

SY5-220
On/Off Floating Point, Non-Spring Return, 220 V



| Technical Data | |
|-------------------------------|--|
| Power Supply | 120 VAC \pm 10%, 50/60 Hz |
| Power Consumption Running | 179 W |
| Transformer Sizing | 207 VA (class 2 power source) |
| Electrical Connection | terminal block |
| Overload Protection | thermally protected 135°C cut-out |
| Operating Range Y | on/off, floating point |
| Angle of Rotation | 90° |
| Torque | 4450 in-lbs [500 Nm] minimum |
| Duty cycle | 30% |
| Direction of Rotation (Motor) | reversible with built-in switch |
| Position Indication | top mounted domed indicator |
| Manual Override | hand wheel |
| Running Time (Motor) | 25 sec |
| Internal Humidity Control | resistive heating element |
| Ambient Humidity | 5 to 100% RH (UL Type 4) |
| Ambient Temperature Range | -22°F to 150°F [-30°C to 65°C] |
| Storage Temperature Range | -40°F to 176°F [-40°C to 80°C] |
| Housing | NEMA 4X, IP66/67, UL Enclosure Type 4 |
| Housing Material | die cast aluminum alloy |
| Gear Train | high alloy steel gear sets, self locking |
| Agency Listings† | ISO, CE, cCSAus |
| Noise Level (Motor) | <45 dB (A) |
| Servicing | maintenance free |
| Quality Standard | ISO 9001 |
| Weight | 50.3 lb [22.8 kg] |
| Auxiliary Switch | 2 x SPDT 3A resistive (0.5A inductive) @ 250 VAC, one set at +10° and one set at 85° |

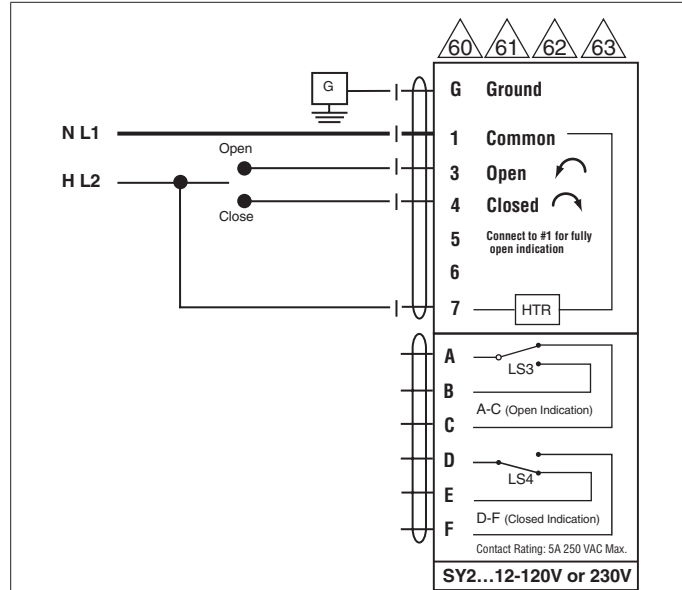
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Wiring Diagrams

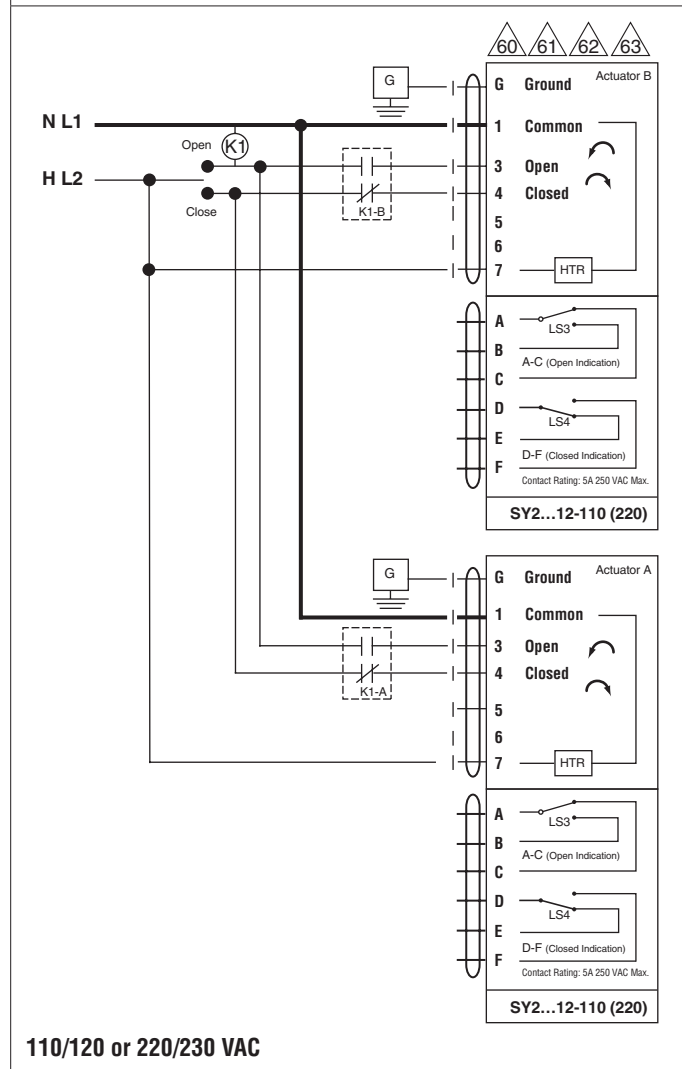
INSTALLATION NOTES

- Do not change sensitivity or dip switch setting with power applied.
- Power supply Common/Neutral and Control Signal “-” wiring to a common is prohibited. Terminals 4 and 6 need to be wired separately.
- Isolation relays must be used in parallel connection of multiple actuators using a common control signal inputs. The relays should be DPDT.
- Isolation relays are required in parallel applications. The reason parallel applications need isolation relays is that the motor uses two sets of windings, one for each direction. When one is energized to turn the actuator in a specific direction a voltage is generated in the other due to the magnetic field created from the first. It's called back EMF. This is not an issue with one actuator because the voltage generated in the second winding isn't connected to anything so there is no flow. On parallel applications without isolation, this EMF voltage energizes the winding it is connected to on the other actuators in the system, the actuators are trying to turn in both directions at once. The EMF voltage is always less than the supply voltage due to the resistance of the windings, so while the actuator still turns in the commanded direction, the drag from the other reduces the torque output and causes overheating.

WARNING! LIVE ELECTRICAL COMPONENTS!
During installation, testing, servicing and troubleshooting of this product, it may be necessary to work with live electrical components. Have a qualified licensed electrician or other individual who has been properly trained in handling live electrical components perform these tasks. Failure to follow all electrical safety precautions when exposed to live electrical components could result in death or serious injury.



110/120V or 220/230V AC/DC



110/120 or 220/230 VAC