GGM

Before use this product, read well manual certainly and understand all about knowledge, safety information and cautions of product, and use right way.

After read, please be sure to keep fixed place to refer at anytime.

Manual

BLDC SPEED CONTROL UNIT

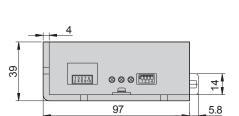
GUX (400W,750W)

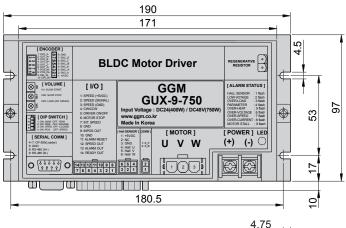
GUX-2-400 GUX-9-750

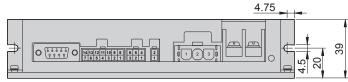
1. Product appearance

■ Driver main part outside view



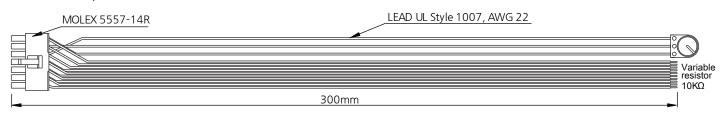






[Accessory]

■ Driver In / Out put IO wire



[Optional Parts]

Please Buy extension cable additionally for extending between motor and control(optional)

■ Motor power extension cable



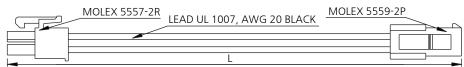
■ Motor sensor extension cable



■ Encoder extension cable



■ Brake extension cable



MODEL	L(extension cable length)
K10XEW-1	1m
K10XEW-1.5	1.5m
K10XEW-2	2m

MODEL	L
K10XEW(h)-1	1m
K10XEW(h)-1.5	1.5m
K10XEW(h)-2	2m

MODEL	L
KEEW-1	1m
KEEW-1.5	1.5m
KEEW-2	2m

MODEL	L
KXEW(B)-1	1m
KXEW(B)-1.5	1.5m
KXEW(B)-2	2m

2. Specifications

Item	GUX-	2-400	GUX-9-750	Note
Rated output[W]	40	0W	750W	
Input power[V]	DC	24V	DC 48V	
Rated current[A]	2	4	21	
Max current[A]	3	10	30	
External size (mm)		190 X		
Communication (option)		RS485 Communica		
Encoder (option)		Encoder Board (c	option) 1,000 ppr	
Velocity control	Speed control	100~3,000r/m	in (Velocity variation±1% or under)	
range	Position control	1~3,000r/mir	n (Velocity variation±1% or under)	Encoder type (when controlling pulse input)
	Termperature	Use: 0	~ 40°C, Storage∶-20 ~ 70°C	Non-freezing
Operating Environment	Humidity	Use: 85% below, Storage: 85% below		Non-condensing
	Environment	No corrosive gas	and dust, No splashing water and oil	

3. Name and functions of each part



1	LED	4	Electronic brake	8	DIP switch
	Power DC 48V/24V		Motor & Hall sensor		
			In / Output IO	9	Internal volume
(2)			Serial communication - OP-500	10	Encoder(option)
3	Motor Power	$ \mathcal{O} $	- RS485 (Option)	11)	Regenerative resistor

4. DIP switch & internal volume specifications

Item	Pin no.		Contents					Note
DIP switch	1	ON	4	400W (24V)		OFF	750W (48V)	
			Sine wave		OFF	Square wave		
	3	ON	Open (No control speed feedback)		OFF	Closed (Control speed feedback)	Applicable for Encoder option	
ON 1 2 3 4	4	ON	Position control mode		OFF	Speed control mode	Encoder option	
Internal volume VR1 VR2 V	VR3	VR1	SLOW START	VR2	SLOW STOP	VR3	Load ratio cantrol / Speed in - speed control	

5. LED specifications

Ite	em	LED sign	Note
150 (0.		Power ON: Orange light on, Power OFF: Orange light off	
LED (OF	peration]	Control ON : Green light on, Control OFF : Green light off	
	Hall sensor alarm	Flickering once at intervals of 6 seconds (Red)	
	Low voltage alarm	Flickering twice at intervals of 6 seconds (Red)	
	Over load alarm	Flickering 3 times at intervals of 6 seconds (Red)	
LED [alarm]	Parameter alarm	Flickering 4 times at intervals of 6 seconds (Red)	Motor stop
	Over heat alarm	Flickering 5 times at intervals of 6 seconds (Red)	- Motor stop
	Over voltage alarm	Flickering 6 times at intervals of 6 seconds (Red)	
	Over speed alarm	Flickering 7 times at intervals of 6 seconds (Red)	
	Over current alarm	Flickering 8 times at intervals of 6 seconds (Red)]

