## SIEMENS

## Data sheet

## US2:18DUC92XJ



Non-reversing motor starter Size 1 Three phase full voltage Solid-state overload relay OLRelay amp range 3-12A 24VAC 50-60HZ coil Combination type 10Amp circuit breaker Encl NEMA type 4X 316 S-steel Water/dust tight noncorrosive Standard width enclosure

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|---|----|-----|-----|------|
|   | au | res | sim | ilar |
|   | -  |     |     |      |

| product brand name  | Class 18 & 26   |  |
|---|---|--|
| design of the product   | Full-voltage non-reversing motor starter with motor circuit protector |  |
| special product feature   | ESP200 overload relay   |  |
| General technical data  |   |  |
| Height x Width x Depth [in]   | 24 × 11 × 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   |   |  |
| <ul> <li>during storage</li> </ul>                                      | -30 +65 °C  |  |
| <ul> <li>during operation</li> </ul>                                    | -20 +40 °C  |  |
| Horsepower ratings  |   |  |
| yielded mechanical performance [hp] for 3-phase AC motor                |   |  |
| • at 200/208 V rated value  | 2 hp  |  |
| • at 220/230 V rated value  | 2 hp  |  |
| • at 460/480 V rated value  | 5 hp  |  |
| • at 575/600 V rated value  | 5 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 (switching cycles) of the main contacts typical | 1000000   |  |
| 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  |   |  |
| <ul> <li>at AC at 50 Hz rated value</li> </ul>                          | 24 V  |  |
| <ul> <li>at AC at 60 Hz rated value</li> </ul>                          | 24 V  |  |

