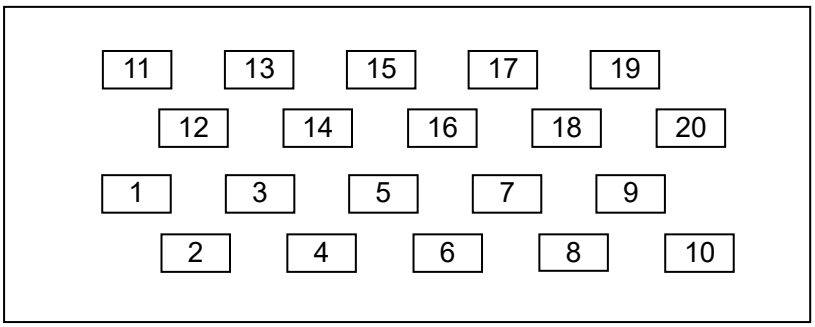


Pay attention to the polarity of the encoder power supply when wiring

Wire specifications: AWG28~AWG18 (multi stranded wire)

3.5 CN5 (I/O)

Sketch



Pin.	Signal name	Pin.	Signal name	Pin.	Signal name
1	COM (IN)	8	IN6 (CW) -	15	NC
2	IN1	9	IN7 (CCW) +	16	NC
3	IN2	10	IN7 (CCW) -	17	NC
4	IN3	11	OUT1	18	NC
5	IN4	12	OUT2	19	NC
6	IN5	13	OUT3	20	NC
7	IN6 (CW)+	14	COM (OUT)		

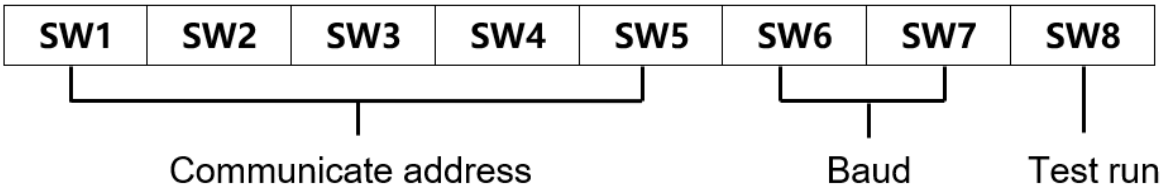
3.6 CN6 (IN) / CN7 (OUT) (RS485)

Pin.	Signal name	Pin.	Signal name
1	NC	2	GND
3	A Input (RS485)	4	NC
5	NC	6	B Input (RS485)
7	Terminator (CN5)	8	Terminator (CN5)

Standard product : RJ45 type ×2

Viewing the position of each pin from the perspective of facing insertion

3.7 SW1 (Set switch)



3.7.1 Mailing Address

Users can control up to 30 DS-CLS10-FRS4-1A drivers simultaneously using the RS-485 bus. The communication address of the driver is set using a 5-bit DIP switch,

The address setting range is 1-32, where address 32 is reserved by the system. When the drive address is set to greater than 31, it needs to be set and saved using upper level debugging software,

And all switches must be set to OFF (default to 1).

Notes

1) A controller can control up to 30 DS-CSL10-FRS4-1A drivers simultaneously through the RS-485 bus.
2) The communication address setting for each drive must be unique, otherwise it may cause communication errors.

DIP switch					Actual address (Decimal)	Display address (Hexadecimal)
SW1	SW2	SW3	SW4	SW5		
ON	ON	ON	ON	ON	1	01H
ON	ON	ON	ON	OFF	2	02H
ON	ON	ON	OFF	ON	3	03H
ON	ON	ON	OFF	OFF	4	04H
ON	ON	OFF	ON	ON	5	05H
ON	ON	OFF	ON	OFF	6	06H
ON	ON	OFF	OFF	ON	7	07H
ON	ON	OFF	OFF	OFF	8	08H
ON	OFF	ON	ON	ON	9	09H
ON	OFF	ON	ON	OFF	10	0AH
ON	OFF	ON	OFF	ON	11	0BH
ON	OFF	ON	OFF	OFF	12	0CH
ON	OFF	OFF	ON	ON	13	0DH
ON	OFF	OFF	ON	OFF	14	0EH
ON	OFF	OFF	OFF	ON	15	0FH
ON	OFF	OFF	OFF	OFF	16	10H
OFF	ON	ON	ON	ON	17	11H

