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## DCS120-140-(A)— Submittal/Technical Data

160 Ib-in. —120 V — Spring Return — On/Off — Auxillary Switch Option

## Specifications:

Power Supply

Switch Range Switch A Switch B Switching Hysteresis
Spring Return
Rotation Range
Torque
Time: $90^{\circ}$ of Rotation
Enclosure
Manual Override
Ambient Conditions
Electrical Connections
Conduit Connections
Mechanical Connections
Life Cycle
Noise Rating
Dimensions
Weight
Agency Certification
$120 \mathrm{Vac} \pm 10 \%$ at $50 / 60 \mathrm{~Hz}:$, Running: 8 VA ; Holding: 6 VA
AC Rating AC 6 A Resistive, AC 2A FLA, 12 LRA
DC Rating DC 2A
$0^{\circ}$ to $90^{\circ}$ with $5^{\circ}$ intervals; Recommended range usage $0^{\circ}$ to $45^{\circ}$; Factory setting $5^{\circ}$
$0^{\circ}$ to $90^{\circ}$ with $5^{\circ}$ intervals; Recommended range usage $45^{\circ}$ to $90^{\circ}$; Factory setting $85^{\circ}$ $2^{\circ}$
Direction is Selectable with Mounting Position of Actuator
Nominal angle of rotation $90^{\circ}$; Maximum angular rotation $95^{\circ}$
$160 \mathrm{lb} \cdot \mathrm{in}$. ( $18 \mathrm{~N} \cdot \mathrm{~m}$ )
Power On (Running) 90 Seconds
Power Off (Returning) 15 Seconds
NEMA 2, IP54 per EN 60529 - in vertical to horizontal $90^{\circ}$
Hex Head Screw
Standard Operating $\quad-25^{\circ} \mathrm{F}$ to $130^{\circ} \mathrm{F}\left(-32^{\circ} \mathrm{C}\right.$ to $\left.55^{\circ} \mathrm{C}\right) ; 95 \%$ RH Maximum, Noncondensing Storage $\quad-40^{\circ} \mathrm{F}$ to $158^{\circ} \mathrm{F}\left(-40^{\circ} \mathrm{C}\right.$ to $\left.70^{\circ} \mathrm{C}\right) ; 95 \%$ RH Maximum, Noncondensing
36 in. (. .9 m ) Standard Cable with 18 AWG ( 0.75 mm 2 ) Wire Leads
Integral Connectors for 3/8 in. Flex
Round Shafts $3 / 8$-in to 1 -in ( 8 to 25.6 mm )
Square Shafts $1 / 4$-in to $3 / 4$-in ( 6 to 18 mm )
60,000 Full stroke cycles
45 dBA (running)
11-13/16" (L) x 4-3/4" (W) x 2-7/8 (H)
4.85 lb ( 2.2 kg )
UL listed to UL60730 (to replace UL873)
cUL certified to Canadian Standard C22.2 No. 24-93

## Wiring: (Cable)

120 V On/Off with Optional AUX Switches


| Pin | Cable Labeling |  |  | Meaning |
| :---: | :---: | :---: | :---: | :---: |
|  | No. | Color | Abbr. |  |
| Actuators | 1 | red | RD | System potential AC $24 \mathrm{~V} / \mathrm{DC} 24 \ldots 48 \mathrm{~V}$ |
| AC 24 V | 2 | black | BK | System neutral |
| DC 24... 48 V | 6 | purple | VT | Pos. signal AC 0 V / AC $24 \mathrm{~V} / \mathrm{DC} 24 . .48 \mathrm{~V}$, "open" |
|  | 7 | orange | OG | Pos. signal AC 0 V / AC $24 \mathrm{~V} / \mathrm{DC} 24 . .48 \mathrm{~V}$, "close" |
|  | 8 | grey | GY | Pos. signal DC 0... $10 \mathrm{~V}, 0 . .35 \mathrm{~V}$ |
|  | 9 | pink | PK | Position indication DC $0 \ldots .10 \mathrm{~V}$ |
| Actuators | 3 | brown | BN | Phase AC 120/230 V |
| AC 120/230 V | 4 | blue | BU | Neutral conductor |
| Auxiliary switch | S1 | grey/red | GY RD | Switch A input |
|  | S2 | grey/blue | GY BU | Switch A normally-closed contact |
|  | S3 | grey/pink | GY PK | Switch A normally-open contact |
|  | S4 | black/red | BK RD | Switch B input |
|  | S5 | black/blue | BK BU | Switch B normally-closed contact |
|  | S6 | black/pink | BK PK | Switch B normally-open contact |

NOTE: WARNING: All DCS-140 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.

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.

