## **SIEMENS**

Data sheet US2:84DUE950DL



Duplex starter w/o alternator Size 1 Three phase full voltage Solid-state overload relay OLR amp range 10-40A 240VAC 50Hz / 277VAC 60Hz Coil Combination type Two 30A disconnect switches Enclosure NEMA type 4/12 Water/dust tight weather proof

| product brand name  | Class 84  |
|---|---|
| design of the product   | Duplex controller with two non-fusible disconnect switches without alternator |
| special product feature   | ESP200 overload relay   |
| General technical data  |   |
| weight [lb]   | 70 lb   |
| Height x Width x Depth [in]   | 34 × 25 × 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]  |   |
| <ul> <li>during storage</li> </ul>                                      | -22 +149 °F   |
| during operation  | -4 +104 °F  |
| ambient temperature   |   |
| during storage  | -30 +65 °C  |
| during operation  | -20 +40 °C  |
| country of origin   | USA   |
| Horsepower ratings  |   |
| yielded mechanical performance [hp] for 3-phase AC motor                |   |
| <ul><li>at 200/208 V rated value</li></ul>                              | 7.5 hp  |
| • at 220/230 V rated value  | 7.5 hp  |
| • at 460/480 V rated value  | 0 hp  |
| • at 575/600 V rated value  | 0 hp  |
| Contactor   |   |
| 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 (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 DC rated value   | 0 0 V   |
| <ul> <li>at AC at 50 Hz rated value</li> </ul>                          | 240 240 V   |
| at AC at 60 Hz rated value  | 277 277 V   |
| holding power at AC minimum   | 8.6 W   |

| apparent pick up power of magnet coil at AC   | 210 \/A                                 |
|---|---|
| apparent holding 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 ms                                |
| OFF-delay time  | 10 24 ms                                |
| Overload relay  |   |
| product function  |   |
| <ul> <li>overload protection</li> </ul>   | Yes                                     |
| <ul> <li>phase failure detection</li> </ul>   | Yes                                     |
| asymmetry detection   | Yes                                     |
| <ul> <li>ground fault detection</li> </ul>  | Yes                                     |
| • test function   | Yes                                     |
| external reset  | Yes                                     |
| reset function  | Manual, automatic and remote            |
| trip class  | CLASS 5 / 10 / 20 (factory set) / 30    |
| adjustable current response value current of the current-<br>dependent overload release   | 10 40 A                                 |
| tripping time at phase-loss maximum   | 3 s                                     |
| relative repeat accuracy  | 1 %                                     |
| 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 (Ui)   |   |
| with single-phase operation at AC rated value   | 600 V                                   |
| with multi-phase operation at AC rated value  | 300 V                                   |
| Disconnect Switch   |   |
| response value of switch disconnector   | 30A / 600V                              |
| design of fuse holder   | non-fusible                             |
| operating class of the fuse link  | non-fusible                             |
| Enclosure   |   |
| degree of protection NEMA rating of the enclosure   | NEMA Type 12                            |
| design of the housing   | dustproof and drip-proof for indoor use |
| Mounting/wiring   |   |
| 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 for 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 for 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                    |
| C 1 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1   | 5 12 lbf-in                             |
| tightening torque [lbf·in] at magnet coil   |   |
| tightening torque [ibf-in] at magnet coil type of connectable conductor cross-sections of magnet coil for AWG cables single or multi-stranded                       | 2x (16 12 AWG)                          |
| type of connectable conductor cross-sections of magnet coil for   | 2x (16 12 AWG)<br>75 °C                 |
| type of connectable conductor cross-sections of magnet coil for AWG cables single or multi-stranded temperature of the conductor at magnet coil maximum             |   |
| type of connectable conductor cross-sections of magnet coil for AWG cables single or multi-stranded temperature of the conductor at magnet coil maximum permissible | 75 °C                                   |

| tightening torque [lbf·in] at contactor for auxiliary contacts  | 10 15 lbf·in  |
|---|---|
| type of connectable conductor cross-sections at contactor for 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 for 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; 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=US2:84DUE950DL

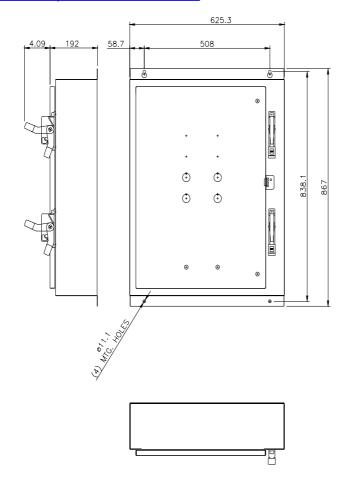
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

https://support.industry.siemens.com/cs/US/en/ps/US2:84DUE950DL

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) <a href="http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=US2:84DUE950DL&lang=en">http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=US2:84DUE950DL&lang=en</a>

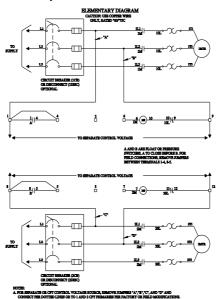
Certificates/approvals

https://support.industry.siemens.com/cs/US/en/ps/US2:84DUE950DL/certificate



## SCHEMATIC DIAGRAM

Class 83 & 84 Duplex W/Manual Alternation Size 0-4



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