OFF	ON	ON	ON	OFF	18	12H
OFF	ON	ON	OFF	ON	19	13H
OFF	ON	ON	OFF	OFF	20	14H
OFF	ON	OFF	ON	ON	21	15H
OFF	ON	OFF	ON	OFF	22	16H
OFF	ON	OFF	OFF	ON	23	17H
OFF	ON	OFF	OFF	OFF	24	18H
OFF	OFF	ON	ON	ON	25	19H
OFF	OFF	ON	ON	OFF	26	1AH
OFF	OFF	ON	OFF	ON	27	1BH
OFF	OFF	ON	OFF	OFF	28	1C H
OFF	OFF	OFF	ON	ON	29	1D H
OFF	OFF	OFF	ON	OFF	30	1E H
OFF	OFF	OFF	OFF	ON	31	1F H
OFF	OFF	OFF	OFF	OFF	Customize	Customize

BAUD

DIP switch		BAUD (bps)
SW6	SW7	
ON	ON	4800
ON	OFF	9600
OFF	ON	19200
OFF	OFF	38400

TEST RUN

The trial run function is used to verify the performance of the drive. Turn the SW8th gear switch to ON in the power-off state. Then, when powered on and in a state without pulse input, turn the SW8th gear dial switch from ON to OFF, and then from OFF to ON after 1 second, to activate the trial run function (the motor rotates forward and backward at a speed of 1 rpm).

4. LED Indicator

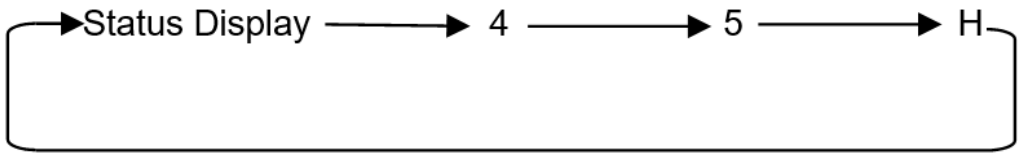
4.1 Status Display

Display	Status
	Motor rotation display The light comes on when the motor rotates, and goes off when it stops
	Equipment Enabling Status Equipment enable light on, equipment disable light off
	Display in command input The light is on during command input
	Displayed in CONNECT The light in CONNECT is on

4.2 Status Number Display

The site number is displayed word by word, ending with H, and only the status is displayed after a successful CONNECT connection

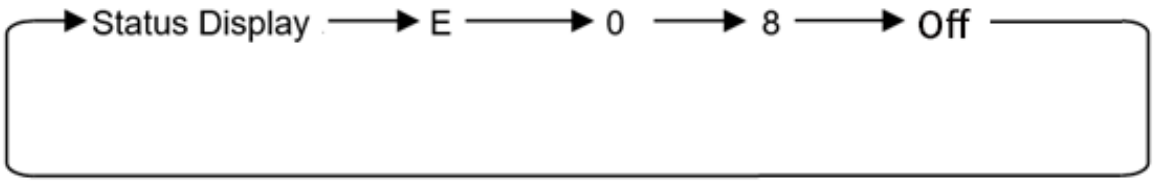
Example: Site number: 45H



4.3 Alarm Display

The alarm code is displayed word by word and blinks, ending with E

Example: Alarm code E8



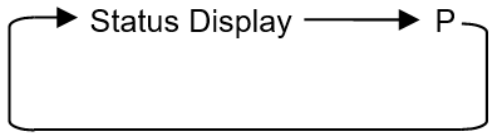
Function	Alarm code	Alarm/Warning	Description
Communication timeout	Warning	8	Abnormal communication cycle during communication
Spare	Warning	9	Spare
Motor overcurrent	Warning	10	Motor phase current overcurrent or driver failure

Motor phase loss	Warning	11	The motor is not connected
Spare	Warning	12	Spare
Undervoltage	Warning	13	Power input less than 18V
Overvoltage	Warning	14	Power input greater than 85V
Superheat	Warning	15	The temperature of the driver heat sink has reached 85 ℃ or above
Speed too high	Warning	16	Set speed exceeding maximum allowable speed
EEM error	Warning	17	CPU storage data exception
Overload	Warning	18	Brake resistor fault
Spare	Warning	19	Spare
Spare	Warning	20	Spare
Internal communication abnormality	Warning	21	Internal communication abnormality of the drive
Abnormal data reading	Warning	22	An exception occurred while reading Flash data
EMERGENCY STOP	Warning	23	Input port triggers emergency stop signal

