## **SIEMENS**

Data sheet US2:14CUD82BA

Non-reversing motor starter Size 0 Three phase full voltage Solid-state overload relay OLRelay amp range 5.5-22A 110-120/220-240VAC 60HZ coil Combination type Indoor general purpose use



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]	20 lb
Height x Width x Depth [in]	20 × 12 × 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
country of origin	USA
Horsepower ratings	
yielded mechanical performance [hp] for 3-phase AC motor	
<ul><li>at 200/208 V rated value</li></ul>	3 hp
<ul><li>at 220/230 V rated value</li></ul>	3 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	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 60 Hz rated value	110 240 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  ON-delay time  OFF-delay time  OFF-delay time  Overload relay  product function  • overload protection  • phase failure detection  • asymmetry detection  • ground fault detection  • test function  • external reset  reset function  trip class  adjustable current response value current of the current-dependent overload release  tripping time at phase-loss maximum  relative repeat accuracy  product feature protective coating on printed-circuit board number of NC contacts of auxililary contacts of overload relay  • at AC at 600 V  • at DC at 250 V  contact rating of auxiliary contacts of overload relay according to  10 24 ms  10 24 ms  Ves  Ves  Ves  Ves  Ves  CLASS 5 / 10 / 20 (factory set) / 30  S.5 22 A  S.5 22 A  Ves  1 %  Yes  1 mumber of NC contacts of auxililary contacts of overload relay  1 at AC at 600 V  • at AC at 600 V  • at DC at 250 V  contact rating of auxiliary contacts of overload relay according to  S.6 600VAC (B600), 1A@250VDC (R300)	
OFF-delay time  Overload relay  product function  overload protection phase failure detection phase failure detection product function phase failure detection phase failure detection product function product feature protective coating on printed-circuit board product feature protective coating on printed-circuit board product feature protective coating on printed-circuit board product feature protective coating on printed-circuit function functional funct	
product function	
product function  overload protection  phase failure detection  phase failure detection  saymmetry detection  ground fault detection  eground fault detection  test function  external reset  reset function  frip class  current response value current of the current-dependent overload release  tripping time at phase-loss maximum  relative repeat accuracy  product feature protective coating on printed-circuit board  number of NC contacts of auxiliary contacts of overload relay  operational current of auxiliary contacts of overload relay  at AC at 600 V  at DC at 250 V  contact rating of auxiliary contacts of overload relay according to  See See See See See See See See See Se	
overload protection     phase failure detection     phase failure detection     asymmetry detection     ground fault detection     ground fault detection     test function     external reset     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  tripping time at phase-loss maximum     relative repeat accuracy     product feature protective coating on printed-circuit board     number of NC contacts of auxiliary contacts of overload relay     number of NO contacts of auxiliary contacts of overload relay     operational current of auxiliary contacts of overload relay     at AC at 600 V     at DC at 250 V     contact rating of auxiliary contacts of overload relay according to      SA@600VAC (B600), 1A@250VDC (R300)	
phase failure detection asymmetry detection ground fault detection test function external reset  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  tripping time at phase-loss maximum relative repeat accuracy product feature protective coating on printed-circuit board number of NC contacts of auxiliary contacts of overload relay number of NO contacts of auxiliary contacts of overload relay  at AC at 600 V at DC at 250 V  contact rating of auxiliary contacts of overload relay according to  Ses	
asymmetry detection ground fault detection test function  external reset  reset function  frip class  adjustable current response value current of the current-dependent overload release  tripping time at phase-loss maximum  relative repeat accuracy product feature protective coating on printed-circuit board number of NC contacts of auxiliary contacts of overload relay number of NO contacts of auxiliary contacts of overload relay  at AC at 600 V  at DC at 250 V  contact rating of auxiliary contacts of overload relay according to  yes  All auxiliary contacts of overload relay  5A@600VAC (B600), 1A@250VDC (R300)	
• ground fault detection	
• test function  • external reset  reset function  trip class  adjustable current response value current of the current-dependent overload release  tripping time at phase-loss maximum  relative repeat accuracy  product feature protective coating on printed-circuit board number of NC contacts of auxiliary contacts of overload relay  number of NO contacts of auxiliary contacts of overload relay  operational current of auxiliary contacts of overload relay  • at AC at 600 V  • at DC at 250 V  contact rating of auxiliary contacts of overload relay according to  yes  1 M  yes  1 M  5 A  6 A  6 A  6 A  6 A  6 A  6 B  6 B  6	
● external reset  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  tripping time at phase-loss maximum  relative repeat accuracy  product feature protective coating on printed-circuit board  number of NC contacts of auxiliary contacts of overload relay  number of NO contacts of auxiliary contacts of overload relay  operational current of auxiliary contacts of overload relay  • at AC at 600 V  • at DC at 250 V  contact rating of auxiliary contacts of overload relay according to  5A@600VAC (B600), 1A@250VDC (R300)	