6. Communication or Encoder output & Position pulse input (option)

ltem	Pin no.		Contents			ote
	1,2,3		N.C			
	4	OP-	500(+5VE	OC)	Separate purchse of OP-500 OP-500 Function - Speed display - Setting the parameter (communication ID, Highest speed, etc)	
	5		GND			
	6	C	P-500(RX)		
D-SUB(9P)-Female	7	C)P-500(TX)		
D 30b(31) Terriale	8	R	S-485(A+	Communication option		
	9	F	RS-485(A-)	(Separate purchse of communication board)	
Encoder output &	1	ENC_A-	2	ENC_A+	A phase output	
Position pulse input	3	ENC_B-	4	ENC_B+	B phase output	
1 3 5 7 9 2 4 6 8 10	5	OUT_Z-	6	OUT_Z+	Z phase output	Separate purchase of encoder board
	7	POS_IN-	8	POS_IN+	Position pulse	
(YEONHO, YDAW 200-10)	9	DIR_IN-	10	DIR_IN+	Direction pulse	

7. Input and output I/O specification (YEONHO, YDH200-14)

Pin no.	Name of signal	Color	Contents
1	SPEED_+5V	Red	Direct current power for speed setting (+5V) / This is used as the power input of variable resistance for receiving this power supply from the external source and entering the speed, and it is prohibited to use it for any other purpose $10 \text{K}\Omega$ (1/4W or higher) is used when the external variable resistance is used.
2	SPEED_IN	Orange	Direct current power input for speed setting/ Change the motor speed up to the maximum speed in proportion to (0~5VDC).
3	SPEED_GND	Black	GND
4	CW / CCW	Yellow	Decides the motor direction. CW direction if the input is "Low" (GND connection). CCW direction if the input is "High" (GND not connected).
5	START	White	If the input is "Low" (GND connection), the motor control function is enabled (Motor rotation ready). If the input is "High" (GND not connected) during motor rotation, the motor will stop automatically.
6	STOP	Blue	If the input is "Low" (GND connection) during motor rotation, the motor is stopped by the deceleration brake.
7	SPEED_IN	Brown	When the input is low (connect GND), the internal volume(VR3) is applied as the speed volume to set the speed. - When the input is low (connect GND), internal Vol. VR3 can not be used as a load factor Vol. When the input is high (GND not connected), use the external volume to set the speed.
8	GND	Black	GND
9	Inpos Out	Green	Position movement completion output (when encoder type control the position) "Low" (0V) changing.
10	GND	Black	GND
11	Alarm Reset	Gray	This eliminates the cause of an alarm and forcibly resets the alarm. If the input is "Low" (GND connection), the alarm is reset.
12	SPEED_OUT	Pink	Motor speed pulseoutput (Open Collector) _ 12 pulseoutput a rotation.
13	Alarm Out	Purple	In the event of an alarm by alarm signal output (Open Collector), output changes to "Low" (0V).
14	N.C		

■ Speed control

If I/O #7inputis"High" (GND not connected), motor speed changes up to the max speed in proportion to the external volume (I/O#2) input voltage ($0\sim5VDC$).

In the event of utilizing external adjustable resistance, use the value of $10K\Omega$ (1/4W or over).

If I/O #7input is "Low" (GND connection), motor speed changes up to the max speed in proportion to the internal volume input voltage (0~3.3VDC)

■ Motor direction control

If I/O #4input is "Low" (GND connected), the motor rotates toward CW (to motor axis).

If I/O #4input is "High" (GND not connected), the motor rotates toward CCW (to motor axis).

■ Controller ON/OFF control

If I/O#5input is"Low" (GND connected), motor control function is activated. (green LED light on) (ready for motor rotation)

Motor operation starts according to an external volume input value. (LED turns on blue) If input is "High" (GND not connected) while motor rotation, the motor stops naturally.

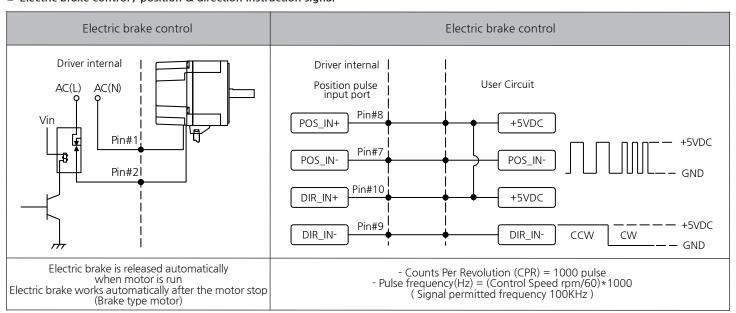
■ Motor stop control

If I/O#6inputis "Low" (GND connected) while motor rotation, the motor stops. [deceleration - brake (no maintaining)]

■ Output signal

Inpos S	Signal output	Motor speed pu	ılse output	Alarm sign output	
	User Circuit Max +24VDC Pull-up Resistance R (Current 10mA Less than)		· (Driver internal input/output IO Pin#13 Pin#8#10	User Circuit Max +24VDC Pull-up Resistor
I/O signal outpu moveme (encoder type is	ut "Low" when position ent is completed position control mode)	I/O #12 outputs signal pulse while motor rotation. (outputs 12 pulses of signal per 1 motor rotation)		In the event of an alarm, I/O #13 output changes to "Low" (0V).	

■ Electric brake control / position & direction instruction signal



* Contact your vendor or our second factory if you haveany questions about product or requirepost-sales service.

Leader of geared motor. GGM CO.,LTD

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