## **SIEMENS**

Data sheet US2:14DUB12FJ



Non-reversing motor starter, Size 1, Single phase full voltage, Solid-state overload relay, OLR amp range 0.75-3.4A, 24VAC 50-60Hz coil, Non-combination type, Enclosure type 4X fiberglass, Water/dust tight noncorrosive, Standard width enclosure

product brand name	Class 14
design of the product	Full-voltage non-reversing motor starter
special product feature	ESP200 overload relay
General technical data	
weight [lb]	14 lb
Height x Width x Depth [in]	15 × 12 × 7 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
country of origin	USA
Horsepower ratings	
yielded mechanical performance [hp] for single-phase AC motor	
• at 115 V rated value	0.125 hp
• at 200/208 V rated value	0.25 hp
• at 220/230 V rated value	0.25 hp
Contactor	
size of contactor	NEMA controller size 1
number of NO contacts for main contacts	2
operating voltage for main current circuit at AC at 60 Hz maximum	240 V
	240 V 27 A
maximum	
maximum operational current at AC at 600 V rated value mechanical service life (operating cycles) of the main contacts	27 A
maximum operational current at AC at 600 V rated value mechanical service life (operating cycles) of the main contacts typical	27 A
maximum operational current at AC at 600 V rated value mechanical service life (operating cycles) of the main contacts typical Auxiliary contact	27 A 10000000
maximum operational current at AC at 600 V rated value mechanical service life (operating cycles) of the main contacts typical  Auxiliary contact number of NC contacts at contactor for auxiliary contacts	27 A 10000000 0
maximum operational current at AC at 600 V rated value mechanical service life (operating cycles) of the main contacts typical  Auxiliary contact number of NC contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts	27 A 10000000 0 1
maximum operational current at AC at 600 V rated value mechanical service life (operating cycles) of the main contacts typical  Auxiliary contact number of NC contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of total auxiliary contacts maximum	27 A 10000000 0 1 8
maximum operational current at AC at 600 V rated value mechanical service life (operating cycles) of the main contacts typical  Auxiliary contact number of NC contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of total auxiliary contacts maximum contact rating of auxiliary contacts of contactor according to UL	27 A 10000000 0 1 8
maximum operational current at AC at 600 V rated value mechanical service life (operating cycles) of the main contacts typical  Auxiliary contact number of NC contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of total auxiliary contacts maximum contact rating of auxiliary contacts of contactor according to UL  Coil	27 A 10000000 0 1 8 10A@600VAC (A600), 5A@600VDC (P600)
maximum operational current at AC at 600 V rated value mechanical service life (operating cycles) of the main contacts typical  Auxiliary contact number of NC contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of total auxiliary contacts maximum contact rating of auxiliary contacts of contactor according to UL  Coil type of voltage of the control supply voltage	27 A 10000000 0 1 8 10A@600VAC (A600), 5A@600VDC (P600)
maximum operational current at AC at 600 V rated value mechanical service life (operating cycles) of the main contacts typical  Auxiliary contact number of NC contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of total auxiliary contacts maximum contact rating of auxiliary contacts of contactor according to UL  Coil type of voltage of the control supply voltage control supply voltage	27 A 10000000 0 1 8 10A@600VAC (A600), 5A@600VDC (P600)
maximum operational current at AC at 600 V rated value mechanical service life (operating cycles) of the main contacts typical  Auxiliary contact  number of NC contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of total auxiliary contacts maximum contact rating of auxiliary contacts of contactor according to UL  Coil  type of voltage of the control supply voltage control supply voltage  • at AC at 50 Hz rated value	27 A 10000000 0 1 8 10A@600VAC (A600), 5A@600VDC (P600) AC 24 V
maximum operational current at AC at 600 V rated value mechanical service life (operating cycles) of the main contacts typical  Auxiliary contact number of NC contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of total auxiliary contacts maximum contact rating of auxiliary contacts of contactor according to UL  Coil  type of voltage of the control supply voltage control supply voltage  • at AC at 50 Hz rated value • at AC at 60 Hz rated value	27 A 10000000 0 1 8 10A@600VAC (A600), 5A@600VDC (P600) AC 24 V 24 V

