## SIEMENS

## Data sheet

## US2:14DP12WF81



Non-reversing motor starter, Size 1, Single Phase, 2-Pole, Amb. compensate bimetal OLR, Contactor amp rating 27A, 110V 50Hz / 120V 60Hz coil, Non-combination type, Encl. type 4X 304 S. Steel, Water/dust tight noncorrosive

product brand name       Class 14 & 22         design of the product       Full-voltage non-reversing motor starter         General technical data           weight [lb]       11 lb         Height X Width x Depth [in]       13 x 8 x 5 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 operation       -4 +104 °F         ambient temperature           • during storage       -30 +65 °C         • during storage       -30 +65 °C         • during storage       -30 +65 °C         • during operation       -20 +40 °F         • during operation       -21 +40 °C         country of origin       USA           Posepower ratings vielded mechanical performance [hp] for single-phase AC motor        • at 200/208 V rated value       3 hp         • at 200/208 V rated value       3 hp         • at 200/208 V rated value       3 hp         • at 220/230 V rated value       3 hp         • at 220/230 V rated value       240 V         maximum       Contactor         number o	Figure similar	
General technical data         weight [lb]       11 lb         Height x Width x Depth [in]       13 x 8 x 5 in         touch protection against electrical shock       NA for enclosed products         installation altitude [ft] at height above sea level maximum       6560 ft         ambient temperature ("F]       -22 +149 °F         • during storage       -22 +149 °F         • during operation       -4 +104 °F         ambient temperature       -30 +65 °C         • during operation       -20 +40 °C         country of origin       USA         Horsepower ratings       -30 +65 °C         yielded mechanical performance [hp] for single-phase AC motor       -20 +40 °C         motor       -at 115 V rated value       2 hp         • at 1200/208 V rated value       3 hp         • at 220/208 V rated value       3 hp         • at 220/208 V rated value       3 hp         • at 220/208 V rated value       2 hQ         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       240 V         maximum       240 V         maximum       240 V         maximum <td< td=""><td>product brand name</td><td>Class 14 &amp; 22</td></td<>	product brand name	Class 14 & 22
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installation altitude [ft] at height above sea level maximum       6560 ft         ambient temperature [°F]       -22 +149 °F         • during operation       -4 +104 °F         ambient temperature       -30 +65 °C         • during operation       -20 +40 °C         country of origin       USA         Horsepower ratings         yielded mechanical performance [hp] for single-phase AC motor         • at 200/208 V rated value       2 hp         • at 200/208 V rated value       3 hp         • at 220/230 V rated value       3 hp         • at 200/208 V rated value       2 hp         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         maximum       240 V         mechanical service life (operating cycles) of the main       10000000	Height x Width x Depth [in]	13 × 8 × 5 in
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<ul> <li>during storage</li> <li>during operation</li> <li>ambient temperature</li> <li>during storage</li> <li>during operation</li> <li>during operation</li> <li>-20 +40 °C</li> <li>country of origin</li> <li>USA</li> <li>Horsepower ratings</li> <li>yielded mechanical performance [hp] for single-phase AC motor</li> <li>at 115 V rated value</li> <li>at 200/208 V rated value</li> <li>by at 220/230 V rated value</li> <li>contactor</li> <li>NEMA controller size 1</li> <li>number of NO contacts for main contacts</li> <li>operating voltage for main current circuit at AC at 60 Hz maximum</li> <li>operational current at AC at 600 V rated value</li> <li>at AC at 600 V rated value</li> <li>at 27 A</li> <li>mechanical service life (operating cycles) of the main</li> </ul>	installation altitude [ft] at height above sea level maximum	