4.4 Overtravel Display

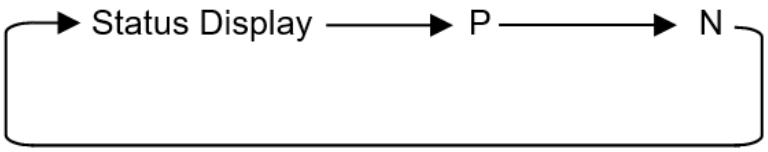
When overtravel occurs, it is displayed as follows :

1) Positive rotation side overtravel (P-OT)



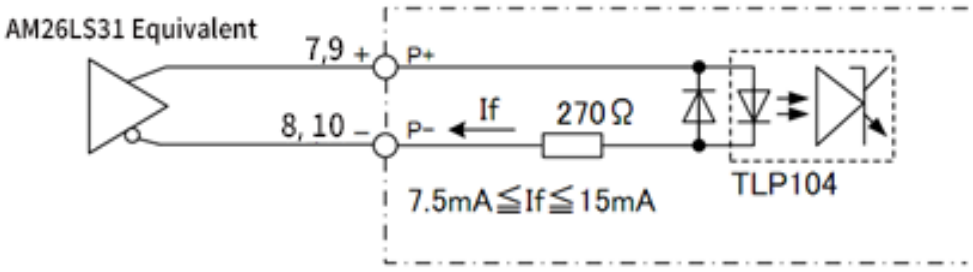
2) Negative side overtravel (N-OT)

3) Both forward and reverse overtravel occur

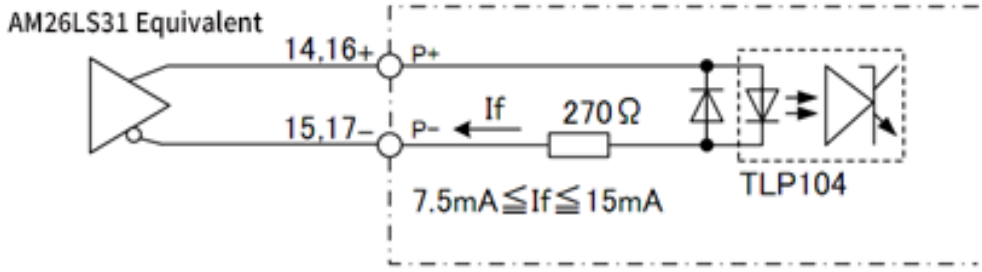


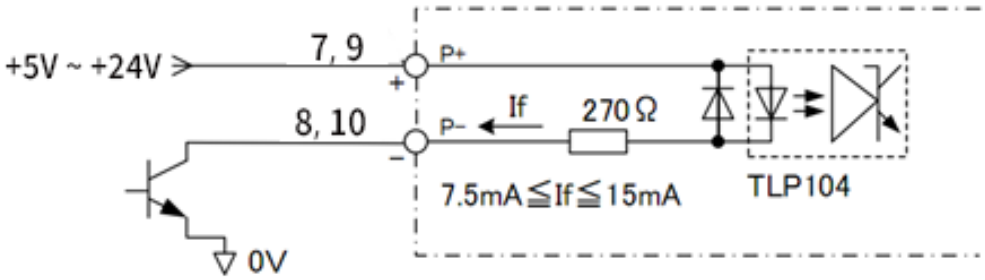
5. Input Circuit Diagram

5.1 Command pulse input circuit (Differential drive)



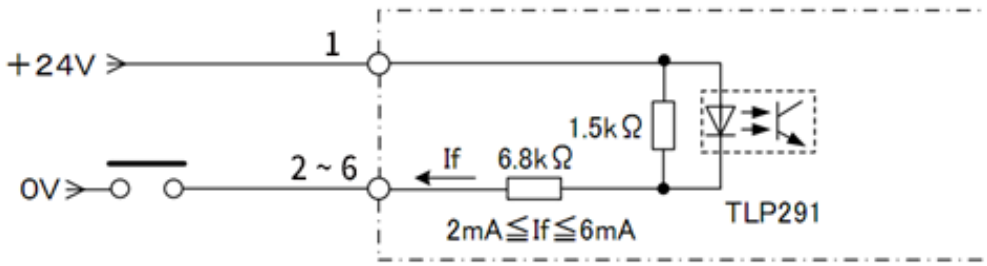
5.2 Command pulse input circuit (Collector)