operating range factor control supply voltage rated value 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	10 1112 1 1110
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- dependent overload release	0.75 3.4 A
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	
• 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
Enclosuro	
Enclosure	AV fiber place
degree of protection NEMA rating	4X, fiber glass
degree of protection NEMA rating design of the housing	4X, fiber glass  Dust-tight, watertight & corrosion resistant
degree of protection NEMA rating design of the housing Mounting/wiring	Dust-tight, watertight & corrosion resistant
degree of protection NEMA rating design of the housing  Mounting/wiring mounting position	Dust-tight, watertight & corrosion resistant  Vertical
degree of protection NEMA rating design of the housing  Mounting/wiring mounting position fastening method	Dust-tight, watertight & corrosion resistant  Vertical  Surface mounting and installation
degree of protection NEMA rating design of the housing  Mounting/wiring mounting position fastening method type of electrical connection for supply voltage line-side	Dust-tight, watertight & corrosion resistant  Vertical  Surface mounting and installation  Screw-type terminals
degree of protection NEMA rating design of the housing  Mounting/wiring mounting position fastening method	Dust-tight, watertight & corrosion resistant  Vertical  Surface mounting and installation
degree of protection NEMA rating design of the housing  Mounting/wiring mounting position fastening method type of electrical connection for supply voltage line-side tightening torque [lbf-in] for supply type of connectable conductor cross-sections at line-side for	Vertical Surface mounting and installation Screw-type terminals 35 35 lbf-in
degree of protection NEMA rating design of the housing  Mounting/wiring mounting position fastening method type of electrical connection for supply voltage line-side tightening torque [lbf-in] for supply type of connectable conductor cross-sections at line-side for AWG cables single or multi-stranded	Vertical Surface mounting and installation Screw-type terminals 35 35 lbf-in 1x(14 - 2 AWG)
degree of protection NEMA rating design of the housing  Mounting/wiring mounting position fastening method type of electrical connection for supply voltage line-side tightening torque [lbf-in] for supply type of connectable conductor cross-sections at line-side for AWG cables single or multi-stranded temperature of the conductor for supply maximum permissible	Vertical Surface mounting and installation Screw-type terminals 35 35 lbf-in 1x(14 - 2 AWG)
design of the housing  Mounting/wiring  mounting position fastening method type of electrical connection for supply voltage line-side tightening torque [lbf-in] for supply 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	Vertical Surface mounting and installation Screw-type terminals 35 35 lbf·in 1x(14 - 2 AWG) 75 °C AL or CU
degree of protection NEMA rating design of the housing  Mounting/wiring mounting position fastening method type of electrical connection for supply voltage line-side tightening torque [lbf-in] for supply 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	Vertical Surface mounting and installation Screw-type terminals 35 35 lbf·in 1x(14 - 2 AWG) 75 °C AL or CU Screw-type terminals
degree of protection NEMA rating design of the housing  Mounting/wiring mounting position fastening method type of electrical connection for supply voltage line-side tightening torque [lbf-in] for supply 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	Vertical Surface mounting and installation Screw-type terminals 35 35 lbf-in 1x(14 - 2 AWG) 75 °C AL or CU Screw-type terminals 20 24 lbf-in
degree of protection NEMA rating design of the housing  Mounting/wiring mounting position fastening method type of electrical connection for supply voltage line-side tightening torque [lbf-in] for supply 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	Vertical Surface mounting and installation Screw-type terminals 35 35 lbf-in 1x(14 - 2 AWG) 75 °C AL or CU Screw-type terminals 20 24 lbf-in 2 x (14 - 10 AWG)
design of the housing  Mounting/wiring  mounting position fastening method type of electrical connection for supply voltage line-side tightening torque [lbf-in] for supply 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	Vertical Surface mounting and installation Screw-type terminals 35 35 lbf-in 1x(14 - 2 AWG) 75 °C AL or CU Screw-type terminals 20 24 lbf-in 2 x (14 - 10 AWG)
degree of protection NEMA rating design of the housing  Mounting/wiring mounting position fastening method type of electrical connection for supply voltage line-side tightening torque [lbf-in] for supply 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	Vertical Surface mounting and installation Screw-type terminals 35 35 lbf-in 1x(14 - 2 AWG)  75 °C AL or CU Screw-type terminals 20 24 lbf-in 2 x (14 - 10 AWG)  75 °C CU