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<ul> <li>during operation country of origin</li> <li>-20 +40 °C USA</li> <li>Horsepower ratings</li> <li>yielded mechanical performance [hp] for single-phase AC motor</li> <li>at 115 V rated value</li> <li>2 hp</li> <li>at 200/208 V rated value</li> <li>3 hp</li> <li>at 220/230 V rated value</li> <li>3 hp</li> <li>contactor</li> <li>number of NO contacts for main contacts</li> <li>operating voltage for main current circuit at AC at 60 Hz maximum</li> <li>operational current at AC at 600 V rated value</li> <li>27 A</li> <li>mechanical service life (operating cycles) of the main</li> <li>10000000</li> </ul>	ambient temperature	
country of originUSAHorsepower ratingsyielded mechanical performance [hp] for single-phase AC motor2 hp• at 115 V rated value2 hp• at 200/208 V rated value3 hp• at 220/230 V rated value3 hp• at 220/230 V rated value3 hpContactorNEMA controller size 1size of contactorNEMA controller size 1number of NO contacts for main contacts2operating voltage for main current circuit at AC at 60 Hz maximum240 Voperational current at AC at 600 V rated value27 Amechanical service life (operating cycles) of the main10000000	<ul> <li>during storage</li> </ul>	-30 +65 °C
Horsepower ratings         yielded mechanical performance [hp] for single-phase AC motor         • at 115 V rated value       2 hp         • at 200/208 V rated value       3 hp         • at 220/230 V rated value       3 hp         • at 220/230 V rated value       3 hp         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       10000000	<ul> <li>during operation</li> </ul>	
yielded mechanical performance [hp] for single-phase AC motor       2 hp         • at 115 V rated value       2 hp         • at 200/208 V rated value       3 hp         • at 220/230 V rated value       3 hp         • at 220/230 V rated value       3 hp         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       10000000	country of origin	USA
motor       • at 115 V rated value       2 hp         • at 200/208 V rated value       3 hp         • at 220/230 V rated value       3 hp         • at 220/230 V rated value       3 hp         Contactor       NEMA controller size 1         number of NO contacts for main contacts       2         operating voltage for main current circuit at AC at 60 Hz       240 V         maximum       27 A         mechanical service life (operating cycles) of the main       10000000	Horsepower ratings	
<ul> <li>at 200/208 V rated value</li> <li>at 220/230 V rated value</li> <li>bp</li> <li>at 220/230 V rated value</li> <li>bp</li> <li>contactor</li> <li>size of contactor</li> <li>number of NO contacts for main contacts</li> <li>operating voltage for main current circuit at AC at 60 Hz maximum</li> <li>operational current at AC at 600 V rated value</li> <li>operational current at AC at 600 V rated value</li> <li>product of the main</li> <li>operational service life (operating cycles) of the main</li> </ul>		
	<ul> <li>at 115 V rated value</li> </ul>	2 hp
Contactor       NEMA controller size 1         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       240 V         maximum       240 V         operational current at AC at 600 V rated value       27 A         mechanical service life (operating cycles) of the main       10000000	<ul> <li>at 200/208 V rated value</li> </ul>	3 hp
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maximumoperational current at AC at 600 V rated value27 Amechanical service life (operating cycles) of the main10000000	number of NO contacts for main contacts	2
mechanical service life (operating cycles) of the main 10000000		240 V
	operational current at AC at 600 V rated value	27 A
contacts typical	mechanical service life (operating cycles) of the main contacts typical	1000000
Auxiliary contact	Auxiliary contact	
number of NC contacts at contactor for auxiliary contacts 0	number of NC contacts at contactor for auxiliary contacts	0
number of NO contacts at contactor for auxiliary contacts 1	number of NO contacts at contactor for auxiliary contacts	1
number of total auxiliary contacts maximum 8	number of total auxiliary contacts maximum	8
contact rating of auxiliary contacts of contactor according 10A@600VAC (A600), 5A@600VDC (P600)		10A@600VAC (A600), 5A@600VDC (P600)
to UL		
Coil		10
type of voltage of the control supply voltage AC control supply voltage		AC
• at AC at 50 Hz rated value 110 V	<ul> <li>at AC at 50 Hz rated value</li> </ul>	110 V
• at AC at 60 Hz rated value 120 V	<ul> <li>at AC at 60 Hz rated value</li> </ul>	120 V
holding power at AC minimum 8.6 W	holding power at AC minimum	8.6 W
apparent pick-up power of magnet coil at AC 218 VA		0403/4