| holding power at AC minimum  | 8.6 W   |  |
|--|---|--|
| apparent pick-up power of magnet coil at AC  | 218 VA  |  |
| apparent holding power of magnet coil at AC  | 218 VA<br>25 VA   |  |
| operating range factor control supply voltage rated value<br>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   |   |  |
| 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  | 3 12 A  |  |
| make time with automatic start after power failure 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   |  |
| Enclosure  |   |  |
| degree of protection NEMA rating   | 4X, 304 stainless steel   |  |
|  |   |  |
| design of the housing  | dustproof, waterproof & resistant to corrosion  |  |
| Circuit Breaker  |   |  |
| Circuit Breaker<br>type of the motor protection  | Motor circuit protector (magnetic trip only)  |  |
| Circuit Breaker<br>type of the motor protection<br>operational current of motor circuit breaker rated value  | Motor circuit protector (magnetic trip only)<br>10 A  |  |
| Circuit Breaker<br>type of the motor protection<br>operational current of motor circuit breaker rated value<br>adjustable current response value current of<br>instantaneous short-circuit trip unit   | Motor circuit protector (magnetic trip only)  |  |
| Circuit Breaker<br>type of the motor protection<br>operational current of motor circuit breaker rated value<br>adjustable current response value current of<br>instantaneous short-circuit trip unit<br>Mounting/wiring  | Motor circuit protector (magnetic trip only)<br>10 A<br>30 100 A  |  |
| Circuit Breaker<br>type of the motor protection<br>operational current of motor circuit breaker rated value<br>adjustable current response value current of<br>instantaneous short-circuit trip unit<br>Mounting/wiring<br>mounting position   | Motor circuit protector (magnetic trip only)<br>10 A<br>30 100 A<br>Vertical  |  |
| Circuit Breaker         type of the motor protection         operational current of motor circuit breaker rated value         adjustable current response value current of         instantaneous short-circuit trip unit         Mounting/wiring         mounting position         fastening method  | Motor circuit protector (magnetic trip only)<br>10 A<br>30 100 A<br>Vertical<br>Surface mounting and installation   |  |
| Circuit Breaker         type of the motor protection         operational current of motor circuit breaker rated value         adjustable current response value current of         instantaneous short-circuit trip unit         Mounting/wiring         mounting position         fastening method         type of electrical connection for supply voltage line-side   | Motor circuit protector (magnetic trip only)<br>10 A<br>30 100 A<br>Vertical<br>Surface mounting and installation<br>Box lug  |  |
| Circuit Breaker<br>type of the motor protection<br>operational current of motor circuit breaker rated value<br>adjustable current response value current of<br>instantaneous short-circuit trip unit<br>Mounting/wiring<br>mounting position<br>fastening method<br>type of electrical connection for supply voltage line-side<br>type of connectable conductor cross-sections at line-side<br>at AWG cables single or multi-stranded  | Motor circuit protector (magnetic trip only)<br>10 A<br>30 100 A<br>Vertical<br>Surface mounting and installation<br>Box lug<br>1x (14 AWG 10 AWG) or 1x (12 AWG 10 AWG)  |  |
| Circuit Breaker<br>type of the motor protection<br>operational current of motor circuit breaker rated value<br>adjustable current response value current of<br>instantaneous short-circuit trip unit<br>Mounting/wiring<br>mounting position<br>fastening method<br>type of electrical connection for supply voltage line-side<br>type of connectable conductor cross-sections at line-side<br>at AWG cables single or multi-stranded<br>temperature of the conductor for supply maximum<br>permissible  | Motor circuit protector (magnetic trip only)<br>10 A<br>30 100 A<br>Vertical<br>Surface mounting and installation<br>Box lug<br>1x (14 AWG 10 AWG) or 1x (12 AWG 10 AWG)<br>75 °C   |  |
| Circuit Breaker<br>type of the motor protection<br>operational current of motor circuit breaker rated value<br>adjustable current response value current of<br>instantaneous short-circuit trip unit<br>Mounting/wiring<br>mounting position<br>fastening method<br>type of electrical connection for supply voltage line-side<br>type of connectable conductor cross-sections at line-side<br>at AWG cables single or multi-stranded<br>temperature of the conductor for supply maximum<br>permissible<br>material of the conductor for supply  | Motor circuit protector (magnetic trip only)<br>10 A<br>30 100 A<br>Vertical<br>Surface mounting and installation<br>Box lug<br>1x (14 AWG 10 AWG) or 1x (12 AWG 10 AWG)<br>75 °C<br>AL or CU   |  |
| Circuit Breaker         type of the motor protection         operational current of motor circuit breaker rated value         adjustable current response value current of         instantaneous short-circuit trip unit         Mounting/wiring         mounting position         fastening method         type of electrical connection for supply voltage line-side         type of connectable conductor cross-sections at line-side         at AWG cables single or multi-stranded         temperature of the conductor for supply maximum         permissible         material of the conductor for supply         type of electrical connection for supply  | Motor circuit protector (magnetic trip only)<br>10 A<br>30 100 A<br>Vertical<br>Surface mounting and installation<br>Box lug<br>1x (14 AWG 10 AWG) or 1x (12 AWG 10 AWG)<br>75 °C<br>AL or CU<br>Screw-type terminals   |  |
| Circuit Breaker<br>type of the motor protection<br>operational current of motor circuit breaker rated value<br>adjustable current response value current of<br>instantaneous short-circuit trip unit<br>Mounting/wiring<br>mounting position<br>fastening method<br>type of electrical connection for supply voltage line-side<br>type of connectable conductor cross-sections at line-side<br>at AWG cables single or multi-stranded<br>temperature of the conductor for supply maximum<br>permissible<br>material of the conductor for supply<br>type of electrical connection for load-side outgoing feeder<br>tightening torque [lbf-in] for load-side outgoing feeder   | Motor circuit protector (magnetic trip only)<br>10 A<br>30 100 A<br>Vertical<br>Surface mounting and installation<br>Box lug<br>1x (14 AWG 10 AWG) or 1x (12 AWG 10 AWG)<br>75 °C<br>AL or CU<br>Screw-type terminals<br>35 35 lbf·in   |  |
