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44,88 Ib-in. — Non-Spring Return — Floating — Plenum Cable — Auxiliary Switches

## Specifications:

| Power Supply | DC24-44 | $24 \mathrm{VAC}+20 \%,-15 \%$ at $50 / 60 \mathrm{~Hz}$ |
| :---: | :---: | :---: |
|  | DC24-88 | $24 \mathrm{VAC}+20 \%,-15 \%$ at $50 / 60 \mathrm{~Hz}$ |
|  | Power Consumption Running | 2 VA 1W |
|  | Control Signal | 0 to 10 VDC |
| Input Signal | Floating: | 24 VAC at $50 / 60 \mathrm{~Hz}$ or 24 VDC |
| Mechanical Output | DC24-44 | $44 \mathrm{lb}-\mathrm{in}$ ( 5 Nm ) |
|  | DC24-88 | 88 lb -in (10 Nm) |
| Dual Auxiliary Switch Contact Rating |  | 4A Resistive, 2A Inductive |
| Switch Range | Switch A | 0 to $90^{\circ}$ with $5^{\circ}$ Intervals (Recommended Range Usage 0 to $45^{\circ}$ ) Factory Setting $5^{\circ}$ |
|  | Switch B | 0 to $90^{\circ}$ with $5^{\circ}$ Intervals (Recommended Range Usage 45 to $90^{\circ}$ ) Factory Setting $85^{\circ}$ |
|  | Switching Hysteresis | $2^{\circ}$ |
| Audible Noise Rating |  | 35 dBA at 1 m |
| Rotation Range |  | Nominal Angle of Rotation $90^{\circ}$, mechanically limited to $95^{\circ}$ |
| Rotation Timing | DC24-44 | 90 sec . at 60 Hz ( $108 \mathrm{sec} . \mathrm{at}^{\text {50Hz }}$ ) |
|  | DC24-88 | 125 sec . at 60 Hz (150 sec.at 50Hz) |
| Cycle Life |  | Designed for 60,000 full stroke cycles |
| Electrical Connection |  | 3 ft . (0.9 m) Pre-cabled - AWG 18 - Plenum Rated Cable |
| Mechanical Connection |  | $3 / 8$ to $5 / 8 \mathrm{in}$. (8 to 16 mm ) diameter round shaft, |
|  |  | $1 / 4$ to $1 / 2 \mathrm{in}$. (6 to 12.8 mm ) square shaft |
|  |  | Minimum Shaft Length 1-5/32 (30 mm) |
| Enclosure |  | NEMA 2, IP54 according to EN60529 |
| Manual Override |  | External Push Button |
| Ambient Conditions | Operating | -25 to $130^{\circ} \mathrm{F}\left(-32\right.$ to $55^{\circ} \mathrm{C}$ ); 0 to $95 \% \mathrm{RH}$, non-condensing |
|  | Storage | -40 to $158^{\circ} \mathrm{F}\left(-40\right.$ to $70^{\circ} \mathrm{C}$ ); 0 to $95 \% \mathrm{RH}$, non-condensing |
| Dimensions (L x W x H) |  | (L) 5.4" $\times$ (W) 2.8 " $\times$ (H) 2.4 ( $137 \times 68 \times 60 \mathrm{~mm}$ ) |
| Shipping Weight |  | $1.06 \mathrm{lb}(.48 \mathrm{~kg})$ |
| Equipment Rating |  | Class 2 According to UL, CSA - Class III per EN60730 |
| Agency Compliance | UL873, CSA C22.2 No. 24-93, In accordance with the direct 89/336/EEC - Emissions Stan | et forth by the European Union for Electromagnetic Compatibility (EMC) ds EN 50081-1 - Immunity Standards EN 50082-2 |

## Wiring: (Plenum Cable)



| Cable |  |  | Function |
| :---: | :---: | :---: | :--- |
| No. | Code | Color |  |
| 1 | G | Red (RD) | AC 24 V Supply (SP) |
| 2 | G0 | Black (BK) | Neutral (SN) |
| 6 | Y1 | Violet (VT) | Control Signal Clockwise AC 0 V |
| 7 | Y2 | Orange (OG) | Control Signal AC 0 V Counterclockwise |
| 8 | Y | Grey (GY) | Control signal DC 0..10 V, 0..35 V |
| 9 | U | Pink (PK) | Position indication DC 0...10 V |
| Auxillary Switch - Factory Installed |  |  |  |
| S1 | Q11 | Gray/Red (GY RD) | Switch A Input |
| S2 | Q12 | Gray/Blue (GY BU) | Switch A - N.C. |
| S3 | Q14 | Gray/Pink (GY PK) | Switch A - N.O. |
| S4 | Q21 | Black/Red (BK RD) | Switch B Input |
| S5 | Q22 | Black/Blue (BK BU) | Switch B - N.C. |
| S6 | Q24 | Black/Pink (BK PK) | Switch B - N.O. |

NOTE: WARNING: AII DC-44,88 Series actuators are designed for use only in conjunction with operating controls. Where an operating control failure would result in personal injury and/or loss of property, it is the responsibility of the installer to add safety devices or alarm systems that protect against, and/or warn of, control failure.

To avoid excessive wear or drive time on the motor, use a controller and/or software that provides a time-out function to remove the signal at the end of rotation (stall).
The performance specifications are nominal and conform to acceptable industry standards. For application at conditions beyond these specifications, consult the nearest Bray office. Bray controls shall not be liable for damages resulting from misapplication or misuse of its products.

