



Figure similar

Non-reversing motor starter, Size 1, Single Phase, 2-Pole, Amb. compensate bimetal OLR, Contactor amp rating 27A, 208VAC 60Hz coil, Non-combination type, Enclosure type 1, Indoor general purpose use

product brand name
design of the product

Class 14 & 22
Full-voltage non-reversing motor starter

General technical data

| | |
|--|--------------------------|
| weight [lb] | 8 lb |
| Height x Width x Depth [in] | 11 × 7 × 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] | |
| • 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 |

Horsepower ratings

| | |
|---|------|
| yielded mechanical performance [hp] for single-phase AC motor | |
| • at 115 V rated value | 2 hp |
| • at 200/208 V rated value | 3 hp |
| • at 220/230 V rated value | 3 hp |

Contactor

| | |
|---|------------------------|
| size of contactor | NEMA controller size 1 |
| 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 | 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 60 Hz rated value | 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 |
| Overload relay | |
| product function | Yes |
| • overload protection | Yes |
| • test function | Yes |
| • external reset | Yes |
| reset function | Manual and automatic |
| adjustment range of thermal overload trip unit | 0.85 ... 1.15 |
| number of NC contacts of auxiliary contacts of overload relay | 1 |
| number of NO contacts of auxiliary contacts of overload relay | 0 |
| operational current of auxiliary contacts of overload relay | |
| • at AC at 600 V | 5 A |
| • at DC at 250 V | 5 A |
| contact rating of auxiliary contacts of overload relay according to UL | 5A@600VAC (B600), 5A@250VDC (P300) |
| Enclosure | |
| degree of protection NEMA rating | 1 |
| design of the housing | indoors, usable on a general basis |
| 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 |
| 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 ... 50 lbf-in |
| 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 at 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 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 at 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 |
| type of electrical connection at overload relay for auxiliary contacts | Screw-type terminals |
| tightening torque [lbf-in] at overload relay for auxiliary contacts | 5 ... 12 lbf-in |
| type of connectable conductor cross-sections at overload relay at AWG cables for auxiliary contacts single or multi-stranded | 2x (16 ... 12 AWG) |
| temperature of the conductor at overload relay for auxiliary contacts maximum permissible | 75 °C |
| material of the conductor at overload relay 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
- at 480 V
- at 600 V

certificate of suitability

14 kA
10 kA
10 kA
NEMA ICS 2; UL 508; CSA 22.2, No.14

Further information

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

www.usa.siemens.com/iccatalog

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/us/Catalog/product?mlfb=US2:14DP12BD81>

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

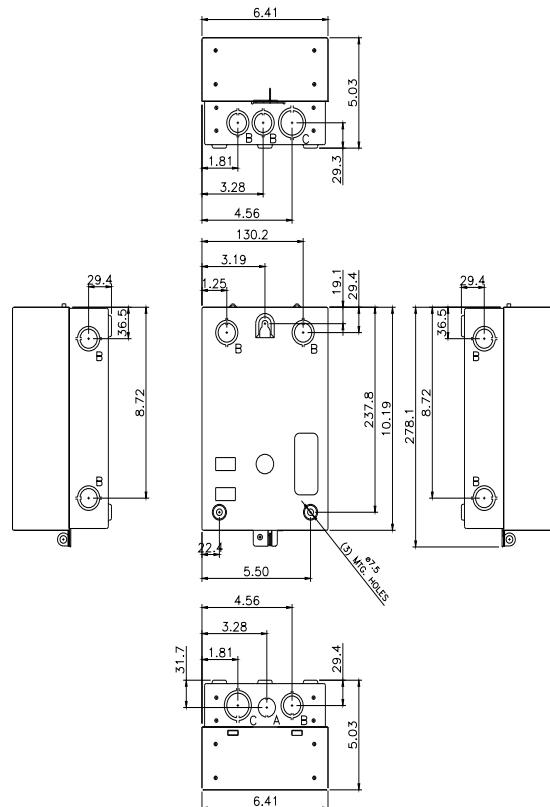
<https://support.industry.siemens.com/cs/US/en/ps/US2:14DP12BD81>

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

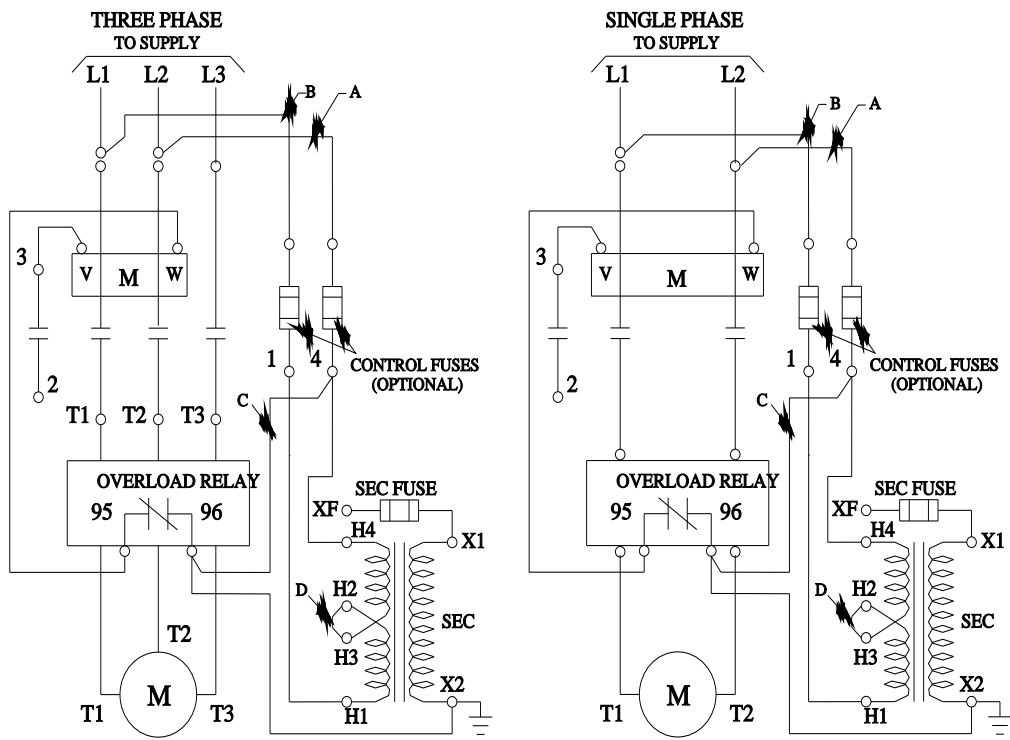
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:14DP12BD81&lang=en

Certificates/approvals

<https://support.industry.siemens.com/cs/US/en/ps/US2:14DP12BD81/certificate>



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



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