## SIEMENS

## Data sheet

## US2:18DUC92NL



Non-reversing motor starter Size 1 Three phase full voltage Solid-state overload relay OLRelay amp range 3-12A 240V 50HZ / 277V 60HZ coil Combination type 10Amp circuit breaker Enclosure NEMA type 4/12 Water/dust tight for outdoors 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
during operation	-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 (operating 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	
• at AC at 50 Hz rated value	240 V
• at AC at 60 Hz rated value	277 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

magnet coil	50.9/
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-	3 12 A
dependent overload release	
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 1 A
• at DC at 250 V	
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
<ul> <li>with multi-phase operation at AC rated value</li> </ul>	300 V
Enclosure	
Enclosure design of the housing	dustproof, waterproof & weatherproof
	dustproof, waterproof & weatherproof
design of the housing	dustproof, waterproof & weatherproof Motor circuit protector (magnetic trip only)
design of the housing Circuit Breaker	
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)
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
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
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)
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
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         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
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         tightening torque [lbf-in] 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
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         tightening torque [lbf·in] for load-side outgoing feeder         type of connectable conductor cross-sections for AWG cables 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         type of connectable conductor for load-side outgoing feeder         tightening torque of the conductor cross-sections for AWG cables for load-side outgoing feeder 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)
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         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         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         tuppe of electrical connectable 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) 75 °C
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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         tightening torque [lbf-in] for load-side outgoing feeder         type of connectable conductor cross-sections for AWG cables for load-side outgoing feeder         tughtening torque [lbf-in] for load-side outgoing feeder         tughtening torque [lbf-in] for load-side outgoing feeder         tughtening torque [lbf-in] for load-side outgoing feeder         tughtening torque feeder single or multi-stranded         temperature of the conductor for load-side outgoing feeder         tughtening torque fib-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	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         Strew-type terminals         AL or CU         Screw-type terminals
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         tightening torque [lbf-in] for load-side outgoing feeder         type of connectable conductor cross-sections for AWG cables for load-side outgoing feeder         type of connectable conductor for load-side outgoing feeder         tightening torque [lbf-in] for load-side outgoing feeder         temperature of the conductor for load-side outgoing feeder         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         35 32 lbf-in         1x (14 2 AWG)         75 °C         AL or CU         Screw-type terminals         35 32 lbf-in         1x (14 2 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         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         type of electrical connection of magnet coil         type of electrical connection of magnet coil         type of electrical connection for load-side outgoing feeder         tightening torque [lbf-in] at magnet coil         type of connectable conductor cross-sections of magnet coil for         AWG cables single or multi-stranded         temperature of the conductor at magnet coil         type of connectable conduc	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 32 lbf-in         1x (14 2 AWG)         75 °C         AL or CU         Screw-type terminals         2x (16 12 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         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 for load-side outgoing feeder         type of connectable conductor 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 of magnet coil         temperature of the conductor for load-side outgoing feeder         type of electrical connection of magnet coil         tightening torque [lbf·in] at magnet coil         tightening torque [lbf·in] at magnet coil         type of connectable conductor cross-sections of magnet coil 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) 75 °C AL or CU Screw-type terminals 35 35 lbf·in 1x (14 2 AWG) 75 °C AL or CU Screw-type terminals 5 12 lbf·in 2x (16 12 AWG) 75 °C
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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	

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=US2:18DUC92NL

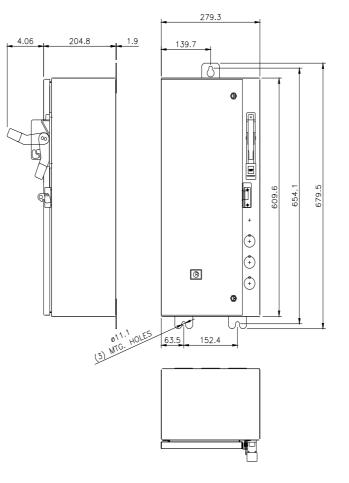
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

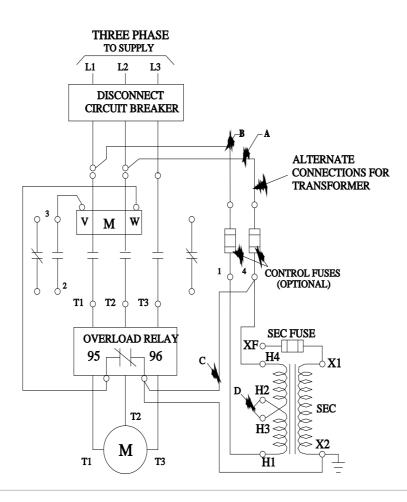
https://support.industry.siemens.com/cs/US/en/ps/US2:18DUC92NL

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=US2:18DUC92NL&lang=en

Certificates/approvals

https://support.industry.siemens.com/cs/US/en/ps/US2:18DUC92NL/certificate





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