



Figure similar

Non-reversing motor starter, Size 3, Three phase full voltage, Solid-state overload relay, OLR amp range 25-100A, Combination type, 100A non-fusible disconnect, Enclosure NEMA type 4/12, Water/dust tight for outdoors, Extra-wide enclosure

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| product brand name | Class 17 & 25 |
| design of the product | Full-voltage non-reversing motor starter with non-fusible disconnect |
| special product feature | ESP200 overload relay |
| General technical data | |
| Height x Width x Depth [in] | 36 × 24 × 8 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 |
| Horsepower ratings | |
| yielded mechanical performance [hp] for 3-phase AC motor | |
| • at 200/208 V rated value | 20 hp |
| • at 220/230 V rated value | 25 hp |
| • at 460/480 V rated value | 50 hp |
| • at 575/600 V rated value | 50 hp |
| Contactors | |
| size of contactor | NEMA controller size 3 |
| number of NO contacts for main contacts | 3 |
| operational current at AC at 600 V rated value | 90 A |
| mechanical service life (switching cycles) of the main contacts typical | 5000000 |
| 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 | 7 |
| 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 | 550 V |
| • at AC at 60 Hz rated value | 575 ... 600 V |
| holding power at AC minimum | 14 W |
| apparent pick-up power of magnet coil at AC | 310 VA |

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| apparent holding power of magnet coil at AC | 26 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 | 26 ... 41 ms |
| OFF-delay time | 14 ... 19 ms |
| Overload relay | |
| product function | |
| • overload protection | Yes |
| • phase failure detection | Yes |
| • asymmetry detection | Yes |
| • ground fault detection | Yes |
| • test function | Yes |
| • external reset | Yes |
| reset function | Manual, automatic and remote |
| trip class | CLASS 5 / 10 / 20 (factory set) / 30 |
| adjustable current response value current of the current-dependent overload release | 25 ... 100 A |
| make time with automatic start after power failure maximum | 3 s |
| relative repeat accuracy | 1 % |
| product feature protective coating on printed-circuit board | Yes |
| number of NC contacts of auxiliary contacts of overload relay | 1 |
| number of NO contacts of auxiliary contacts of overload relay | 1 |
| operational current of auxiliary contacts of overload relay | |
| • at AC at 600 V | 5 A |
| • at DC at 250 V | 1 A |
| contact rating of auxiliary contacts of overload relay according to UL | 5A@600VAC (B600), 1A@250VDC (R300) |
| insulation voltage (Ui) | |
| • with single-phase operation at AC rated value | 600 V |
| • with multi-phase operation at AC rated value | 300 V |
| Disconnect Switch | |
| response value of switch disconnecter | 100A / 600V |
| design of fuse holder | non-fusible |
| operating class of the fuse link | non-fusible |
| Enclosure | |
| degree of protection NEMA rating | 4, 12 |
| design of the housing | Extra-wide |
| design of the housing | dustproof, waterproof & weatherproof |
| Mounting/wiring | |
| 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 | 120 ... 120 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 | Box lug |
| tightening torque [lbf-in] for load-side outgoing feeder | 120 ... 120 lbf-in |
| type of connectable conductor cross-sections at AWG cables for load-side outgoing feeder single or multi-stranded | 1x (14 ... 2/0 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 | 2x (16 ... 12 AWG) |

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| coil at AWG cables single or multi-stranded | |
| 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 | 7 ... 10 lbf·in |
| type of connectable conductor cross-sections at overload relay at AWG cables for auxiliary contacts single or multi-stranded | 2x (20 ... 14 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

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| 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) |
| certificate of suitability | 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=US2:17HUG82NE>

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

<https://support.industry.siemens.com/cs/US/en/ps/US2:17HUG82NE>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:17HUG82NE&lang=en

Certificates/approvals

<https://support.industry.siemens.com/cs/US/en/ps/US2:17HUG82NE/certificate>

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