



Figure similar

Pump control panel, Size 1, Three phase full voltage, Solid-state overload relay, OLR amp range 5.5-22A, 220-240/440-480VAC 60Hz coil, Standard type contactor, 30A fusible disconnect, 30A/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]   | 47 lb   |
| Height x Width x Depth [in]   | 29 × 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                                  |
| 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  | 10 hp   |
| • at 575/600 V rated value  | 10 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  |   |

|   |                                      |
|---|--------------------------------------|
| <ul style="list-style-type: none"> <li>• at DC rated value</li> </ul>                             | 0 ... 0 V                            |
| <ul style="list-style-type: none"> <li>• at AC at 50 Hz rated value</li> </ul>                    | 0 ... 0 V                            |
| <ul style="list-style-type: none"> <li>• at AC at 60 Hz rated value</li> </ul>                    | 220 ... 480 V                        |
| holding power at AC minimum   | 8.6 W                                |
| apparent pick-up power of magnet coil at AC   | 218 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 ms                         |
| OFF-delay time  | 10 ... 24 ms                         |
| <b>Overload relay</b>   |                                      |
| product function  |                                      |
| <ul style="list-style-type: none"> <li>• overload protection</li> </ul>                           | Yes                                  |
| <ul style="list-style-type: none"> <li>• phase failure detection</li> </ul>                       | Yes                                  |
| <ul style="list-style-type: none"> <li>• asymmetry detection</li> </ul>                           | Yes                                  |
| <ul style="list-style-type: none"> <li>• ground fault detection</li> </ul>                        | Yes                                  |
| <ul style="list-style-type: none"> <li>• test function</li> </ul>                                 | Yes                                  |
| <ul style="list-style-type: none"> <li>• external reset</li> </ul>                                | 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               | 5.5 ... 22 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                                       |                                      |
| <ul style="list-style-type: none"> <li>• at AC at 600 V</li> </ul>                                | 5 A                                  |
| <ul style="list-style-type: none"> <li>• at DC at 250 V</li> </ul>                                | 1 A                                  |
| contact rating of auxiliary contacts of overload relay according to UL                            | 5A@600VAC (B600), 1A@250VDC (R300)   |
| insulation voltage (Ui)   |                                      |
| <ul style="list-style-type: none"> <li>• with single-phase operation at AC rated value</li> </ul> | 600 V                                |
| <ul style="list-style-type: none"> <li>• with multi-phase operation at AC rated value</li> </ul>  | 300 V                                |
| <b>Disconnect Switch</b>  |                                      |
| response value of switch disconnecter   | 30A / 600V                           |
| design of fuse holder   | Class H fuse clips                   |
| operating class of the fuse link  | Class H, J (retrofitable), K and R   |
| <b>Enclosure</b>  |                                      |
| degree of protection NEMA rating of the enclosure   | NEMA Type 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 matte finish |
| product component start push button   | Yes                                  |
| type of start push button   | 30mm metal housing with matte 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   | 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   | 35 ... 35 lbf·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 °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  |

#### 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) |
| 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=US2:87DUD6FC>

