SIEMENS

Data sheet

US2:18DUD82WJ



Non-reversing motor starter, Size 1, Three phase full voltage, Solid-state overload relay, OLR amp range 5.5-22A, 24VAC 50-60Hz coil, Combination type, 25A circuit breaker, Encl NEMA type 4X 304 S-Steel, Water/dust tight noncorrosive, Extrawide enclosure

| product brand name | Class 18 & 26 |
|---|---|
| design of the product | Full-voltage non-reversing motor starter with motor circuit protector |
| special product feature | ESP200 overload relay |
| General technical data | |
| Height x Width x Depth [in] | 24 × 20 × 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 | 3 hp |
| • at 220/230 V rated value | 3 hp |
| • at 460/480 V rated value | 7.5 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 | 1000000 |
| 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 | 24 V |
| • at AC at 60 Hz rated value | 24 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 | 0.85 1.1 |

| magnet coil | 50 % |
|---|--|
| percental drop-out voltage of magnet coil related to the input voltage | 00 /0 |
| ON-delay time | 19 29 ms |
| OFF-delay time | 10 24 ms |
| Overload relay | |
| 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 | 5.5 22 A |
| make time with automatic start after power failure maximum | 3 s |
| relative repeat accuracy | 1 % |
| 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) | 0001/ |
| with single-phase operation at AC rated value | 600 V |
| with multi-phase operation at AC rated value | 300 V |
| Enclosure | |
| degree of protection NEMA rating | 4X, 304 stainless steel |
| design of the housing | dustproof, waterproof & resistant to corrosion |
| Circuit Breaker | |
| type of the motor protection | Motor circuit protector (magnetic trip only) |
| operational current of motor circuit breaker rated value | 25 A |
| adjustable current response value current of instantaneous short-circuit trip unit | 55 180 A |
| Mounting/wiring | |
| mounting position | Vertical |
| fastening method | Surface mounting and installation |
| type of electrical connection for supply voltage line-side | |
| type of connectable conductor cross-sections at line-side for AWG cables single or multi-stranded | 1x (14 AWG 10 AWG) or 1x (12 AWG 10 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 type of connectable conductor cross-sections for AWG cables for load-side outgoing feeder single or multi-stranded | 35 35 lbf-in 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 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 |
| type of electrical connection at overload relay for auxiliary | Screw-type terminals |
| contacts | |
| tightening torque [lbf·in] at overload relay for auxiliary contacts | 7 10 lbf·in |

| 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 short-circuit trip | Instantaneous trip circuit breaker |
| maximum short-circuit current breaking capacity (Icu) | |
| • at 240 V | 100 kA |
| • at 480 V | 100 kA |
| • at 600 V | 25 kA |
| 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)

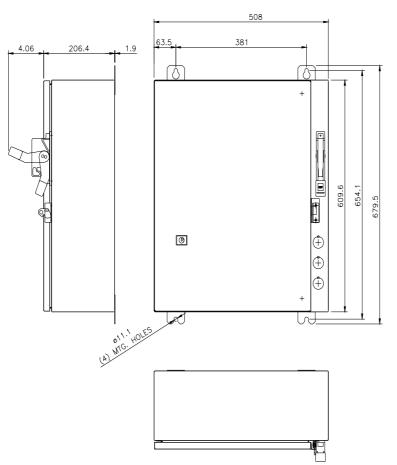
https://mall.industry.siemens.com/mall/en/us/Catalog/product?mlfb=US2:18DUD82WJ

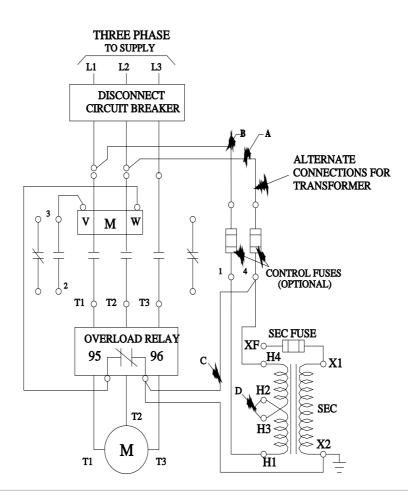
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/US/en/ps/US2:18DUD82WJ

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:18DUD82WJ&lang=en

Certificates/approvals

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