



Figure similar

Reversing motor starter Size 1 Three phase full voltage Solid-state overload relay OLRelay amp range 0.25-1A 110VAC 50HZ / 120VAC 60HZ coil Non-combination type Enclosure type (open)

|                                                                         |                                      |
|-------------------------------------------------------------------------|--------------------------------------|
| product brand name                                                      | Class 22                             |
| design of the product                                                   | Full-voltage reversing motor starter |
| special product feature                                                 | ESP200 overload relay                |
| <b>General technical data</b>                                           |                                      |
| weight [lb]                                                             | 6 lb                                 |
| Height x Width x Depth [in]                                             | 7.69 × 10.5 × 3.92 in                |
| touch protection against electrical shock                               | Not finger-safe                      |
| 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                                                       | Mexico                               |
| <b>Horsepower ratings</b>                                               |                                      |
| yielded mechanical performance [hp] for 3-phase AC motor                |                                      |
| • at 200/208 V rated value                                              | 0.17 hp                              |
| • at 220/230 V rated value                                              | 0.17 hp                              |
| • at 460/480 V rated value                                              | 0.33 hp                              |
| • at 575/600 V rated value                                              | 0.5 hp                               |
| <b>Contactors</b>                                                       |                                      |
| 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 (switching cycles) of the main contacts typical | 10000000                             |
| <b>Auxiliary contact</b>                                                |                                      |
| 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)  |
| <b>Coil</b>                                                             |                                      |

|                                                                                                                   |                                      |
|-------------------------------------------------------------------------------------------------------------------|--------------------------------------|
| 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 V·A                              |
| apparent holding power of magnet coil at AC                                                                       | 25 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                                                                                              | 19 ... 29 ms                         |
| OFF delay time                                                                                                    | 10 ... 24 ms                         |
| <b>Overload relay</b>                                                                                             |                                      |
| product function                                                                                                  |                                      |
| • overload protection                                                                                             | Yes                                  |
| • phase failure detection                                                                                         | Yes                                  |
| • asymmetry detection                                                                                             | 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 current response value current of the current-dependent overload release                               | 0.25 ... 1 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                                                                                                |                                      |
| • with single-phase operation at AC rated value                                                                   | 600 V                                |
| • with multi-phase operation at AC rated value                                                                    | 300 V                                |
| <b>Enclosure</b>                                                                                                  |                                      |
| degree of protection NEMA rating                                                                                  | Open device (no enclosure)           |
| design of the housing                                                                                             | NA                                   |
| <b>Mounting/wiring</b>                                                                                            |                                      |
| 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                     |
| 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 °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                                                          | 20 ... 24 lbf·in                     |
| type of connectable conductor cross-sections at AWG cables for load-side outgoing feeder single or multi-stranded | 2x (14 ... 10 AWG)                   |
| 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 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                                                          | 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

|                                                                                   |                                                     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------|
| 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                    |
| breaking capacity maximum short-circuit current (I <sub>cu</sub> )                |                                                     |
| • at 240 V                                                                        | 14 kA                                               |
| • at 480 V                                                                        | 10 kA                                               |
| • at 600 V                                                                        | 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?mlfb=US2:22DUA32AF>

