



Non-reversing NEMA contactor, Size 2, Single phase full voltage, Contactor amp rating 45A, 3 wire (NO aux included), 208VAC 60Hz coil, Non-combination type, Enclosure NEMA type 1, Indoor general purpose use, Standard width 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 |
| <b>General technical data</b>   |  |
| weight [lb]   | 12 lb  |
| Height x Width x Depth [in]   | 14 × 8 × 7 in  |
| touch protection against electrical shock                               | NA for enclosed products   |
| installation altitude [ft] at height above sea level maximum            | 6560 ft  |
| ambient temperature [°F]  |  |
| • during storage  | -22 ... +149 °F  |
| • during operation  | -4 ... +104 °F   |
| ambient temperature   |  |
| • during storage  | -30 ... +65 °C   |
| • during operation  | -20 ... +40 °C   |
| country of origin   | USA  |
| <b>Horsepower ratings</b>   |  |
| yielded mechanical performance [hp] for single-phase AC motor           |  |
| • at 115 V rated value  | 3 hp   |
| • at 200/208 V rated value  | 7.5 hp   |
| • at 220/230 V rated value  | 7.5 hp   |
| • at 460/480 V rated value  | 0 hp   |
| • at 575/600 V rated value  | 0 hp   |
| <b>Contactors</b>   |  |
| size of contactor   | NEMA controller size 2   |
| number of NO contacts for main contacts                                 | 2  |
| operating voltage for main current circuit at AC at 60 Hz maximum       | 240 V  |
| operational current at AC at 600 V rated value                          | 45 A   |
| mechanical service life (operating cycles) of the main contacts typical | 10000000   |
| <b>Auxiliary contact</b>  |  |
| 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                              | 7  |
| contact rating of auxiliary contacts of contactor according to UL       | 10A@600VAC (A600), 2.5A@300VDC (Q300)  |
| <b>Coil</b>   |  |
| type of voltage of the control supply voltage                           | AC   |
| control supply voltage  |  |
| • at AC at 60 Hz rated value  | 208 ... 208 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  |
| percentual drop-out voltage of magnet coil related to the input voltage  | 50 %  |
| ON-delay time  | 19 ... 29 ms  |
| OFF-delay time   | 10 ... 24 ms  |
| <b>Enclosure</b>   |   |
| degree of protection NEMA rating of the enclosure  | NEMA Type 1   |
| design of the housing  | indoors, usable on a general basis                  |
| <b>Mounting/wiring</b>   |   |
| mounting position  | Vertical  |
| fastening method   | Surface mounting and installation                   |
| type of electrical connection for supply voltage line-side   | Box lug   |
| tightening torque [lbf-in] for supply  | 45 ... 45 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  | Box lug   |
| tightening torque [lbf-in] for load-side outgoing feeder   | 45 ... 45 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  |
| <b>Short-circuit current rating</b>  |   |
| 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) <ul style="list-style-type: none"> <li>• at 240 V</li> <li>• at 480 V</li> <li>• at 600 V</li> </ul> | 14 A<br>10 A<br>10 A                                |
| certificate of suitability   | NEMA ICS 2; UL 508; CSA 22.2, No.14                 |
| <b>Approvals Certificates</b>  |   |
| <b>Test Certificates</b>   |   |



#### Further information

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

[www.usa.siemens.com/iccatalog](http://www.usa.siemens.com/iccatalog)

Industry Mall (Online ordering system)

