



Figure similar

Duplex starter w/ alternator, Size 3 1/2, Three phase full voltage, Amb compensate bimetal OLrelay Contactor amp rating 115Amp 110V 50HZ / 120V 60HZ coil, Combination type, Two 200A disconnect switches, Encl NEMA type 4X 304 S-steel Water/dust tight noncorrosive

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|---|--|
| product brand name | Class 84 |
| design of the product | Duplex controller with two non-fusible disconnect switches with alternator |
| special product feature | Half-size controller |
| General technical data | |
| weight [lb] | 106 lb |
| Height x Width x Depth [in] | 56 × 29 × 10 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 |
| Horsepower ratings | |
| yielded mechanical performance [hp] for 3-phase AC motor | |
| • at 200/208 V rated value | 30 hp |
| • at 220/230 V rated value | 40 hp |
| • at 460/480 V rated value | 75 hp |
| • at 575/600 V rated value | 75 hp |
| Contactors | |
| size of contactor | Controller half size 3 1/2 |
| 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 | 115 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 | |
| <ul style="list-style-type: none"> at DC rated value at AC at 50 Hz rated value at AC at 60 Hz rated value | 0 ... 0 V 110 ... 110 V 120 ... 120 V |
| holding power at AC minimum | 14 W |
| apparent pick-up power of magnet coil at AC | 310 V·A |
| apparent holding power of magnet coil at AC | 26 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 | 26 ... 41 ms |
| OFF delay time | 14 ... 19 ms |
| Overload relay | |
| product function | |
| <ul style="list-style-type: none"> overload protection test function external reset | Yes Yes Yes |
| reset function | Manual and automatic |
| adjustment range of thermal overload trip unit | 0.85 ... 1.15 |
| number of NC contacts of auxiliary contacts of overload relay | 3 |
| number of NO contacts of auxiliary contacts of overload relay | 0 |
| operational current of auxiliary contacts of overload relay | |
| <ul style="list-style-type: none"> at AC at 600 V at DC at 250 V | 5 A 5 A |
| contact rating of auxiliary contacts of overload relay according to UL | 5A@600VAC (B600), 5A@250VDC (P300) |
| Disconnect Switch | |
| response value of switch disconnecter | 200A / 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 4X 304 stainless steel enclosure |
| design of the housing | Dust-tight, watertight & corrosion resistant |
| 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 | 275 ... 275 lbf·in |
| type of connectable conductor cross-sections at line-side at AWG cables single or multi-stranded | 1x (6 AWG ... 300 Kcmil) |
| 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 ... 50 lbf·in |
| 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 |

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|--|---|
| 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 | 5 ... 12 lbf·in |
| type of connectable conductor cross-sections at overload relay at AWG cables for auxiliary contacts single or multi-stranded | 2x (16 ... 12 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

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|---|---|
| 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=US2:84IP92WDF81>

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

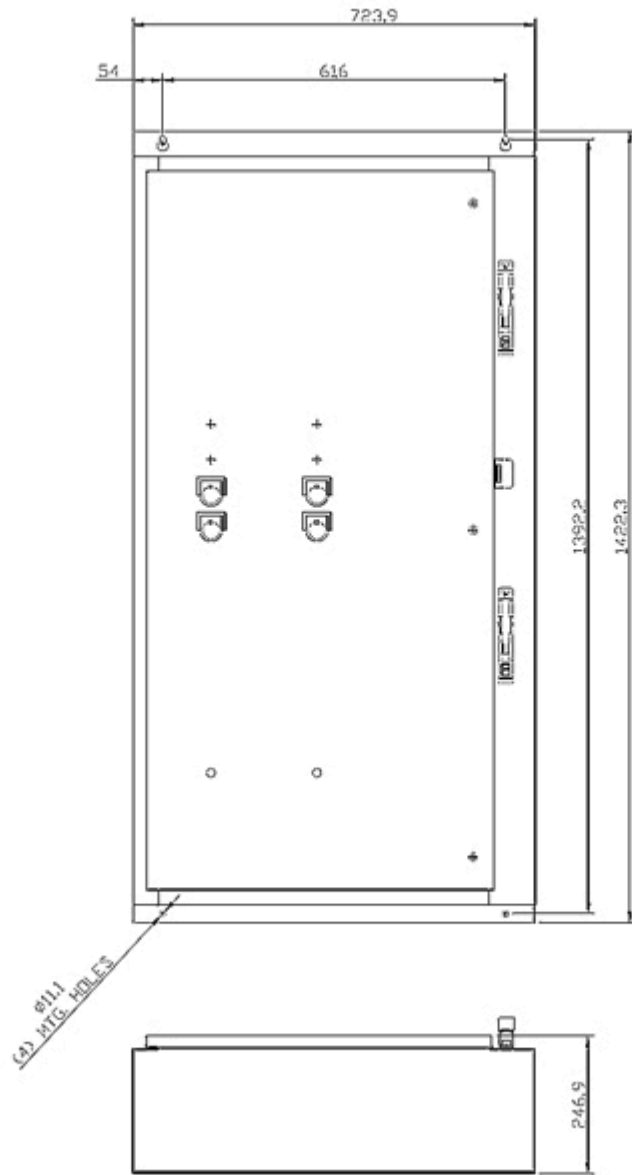
<https://support.industry.siemens.com/cs/US/en/ps/US2:84IP92WDF81>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:84IP92WDF81&lang=en

