## **SIEMENS**

Data sheet US2:40DP820F



Non-reversing NEMA contactor, Size 1, Three phase full voltage, Contactor amp rating 27A, 3 wire (NO aux included), 110V 50Hz / 120V 60Hz coil, Non-combination type, Enclosure NEMA type 12, Dust/drip proof for indoors, Extra-wide enclosure

| product brand name  | Class 40   |  |  |
|---|--|--|--|
| design of the product   | Non-reversing contactor  |  |  |
| special product feature   | Gravity dropout contacts; 45 degree, wedge action contacts; Self-rising pressure type control terminals; Encapsulated coil |  |  |
| General technical data  |  |  |  |
| weight [lb]   | 15 lb  |  |  |
| Height x Width x Depth [in]   | 13 × 13 × 5 in   |  |  |
| touch protection against electrical shock                               | NA for enclosed products   |  |  |
| installation altitude [ft] at height above sea level maximum            | 6560 ft  |  |  |
| ambient temperature [°F]  |  |  |  |
| <ul> <li>during storage</li> </ul>                                      | -22 +149 °F  |  |  |
| during operation  | -4 +104 °F   |  |  |
| ambient temperature   |  |  |  |
| <ul> <li>during storage</li> </ul>                                      | -30 +65 °C   |  |  |
| during operation  | -20 +40 °C   |  |  |
| country of origin   | USA  |  |  |
| Horsepower ratings  |  |  |  |
| yielded mechanical performance [hp] for 3-phase AC motor                |  |  |  |
| • at 200/208 V rated value  | 7.5 hp   |  |  |
| • at 220/230 V rated value  | 7.5 hp   |  |  |
| • at 460/480 V rated value  | 10 hp  |  |  |
| • at 575/600 V rated value  | 10 hp  |  |  |
| Contactor   |  |  |  |
| size of contactor   | NEMA controller size 1   |  |  |
| number of NO contacts for main contacts                                 | 3  |  |  |
| operating voltage for main current circuit at AC at 60 Hz maximum       | 600 V  |  |  |
| operational current at AC at 600 V rated value                          | 27 A   |  |  |
| mechanical service life (operating cycles) of the main contacts typical | 10000000   |  |  |
| Auxiliary contact   |  |  |  |
| number of NC contacts at contactor for auxiliary contacts               | 0  |  |  |
| number of NO contacts at contactor for auxiliary contacts               | 1  |  |  |
| number of total auxiliary contacts maximum                              | 8  |  |  |
| contact rating of auxiliary contacts of contactor according to UL       | 10A@600VAC (A600), 5A@600VDC (P600)  |  |  |
| Coil  |  |  |  |
| type of voltage of the control supply voltage                           | AC   |  |  |
| control supply voltage  |  |  |  |
| • at AC at 50 Hz rated value  | 110 V  |  |  |
| at AC at 60 Hz rated value  | 120 V  |  |  |
| holding power at AC minimum   | 8.6 W  |  |  |

