## SIEMENS

## Data sheet

## US2:18CUB92NF



Non-reversing motor starter, Size 0, Three phase full voltage, Solid-state overload relay, OLR amp range 0.75-3.4A, 110V 50Hz / 120V 60Hz coil, Combination type, 3A 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	0.5 hp
<ul> <li>at 220/230 V rated value</li> </ul>	0.5 hp
• at 460/480 V rated value	1 hp
• at 575/600 V rated value	1 hp
Contactor	
size of contactor	NEMA controller size 0
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	18 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	110 V
<ul> <li>at AC at 60 Hz rated value</li> </ul>	120 V
at AC at 60 Hz rated value     holding power at AC minimum	120 V 8.6 W
holding power at AC minimum	8.6 W

magnatical	
magnet coilpercental drop-out voltage of magnet coil related to the input	50 %
voltage	00 /0
ON-delay time	19 29 ms
OFF-delay time	10 24 ms
Overload relay	
product function	
<ul> <li>overload protection</li> </ul>	Yes
<ul> <li>phase failure detection</li> </ul>	Yes
<ul> <li>asymmetry detection</li> </ul>	Yes
<ul> <li>ground fault detection</li> </ul>	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- dependent overload release	0.75 3.4 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	
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	4, 12
degree of protection NEMA rating design of the housing	4, 12 dustproof, waterproof & weatherproof
degree of protection NEMA rating design of the housing Circuit Breaker	dustproof, waterproof & weatherproof
degree of protection NEMA rating design of the housing Circuit Breaker type of the motor protection	dustproof, waterproof & weatherproof Motor circuit protector (magnetic trip only)
degree of protection NEMA rating         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	dustproof, waterproof & weatherproof
degree of protection NEMA rating design of the housing Circuit Breaker type of the motor protection operational current of motor circuit breaker rated value	dustproof, waterproof & weatherproof Motor circuit protector (magnetic trip only) 3 A
degree of protection NEMA rating         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	dustproof, waterproof & weatherproof Motor circuit protector (magnetic trip only) 3 A
degree of protection NEMA rating         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	dustproof, waterproof & weatherproof Motor circuit protector (magnetic trip only) 3 A 10 35 A
degree of protection NEMA rating         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	dustproof, waterproof & weatherproof Motor circuit protector (magnetic trip only) 3 A 10 35 A Vertical
degree of protection NEMA rating         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	dustproof, waterproof & weatherproof         Motor circuit protector (magnetic trip only)         3 A         10 35 A         Vertical         Surface mounting and installation
degree of protection NEMA rating         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	dustproof, waterproof & weatherproof         Motor circuit protector (magnetic trip only)         3 A         10 35 A         Vertical         Surface mounting and installation         Box lug
degree of protection NEMA rating         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	dustproof, waterproof & weatherproof         Motor circuit protector (magnetic trip only)         3 A         10 35 A         Vertical         Surface mounting and installation         Box lug         1x (14 AWG 10 AWG) or 1x (12 AWG 10 AWG)
degree of protection NEMA rating         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	dustproof, waterproof & weatherproof         Motor circuit protector (magnetic trip only)         3 A         10 35 A         Vertical         Surface mounting and installation         Box lug         1x (14 AWG 10 AWG) or 1x (12 AWG 10 AWG)         75 °C
degree of protection NEMA rating         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	dustproof, waterproof & weatherproof         Motor circuit protector (magnetic trip only)         3 A         10 35 A         Vertical         Surface mounting and installation         Box lug         1x (14 AWG 10 AWG) or 1x (12 AWG 10 AWG)         75 °C         AL or CU
degree of protection NEMA rating         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 supply maximum permissible	dustproof, waterproof & weatherproof         Motor circuit protector (magnetic trip only)         3 A         10 35 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
degree of protection NEMA rating         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         tightening torque [lbf-in] for load-side outgoing feeder         type of connectable conductor cross-sections for AWG cables	dustproof, waterproof & weatherproof         Motor circuit protector (magnetic trip only)         3 A         10 35 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         20 24 lbf-in
degree of protection NEMA rating         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         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 fibries for load-side outgoing feeder         tightening torque of the conductor for load-side outgoing feeder         tightening torque of the conductor for load-side outgoing feeder         tightening torque of the conductor for load-side outgoing feeder         tightening torque of the c	dustproof, waterproof & weatherproof         Motor circuit protector (magnetic trip only)         3 A         10 35 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         20 24 lbf-in         2x (14 10 AWG)
degree of protection NEMA rating         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 for supply         type of connectable conductor for load-side outgoing feeder         tightenin	dustproof, waterproof & weatherproof         Motor circuit protector (magnetic trip only)         3 A         10 35 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         20 24 lbf in         2x (14 10 AWG)         75 °C
degree of protection NEMA rating         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         temperature of the conductor for load-side outgoing feeder         tupe of the conductor for load-side outgoing feeder         tupe of connectable conductor for load-side outgoing feeder         tupe of connectable conductor for load-side outgoing feeder         tupe of the conductor for load-side outgoing feeder         tupe of the conductor for load-side outgoing feeder	dustproof, waterproof & weatherproof         Motor circuit protector (magnetic trip only)         3 A         10 35 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         20 24 lbf-in         2x (14 10 AWG)         75 °C         CU
degree of protection NEMA rating         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 supply         type of electrical connection for load-side outgoing feeder         tightening torque [lbf-in] for load-side outgoing feeder         type of connectable conductor for supply         type of connectable conductor for load-side outgoing feeder         type of electrical connection for load-side outgoing feeder         type of electrical connector for load-side outgoing feeder         type of electrical connection for load-side outgoing feeder         type of e	dustproof, waterproof & weatherproof         Motor circuit protector (magnetic trip only)         3 A         10 35 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         20 24 lbf in         2x (14 10 AWG)         75 °C         CU         Screw-type terminals
degree of protection NEMA rating         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         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         temperature 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 magnet coil for	dustproof, waterproof & weatherproof         Motor circuit protector (magnetic trip only)         3 A         10 35 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         20 24 lbf-in         2x (14 10 AWG)         75 °C         CU         Screw-type terminals         5 12 lbf-in
degree of protection NEMA rating         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 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 for supply         type of connectable conductor cross-sections for AWG cables for load-side outgoing feeder         type of connectable 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 cables single or multi-stranded         temperature of the conductor cross-sections of magnet coil for AWG cables single or multi-stranded	dustproof, waterproof & weatherproof         Motor circuit protector (magnetic trip only)         3 A         10 35 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         20 24 lbf-in         2x (14 10 AWG)         75 °C         CU         Screw-type terminals         20 24 lbf-in         2x (14 10 AWG)         75 °C         CU         Screw-type terminals         5 12 lbf-in         2x (16 12 AWG)
degree of protection NEMA rating         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         type of electrical connection of 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         temperature of the conductor at magnet coil maximum permissible	dustproof, waterproof & weatherproof         Motor circuit protector (magnetic trip only)         3 A         10 35 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         20 24 lbf in         2x (14 10 AWG)         75 °C         CU         Screw-type terminals         5 12 lbf in         2x (16 12 AWG)         75 °C
degree of protection NEMA rating         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         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         type of connectable conductor cross-sections of magnet coil for AWG cables single or multi-stranded         temperature of the conductor at magnet coil maximum permissible	dustproof, waterproof & weatherproof         Motor circuit protector (magnetic trip only)         3 A         10 35 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         20 24 lbf in         2x (14 10 AWG)         75 °C         CU         Screw-type terminals         5 12 lbf-in         2x (16 12 AWG)         75 °C         CU         Screw-type terminals         5 12 lbf-in         2x (16 12 AWG)         75 °C         CU