| Circuit Breaker         type of the motor protection         operational current of motor circuit breaker rated value         adjustable current response value current of         instantaneous short-circuit trip unit         Mounting/wiring         mounting position         fastening method         type of electrical connection for supply voltage line-side         type of connectable conductor cross-sections at line-side         at AWG cables single or multi-stranded         temperature of the conductor for supply maximum         permissible         material of the conductor for supply         type of electrical connection for supply  | Motor circuit protector (magnetic trip only)<br>10 A<br>30 100 A<br>Vertical<br>Surface mounting and installation<br>Box lug<br>1x (14 AWG 10 AWG) or 1x (12 AWG 10 AWG)<br>75 °C<br>AL or CU<br>Screw-type terminals   |  |
| Circuit Breaker<br>type of the motor protection<br>operational current of motor circuit breaker rated value<br>adjustable current response value current of<br>instantaneous short-circuit trip unit<br><u>Mounting/wiring</u><br>mounting position<br>fastening method<br>type of electrical connection for supply voltage line-side<br>type of connectable conductor cross-sections at line-side<br>at AWG cables single or multi-stranded<br>temperature of the conductor for supply maximum<br>permissible<br>material of the conductor for supply<br>type of electrical connection for load-side outgoing feeder<br>tightening torque [lbf-in] for load-side outgoing feeder<br>type of connectable conductor cross-sections at AWG<br>cables for load-side outgoing feeder<br>type of connectable conductor for supply<br>type of connectable conductor cross-sections at AWG<br>cables for load-side outgoing feeder<br>type of connectable conductor for load-side outgoing feeder<br>type of connectable conductor for load-side outgoing feeder<br>type of the conductor for load-side outgoing feeder<br>maximum permissible  | Motor circuit protector (magnetic trip only)<br>10 A<br>30 100 A<br>Vertical<br>Surface mounting and installation<br>Box lug<br>1x (14 AWG 10 AWG) or 1x (12 AWG 10 AWG)<br>75 °C<br>AL or CU<br>Screw-type terminals<br>35 35 lbf·in   |  |
| Circuit Breaker<br>type of the motor protection<br>operational current of motor circuit breaker rated value<br>adjustable current response value current of<br>instantaneous short-circuit trip unit<br><u>Mounting/wiring</u><br>mounting position<br>fastening method<br>type of electrical connection for supply voltage line-side<br>type of connectable conductor cross-sections at line-side<br>at AWG cables single or multi-stranded<br>temperature of the conductor for supply maximum<br>permissible<br>material of the conductor for supply<br>type of electrical connection for load-side outgoing feeder<br>tightening torque [lbf·in] for load-side outgoing feeder<br>type of connectable conductor cross-sections at AWG<br>cables for load-side outgoing feeder<br>type of connectable conductor cross-sections at AWG<br>cables for load-side outgoing feeder<br>type of connectable conductor for load-side outgoing feeder<br>type of the conductor for load-side outgoing feeder<br>material of the conductor for load-side outgoing feeder<br>maximum permissible<br>material of the conductor for load-side outgoing feeder<br>maximum permissible<br>material of the conductor for load-side outgoing feeder<br>maximum permissible  | Motor circuit protector (magnetic trip only)<br>10 A<br>30 100 A<br>Vertical<br>Surface mounting and installation<br>Box lug<br>1x (14 AWG 10 AWG) or 1x (12 AWG 10 AWG)<br>75 °C<br>AL or CU<br>Screw-type terminals<br>35 35 lbf-in<br>1x (14 2 AWG)<br>75 °C<br>AL or CU   |  |
| Circuit Breaker         type of the motor protection         operational current of motor circuit breaker rated value         adjustable current response value current of<br>instantaneous short-circuit trip unit         Mounting/wiring         mounting position         fastening method         type of electrical connection for supply voltage line-side         type of connectable conductor cross-sections at line-side         at AWG cables single or multi-stranded         temperature of the conductor for supply maximum         permissible         material of the conductor for supply         type of electrical connection for load-side outgoing feeder         tightening torque [lbf-in] for load-side outgoing feeder         type of connectable conductor cross-sections at AWG         cables for load-side outgoing feeder         tightening torque [lbf-in] for load-side outgoing feeder         type of connectable conductor cross-sections at AWG         cables for load-side outgoing feeder         type of connectable conductor for load-side outgoing feeder         type of connectable conductor for load-side outgoing feeder         type of connectable conductor for load-side outgoing feeder         material of the conductor for load-side outgoing feeder         maximum permissible         material of the conductor for load-side outgoing feeder <td>Motor circuit protector (magnetic trip only)<br/>10 A<br/>30 100 A<br/>Vertical<br/>Surface mounting and installation<br/>Box lug<br/>1x (14 AWG 10 AWG) or 1x (12 AWG 10 AWG)<br/>75 °C<br/>AL or CU<br/>Screw-type terminals<br/>35 35 lbf-in<br/>1x (14 2 AWG)<br/>75 °C<br/>AL or CU<br/>Screw-type terminals</td> | Motor circuit protector (magnetic trip only)<br>10 A<br>30 100 A<br>Vertical<br>Surface mounting and installation<br>Box lug<br>1x (14 AWG 10 AWG) or 1x (12 AWG 10 AWG)<br>75 °C<br>AL or CU<br>Screw-type terminals<br>35 35 lbf-in<br>1x (14 2 AWG)<br>75 °C<br>AL or CU<br>Screw-type terminals   |  |
| Circuit Breaker         type of the motor protection         operational current of motor circuit breaker rated value         adjustable current response value current of<br>instantaneous short-circuit trip unit         Mounting/wiring         mounting position         fastening method         type of electrical connection for supply voltage line-side         type of connectable conductor cross-sections at line-side<br>at AWG cables single or multi-stranded         temperature of the conductor for supply maximum<br>permissible         material of the conductor for supply         type of electrical connection for load-side outgoing feeder         tightening torque [lbf-in] for load-side outgoing feeder         type of connectable conductor cross-sections at AWG<br>cables for load-side outgoing feeder         type of connectable conductor for supply         type of electrical connection for load-side outgoing feeder         tightening torque [lbf-in] for load-side outgoing feeder         type of connectable conductor for load-side outgoing feeder         type of electrical connection for load-side outgoing feeder         type of electrical connection for load-side outgoing feeder         type of electrical connection of magnet coil         tightening torque [lbf-in] at magnet coil  | Motor circuit protector (magnetic trip only)         10 A         30 100 A         Vertical         Surface mounting and installation         Box lug         1x (14 AWG 10 AWG) or 1x (12 AWG 10 AWG)         75 °C         AL or CU         Screw-type terminals         35 35 lbf-in         1x (14 2 AWG)         75 °C         AL or CU         Screw-type terminals         35 35 lbf-in         1x (14 2 AWG)  |  |