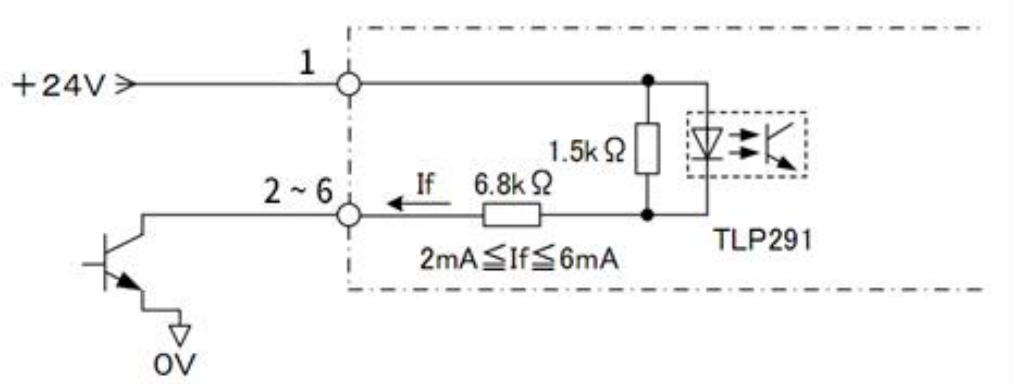


Notes This product is compatible with +5V/+24V signals and does not require a series current limiting resistor for 24V input.

5.3 Sensor, digital input circuits (Contacts)

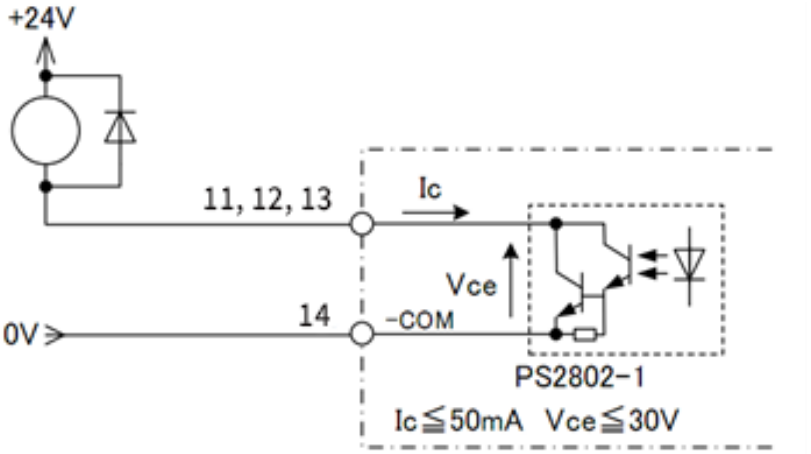


5.4 Sensor, digital input circuits (Collector output)



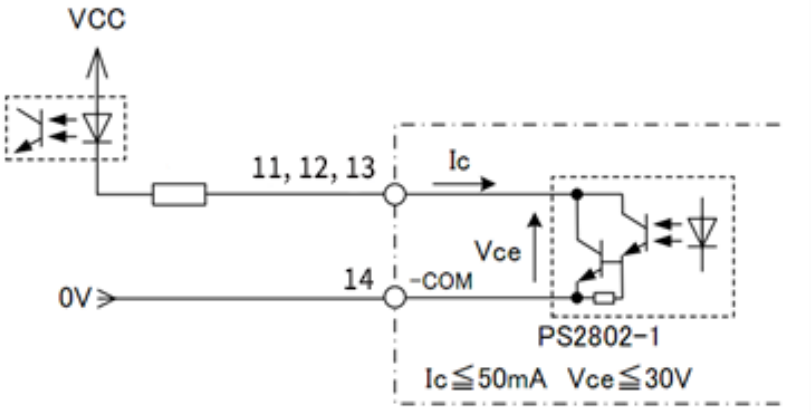
6. Output Circuit Diagram

6.1 Digital output circuit (Relay connection)



Notes When connects relay, diodes at both ends of relay (similar to IN4000)

6.2 Digital output circuit (Optocoupler connection)



8. Control Parameter

Notes **Informal version of communication parameters, some parameters are fixed and not open.**

