## SIEMENS



Reversing motor starter, Size 1 3/4, Three phase full voltage, Solid-state overload relay, OLR amp range $10-40 \mathrm{~A}, 110 \mathrm{~V} 50 \mathrm{~Hz} / 120 \mathrm{~V} 60 \mathrm{~Hz}$ coil, Non-combination type, Enclosure type 7/9/3/4, Hazardous locations, Standard width enclosure

Figure similar

| product brand name | Class 22 |
| :---: | :---: |
| design of the product | Full-voltage reversing motor starter |
| special product feature | ESP200 overload relay; Half-size starter |
| General technical data |  |
| weight [lb] | 141 lb |
| Height x Width $\times$ Depth [in] | $28.69 \times 17.75 \times 11.75$ in |
| touch protection against electrical shock | NA for enclosed products |
| installation altitude [ft] at height above sea level maximum | 6560 ft |
| ambient temperature [ ${ }^{\circ} \mathrm{F}$ ] |  |
| - during storage | $-22 \ldots+149{ }^{\circ} \mathrm{F}$ |
| - during operation | $-4 \ldots+104{ }^{\circ} \mathrm{F}$ |
| ambient temperature |  |
| - during storage | $-30 \ldots+65^{\circ} \mathrm{C}$ |
| - during operation | $-20 \ldots+40^{\circ} \mathrm{C}$ |
| country of origin | USA |
| Horsepower ratings |  |
| yielded mechanical performance [hp] for 3-phase AC motor |  |
| - at 200/208 V rated value | 10 hp |
| - at 220/230 V rated value | 10 hp |
| - at 460/480 V rated value | 15 hp |
| - at 575/600 V rated value | 15 hp |
| Contactor |  |
| size of contactor | Controller half size $13 / 4$ |
| 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 | 40 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 | $19 . . .29 \mathrm{~ms}$ |
| OFF-delay time | $10 . . .24 \mathrm{~ms}$ |
| Overload relay |  |
| product function <br> - overload protection <br> - phase failure detection <br> - asymmetry detection <br> - ground fault detection <br> - test function <br> - external reset | Yes <br> Yes <br> Yes <br> Yes <br> Yes <br> Yes |
| reset function | Manual, automatic and remote |
| trip class | CLASS 5 / 10 / 20 (factory set) / 30 |
| adjustable current response value current of the currentdependent overload release | 10... 40 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 <br> - at AC at 600 V <br> - at DC at 250 V | $\begin{aligned} & 5 \mathrm{~A} \\ & 1 \mathrm{~A} \end{aligned}$ |
| contact rating of auxiliary contacts of overload relay according to UL | 5A@600VAC (B600), 1A@250VDC (R300) |
| insulation voltage (Ui) <br> - with single-phase operation at AC rated value <br> - with multi-phase operation at AC rated value | $\begin{aligned} & 600 \mathrm{~V} \\ & 300 \mathrm{~V} \end{aligned}$ |
| Enclosure |  |
| degree of protection NEMA rating | 3, 4, 7, 9 |
| design of the housing | extreme conditions indoor \& outdoor Class I Div. 1\&2 Groups C\&D, Class II Groups E, F\&G, Class III |
| 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 | $45 . .45 \mathrm{lbf} \cdot \mathrm{in}$ |
| type of connectable conductor cross-sections at line-side at AWG cables single or multi-stranded | 1x (14 ... 2 AWG) |
| temperature of the conductor for supply maximum permissible | $75^{\circ} \mathrm{C}$ |
| 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 | $45 . . .45 \mathrm{lbf} \cdot \mathrm{in}$ |
| type of connectable conductor cross-sections at 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 | $75^{\circ} \mathrm{C}$ |
| material of the conductor for load-side outgoing feeder | AL or CU |
| type of electrical connection of magnet coil | Screw-type terminals |
| tightening torque [lbff.in] at magnet coil | 5 ... $12 \mathrm{lbf} \cdot \mathrm{in}$ |
| 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 | $75^{\circ} \mathrm{C}$ |
| 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 | $10 . .15 \mathrm{lbf} \cdot \mathrm{in}$ |
| type of connectable conductor cross-sections at contactor at AWG cables for auxiliary contacts single or multi-stranded | 1x (12 AWG), $2 \times$ ( $16 \ldots 14$ AWG), $2 \times$ ( $18 \ldots 16$ AWG) |


| temperature of the conductor at contactor for auxiliary contacts maximum permissible | $75^{\circ} \mathrm{C}$ |
| :---: | :---: |
| 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 [lbffin] at overload relay for auxiliary contacts | 7 ... $10 \mathrm{lbf} \cdot \mathrm{in}$ |
| type of connectable conductor cross-sections at overload relay at AWG cables for auxiliary contacts single or multi-stranded | 2 x (20 ... 14 AWG) |
| temperature of the conductor at overload relay for auxiliary contacts maximum permissible | $75^{\circ} \mathrm{C}$ |
| 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 | none |
| design of the short-circuit trip | none |
| maximum short-circuit current breaking capacity (Icu) |  |
| - at 240 V | 0 kA |
| - at 480 V | 0 kA |
| - at 600 V | 0 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=US2:22EUE32HF
Service\&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/US/en/ps/US2:22EUE32HF
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
http://www.automation.siemens.com/bilddb/cax de.aspx?mlfb=US2:22EUE32HF\&lang=en
Certificates/approvals
https://support.industry.siemens.com/cs/US/en/ps/US2:22EUE32HF/certificate