AWG cables for auxiliary contacts single or multi-stranded	
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
Funther information	

Further information

Industrial Controls - Product Overview (Catalogs, Brochures,...)

www.usa.siemens.com/iccatalog

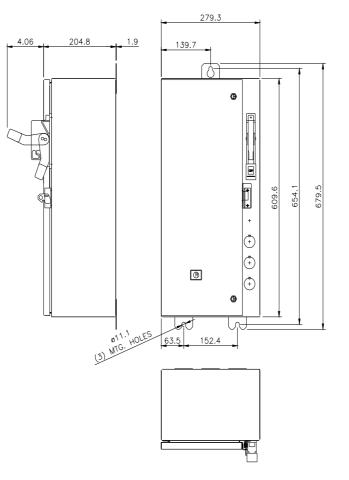
Industry Mall (Online ordering system) https://mall.industry.siemens.com/mall/en/us/Catalog/product?mlfb=US2:18CUB92NF

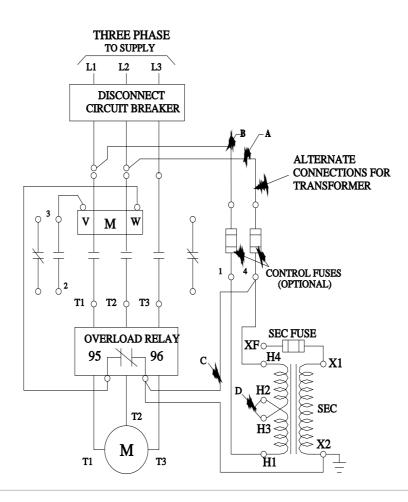
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

https://support.industry.siemens.com/cs/US/en/ps/US2:18CUB92NF

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=US2:18CUB92NF&lang=en

Certificates/approvals https://support.industry.siemens.com/cs/US/en/ps/US2:18CUB92NF/certificate





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