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

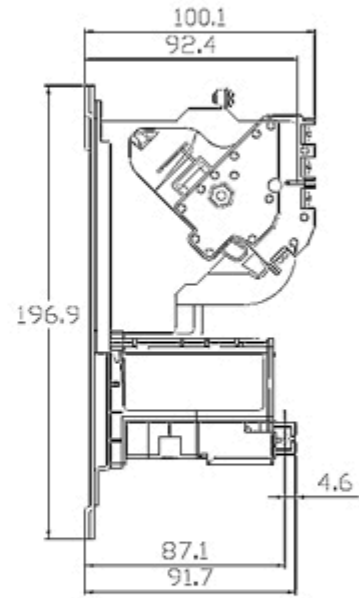
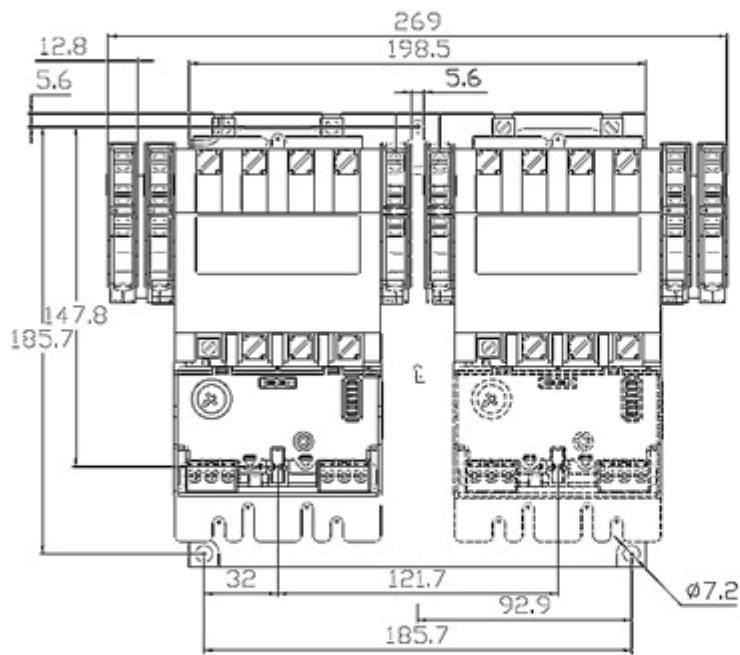
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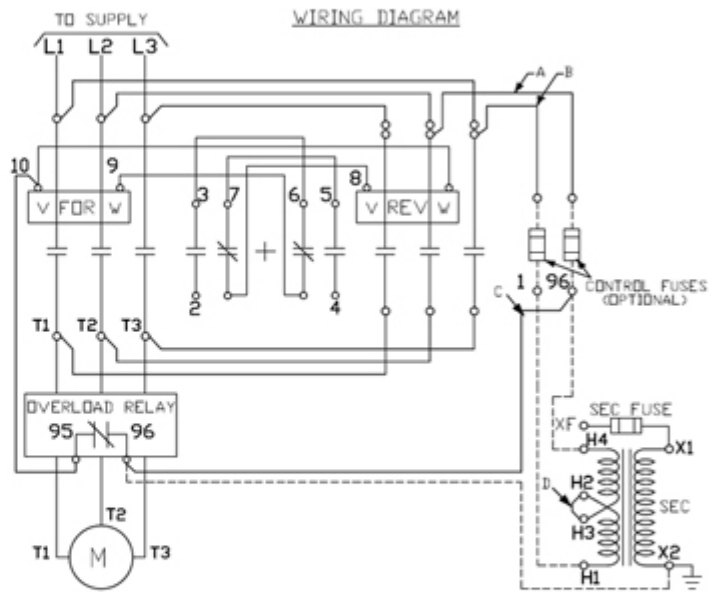
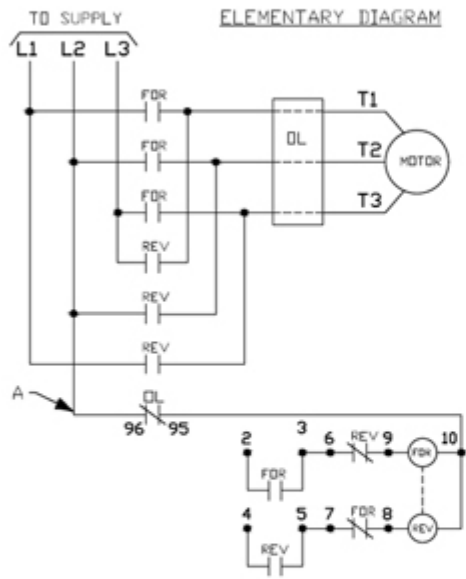
**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)**

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=US2:22DUA32AF&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:22DUA32AF&lang=en)

**Certificates/approvals**

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