Vpro NIPPON VALVE CONTROLS,INC.
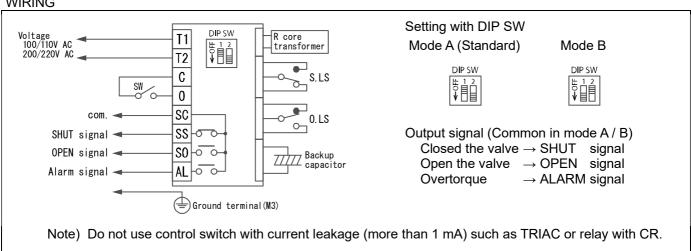
ECR type Electric Actuator Specifications

FEATURE

Ultra high capacity electric double layer capacitor and compact, light weight and economy.
In case of power failure, electric discharge from built-in capacitor lets valve operate.
Capable of high-frequency operation (over 200,000 times), and maintenance-free.

SPECIFICATION

Actuator type (□:Voltage code)	ECR-120-□	ECR-360-□
Voltage	100 / 110 AC V ±5 % 50/60 Hz (Code: 1) 200 / 220 AC V ±5 % 50/60 Hz (Code: 2)	
Rated torque [N·m]	12	36
Operation time [s]	3 to 6	7 to 14
	When power is turned on, operation starts about 30 seconds after capacitor is charged.	
Charging Time [s]	30	90
	When the power is just turned on.	
Power consumption [VA]	In motion: 30 max. Charging: 50 max. Stop: 2.5	
Motor	DC motor	
Overload protection	Timer	
Method of operation	a-contact input type, with built-in relay	
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)	
Power failure	[Mode A] SHUT [Mode B] OPEN	
Built-in power supply	Electric double layer capacitor	
Input signal current	6 mA (O-terminal) Leakage current in SW: less than 1 mA.	
Output signal rating	Resistance load: 0.5 A 125 V AC / 1 A 24 V DC.	
Alarm signal	Output when the motor protection circuit operates by the overload. (it returns by power supply OFF or reverse operating signal)	
Duty cycle	20 % 15 min.	
Ambient temperature	-20 to 50 ºC	
Space heater	Built in to the control board	
Manual operation	Manual shaft	
Enclosure	Equivalent to IP65 (IEC 60529)	
Housing material	Aluminum alloy diecast (acrylic resin baking finish)	
Terminal block	For bare wire 0.2 to 1.5 mm² (AWG 26 to 16) Ground terminal: M3	
Conduct port	2-G1/2 Attachments: Cable gland (for Φ6 to 12 mm cable), plug.	

3 way valve: SHUT / Position-1, OPEN / Position-2.

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

WIRING

Note) Do not use control switch with current leakage (more than 1 mA) such as TRIAC or relay with CR.