

**1. Specifications**

Driver Name	<b>SBDM-05A</b>
Input Voltage	DC 12 ~ 24 V $\pm 15\%$
Maximum Allowable Current	2A
Speed Control Range	300~3000 RPM
Insulation Resistance	Measured value of 100M $\Omega$ at DC500V Mega Input Columns
Environment	Ambient temperature 0°C ~ 50°C (Is not freezing)
Speed Settings	External speed setting
Protection	Overload / Incorrect connection -> Motor Stop

**2. Functions.****2-1) Display**

Power	- PW LED will light when you connect the power.
Fault	- FLT LED will light when the driver Incorrect connection, low voltage, overload
ALARM	- ALM LED lights come on when the overload. And the output is low.

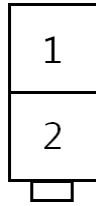
**2-2) U/I**

②Dir. Out	- HIGH signal is output on CW and vice versa. (Open collector signal)
③ALARM Out	- When protective function (over current, misconnection, Motor fault) is acted, LED is turned on and motor is stopped of itself, then alarm is out
④SPEED Out	- Pulse output is proportional to speed. - 60□: 6pulse/rev, 80□, 90□: 18 pulse/rev, SL: 12 pulse/rev.
⑤ALARM RESET	- When OC LED is turned on, Every condition becomes clear pushing the button..
⑥Direction	- Direction of rotation is changed when F/R pin is connected to GND ※ <u>What the direction is changed at a high speed condition is so dangerous.</u> (Please contact to us.)
⑦Brake	- Free if Brk pin is connected to GND and vice versa. - Block of the motor current is flowing.( Dynamic brake) ※ This is an option. If you need this function, please contact to us.
⑧Run/Stop(A)	- R / S terminal GND and contact Run, non-contact Stop. - Model back (A).
⑧Run/Stop(B)	- R / S terminal GND and non-contact Run, contact Stop - Model back (B).
⑨⑩⑪SPEED	- Please keep the voltage level under 5V when using another voltage source. - CW is the direction increasing a speed when using a variable resistance at #9,10,11 of U/I Connector.
Slow Start/Down	- Variable resistor VR1 (variable resistor is attached to the driver board) by adjusting You can adjust the speed of the motor response - Clockwise direction, the reaction speed is faster. (Factory Slowest) ※This feature controls the variable resistor must be reset after power is applied

## 3. Connector Specifications

3-1) Power (Driver : 5557D – 02,

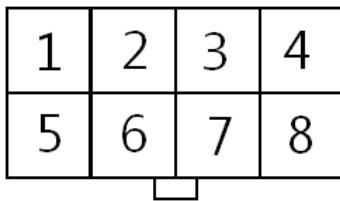
Housing : 5264D – 02)



1	2
DC12 ~ 24V	GND
DC Power Input	

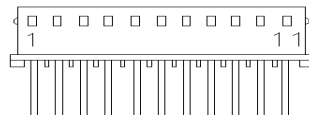
3-2) Motor (Driver : 5557D – 08,

Housing : 5264D – 02)



1	2	3	4
Vcc	U	V	W
Hall power	Motor Power		
5	6	7	8
GND	Hu	Hv	Hw
Hall power	Hall Signal		

3-3) User Interface (Driver : 5267 – 11, Housing : 5264 – 02)



1	2	3	4	5	6	7	8	9	10	11
COM (Black)	Dir Out (Green)	Alarm Out (Purple)	Speed Out (Orange)	Alarm Reset (Gray)	F/R (Brown)	BRK (White)	R/S (pink)	GND (blue)	Speed (yellow)	+5V (red)

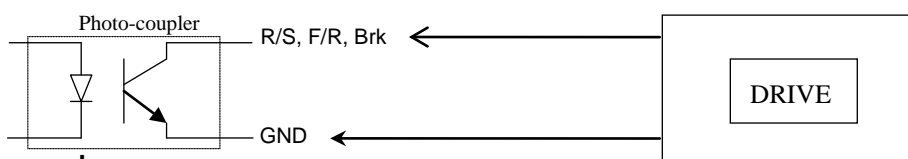
Black(1)+white(7)+pink(8) after the connection speed, turn the variable resistor in a clockwise direction = CCW rotation

※Tip. Black(1)+white(7)+pink(8)+brown(6) after the connection speed, turn the variable resistor clockwise direction = CW rotation

※ SBDM-05 (B) above, if an how the R / S (8) being you can remove the terminal

## 4. Interface with another controller

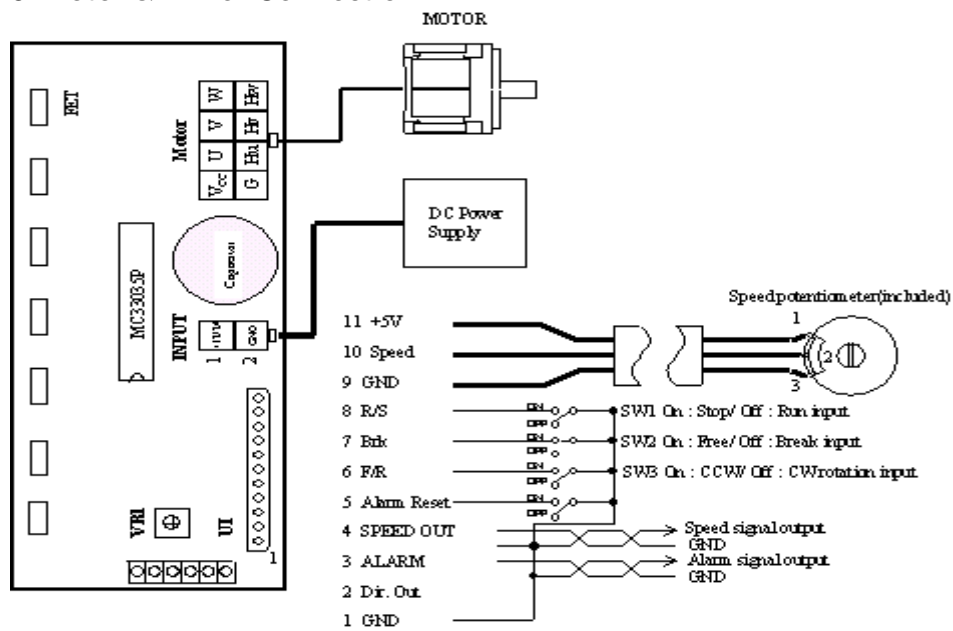
F/R, R/S, Brk



### Speed Command

Put Analog voltage(0~5V) into #10 pin of U/I Connector.

## 5. Motor & Driver Connection



Interface connection

## 6. Dimension

