SIEMENS

Data sheet

US2:14DUD12FC



Non-reversing motor starter, Size 1, Single phase full voltage, Solid-state overload relay, OLR amp range 5.5-22A, Non-combination type, Enclosure type 4X fiberglass, Water/dust tight noncorrosive, Standard width enclosure

3	
product brand name	Class 14
design of the product	Full-voltage non-reversing motor starter
special product feature	ESP200 overload relay; Dual voltage coil
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 	1 hp
• at 200/208 V rated value	2 hp
at 220/230 V rated value	2 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
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 60 Hz rated value	220 480 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
	0.85 1.1

magnet coll	
magnet coil percental drop-out voltage of magnet coil related to the input	50 %
voltage	50 /0
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- dependent overload release	5.5 22 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	1A
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	
	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	
degree of protection NEMA rating design of the housing Mounting/wiring	
degree of protection NEMA rating design of the housing	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 type of electrical connection for supply voltage line-side tightening torque [lbf-in] for supply	Dust-tight, watertight & corrosion resistant 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	Dust-tight, watertight & corrosion resistant 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	Dust-tight, watertight & corrosion resistant 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	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
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	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 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 temperature of the conductor for supply maximum permissible material of the conductor for supply type of electrical connection for load-side outgoing feeder	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 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 material of the conductor for supply type of electrical connection for load-side outgoing feeder tightening torque [lbf·in] for load-side outgoing feeder	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 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 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	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 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 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	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 35 35 lbf-in 1x(14 - 2 AWG) 75 °C AL or CU Screw-type terminals 35 35 lbf-in 1x(14 - 2 AWG) 75 °C
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 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 for load-side outgoing feeder temperature of the conductor for load-side outgoing feeder maximum permissible material of the conductor for load-side outgoing feeder	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 35 35 lbf-in 1x(14 - 2 AWG) 75 °C AL or CU 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 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	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 35 35 lbf-in 1x(14 - 2 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
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 tightening torque [lbf-in] 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 type of electrical connection of no load-side outgoing feeder 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 tightening torque [lbf-in] at magnet coil tightening torque [lbf-in] 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 35 35 lbf-in 1x(14 - 2 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
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 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 for load-side outgoing feeder type of connectable conductor for load-side outgoing feeder type of connectable conductor for load-side outgoing feeder 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	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 35 35 lbf-in 1x(14 - 2 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 2 x (16 - 12 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 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 type of connectable conductor for load-side outgoing feeder type of electrical connection of nagnet 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	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 35 35 lbf-in 1x(14 - 2 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 2 x (16 - 12 AWG) 75 °C
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 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 type of connectable 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 35 35 lbf·in 1x(14 - 2 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 2 x (16 - 12 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 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 cables single or multi-stranded temperature of the conductor at magnet coil maximum permissible material of the conductor at magnet coil type of electrical connection for auxiliary contacts	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 35 35 lbf·in 1x(14 - 2 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 2 x (16 - 12 AWG) 75 °C 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 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 at magnet coil maximum type of electrical connection for auxiliary contacts tightening torque [lbf-in] at contactor for auxiliary contacts	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 35 35 lbf-in 1x(14 - 2 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 2 x (16 - 12 AWG) 75 °C CU screw-type terminals 10 15 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 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 connectable conductor cross-sections of magnet coil for AWG cables single or multi-stranded temperature 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 tighte	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 35 35 lbf in 1x(14 - 2 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 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)

contacts	
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)	
• 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/iccatale

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/us/Catalog/product?mlfb=US2:14DUD12FC

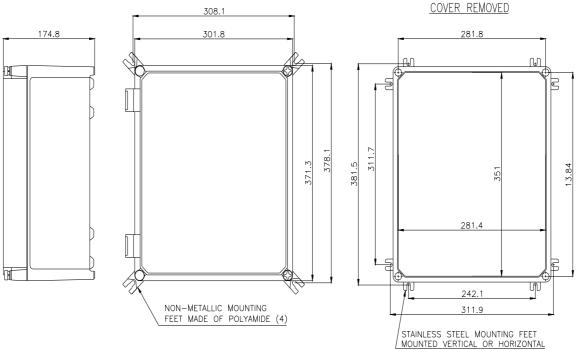
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

https://support.industry.siemens.com/cs/US/en/ps/US2:14DUD12FC

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:14DUD12FC&lang=en

Certificates/approvals

https://support.industry.siemens.com/cs/US/en/ps/US2:14DUD12FC/certificate





last modified:

11/29/2021 🖸