## **SIEMENS**

Data sheet US2:18DUC92BF



Non-reversing motor starter, Size 1, Three phase full voltage, Solid-state overload relay, OLR amp range 3-12A, 110V 50Hz / 120V 60Hz coil, Combination type, 10A circuit breaker, Enclosure NEMA type 1, Indoor general purpose use, Standard width enclosure

| 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]  |   |
| during storage  | -22 +149 °F   |
| during operation  | -4 +104 °F  |
| ambient temperature   |   |
| during storage  | -30 +65 °C  |
| <ul> <li>during operation</li> </ul>                                    | -20 +40 °C  |
| Horsepower ratings  |   |
| yielded mechanical performance [hp] for 3-phase AC motor                |   |
| <ul><li>at 200/208 V rated value</li></ul>                              | 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 (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  |   |
| <ul> <li>at AC at 50 Hz rated value</li> </ul>                          | 110 V   |
| at AC at 60 Hz rated value  | 120 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                             | 25 VA   |
| operating range factor control supply voltage rated value of            | 0.85 1.1  |

| magnet coil   |  |
|---|--|
| 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  |  |
| overload protection   | Yes  |
| phase failure detection   | Yes  |
| asymmetry detection   | Yes  |
| ground fault detection  | 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   | 3 12 A   |
| make time with automatic start after power failure 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   |  |
| • 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)   |  |
| <ul> <li>with single-phase operation at AC rated value</li> </ul>   | 600 V  |
| with multi-phase operation at AC rated value  | 300 V  |
| Enclosure   |  |
|   |  |
| design of the housing   | indoors, usable on a general basis   |
| design of the housing Circuit Breaker   |  |
| design of the housing  Circuit Breaker  type of the motor protection  | Motor circuit protector (magnetic trip only)   |
| design of the housing  Circuit Breaker  type of the motor protection  operational current of motor circuit breaker rated value  | Motor circuit protector (magnetic trip only)  10 A   |
| design of the housing  Circuit Breaker  type of the motor protection  | Motor circuit protector (magnetic trip only)   |
| design of the housing  Circuit Breaker  type of the motor protection  operational current of motor circuit breaker rated value  adjustable current response value current of instantaneous  | Motor circuit protector (magnetic trip only)  10 A   |
| design of the housing  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  | Motor circuit protector (magnetic trip only)  10 A   |
| design of the housing  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   | Motor circuit protector (magnetic trip only) 10 A 30 100 A   |
| design of the housing  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  | Motor circuit protector (magnetic trip only)  10 A  30 100 A  Vertical   |
| design of the housing  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)  10 A  30 100 A  Vertical  Surface mounting and installation  |
| design of the housing  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 for   | Motor circuit protector (magnetic trip only) 10 A 30 100 A  Vertical Surface mounting and installation Box lug   |
| design of the housing  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 for 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)   |
| design of the housing  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 for AWG cables single or multi-stranded temperature of the conductor for supply maximum permissible   | 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  |
| design of the housing  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 for AWG cables single or multi-stranded temperature of the conductor for supply maximum permissible material of the conductor for supply  | 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  |
| design of the housing  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 for 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  | 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  |
| 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 for 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 for AWG cables  | 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  |
| 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 for 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 for AWG cables for load-side outgoing feeder single or multi-stranded temperature of the conductor for load-side outgoing feeder  | 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)  |
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| 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 for 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 for AWG cables for load-side outgoing feeder single or multi-stranded 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   | 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                               |
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| 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 short-circuit trip  | Instantaneous trip circuit breaker  |
| maximum short-circuit current breaking capacity (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=US2:18DUC92BF

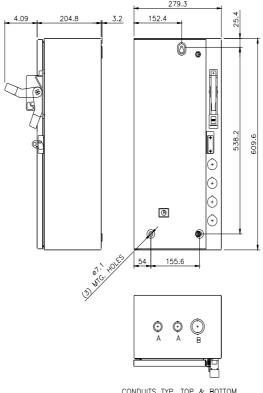
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

https://support.industry.siemens.com/cs/US/en/ps/US2:18DUC92BF

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=US2:18DUC92BF&lang=en">http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=US2:18DUC92BF&lang=en</a>

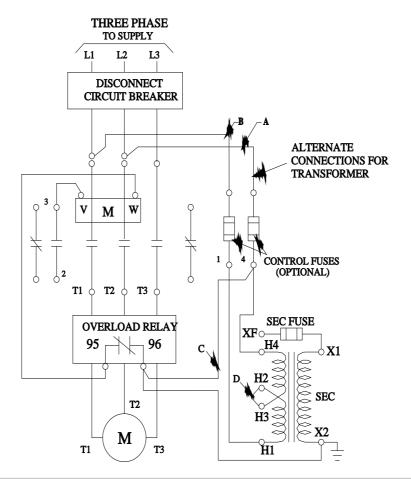
Certificates/approvals

https://support.industry.siemens.com/cs/US/en/ps/US2:18DUC92BF/certificate



CONDUITS TYP. TOP & BOTTOM

| LETTER | CONDUIT SIZE          |  |  |
|--------|-----------------------|--|--|
| A      | ø12.7 & ø19 CONDUIT   |  |  |
| В      | ø25.4 & ø31.8 CONDUIT |  |  |
|        |                       |  |  |



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