degree of protection NEMA rating design of the housing  Mounting/wiring mounting position fastening method type of electrical connection for supply voltage line-side tightening torque [lbf-in] for supply 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	Vertical Surface mounting and installation Screw-type terminals 35 35 lbf·in 1x(14 - 2 AWG)  75 °C AL or CU Screw-type terminals 20 24 lbf·in 2 x (14 - 10 AWG)  75 °C  CU screw-type terminals 2 x (14 - 10 AWG)
design of the housing  Mounting/wiring  mounting position fastening method type of electrical connection for supply voltage line-side tightening torque [lbf-in] for supply 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 tightening torque [lbf-in] at magnet coil type of connectable conductor cross-sections of magnet coil for	Vertical Surface mounting and installation Screw-type terminals 35 35 lbf-in 1x(14 - 2 AWG)  75 °C AL or CU Screw-type terminals 20 24 lbf-in 2 x (14 - 10 AWG)  75 °C  CU screw-type terminals 5 12 lbf-in 2 x (16 - 12 AWG)
design of the housing  Mounting/wiring  mounting position fastening method type of electrical connection for supply voltage line-side tightening torque [lbf-in] for supply 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 tightening torque [lbf-in] at magnet coil type of connectable conductor cross-sections of magnet coil type of connectable conductor at magnet coil maximum permissible material of the conductor at magnet coil maximum permissible	Dust-tight, watertight & corrosion resistant  Vertical  Surface mounting and installation  Screw-type terminals  35 35 lbf-in  1x(14 - 2 AWG)  75 °C  AL or CU  Screw-type terminals  20 24 lbf-in  2 x (14 - 10 AWG)  75 °C  CU  screw-type terminals  5 12 lbf-in  2 x (16 - 12 AWG)
design of the housing  Mounting/wiring  mounting position fastening method type of electrical connection for supply voltage line-side tightening torque [lbf-in] for supply 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 tightening torque [lbf-in] at magnet coil type of connectable conductor cross-sections of magnet coil type of connectable conductor at magnet coil maximum permissible material of the conductor at magnet coil maximum permissible material of the conductor at magnet coil	Dust-tight, watertight & corrosion resistant  Vertical  Surface mounting and installation  Screw-type terminals  35 35 lbf-in  1x(14 - 2 AWG)  75 °C  AL or CU  Screw-type terminals  20 24 lbf-in  2 x (14 - 10 AWG)  75 °C  CU  screw-type terminals  5 12 lbf-in  2 x (16 - 12 AWG)  75 °C  CU  screw-type terminals
design of the housing  Mounting/wiring  mounting position fastening method type of electrical connection for supply voltage line-side tightening torque [lbf-in] for supply 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 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 material of the conductor at magnet coil maximum permissible	Vertical Surface mounting and installation Screw-type terminals 35 35 lbf-in 1x(14 - 2 AWG) 75 °C AL or CU Screw-type terminals 20 24 lbf-in 2 x (14 - 10 AWG) 75 °C CU screw-type terminals 5 12 lbf-in 2 x (16 - 12 AWG) 75 °C CU screw-type terminals 5 12 lbf-in 2 x (16 - 12 AWG)
design of the housing  Mounting/wiring  mounting position fastening method type of electrical connection for supply voltage line-side tightening torque [lbf-in] for supply 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 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 material of the conductor at magnet coil maximum permissible material of the conductor at magnet coil maximum permissible material of the conductor at magnet coil maximum permissible material of the conductor at magnet coil maximum permissible material of the conductor at magnet coil maximum permissible	Dust-tight, watertight & corrosion resistant  Vertical  Surface mounting and installation  Screw-type terminals  35 35 lbf-in  1x(14 - 2 AWG)  75 °C  AL or CU  Screw-type terminals  20 24 lbf-in  2 x (14 - 10 AWG)  75 °C  CU  screw-type terminals  5 12 lbf-in  2 x (16 - 12 AWG)  75 °C  CU  screw-type terminals  5 12 lbf-in  2 x (16 - 12 AWG)  75 °C  CU  screw-type terminals  10 15 lbf-in  1 x (12 AWG), 2 x (16 - 14 AWG), 2 x (18 - 16 AWG)
design of the housing  Mounting/wiring  mounting position fastening method type of electrical connection for supply voltage line-side tightening torque [lbf-in] for supply 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 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 material of the conductor at magnet coil maximum permissible material of the conductor at magnet coil maximum permissible material of the conductor at magnet coil type of electrical connection for auxiliary contacts tightening torque [lbf-in] at contactor for auxiliary contacts tightening torque [lbf-in] at contactor for auxiliary contacts	Vertical Surface mounting and installation Screw-type terminals 35 35 lbf-in 1x(14 - 2 AWG) 75 °C AL or CU Screw-type terminals 20 24 lbf-in 2 x (14 - 10 AWG) 75 °C CU screw-type terminals 5 12 lbf-in 2 x (16 - 12 AWG) 75 °C CU screw-type terminals 5 12 lbf-in 2 x (16 - 12 AWG)

