



2-speed 3-phase motor starter Size 1 One winding consequent pole Constant or variable torque Solid-state overload relays Low SPD OLR range 3-12A High SPD OLR range 3-12A 110-120/220-240VAC 60HZ coil Enclosure NEMA type (open) No enclosure

|   |  |
|---|--|
| product brand name  | Class 30                                 |
| design of the product   | Full-voltage two speed motor starter     |
| special product feature   | ESP200 overload relay; Dual voltage coil |
| <b>General technical data</b>   |  |
| weight [lb]   | 8 lb                                     |
| Height x Width x Depth [in]   | 7 × 10 × 3 in                            |
| touch protection against electrical shock                               | Not finger-safe                          |
| 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   | Mexico                                   |
| <b>Horsepower ratings</b>   |  |
| 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                                     |
| <b>Contactors</b>   |  |
| size of contactor   | NEMA controller size 1                   |
| number of NO contacts for main contacts                                 | 6  |
| 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                                 |
| <b>Auxiliary contact</b>  |  |
| number of NC contacts at contactor for auxiliary contacts               | 2  |
| number of NO contacts at contactor for auxiliary contacts               | 2  |
| number of total auxiliary contacts maximum                              | 8  |
| contact rating of auxiliary contacts of contactor according to UL       | 345VA@115VAC / 768VA@240VAC              |
| <b>Coil</b>   |  |
| type of voltage of the control supply voltage                           | AC                                       |
| control supply voltage  |  |
| • at AC at 60 Hz rated value  | 110 ... 240 V                            |
| holding power at AC minimum   | 8 W                                      |
| apparent pick-up 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 ... 1      |
| percentual 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 style="list-style-type: none"> <li>• overload protection</li> <li>• phase failure detection</li> <li>• asymmetry detection</li> <li>• ground fault detection</li> <li>• test function</li> <li>• external reset</li> </ul> | <ul style="list-style-type: none"> <li>Yes</li> <li>Yes</li> <li>Yes</li> <li>Yes</li> <li>Yes</li> <li>No</li> </ul> |
| reset function   | Manual, automatic and remote  |
| trip class   | CLASS 5 / 10 / 20 (factory set) / 30  |
| adjustable current response value current of overload relay  |   |
| <ul style="list-style-type: none"> <li>• for low rotational speed</li> <li>• for high rotational speed</li> </ul>  | <ul style="list-style-type: none"> <li>3 ... 12 A</li> <li>3 ... 12 A</li> </ul>                                      |
| 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> <li>• at DC at 250 V</li> </ul>   | <ul style="list-style-type: none"> <li>5 A</li> <li>1 A</li> </ul>  |
| contact rating of auxiliary contacts of overload relay according to UL   | 5   |
| insulation voltage (Ui)  |   |
| <ul style="list-style-type: none"> <li>• with single-phase operation at AC rated value</li> <li>• with multi-phase operation at AC rated value</li> </ul>  | <ul style="list-style-type: none"> <li>600 V</li> <li>300 V</li> </ul>  |

### Enclosure

|                                  |                            |
|----------------------------------|----------------------------|
| degree of protection NEMA rating | Open device (no enclosure) |
|----------------------------------|----------------------------|

### Mounting/wiring

|  |                                   |
|--|-----------------------------------|
| mounting position  | vertical                          |
| fastening method   | Surface mounting and installation |
| type of electrical connection for supply voltage line-side   | Screw-type terminals              |
| 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                        | 1                                 |
| 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       | 1                                 |
| 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 for AWG cables single or multi-stranded                      | 2                                 |
| temperature of the conductor at magnet coil maximum permissible  | 75 °C                             |
| material of the conductor at magnet coil   | CU                                |
| type of electrical connection 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 for AWG cables for auxiliary contacts single or multi-stranded | 1                                 |
| 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 | 2                    |
| 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 | 10                                  |
| design of the short-circuit trip  | Thermal magnetic circuit breaker    |
| maximum short-circuit current breaking capacity (I <sub>cu</sub> )                |                                     |
| • at 240 V  | 14 kA                               |
| • at 480 V  | 10 kA                               |
| • at 600 V  | 10 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](http://www.usa.siemens.com/iccatalog)

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/us/Catalog/product?mlfb=US2:30DUCC32A2VA>