| Circuit Breaker<br>type of the motor protection<br>operational current of motor circuit breaker rated value<br>adjustable current response value current of<br>instantaneous short-circuit trip unit<br>Mounting/wiring<br>mounting position<br>fastening method<br>type of electrical connection for supply voltage line-side<br>type of connectable conductor cross-sections at line-side<br>at AWG cables single or multi-stranded<br>temperature of the conductor for supply maximum<br>permissible<br>material of the conductor for supply<br>type of electrical connection for load-side outgoing feeder<br>tightening torque [lbf-in] for load-side outgoing feeder<br>type of connectable conductor cross-sections at AWG<br>cables for load-side outgoing feeder<br>type of connectable conductor for load-side outgoing feeder<br>type of connectable conductor for load-side outgoing feeder<br>type of connectable conductor for load-side outgoing feeder<br>type of electrical connection of no load-side outgoing feeder<br>type of connectable conductor for load-side outgoing feeder<br>type of electrical connection of nagnet coil<br>tightening torque [lbf-in] at magnet coil<br>type of connectable conductor cross-sections of magnet<br>coil at AWG cables single or multi-stranded   | Motor circuit protector (magnetic trip only)         10 A         30 100 A         Vertical         Surface mounting and installation         Box lug         1x (14 AWG 10 AWG) or 1x (12 AWG 10 AWG)         75 °C         AL or CU         Screw-type terminals         35 35 lbf-in         1x (14 2 AWG)         75 °C         AL or CU         Screw-type terminals         35 35 lbf-in         1x (14 2 AWG)         Zerew-type terminals         35 12 lbf-in         2x (16 12 AWG) |  |
| Circuit Breaker         type of the motor protection         operational current of motor circuit breaker rated value         adjustable current response value current of<br>instantaneous short-circuit trip unit         Mounting/wiring         mounting position         fastening method         type of electrical connection for supply voltage line-side         type of connectable conductor cross-sections at line-side         at AWG cables single or multi-stranded         temperature of the conductor for supply maximum         permissible         material of the conductor for supply         type of connectable conductor for supply         type of electrical connection for load-side outgoing feeder         tightening torque [lbf-in] for load-side outgoing feeder         type of connectable conductor cross-sections at AWG         cables for load-side outgoing feeder         type of connectable conductor for load-side outgoing feeder         type of connectable conductor for load-side outgoing feeder         type of electrical connection of magnet coil         type of electrical connection of magnet coil         tightening torque [lbf-in] at magnet co   | Motor circuit protector (magnetic trip only)<br>10 A<br>30 100 A<br>Vertical<br>Surface mounting and installation<br>Box lug<br>1x (14 AWG 10 AWG) or 1x (12 AWG 10 AWG)<br>75 °C<br>AL or CU<br>Screw-type terminals<br>35 35 lbf·in<br>1x (14 2 AWG)<br>75 °C<br>AL or CU<br>Screw-type terminals<br>5 12 lbf·in<br>2x (16 12 AWG)<br>75 °C   |  |
| Circuit Breaker         type of the motor protection         operational current of motor circuit breaker rated value         adjustable current response value current of         instantaneous short-circuit trip unit         Mounting/wiring         mounting position         fastening method         type of electrical connection for supply voltage line-side         type of connectable conductor cross-sections at line-side         at AWG cables single or multi-stranded         temperature of the conductor for supply maximum         permissible         material of the conductor for supply         type of connectable conductor cross-sections at AWG         cables for load-side outgoing feeder         tightening torque [lbf-in] for load-side outgoing feeder         type of connectable conductor for load-side outgoing feeder         type of electrical connection for load-side outgoing feeder         type of connectable conductor for load-side outgoing feeder         type of electrical connection of magnet coil         temperature of the conductor for load-side outgoing feeder         maximum permissible         material of the conductor for load-side outgoing feeder         type of electrical connection of magnet coil         tightening torque [lbf-in] at magnet coil         type of connectable conductor cross-sections of m  | Motor circuit protector (magnetic trip only)<br>10 A<br>30 100 A<br>Vertical<br>Surface mounting and installation<br>Box lug<br>1x (14 AWG 10 AWG) or 1x (12 AWG 10 AWG)<br>75 °C<br>AL or CU<br>Screw-type terminals<br>35 35 lbf·in<br>1x (14 2 AWG)<br>75 °C<br>AL or CU<br>Screw-type terminals<br>5 12 lbf·in<br>2x (16 12 AWG)<br>75 °C<br>CU   |  |
| Circuit Breaker<br>type of the motor protection<br>operational current of motor circuit breaker rated value<br>adjustable current response value current of<br>instantaneous short-circuit trip unit<br>Mounting/wiring<br>mounting position<br>fastening method<br>type of electrical connection for supply voltage line-side<br>type of connectable conductor cross-sections at line-side<br>at AWG cables single or multi-stranded<br>temperature of the conductor for supply maximum<br>permissible<br>material of the conductor for supply<br>type of electrical connection for load-side outgoing feeder<br>tightening torque [lbf-in] for load-side outgoing feeder<br>type of connectable conductor cross-sections at AWG<br>cables for load-side outgoing feeder<br>type of connectable conductor cross-sections at AWG<br>cables for load-side outgoing feeder<br>type of connectable conductor for load-side outgoing feeder<br>type of electrical connection for load-side outgoing feeder<br>type of connectable conductor for load-side outgoing feeder<br>type of connectable conductor for load-side outgoing feeder<br>material of the conductor for load-side outgoing feeder<br>type of electrical connection of magnet coil<br>tightening torque [lbf-in] at magnet coil<br>type of connectable conductor cross-sections of magnet<br>coil at AWG cables single or multi-stranded<br>temperature of the conductor at magnet coil maximum<br>permissible  | Motor circuit protector (magnetic trip only)<br>10 A<br>30 100 A<br>Vertical<br>Surface mounting and installation<br>Box lug<br>1x (14 AWG 10 AWG) or 1x (12 AWG 10 AWG)<br>75 °C<br>AL or CU<br>Screw-type terminals<br>35 35 lbf·in<br>1x (14 2 AWG)<br>75 °C<br>AL or CU<br>Screw-type terminals<br>5 12 lbf·in<br>2x (16 12 AWG)<br>75 °C   |  |