| apparent pick-up power of magnet coil at AC  | 218 VA  |  |  |
|--|---|--|--|
| apparent holding power of magnet coil at AC  | 25 VA   |  |  |
| operating range factor control supply voltage rated value of magnet coil   | 0.85 1.1  |  |  |
| percental drop-out voltage of magnet coil related to the input voltage   | 50 %  |  |  |
| ON-delay time  | 19 29 ms  |  |  |
| OFF-delay time   | 10 24 ms  |  |  |
| Enclosure  |   |  |  |
| degree of protection NEMA rating of the enclosure  | NEMA Type 12  |  |  |
| design of the housing  | dustproof and drip-proof for indoor use             |  |  |
| Mounting/wiring  |   |  |  |
| mounting position  | Vertical  |  |  |
| fastening method   | Surface mounting and installation                   |  |  |
| type of electrical connection for supply voltage line-side   | Screw-type terminals                                |  |  |
| tightening torque [lbf-in] for supply  | 35 35 lbf·in  |  |  |
| type of connectable conductor cross-sections at line-side for AWG cables single or multi-stranded                        | 1x (14 2 AWG)                                       |  |  |
| temperature of the conductor for supply maximum permissible  | 75 °C   |  |  |
| material of the conductor for supply   | AL or CU  |  |  |
| type of electrical connection for load-side outgoing feeder  | Screw-type terminals                                |  |  |
| tightening torque [lbf·in] for load-side outgoing feeder   | 35 35 lbf·in  |  |  |
| type of connectable conductor cross-sections for AWG cables for load-side outgoing feeder single or multi-stranded       | 1x (14 2 AWG)                                       |  |  |
| temperature of the conductor for load-side outgoing feeder maximum permissible   | 75 °C   |  |  |
| material of the conductor for load-side outgoing feeder  | AL or CU  |  |  |
| type of electrical connection of magnet coil   | Screw-type terminals                                |  |  |
| tightening torque [lbf·in] at magnet coil  | 5 12 lbf·in   |  |  |
| type of connectable conductor cross-sections of magnet coil for AWG cables single or multi-stranded                      | 2x (16 12 AWG)                                      |  |  |
| temperature of the conductor at magnet coil maximum permissible  | 75 °C   |  |  |
| material of the conductor at magnet coil   | CU  |  |  |
| type of electrical connection at contactor for auxiliary contacts  | Screw-type terminals                                |  |  |
| tightening torque [lbf-in] at contactor for auxiliary contacts   | 10 15 lbf·in  |  |  |
| type of connectable conductor cross-sections at contactor for AWG cables for auxiliary contacts single or multi-stranded | 1x (12 AWG), 2x (16 14 AWG), 2x (18 16 AWG)         |  |  |
| temperature of the conductor at contactor for auxiliary contacts maximum permissible                                     | 75 °C   |  |  |
| material of the conductor at contactor for auxiliary contacts  | CU  |  |  |
| Short-circuit current rating   |   |  |  |
| design of the fuse link for short-circuit protection of the main circuit required  | 10kA@600V (Class H or K); 100kA@600V (Class R or J) |  |  |
| design of the short-circuit trip   | Thermal magnetic circuit breaker                    |  |  |
| maximum short-circuit current breaking capacity (Icu)  |   |  |  |
| • at 240 V   | 14 A  |  |  |
| • at 480 V   | 10 A  |  |  |
|  | 40.4  |  |  |
| ● at 600 V   | 10 A  |  |  |

Industrial Controls - Product Overview (Catalogs, Brochures,...)

www.usa.siemens.com/iccatalog

Industry Mall (Online ordering system)
<a href="https://mall.industry.siemens.com/mall/en/us/Catalog/product?mlfb=US2:40DP820F">https://mall.industry.siemens.com/mall/en/us/Catalog/product?mlfb=US2:40DP820F</a>

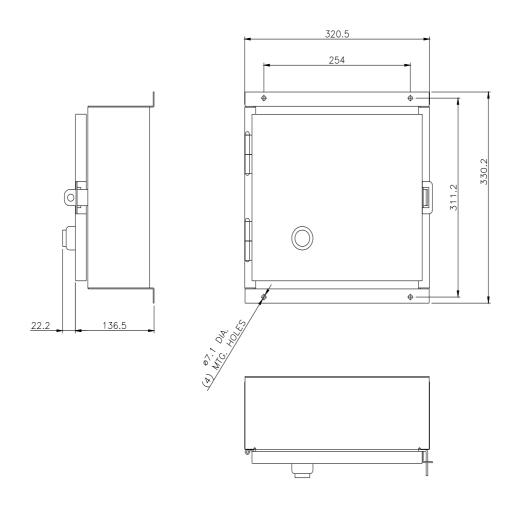
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/US/en/ps/US2:40DP820F

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

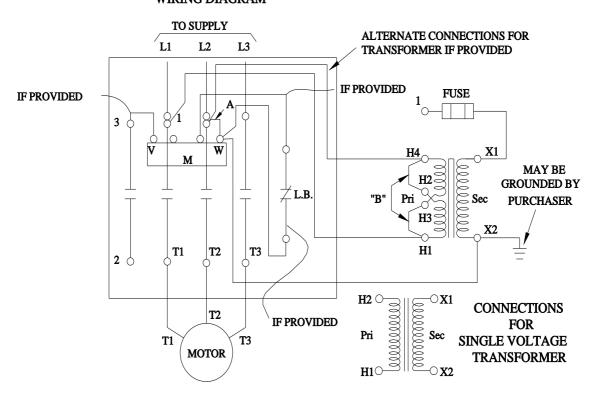
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Certificates/approvals

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## WIRING DIAGRAM



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