

Reversing motor starter Size 4 Three phase full voltage Solid-state overload relay OLRelay amp range 50-200A 220-240/440-480VAC 60HZ coil Non-combination type Enclosure type (open)

|                         |                         |
|-------------------------|-------------------------|
| Product brand name      | Class 22                |
| Design of the product   | Reversing motor starter |
| Special product feature | ESP200 overload relay   |

### General technical data

|  |                         |
|--|-------------------------|
| Weight [lb]  | 19 lb                   |
| Height x Width x Depth [in]  | 11.91 × 12.75 × 6.22 in |
| Protection against electrical shock  | Not finger-safe         |
| Installation altitude [ft] at height above sea level maximum   | 6560 ft                 |
| Ambient temperature [°F]   |                         |
| <ul style="list-style-type: none"> <li>during storage maximum</li> <li>during operation maximum</li> </ul> | 149 °F<br>104 °F        |
| Ambient temperature  |                         |
| <ul style="list-style-type: none"> <li>during storage maximum</li> <li>during operation maximum</li> </ul> | 65 °C<br>40 °C          |
| Country of origin  | USA                     |

### Horsepower ratings

|  |                                    |
|--|------------------------------------|
| Yielded mechanical performance [hp] for three-phase AC motor   |                                    |
| <ul style="list-style-type: none"> <li>at 200/208 V rated value</li> <li>at 220/230 V rated value</li> <li>at 460/480 V rated value</li> <li>at 575/600 V rated value</li> </ul> | 40 hp<br>50 hp<br>100 hp<br>100 hp |

### Contactors

|   |                        |
|---|------------------------|
| Size of contactor   | NEMA controller size 4 |
| Number of NO contacts for main contacts                                 | 3                      |
| Operating voltage for main current circuit at AC at 60 Hz maximum       | 600 V                  |
| Operating current at AC at 600 V rated value                            | 135 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 60 Hz rated value   | 220 ... 480 V |
| Holding power at AC minimum  | 22 W          |
| Apparent pick-up power of magnet coil at AC                              | 510 V·A       |
| Apparent holding power of magnet coil at AC                              | 51 V·A        |
| 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 %          |
| Switch-on delay time   | 18 ... 34 ms  |
| Off-delay time   | 10 ... 12 ms  |

### Overload relay

|  |                                      |
|--|--------------------------------------|
| Product function   |                                      |
| • Overload protection  | Yes                                  |
| • Phase failure detection  | Yes                                  |
| • Phase unbalance  | Yes                                  |
| • Ground fault detection   | Yes                                  |
| • Test function  | Yes                                  |
| • External reset   | No                                   |
| Reset function   | Manual, automatic and remote         |
| Trip class   | Class 5 / 10 / 20 (factory set) / 30 |
| Adjustable pick-up value current of the current-dependent overload release | 50 ... 200 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                                    |
| Operating 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  |                                    |
| <ul style="list-style-type: none"> <li>• with single-phase operation at AC rated value</li> <li>• with multi-phase operation at AC rated value</li> </ul> | 600 V<br>300 V                     |

### Enclosure

|   |                            |
|---|----------------------------|
| Degree of protection NEMA rating of the enclosure | Open device (no enclosure) |
| Design of the housing                             | NA                         |

### Mounting/wiring

|   |   |
|---|---|
| Mounting position   | Vertical  |
| Mounting type   | Surface mounting and installation                   |
| Type of electrical connection for supply voltage line-side  | Box lug   |
| Tightening torque [lbf·in] for supply   | 200 ... 200 lbf·in                                  |
| Type of connectable conductor cross-sections at line-side at AWG conductors single or multi-stranded                        | 1x (6 AWG ... 250 MCM)                              |
| Temperature of the conductor for supply maximum permissible   | 75 °C   |
| Material of the conductor for supply  | CU  |
| Type of electrical connection for load-side outgoing feeder   | Box lug   |
| Tightening torque [lbf·in] for load-side outgoing feeder  | 200 ... 200 lbf·in                                  |
| Type of connectable conductor cross-sections at AWG conductors for load-side outgoing feeder single or multi-stranded       | 1x (6 AWG ... 250 MCM)                              |
| Temperature of the conductor for load-side outgoing feeder maximum permissible  | 75 °C   |
| Material of the conductor for load-side outgoing feeder   | 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 at AWG conductors 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 conductors 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 conductors 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

|  |   |
|--|---|
| 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> | 10 kA<br>10 kA<br>10 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](http://www.usa.siemens.com/iccatalog)

**Industry Mall (Online ordering system)**

<https://mall.industry.siemens.com/mall/en/us/Catalog/product?mfb=US2:22JUH32AC>

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

<https://support.industry.siemens.com/cs/US/en/ps/US2:22JUH32AC>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mfb=US2:22JUH32AC&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mfb=US2:22JUH32AC&lang=en)

**Certificates/approvals**

<https://support.industry.siemens.com/cs/US/en/ps/US2:22JUH32AC/certificate>



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