apparent holding power of magnet coil at AC	25 VA
operating range factor control supply voltage rated value	0.85 1.1
of magnet coil percental drop-out voltage of magnet coil related to the	50 %
input voltage	
ON-delay time	19 29 ms
OFF-delay time	10 24 ms
Overload relay	
product function	
<ul> <li>overload protection</li> </ul>	Yes
test function	Yes
<ul> <li>external reset</li> </ul>	Yes
reset function	Manual and automatic
adjustment range of thermal overload trip unit	0.85 1.15
number of NC contacts of auxiliary contacts of overload relay	1
number of NO contacts of auxiliary contacts of overload relay	0
operational current of auxiliary contacts of overload relay	
• at AC at 600 V	5 A
• at DC at 250 V	5 A
contact rating of auxiliary contacts of overload relay according to UL	5A@600VAC (B600), 5A@250VDC (P300)
Enclosure	
degree of protection NEMA rating	4X, 304 stainless steel
design of the housing	dustproof, waterproof & resistant to corrosion
Mounting/wiring	
	Vertical
mounting position	
fastening method	Surface mounting and installation
type of electrical connection for supply voltage line-side	Screw-type terminals 35 35 lbf·in
tightening torque [lbf·in] for supply	75 °C
temperature of the conductor for supply maximum permissible	75 0
material of the conductor for supply	AL or CU
type of electrical connection for load-side outgoing feeder	Screw-type terminals
tightening torque [lbf·in] for load-side outgoing feeder	35 50 lbf-in
type of electrical connection of magnet coil	Screw-type terminals
tightening torque [lbf·in] at magnet coil	5 12 lbf·in
type of connectable conductor cross-sections of magnet	2x (16 12 AWG)
coil at AWG cables single or multi-stranded	
temperature of the conductor at magnet coil maximum permissible	75 °C
material of the conductor at magnet coil	CU
type of electrical connection for auxiliary contacts	Screw-type terminals
tightening torque [lbf·in] at contactor for auxiliary contacts	10 15 lbf·in
type of connectable conductor cross-sections at contactor at AWG cables for auxiliary contacts single or multi- stranded	1x (12 AWG), 2x (16 14 AWG), 2x (18 16 AWG)
temperature of the conductor at contactor for auxiliary	75 °C
contacts maximum permissible	
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	5 12 lbf·in
type of connectable conductor cross-sections at overload relay at AWG cables for auxiliary contacts single or multi- stranded	2x (16 12 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	10kA@600V (Class H or K); 100kA@600V (Class R or J)
main circuit required	
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/iccatalog

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/us/Catalog/product?mlfb=US2:14DP12WF81

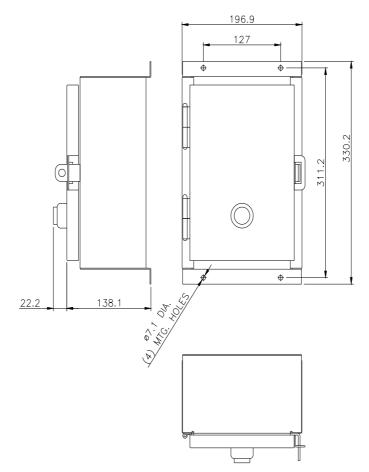
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

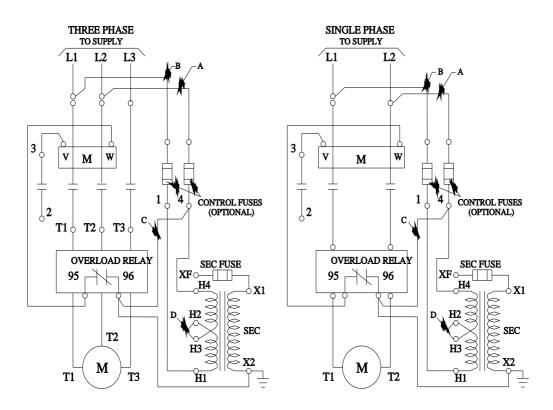
https://support.industry.siemens.com/cs/US/en/ps/US2:14DP12WF81

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=US2:14DP12WF81&lang=en

Certificates/approvals

https://support.industry.siemens.com/cs/US/en/ps/US2:14DP12WF81/certificate





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