## **SIEMENS**

Data sheet US2:18CUC82NA



Non-reversing motor starter, Size 0, Three phase full voltage, Solid-state overload relay, OLR amp range 3-12A, Combination type, 10A circuit breaker, Enclosure NEMA type 4/12, Water/dust tight for outdoors, Extrawide enclosure

Figure similar

product brand name	Class 18 & 26
design of the product	Full-voltage non-reversing motor starter with motor circuit protector
special product feature	ESP200 overload relay; Dual voltage coil
General technical data	
Height x Width x Depth [in]	24 × 20 × 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]	
<ul> <li>during storage</li> </ul>	-22 +149 °F
<ul> <li>during operation</li> </ul>	-4 +104 °F
ambient temperature	
<ul> <li>during storage</li> </ul>	-30 +65 °C
<ul> <li>during operation</li> </ul>	-20 +40 °C
Horsepower ratings	
yielded mechanical performance [hp] for 3-phase AC motor	
• at 200/208 V rated value	2 hp
• at 220/230 V rated value	2 hp
• at 460/480 V rated value	5 hp
• at 575/600 V rated value	5 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 (switching 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  apparent holding power of magnet coil at AC  operating range factor control supply voltage rated value of magnet coil  percental drop-out voltage of magnet coil related to the input voltage  ON-delay time  OFF-delay time  Overload relay  product function  • overload protection  • phase failure detection  • ground fault detection  • test function  • external reset  reset function  trip class  adjustable current response value current of the current-dependent overload release  make time with automatic start after power failure maximum  relative repeat accuracy  25 VA  25 VA  25 VA  25 VA  25 VA  25 VA  0.85 1.1  on	
operating range factor control supply voltage rated value of magnet coil  percental drop-out voltage of magnet coil related to the input voltage  ON-delay time  OFF-delay time  Overload relay  product function  overload protection  pround fault detection  pround fault detection  external reset  reset function  trip class  adjustable current response value current of the current-dependent overload release  make time with automatic start after power failure maximum  oN-85 1.1  50 %  19 29 ms  70 24 ms  70	
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input voltage  ON-delay time  OFF-delay time  10 24 ms  Overload relay  product function  overload protection  phase failure detection  saymmetry detection  ground fault detection  test function  external reset  reset function  trip class  adjustable current response value current of the current-dependent overload release  make time with automatic start after power failure maximum  19 29 ms  10 24 ms  Yes  Yes  Yes  Yes  Yes  Amsual, automatic and remote  CLASS 5 / 10 / 20 (factory set) / 30  3 12 A  3 s	
OFF-delay time  Overload relay  product function  overload protection  phase failure detection  ground fault detection  test function  external reset  reset function  trip class  adjustable current response value current of the current-dependent overload release  make time with automatic start after power failure  maximum  reset function  10 24 ms  Yes  Yes  Yes  Yes  Yes  Annual, automatic and remote  CLASS 5 / 10 / 20 (factory set) / 30  3 12 A  3 s	
product function	
product function	
<ul> <li>overload protection</li> <li>phase failure detection</li> <li>asymmetry detection</li> <li>ground fault detection</li> <li>test function</li> <li>external reset</li> <li>reset function</li> <li>trip class</li> <li>adjustable current response value current of the current-dependent overload release</li> <li>make time with automatic start after power failure maximum</li> <li>Yes</li> <li>Yes</li> <li>Yes</li> <li>Yes</li> <li>CLASS 5 / 10 / 20 (factory set) / 30</li> <li>3 12 A</li> <li>3 s</li> </ul>	
<ul> <li>phase failure detection</li> <li>asymmetry detection</li> <li>ground fault detection</li> <li>test function</li> <li>external reset</li> <li>reset function</li> <li>trip class</li> <li>adjustable current response value current of the current-dependent overload release</li> <li>make time with automatic start after power failure maximum</li> </ul> Yes Yes Yes CLASS 5 / 10 / 20 (factory set) / 30 3 12 A 3 s 3 s	
<ul> <li>asymmetry detection</li> <li>ground fault detection</li> <li>test function</li> <li>external reset</li> <li>reset function</li> <li>Manual, automatic and remote</li> <li>trip class</li> <li>cLASS 5 / 10 / 20 (factory set) / 30</li> <li>adjustable current response value current of the current-dependent overload release</li> <li>make time with automatic start after power failure maximum</li> <li>3 s</li> </ul>	
<ul> <li>ground fault detection</li> <li>test function</li> <li>external reset</li> <li>reset function</li> <li>trip class</li> <li>adjustable current response value current of the current-dependent overload release</li> <li>make time with automatic start after power failure maximum</li> </ul> Yes Yes Yes CLASS 5 / 10 / 20 (factory set) / 30 3 12 A 3 s 3 s	
◆ test function     ◆ 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  make time with automatic start after power failure maximum  Yes  Yes  Yes  CLASS 5 / 10 / 20 (factory set) / 30  3 12 A  3 s	
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adjustable current response value current of the current- dependent overload release make time with automatic start after power failure maximum  3 12 A 3 s	
adjustable current response value current of the current- dependent overload release make time with automatic start after power failure maximum  3 12 A 3 s	
make time with automatic start after power failure as s 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	
number of NO contacts of auxiliary contacts of overload relay	
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 4, 12	
design of the housing dustproof, waterproof & weatherproof	
Circuit Breaker	
type of the motor protection Motor circuit protector (magnetic trip only)	
operational current of motor circuit breaker rated value 10 A	
adjustable current response value current of instantaneous short-circuit trip unit	
Mounting/wiring	
mounting position Vertical	
fastening method Surface mounting and installation	
type of electrical connection for supply voltage line-side  Box lug	
type of connectable conductor cross-sections at line-side at AWG cables single or multi-stranded  1x (14 AWG 10 AWG) or 1x (12 AWG 10 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 20 20 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	
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type of connectable conductor cross-sections of magnet coil at AWG cables single or multi-stranded	2x (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 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 contacts maximum permissible	75 °C
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	7 10 lbf·in
type of connectable conductor cross-sections at overload relay at AWG cables for auxiliary contacts single or multi-stranded	2x (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 short-circuit trip	Instantaneous trip circuit breaker
breaking capacity maximum short-circuit current (Icu)	
• at 240 V	100 kA
• at 480 V	100 kA
• at 600 V	25 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)

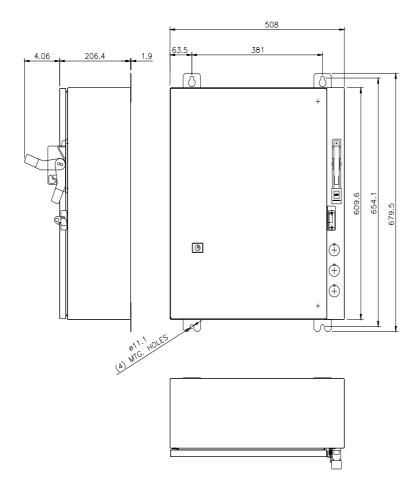
https://mall.industry.siemens.com/mall/en/us/Catalog/product?mlfb=US2:18CUC82NA

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/US/en/ps/US2:18CUC82NA

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) <a href="http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=US2:18CUC82NA&lang=en">http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=US2:18CUC82NA&lang=en</a>

Certificates/approvals

https://support.industry.siemens.com/cs/US/en/ps/US2:18CUC82NA/certificate



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