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

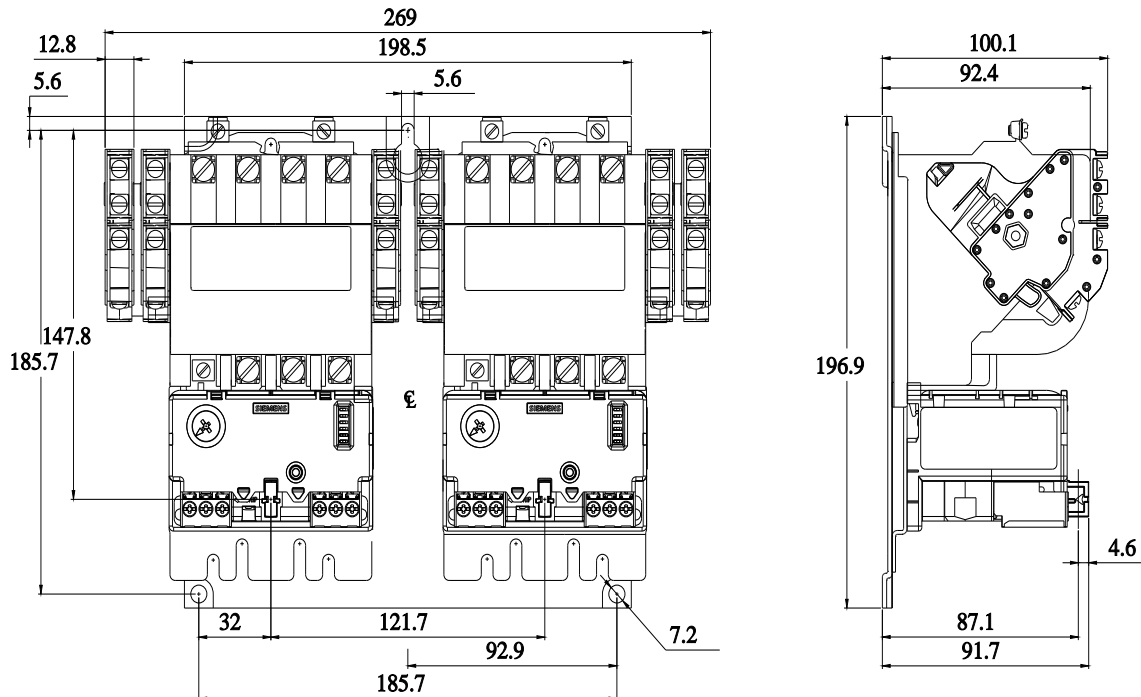
<https://support.industry.siemens.com/cs/US/en/ps/US2:30DUCC32A2VA>

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

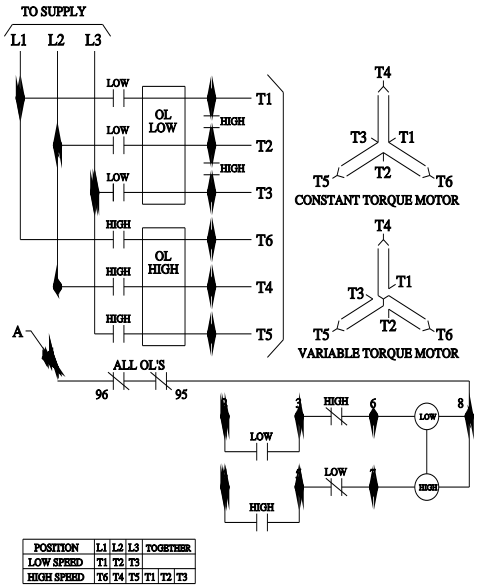
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=US2:30DUCC32A2VA&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:30DUCC32A2VA&lang=en)

Certificates/approvals

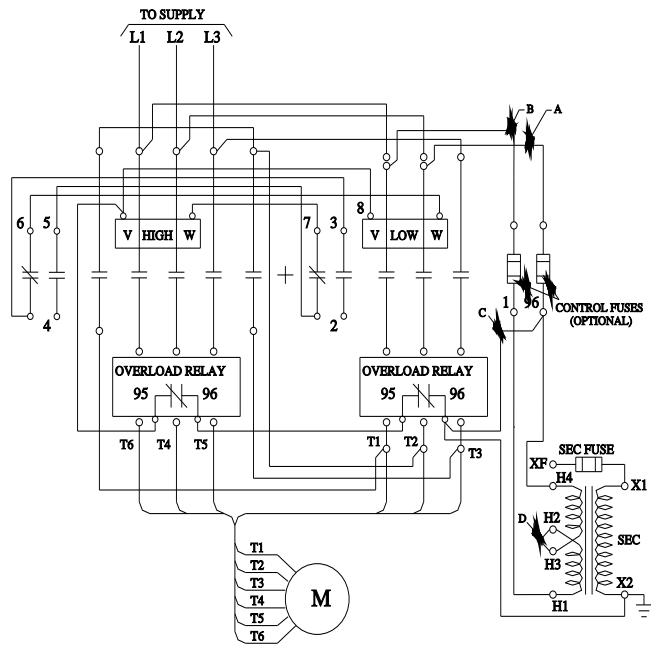
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ELEMENTARY DIAGRAM



WIRING DIAGRAM



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