reset function  trip class  CLASS 5 / 10 / 20 (factory set) / 30  adjustable current response value current of the current- dependent overload release  tripping time at phase-loss maximum  relative repeat accuracy  product feature protective coating on printed-circuit board  number of NC contacts of auxiliary contacts of overload relay  number of NO contacts of auxiliary contacts of overload relay  operational current of auxiliary contacts of overload relay  • at AC at 600 V  • at DC at 250 V  contact rating of auxiliary contacts of overload relay according to  Manual, automatic and remote  CLASS 5 / 10 / 20 (factory set) / 30  5.5 22 A  5 / 0  5 /	
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adjustable current response value current of the current- dependent overload release  tripping time at phase-loss maximum  relative repeat accuracy  product feature protective coating on printed-circuit board  number of NC contacts of auxiliary contacts of overload relay  number of NO contacts of auxiliary contacts of overload relay  operational current of auxiliary contacts of overload relay  at AC at 600 V  at DC at 250 V  to at DC at 250 V  contact rating of auxiliary contacts of overload relay according to  5.5 22 A  5.5 22 A  5.5 22 A  5.5 22 A  1 %  1 %  5.5 22 A	
dependent overload release  tripping time at phase-loss maximum  relative repeat accuracy  product feature protective coating on printed-circuit board  number of NC contacts of auxiliary contacts of overload relay  number of NO contacts of auxiliary contacts of overload relay  operational current of auxiliary contacts of overload relay  • at AC at 600 V  • at DC at 250 V  contact rating of auxiliary contacts of overload relay according to  5A@600VAC (B600), 1A@250VDC (R300)	
relative repeat accuracy product feature protective coating on printed-circuit board Yes number of NC contacts of auxiliary contacts of overload relay number of NO contacts of auxiliary contacts of overload relay operational current of auxiliary contacts of overload relay • at AC at 600 V • at DC at 250 V  to at DC at 250 V  contact rating of auxiliary contacts of overload relay according to  5A@600VAC (B600), 1A@250VDC (R300)	
product feature protective coating on printed-circuit board  number of NC contacts of auxiliary contacts of overload relay  number of NO contacts of auxiliary contacts of overload relay  operational current of auxiliary contacts of overload relay  • at AC at 600 V  • at DC at 250 V  to at DC at 250 V  contact rating of auxiliary contacts of overload relay according to  5A@600VAC (B600), 1A@250VDC (R300)	
number of NC contacts of auxiliary contacts of overload relay  number of NO contacts of auxiliary contacts of overload relay  operational current of auxiliary contacts of overload relay  • at AC at 600 V  • at DC at 250 V  to at DC at 250 V  contact rating of auxiliary contacts of overload relay according to  5A@600VAC (B600), 1A@250VDC (R300)	
number of NO contacts of auxiliary contacts of overload relay  operational current of auxiliary contacts of overload relay  • at AC at 600 V  • at DC at 250 V  contact rating of auxiliary contacts of overload relay according to  5A@600VAC (B600), 1A@250VDC (R300)	
operational current of auxiliary contacts of overload relay  • at AC at 600 V  • at DC at 250 V  contact rating of auxiliary contacts of overload relay according to  5A@600VAC (B600), 1A@250VDC (R300)	
<ul> <li>at AC at 600 V</li> <li>at DC at 250 V</li> <li>contact rating of auxiliary contacts of overload relay according to</li> <li>5 A</li> <li>1 A</li> <li>5A@600VAC (B600), 1A@250VDC (R300)</li> </ul>	
• at DC at 250 V  contact rating of auxiliary contacts of overload relay according to  5A@600VAC (B600), 1A@250VDC (R300)	
contact rating of auxiliary contacts of overload relay according to 5A@600VAC (B600), 1A@250VDC (R300)	
UL U	
insulation voltage (Ui)	
• with single-phase operation at AC rated value 600 V	
• with multi-phase operation at AC rated value 300 V	
Enclosure	
design of the housing Extra-wide	
degree of protection NEMA rating of the enclosure Extra-wide NEMA Type 1	
design of the housing Indoor general purpose use	
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 20 20 lbf-in	
type of connectable conductor cross-sections at line-side for AWG cables single or multi-stranded	
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 20 20 lbf·in	
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 75 °C	
material of the conductor for load-side outgoing feeder AL or CU	
type of electrical connection of magnet coil screw-type terminals	
71	
tightening torque [lbf-in] at magnet coil  5 12 lbf-in	
tightening torque [lbf·in] at magnet coil 5 12 lbf·in type of connectable conductor cross-sections of magnet coil for 2 x (16 - 12 AWG)	
tightening torque [lbf-in] at magnet coil 5 12 lbf-in  type of connectable conductor cross-sections of magnet coil for AWG cables single or multi-stranded  temperature of the conductor at magnet coil maximum  75 °C	
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  5 12 lbf-in  2 x (16 - 12 AWG)  75 °C	
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  CU	
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  type of electrical connection for auxiliary contacts  tightening torque [lbf-in] at contactor for auxiliary contacts  type of connectable conductor cross-sections at contactor for  1 x (12 AWG), 2 x (16 - 14 AWG), 2 x (18 - 16 AWG)	
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  type of electrical connection for auxiliary contacts  tightening torque [lbf-in] at contactor for auxiliary contacts  type of connectable conductor cross-sections at contactor for AWG cables for auxiliary contacts single or multi-stranded  temperature of the conductor at contactor for auxiliary contacts  75 °C	
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  type of electrical connection for auxiliary contacts  tightening torque [lbf-in] at contactor for auxiliary contacts  type of connectable conductor cross-sections at contactor for AWG cables for auxiliary contacts single or multi-stranded  5 12 lbf-in  2 x (16 - 12 AWG)  CU  CU  type of connectable conductor at magnet coil  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,...)