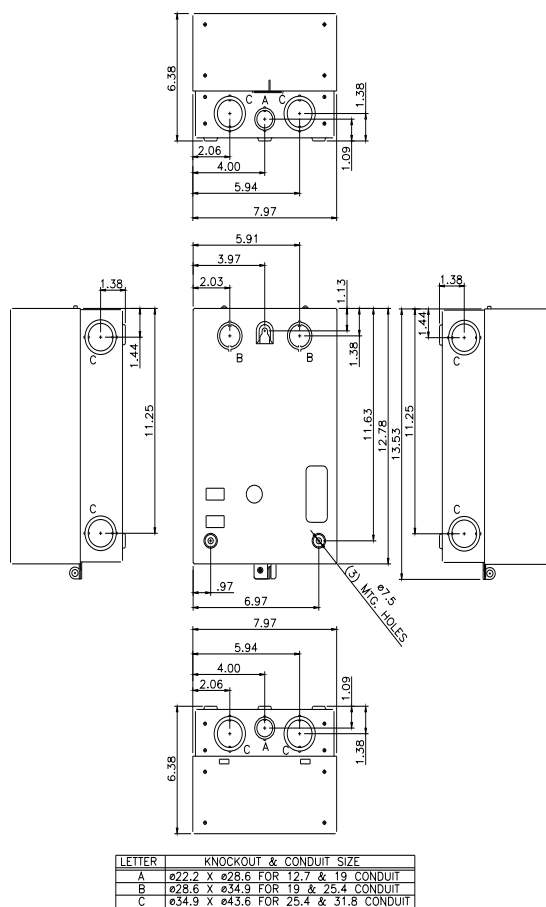
<https://mall.industry.siemens.com/mall/en/us/Catalog/product?mlfb=US2:40FP12BD>

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=US2:40FP12BD&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:40FP12BD&lang=en)

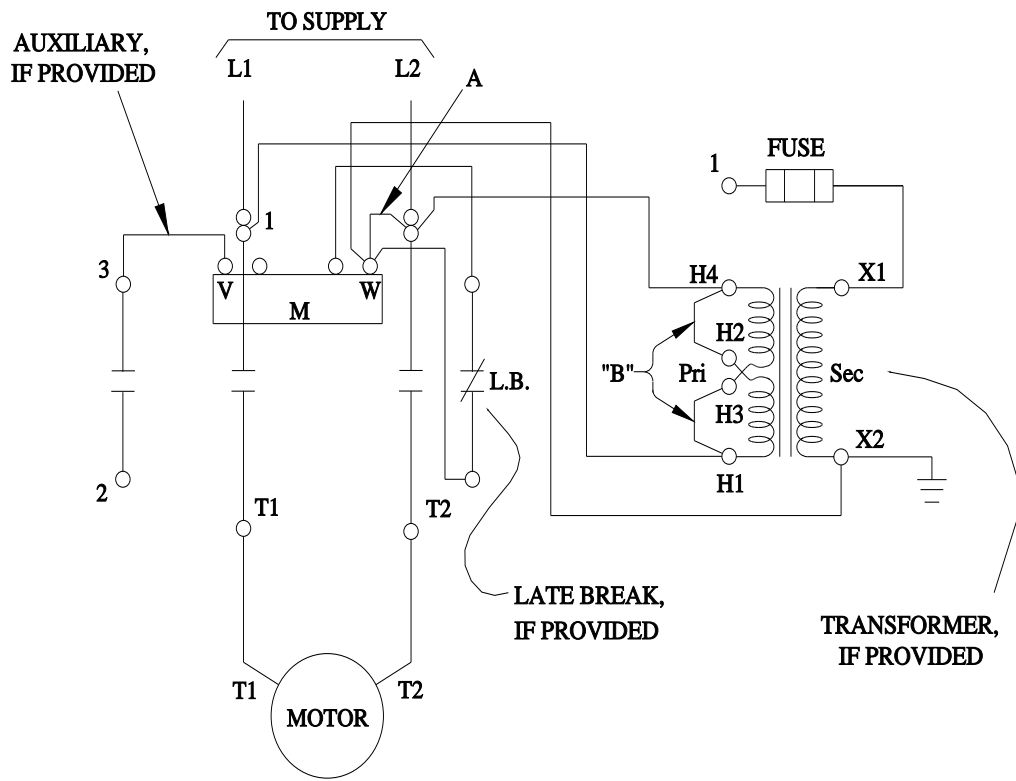
### Certificates/approvals

<https://support.industry.siemens.com/cs/US/en/ps/US2:40FP12BD/certificate>



| LETTER | KNOCKOUT & CONDUIT SIZE               |
|--------|---------------------------------------|
| A      | ø22.2 X ø28.6 FOR 12.7 & 19 CONDUIT   |
| B      | ø28.6 X ø34.9 FOR 19 & 25.4 CONDUIT   |
| C      | ø34.9 X ø43.6 FOR 25.4 & 31.8 CONDUIT |

WIRING DIAGRAM



D29277001

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