

PHR type Electric Actuator Specifications

FEATURE

High frequency ON-OFF operating actuator with high speed brushless DC motor.
 This series can be substitute for AD / HD series.

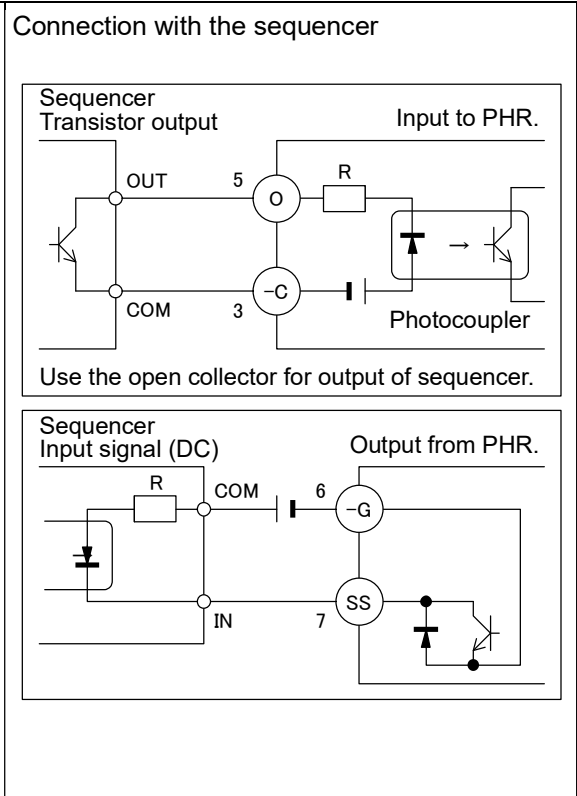
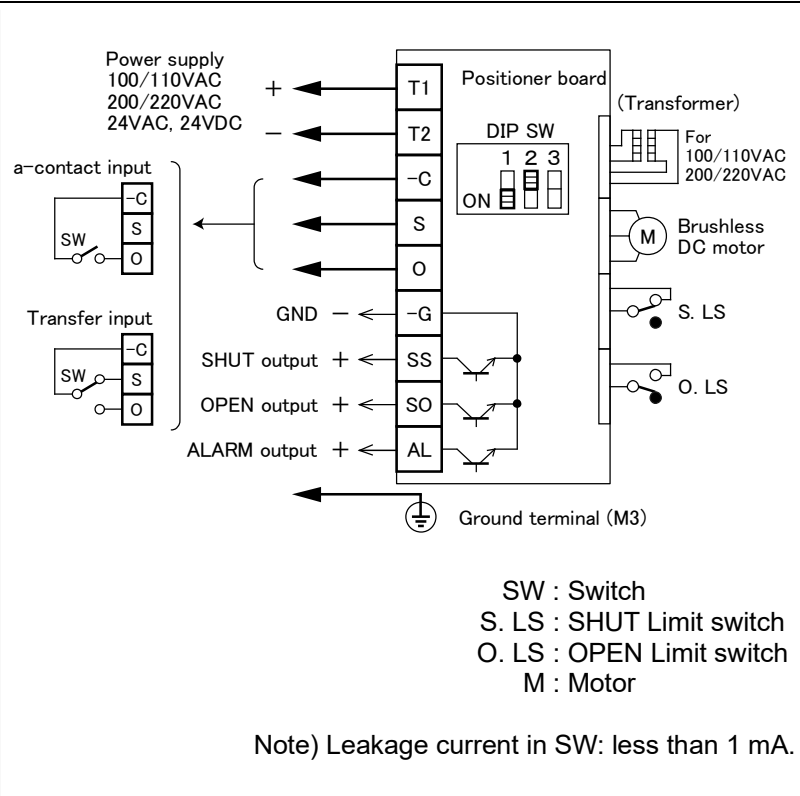
SPECIFICATION

Actuator type (□:Voltage code)	PHR-300-□	PHR-700-□	PHR-02K-□	PHR-06K-□
Voltage	100 / 110 V AC ±10 % 50/60 Hz (Code: 1) 200 / 220 V AC ±10 % 50/60 Hz (Code: 2) 24 V AC ±10 % 50/60 Hz (Code: 3) 24 V DC (Code: 0)			
Rated torque [N·m]	21	50	140	400
Operation time [s]	1.5 to 2.5	AC: 4 to 7 DC: 5 to 7	AC: 13 to 18 DC: 16 to 18	AC: 38 to 50 DC: 45 to 58
Power consumption (Max) [VA]	120			
Motor	Brushless DC motor (PWM control)			
Overload protection	Current limiter			
Method of operation	a-contact input type, with built-in relay [Mode A] [Mode B] Transfer input type, transistor output signal [Mode C]			
Operation *1	Mode A	SW is OFF → SHUT. SW is ON → OPEN. (Standard)		
	Mode B	SW is ON → SHUT. SW is OFF → OPEN. (Option: Q)		
	Mode C	C-S is ON → SHUT. C-O is ON → OPEN. If both OFF / both ON → HOLD. (Option: V)		
Input signal current	6 mA 15 V DC (O-terminal) *Can use a transistor. Leakage current in SW: less than 1 mA			
Output signal rating (Max)	30 mA 50 V DC Transistor output (Open collector)			
Alarm signal	Output when the motor protection circuit operates by the overload. (it returns by power supply OFF or reverse operating signal)			
Duty cycle	100 % (Continuous)			
Ambient temperature	-20 to 55 °C			
Space heater	100 / 110, 200 / 220 V AC: 4 W 24 V AC: 2 W 24 V DC: 1.5 W			
Manual operation	Manual over-ride with clutch. (Direct operation / 06K: Operation by manual shaft.)			
Enclosure	Equivalent to IP65 (IEC 60529)			
Housing material	Aluminum alloy die cast (acrylic resin baking finish)			
Wire connection	Terminal Block: M3, Ground terminal: M3			
Conduct port	2-G1/2 Attachments: Cable gland (for Φ6 to 12 mm cable), plug.			

3 way valve: SHUT / Position⓪, OPEN / PositionⓁ

*1 Change by DIP switch. (Standard → Mode B / Mode C)

WIRING



Setting with DIP SW	Operation			Power supply (AC / DC)	
	Mode A (Standard)	Mode B	Mode C	AC power	DC power
	(factory adjusted)				