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

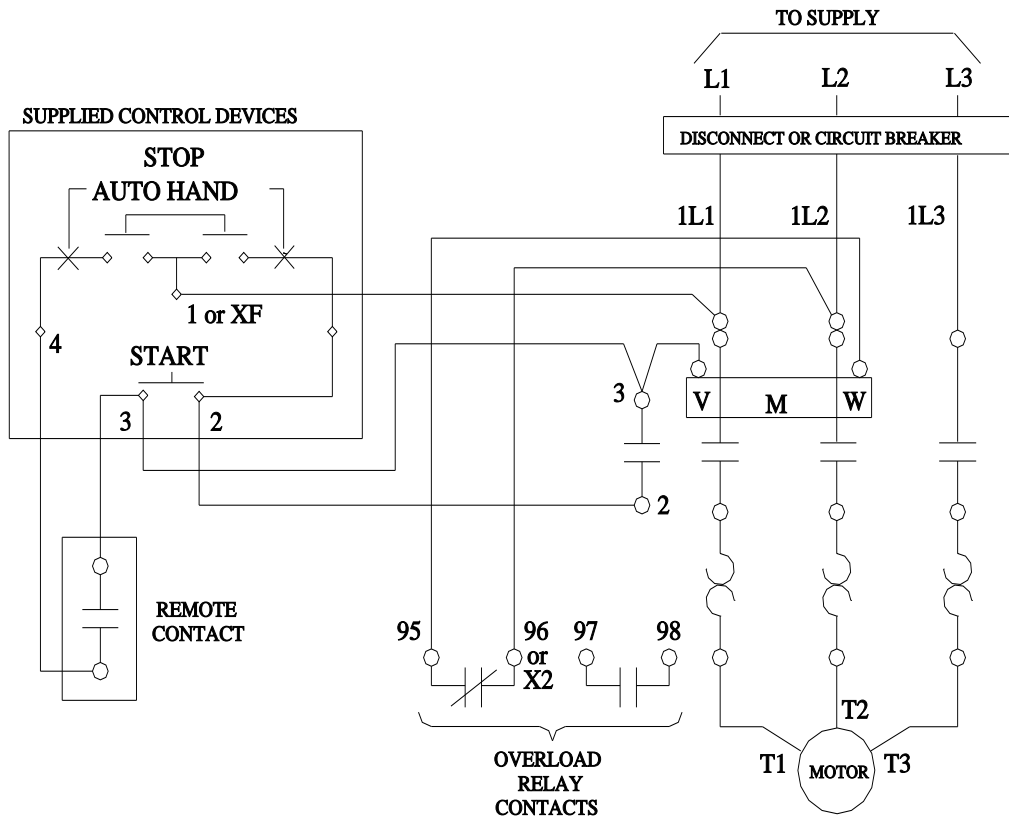
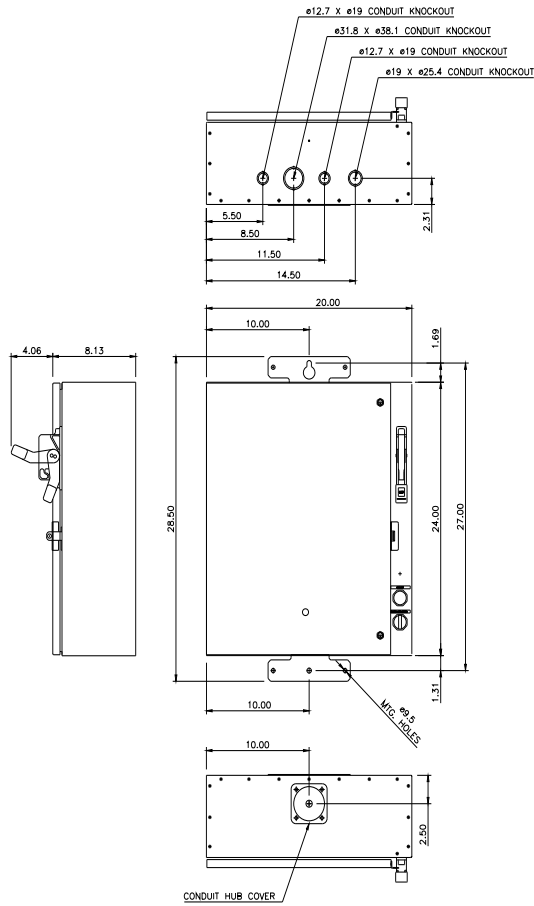
<https://support.industry.siemens.com/cs/US/en/ps/US2:87DUD6FC>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=US2:87DUD6FC&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:87DUD6FC&lang=en)

**Certificates/approvals**

<https://support.industry.siemens.com/cs/US/en/ps/US2:87DUD6FC/certificate>



D63677012