| type of connectable conductor cross-sections at contactor<br>at AWG cables for auxiliary contacts single or multi-<br>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-<br>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 short-circuit trip   | Instantaneous trip circuit breaker          |
| breaking capacity maximum short-circuit current (Icu)  |   |
| • at 240 V   | 100 kA                                      |
| • at 480 V   | 100 kA                                      |
| • at 600 V   | 25 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

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/us/Catalog/product?mlfb=US2:18DUC92XJ

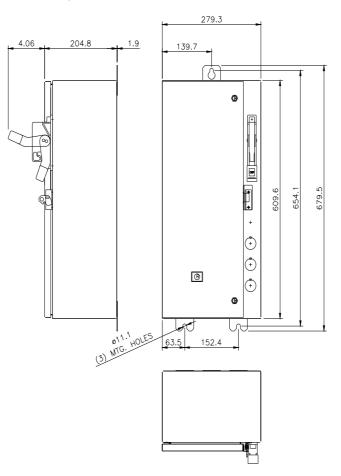
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

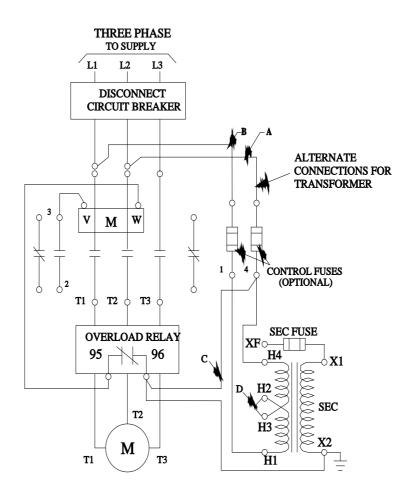
https://support.industry.siemens.com/cs/US/en/ps/US2:18DUC92XJ

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=US2:18DUC92XJ&lang=en

Certificates/approvals

https://support.industry.siemens.com/cs/US/en/ps/US2:18DUC92XJ/certificate





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