8.1 Controller Basic Status (Class 01)

adr	word	content	recount	range / unit
0100	1	Motor current	Real-time motor current value	0.1%A
0101	1	Input voltage	Current input voltage	1%V
0104	2	Set up segments	Set breakdown values	ppr
0106	1	Pulse mode	1 is pulse + direction mode, 2 is double pulse mode	1-2
0108	1	Failure code	The alarm code, see 1-2, shows "0" as no fault	-
0109	1	Running status	Drive operating status, see 1-1	-
0110	1	Hardware version	Drive hardware version	-
0111	1	Software version	Drive software version	-
0117	2	Current location	Target location	pulse
0119	1	Actual speed display	-	0.01rps
0126	2	Physical location	Run a live location	pulse
0174	1	IO Select Multi-segment Run Paragraph	-	-
0176	1	Multi-segment writing error No	-	-
0178	1	Multi-stage operation No	-	-
0135	1	Enter the port status	Data bits: Bit7 …….. Bit1 Bit0 Enter the port: IN7 …….. IN2 IN1	
0136	1	Output port status	Data bits: Bit3 Bit2 Bit1 Bit0 Output port: OUT4 OUT3 OUT2 OUT1	

8.2 Basic Parameter Setting (Class 02)

adr	word	content	recount	range/unit
0201	1	Motor direction switching	Select the direction in which the motor runs	0～1
0213	1	Half-flow ratio	Stop current ratio (active in open-loop mode)	10%~120%
0217	1	Motor control mode	0: Open loop 1: Closed loop Default: 1	0～1
0224	1	Angular filtering	The smaller the value, the smoother the motor runs, but the higher the latency	1~700
0234	1	Digital filtering	The filter coefficient of the input pulse, the larger the value, the lower the input frequency response	1~15
0241	1	Input current	Set the current	100~6500 0.1A~-6.5A

0242	2		Number of pulses per revolution	200~ 102400ppr
0244	1	Pulse mode	1: Pulse + direction mode 2: Double pulse mode	1~2
0245	1	Half-flow time	Time delay time to enter half-flow after motor stops operation (active in open-loop mode)	1~32767ms
0296	1	Operating mode selection	0: External pulse 1: Internal pulse Default: 0 Note: After the function is modified, the power needs to be turned off and restarted	0~1
0298	1	Mailing address	Default: 1	1~255
0299	2	Communication baud rate	Default: 19200	1600~ 115200

8.3 Closed-Loop Parameter Setting (Class 04)

adr	word	content	recount	range/unit
0246	1	Encoder resolution	Fixed	-
0247	2	Pulse width in place	Reach the target position close to the distance, output the signal in place Default: 0	1~1000 Encoder resolution
0251	1	Speed ring Kp	Speed ring Kp	0～30000
0252	1	Speed ring Ki	Speed ring Ki	0～30000
0255	1	Location ring Kp	Location ring Kp	0～30000
0258	1	Location out-of-tolerance threshold	In units of encoder resolution	0～30000 Encoder resolution

8.4 Control Parameters (Class 05)

adr	word	content	recount	range/unit
0301	1	Startup frequency	Default: 100	1~2000 0.01~20rps
0302	1	Stop frequency	Default: 100	1~2000 0.01~20rps
0303	1	acceleration	Default: 100	5~10000rps^2
0304	1	Deceleration	Default: 100	5~10000rps^2
0305	1	Return to origin mode	Return to origin mode, 0: Clockwise back to origin 1: Return counterclockwise to the origin	0~1
0306	1	Fixed-length running speed	Default：1000	1~5000 0.01~50rps
0307	1	Speed mode runs speed	In speed mode, the direction of operation coincides with the direction of speed Default：1000	-5000~5000 -50~50rps
0308	1	Jog running speed	Default：1000	1~5000 0.01~50rps

