



Figure similar

Pump control panel, Size 3, Three phase full voltage, Solid-state overload relay, OLR amp range 25-100A, 220-240/440-480VAC 60Hz coil, Standard type contactor, 100A fusible disconnect, 100A/600V fuse clip, HOA Sel Sw. <(>&<)> Start P.B., Enclosure NEMA type 3/3R, Weather proof outdoor use

|                                                                         |                                                 |
|-------------------------------------------------------------------------|-------------------------------------------------|
| product brand name                                                      | Class 87                                        |
| design of the product                                                   | Pump control panel with fused disconnect switch |
| special product feature                                                 | ESP200 overload relay; Dual voltage coil        |
| <b>General technical data</b>                                           |                                                 |
| weight [lb]                                                             | 81 lb                                           |
| Height x Width x Depth [in]                                             | 41 × 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                                  |
| country of origin                                                       | USA                                             |
| <b>Horsepower ratings</b>                                               |                                                 |
| yielded mechanical performance [hp] for 3-phase AC motor                |                                                 |
| • at 200/208 V rated value                                              | 0 hp                                            |
| • at 220/230 V rated value                                              | 0 hp                                            |
| • at 460/480 V rated value                                              | 50 hp                                           |
| • at 575/600 V rated value                                              | 50 hp                                           |
| <b>Contactor</b>                                                        |                                                 |
| size of contactor                                                       | NEMA controller size 3                          |
| 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                          | 90 A                                            |
| mechanical service life (switching cycles) of the main contacts typical | 5000000                                         |
| <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                              | 7                                               |
| 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 DC rated value                                                                              | 0 ... 0 V                             |
| • at AC at 50 Hz rated value                                                                     | 0 ... 0 V                             |
| • at AC at 60 Hz rated value                                                                     | 220 ... 480 V                         |
| holding power at AC minimum                                                                      | 14 W                                  |
| apparent pick-up power of magnet coil at AC                                                      | 310 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 %                                  |
| ON-delay time                                                                                    | 26 ... 41 ms                          |
| OFF-delay time                                                                                   | 14 ... 19 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                                                                                 | Yes                                   |
| reset function                                                                                   | Manual, automatic and remote          |
| trip class                                                                                       | Class 5 / 10 (factory set) / 20 / 30  |
| adjustable current response value current of the current-dependent overload release              | 25 ... 100 A                          |
| tripping time at phase-loss 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>Disconnect Switch</b>                                                                         |                                       |
| response value of switch disconnecter                                                            | 100A / 600V                           |
| design of fuse holder                                                                            | Class H fuse clips                    |
| operating class of the fuse link                                                                 | Class H, J (convertible), K and R     |
| <b>Enclosure</b>                                                                                 |                                       |
| degree of protection NEMA rating of the enclosure                                                | NEMA 3/3R                             |
| design of the housing                                                                            | Weather proof for outdoor use         |
| <b>Standard Control Devices</b>                                                                  |                                       |
| product component Hand-Off-Auto selector switch                                                  | Yes                                   |
| type of Hand-Off-Auto selector switch                                                            | 30mm metal housing with chrome finish |
| product component start push button                                                              | Yes                                   |
| type of start push button                                                                        | 30mm metal housing with chrome finish |
| <b>Mounting/wiring</b>                                                                           |                                       |
| 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                    |
| type of connectable conductor cross-sections at line-side at AWG cables single or multi-stranded | 1x (14 ... 1/0 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                                                                  | 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 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 at contactor 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                                                  |
| <b>Short-circuit current rating</b>                                                                                          |                                                     |
| 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                                  |

#### 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=US2:87HUG6FC>

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

<https://support.industry.siemens.com/cs/US/en/ps/US2:87HUG6FC>

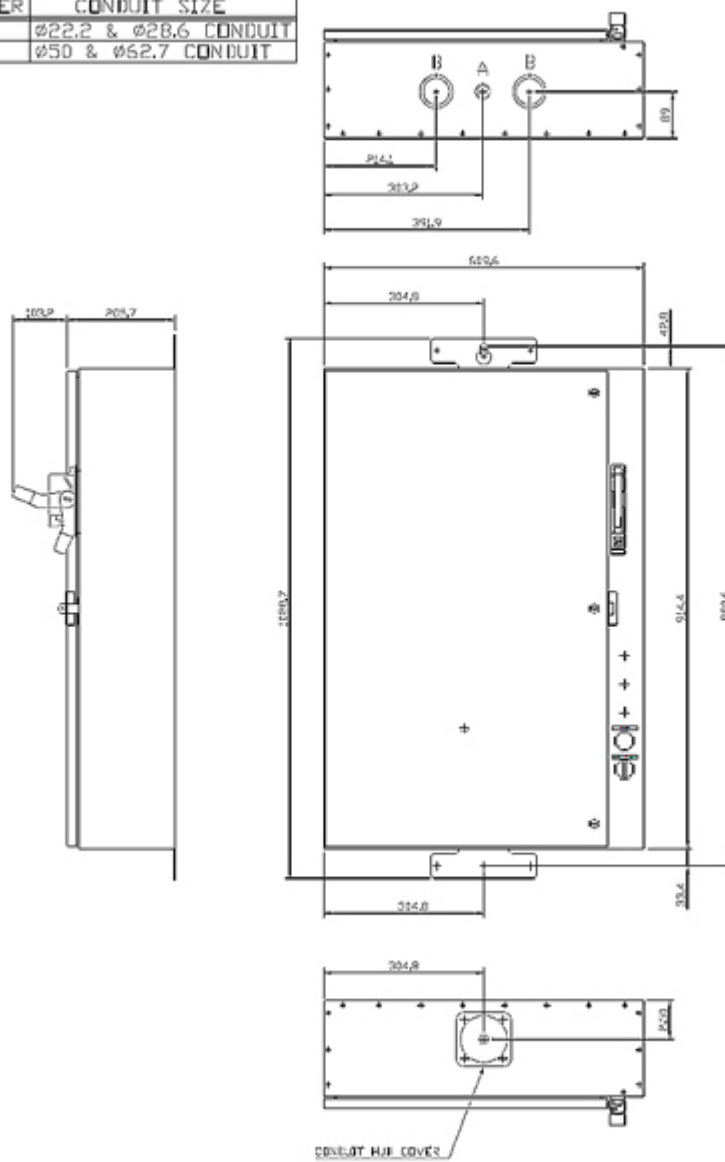
**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)**