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 x (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 fuse link for short-circuit protection of the main circuit required	10kA@600V (Class H or K); 100kA@600V (Class R or J)
design of the short-circuit trip	Thermal magnetic circuit breaker
maximum short-circuit current breaking capacity (Icu)	Thermal magnetic circuit breaker
	Thermal magnetic circuit breaker  14 kA
maximum short-circuit current breaking capacity (Icu)	,
maximum short-circuit current breaking capacity (Icu)  • at 240 V	14 kA
maximum short-circuit current breaking capacity (Icu)  • at 240 V  • at 480 V	14 kA 10 kA

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

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/us/Catalog/product?mlfb=US2:14DUB12FJ

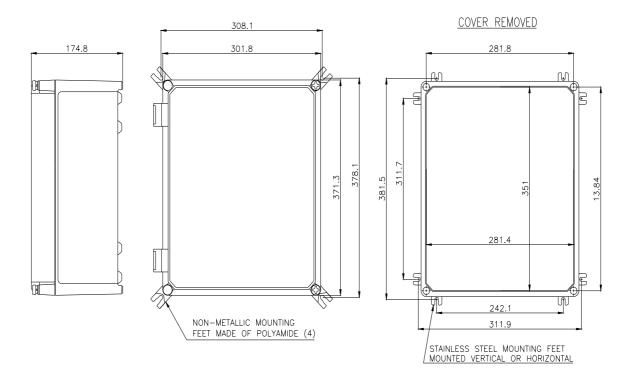
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

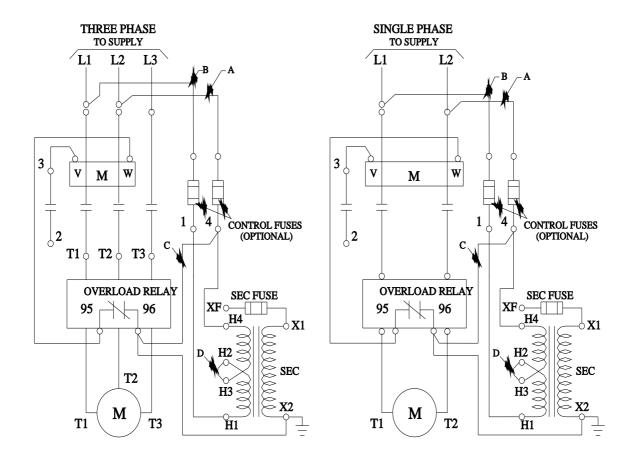
https://support.industry.siemens.com/cs/US/en/ps/US2:14DUB12FJ

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=US2:14DUB12FJ&lang=en

Certificates/approvals

https://support.industry.siemens.com/cs/US/en/ps/US2:14DUB12FJ/certificate





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