0309	1	Return to origin running speed	Default: 1000	1~5000 0.01~50rps
0310	1	Return to the origin peristaltic speed	The speed of operation after hitting the origin Default: 1000	1~5000 0.01~50rps
0311	2	Return to origin offset	Default: 0	-2000000000~ 2000000000 pulse
0313	2	Output pulse	Run the trip Absolute position mode: Runs to a specified location Relative Position Mode: Run the set offset stroke Default: 0	-2000000000~ 2000000000 pulse
0317	2	Positive and soft limits	Default: 2000000000 Note: The process of returning to the origin is not valid	-2000000000~ 2000000000 pulse
0319	2	Negative soft limit	Default: -2000000000 Note: The process of returning to the origin is not valid	-2000000000~ 2000000000 pulse
0321	2	Sets the current location	Default: 0	-2000000000~ 2000000000 pulse
0323	1	Control commands	0: Empty 1: Absolute operation, running to the set distance, the running direction is determined by the distance plus or minus, the speed plus and minus values are invalid, and the modification of the target position during operation is effective 2: Relative operation, run with set distance and running speed, the running direction is determined by the distance plus or minus, the speed plus and minus value is invalid, and the modification of the moving distance during operation is invalid 3: Speed mode 4: Positive jogging 5: Reverse jogging 6: Decelerate and stop 7: Emergency stop 8: Set the current position, only when the motor stops 12: Return to the original point 13: Alarm clearance 14: Multi-segment data verification 15: Multi-segment data saving 16: Multi-segment data starts 17: Multi-segment data paused 18: End of multi-segment data Default: 0	0~29
0324	1	Internal control switch	<table><tr><td>Data bits</td><td>Bit1</td><td>Bit0</td></tr><tr><td>function</td><td>Negative soft limit</td><td>Positive and soft limits</td></tr></table>1: Turn on the function, 0: Turn off the function Default: 0	0-65535
0327	1	Number of multiple paragraphs	Default: 1	1~32
0328	1	Multi-segment selection	Default: 0 Note: If the IO port is configured with the multi-segment selection feature, the IO configuration multi-segment selection takes precedence	0~31

8.5 Input Block Designation (Class 06)

adr	word	content	recount	range /unit
0400	1	IN1 function selection	0: Empty 1: Absolute operation, running to the set distance, the running direction is determined by the distance plus or minus, the speed plus and minus values are invalid, and the modification of the target position during operation is effective 2: Relative operation, run with set distance and running speed, the running direction is determined by the distance plus or minus, the speed plus and minus value is invalid, and the modification of the moving distance during operation is invalid 3: Speed mode 4: Positive jogging 5: Reverse jogging 6: Decelerate and stop 7: Emergency stop 8: Set the current position, only when the motor stops 9: Positive limit 10: Negative limit 11: Origin signal 12: Return to the original point 13: Alarm clearance 14: Multi-segment data verification 15: Multi-segment data saving 16: Multi-segment data starts 17: Multi-segment data paused 18: End of multi-segment data 20: Enablement 25: Select Bit0 for the IO port configuration multi-segment 26: The IO port is configured with multiple segments to select Bit1 27: The IO port is configured with multiple segments to select Bit2 28: The IO port is configured with multiple segments to select Bit3 29: IO port configuration multi-segment selection Bit4 Default: 0	0~30
0401	1	IN2 function selection	The setting content is the same as IN1 (default: 0)	0~30
0402	1	IN3 function selection	The setting content is the same as IN1 (default: 0)	0~30
0403	1	IN4 function selection	The setting content is the same as IN1 (default: 0)	0~30
0404	1	IN5 feature selection	The setting content is the same as IN1 (default: 0)	0~30
0405	1	IN6 Function Selection (CCW Port)	The setting content is the same as IN1 (default: 0) (When the external pulse is off, the port function fails)	0~30
0406	1	IN7 Function Selection (CW Port)	The setting content is the same as IN1 (default: 0) (When the external pulse is off, the port function fails)	0~30
0429	1	Universal numeric input logic		
0410	1	Pseudo communication setting IN1	0: OFF (initial value 0) 1: ON (action that triggers IN1 configuration)	0~1
0411	1	Pseudo communication setting IN2	0: OFF (initial value 0) 1: ON (action that triggers IN1 configuration)	0~1

0412	1	Pseudo communication setting IN3	0: OFF (initial value 0) 1: ON (action that triggers IN1 configuration)	0~1
0413	1	Pseudo communication setting IN4	0: OFF (initial value 0) 1: ON (action that triggers IN1 configuration)	0~1
0414	1	Pseudo communication settings IN5	0: OFF (initial value 0) 1: ON (action that triggers IN1 configuration)	0~1
0415	1	Pseudo communication setting IN6	0: OFF (initial value 0)	0~1
0416	1	Pseudo communication settings IN7	0: OFF (initial value 0) 1: ON (action that triggers IN1 configuration) (When the external pulse is used, the pseudo-communication port function fails)	0~1