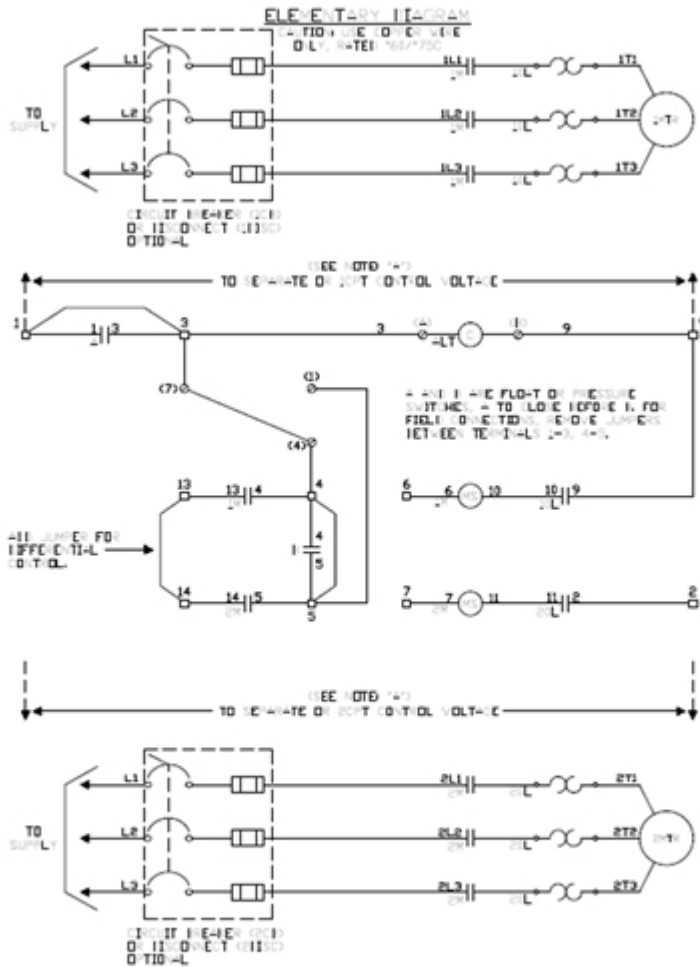
Certificates/approvals

<https://support.industry.siemens.com/cs/US/en/ps/US2:84IP92WDF81/certificate>



SCHEMATIC DIAGRAM

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



- NOTES:**
4. FOR SEPARATE OR TO CONTROL VOLTAGE (OR BOTH) CONNECTIONS, USE THE FOLLOWING TERMINALS PER FACTORY OR FIELD DISPOSITIONS.
 1. FOR PROTECTION OF TERMINAL CONTROL CIRCUIT INDUCTIONS IN ACCORDANCE WITH THE N.E.C., USE FUSE #12 4504P14.
 2. TO USE THIS CONTROLLER W/O SWITCH, JUMPER BETWEEN THE FOLLOWING PAIRS OF TERMINALS: (1-2), (3-4), (5-6).
 3. FOR T-D CONTROL, USE TO SWITCHES WIRE AS SHOWN AND ADD JUMPER BETWEEN TERMINALS 9-10.
 4. SEPARATE TO BE CONNECTIONS TO TERMINALS 8 AND 12 ARE REQUIRED ONLY WHEN THREE POSITION SELECTOR SWITCH IS FIELD IN.

last modified:

4/8/2020