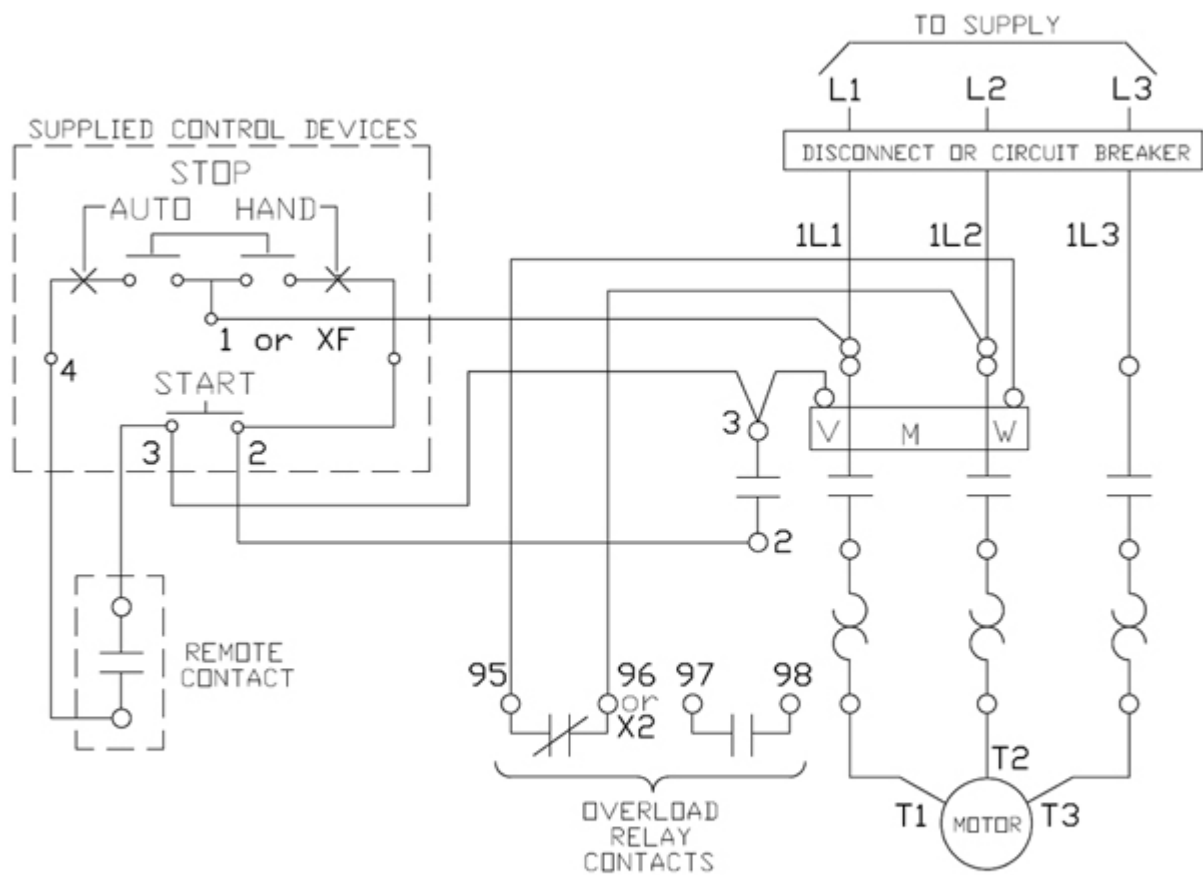
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**Certificates/approvals**

<https://support.industry.siemens.com/cs/US/en/ps/US2:87HUG6FC/certificate>

| LETTER | CONDUIT SIZE          |
|--------|-----------------------|
| A      | Ø22.2 & Ø28.6 CONDUIT |
| B      | Ø50 & Ø52.7 CONDUIT   |





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