



Figure similar

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 12, Dust/drip proof for indoors, Standard width enclosure

product brand name
design of the product
special product feature

Class 14
Full-voltage non-reversing motor starter
ESP200 overload relay

General technical data

weight [lb] 11 lb
Height x Width x Depth [in] 13 × 8 × 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 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

Contactors

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 10000000

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 190 ... 220 V
 • at AC at 60 Hz rated value 220 ... 240 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
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

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	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

Enclosure

degree of protection NEMA rating	12
design of the housing	Dust tight and drip proof for indoors

Mounting/wiring

mounting position	Vertical
fastening method	Surface mounting and installation
type of electrical connection for supply voltage line-side	Screw-type terminals
tightening torque [lbf-in] for supply	35 ... 35 lbf-in
type of connectable conductor cross-sections at line-side at AWG cables single or multi-stranded	1x(14 - 2 AWG)
temperature of the conductor for supply maximum permissible	75 °C
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 ... 35 lbf-in
type of connectable conductor cross-sections at AWG cables for load-side outgoing feeder single or multi-stranded	1x(14 - 2 AWG)
temperature of the conductor for load-side outgoing feeder maximum permissible	75 °C
material of the conductor for load-side outgoing feeder	AL or CU
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 coil at AWG cables single or multi-stranded	2 x (16 - 12 AWG)
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	1 x (12 AWG), 2 x (16 - 14 AWG), 2 x (18 - 16 AWG)

at AWG cables for auxiliary contacts single or multi-stranded

temperature of the conductor at contactor for auxiliary contacts maximum permissible

material of the conductor at contactor for auxiliary contacts

type of electrical connection at overload relay for auxiliary contacts

tightening torque [lbf-in] at overload relay for auxiliary contacts

type of connectable conductor cross-sections at overload relay at AWG cables for auxiliary contacts single or multi-stranded

temperature of the conductor at overload relay for auxiliary contacts maximum permissible

material of the conductor at overload relay for auxiliary contacts

75 °C

CU

screw-type terminals

7 ... 10 lbf-in

2 x (20 - 14 AWG)

75 °C

CU

Short-circuit current rating

design of the fuse link for short-circuit protection of the main circuit required

design of the short-circuit trip

maximum short-circuit current breaking capacity (I_{cu})

- at 240 V
- at 480 V
- at 600 V

certificate of suitability

10kA@600V (Class H or K); 100kA@600V (Class R or J)

Thermal magnetic circuit breaker

14 kA

10 kA

10 kA

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=US2:14DUD120G>

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

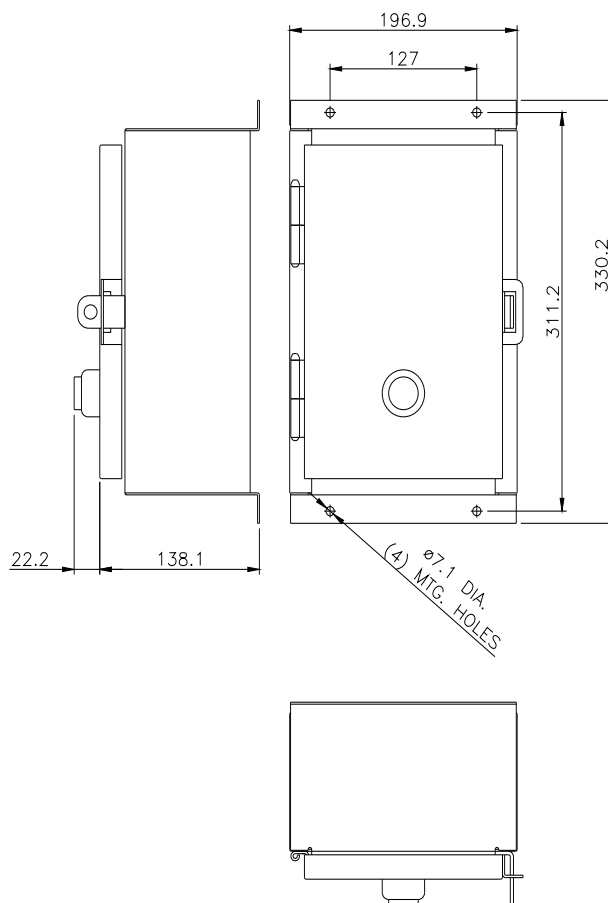
<https://support.industry.siemens.com/cs/US/en/ps/US2:14DUD120G>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:14DUD120G&lang=en

Certificates/approvals

<https://support.industry.siemens.com/cs/US/en/ps/US2:14DUD120G/certificate>





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