8.6 Output Block Specification (Class 07)

adr	word	content	recount	range/unit
0420	1	OUT1 function selection	100: Generic port 101: Alarm output function: There is an output signal when there is no alarm, and no output signal when there is an alarm. 102: Signal in place 103: Enable control output: There is an output signal when offline, and no output signal when enabled. (Default value: 101)	100~104
0421	1	OUT2 function selection	The setting content is the same as OUT 1 (default: 100)	100~104
0422	1	OUT3 function selection	The setting content is the same as OUT 1 (default: 100)	100~104
0423	1	OUT 4 feature selection	The setting content is the same as OUT 1 (default: 100)	100~104
0428	1	Universal digital output control	Output port function selects 100 Data bits: Bit3 | Bit2 | Bit1 | Bit0 Output port: OUT4 | OUT3 | OUT2 | OUT1	
0430	1	Digital output logic	Corresponds to the output port logic Data bits: Bit3 | Bit2 | Bit1 | Bit0 Output port: OUT4 | OUT3 | OUT2 | OUT1	

8.7 Multi-segment Position Mode (Class 08)

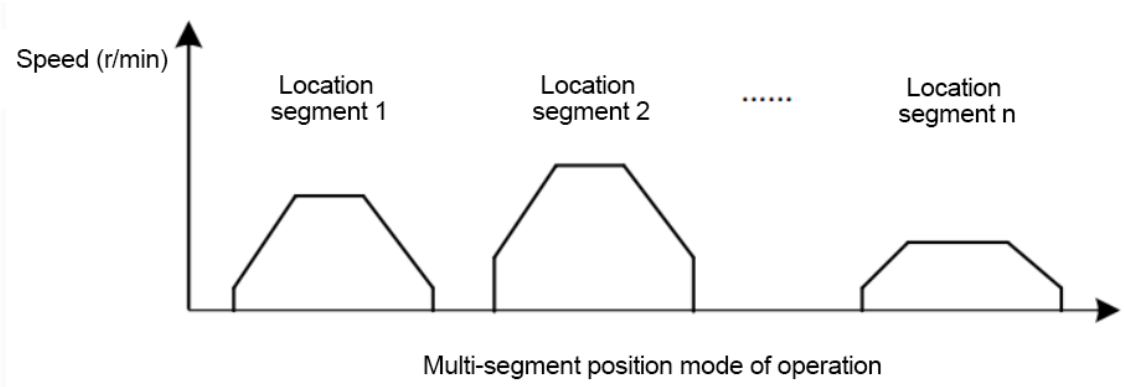
The multi-segment address range is 1024~1536, and up to 256 data can be set

Multi-segment command format

Command code	word	content	recount	range/unit
1	2	Absolutely run	Parameter 1: Running position Default: 0	-2147483647~2147483647 pulse
2	2	Relative operation	Parameter 1: Running position Default: 0	-2147483647~2147483647 pulse
51	1	Startup speed	Default: 100	1~2000 0.01~20rps

53	1	Stop speed	Default: 100	1~2000 0.01~20rps
54	1	Fixed length speed	Default: 1000	1~5000 0.01~50rps
61	1	acceleration	Default: 100	5~10000rps^2
62	1	Deceleration	Default: 100	5~10000rps^2
65	2	Wait for the jump	A (high 8 bits) / B (low 8 bits) / C (low 16 bits), A: fixed at 0 / B: jump address / C: Waiting time	-
66	2	Jump sequence	A (high 16 bits) / B (low 16 bits), A: number of cycles / B: jump address	-
100	1	End of multiple segments	Each paragraph should end with an end code	-

The multi-segment position mode function is a working method that combines multiple position segments in a certain order, triggers the movement through an external IO signal, and completes a series of position segment actions. This function can be regarded as a multi-segment combination of position mode, the user can store the description parameters of several position segments such as acceleration and deceleration, pulse number, etc. in advance in EEPROM, and only need to provide a trigger signal to complete the work when these position segments need to be enabled, and its working process description is shown in the figure below.



Multi-segment position mode of operation

Port selection corresponds to multiple segments

Bit4	Bit3	Bit2	Bit1	Bit0	Location segment
0	0	0	0	0	1
0	0	0	0	1	2
0	0	0	1	0	3
0	0	0	1	1	4
…	…	…	…	…	…
1	1	1	0	1	30
1	1	1	1	0	31
1	1	1	1	1	32

IO Select the port

1. Input port configuration multi-segment selection function 25~29: IO port configuration multi-se

gment selection Bit0~Bit4

Input port configuration multi-segment start function 15: multi-segment data start

