SIEMENS

Data sheet

US2:18CUC82NH



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

Figur	esi	milar	

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	
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]		
 during storage 	-22 +149 °F	
during operation	-4 +104 °F	
ambient temperature		
 during storage 	-30 +65 °C	
during operation	-20 +40 °C	
Horsepower ratings		
yielded mechanical performance [hp] for 3-phase AC		
motor	0.64	
at 200/208 V rated value	2 hp	
at 220/230 V rated value	2 hp	
 at 460/480 V rated value at 575/600 V rated value 	5 hp	
Contactor	5 hp	
	NEMA controllor size 0	
size of contactor number of NO contacts for main contacts	NEMA controller size 0 3	
	600 V	
operating voltage for main current circuit at AC at 60 Hz maximum	000 V	
operational current at AC at 600 V rated value	18 A	
mechanical service life (switching 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 50 Hz rated value 	380 440 V	
• at AC at 60 Hz rated value	440 480 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	
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	3 12 A	
make time with automatic start after power failure 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		
contact rating of auxiliary contacts of overload relay according to UL	5A@600VAC (B600), 1A@250VDC (R300)	
insulation voltage (Ui)	000.1/	
with single-phase operation at AC rated value	600 V 300 V	
with multi-phase operation at AC rated value	300 V	
Enclosure	4.40	
degree of protection NEMA rating	4, 12	
design of the housing	dustproof, waterproof & weatherproof	
Circuit Breaker	Motor airquit protoctor (magnotic trip only)	
type of the motor protection	Motor circuit protector (magnetic trip only)	
operational current of motor circuit breaker rated value	10 A 30 100 A	
adjustable current response value current of instantaneous short-circuit trip unit	30 100 A	
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	

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	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 (lcu)		
• 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=US2:18CUC82NH		
Service&Support (Manuals, Certificates, Characteristics, FAQs,)		
https://support.industry.siemens.com/cs/US/en/ps/US2:18CUC82NH		
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros,) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:18CUC82NH⟨=en		
Certificates/approvals		
https://support.industry.siemens.com/cs/US/en/ps/US2:18CUC82NH/certificate		

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