Industry Mall (Online ordering system)

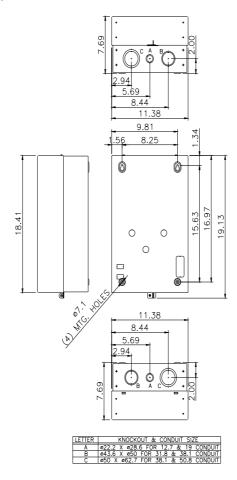
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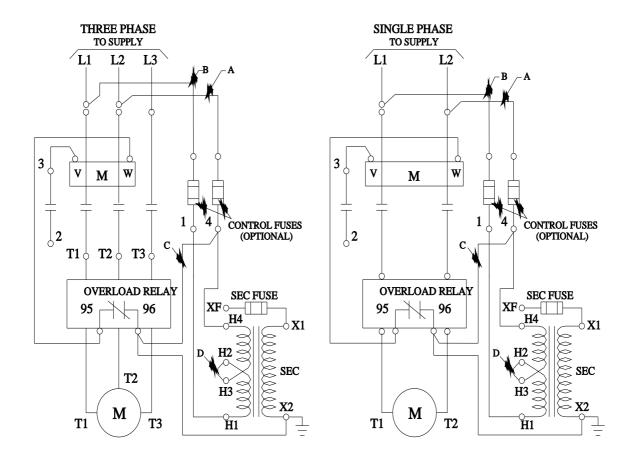
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