2. Port selection corresponds to multiple segments

Example: IN1 port function configuration 25, Bit0

IN3 port function configuration 26, Bit1

The IN1~ IN7 function can be configured according to the requirements

IN3 Bit1	IN1 Bit0	Location segment
0	0	1
0	1	2
1	0	3
1	1	4

Notes

"1" in the table indicates a valid hold signal
The segment selection signal needs to be completed more than 20ms in advance of the start signal

Example: Writing, validating, and saving multi-segment parameters *Note: The data in the example is expressed in base 16

1. Multi-segment parameter settings

[Command 1] the current line number 0: the fixed length speed is set to 1000, that is, 10rps,

01	10	04 00	00 02	04	00 36	03 e8	21 DF
①	②	③	④	⑤	⑥	⑦	⑧

① : Mailing address 0x1

② : MODBUS WRITE COMMAND 0x10

③ : Mailing address 0x400 (decimal means 1024)

④ : Write 2 pieces of data

⑤ : Write 4 bytes

⑥ : Data 1, fixed-length speed command 0x0036 (decimal means 54)

⑦ : Data 2, fixed length speed value 0x03E8 (decimal means 1000)

⑧ : CRC check

[Command 2] current line number 1: relative operation, running distance 10000 pulses

01	10	04 02	00 03	06	00 02	27 10 00 00	20 CB
①	②	③	④	⑤	⑥	⑦	⑧

① : 0x1 mailing address

② : MODBUS write command 0x10

③ : Mailing address 0x402 (decimal means 1026)

④ : Write 3 data

⑤ : Write 6 bytes

⑥ : Data 1, relative to the command 0x0002 (decimal means 2)

⑦ : Data 2, parameters: running pulse value 0x2710 (decimal means 10000)

⑧ : CRC verification

[Command 3] current line number 2: wait 1000ms

01	10	04 05	00 03	06	00 41	03 E8 00 03	1F DE
①	②	③	④	⑤	⑥	⑦	⑧

① : Mailing address 0x1

② : MODBUS write command 0x10

③ : Mailing address 0x405 (decimal means 1029)

④ : Write 3 data

⑤ : Write 6 bytes

⑥ : Data 1, relative to the 0x0041 of running the command (decimal means 65)

⑦ : Data 2，Data 03 E8 00 03 Converted to 00 03 03 E8 *Note: 4 bytes of data, the lower 16 bits

A B C

First, the high 16 bits last

Parameter A: The system reservation is set to 0 by default, do not set the value

Parameter B: Wait for jump line 3, the current waiting command line is 2

Parameter C: wait time 0x03E8 (decimal means 1000ms)

⑧ : CRC check

[Command 4] current line number 3: The recycle execution runs 10 times relative to each other

01	10	04 08	00 03	06	00 42	00 01 00 0A	DB 92
①	②	③	④	⑤	⑥	⑦	⑧

① : 0x1 mailing address

② : MODBUS write command 0x10

③ : Mailing address 0x408 (decimal means 1032)

④ : Write 3 data

⑤ : Write 6 bytes

⑥ : Data 1, relative to the 0x0042 of running the command (decimal means 66)

⑦ : Data 2, Data 00 01 00 0A Convert to 00 0A 00 01 *Note: 4 bytes of data, the lower 16 bits

A B

⑧ : First, the high 16 bits last

Parameter A: the number of action jumps 0xA (decimal means 10 jumps)

Parameter B: Jump to line 1 and perform the relative run again

⑨ : CRC check

[Command 5] current line number 4: End of action

01	06	04 0B	00 64	F8 D3
①	②	③	④	⑤

① : 0x1 mailing address

② : MODBUS write command 0x06

③ : Mailing address 0x40B (decimal means 1035)

④ : End of data segment 0x64 (decimal means 100)

⑤ : CRC check

2. Multi-segment parameter checking

01	06	01 43	00 0E	F8 26
①	②	③	④	⑤

① : 0x1 mailing address

② : MODBUS write command 0x06

③ : Mailing address 0x0143 (decimal means 323, write communication command)

④ : Data multi-segment data check 0xE (decimal representation 14)

⑤ : CRC check

3. Multi-segment parameter saving

*Note: Data can only be saved after the data verification is successful, otherwise the data can not be saved normally

01	06	01 43	00 0F	39 E6
①	②	③	④	⑤

① : 0x1 mailing address

② : MODBUS write command 0x06

③ : Mailing address 0x0143 (decimal means 323, write communication command)

④ : Data Multi-segment data check 0xF (decimal representation 15)

⑤ : CRC check

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