SIEMENS

Data sheet US2:17CUD82BJ



Non-reversing motor starter, Size 0, Three phase full voltage, Solid-state overload relay, OLR amp range 5.5-22A, 24VAC 50-60Hz coil, Combination type, 30A non-fusible disconnect, Enclosure NEMA type 1, Indoor general purpose use, Extra-wide enclosure

Figure similar

design of the product special product feature ESP200 overload relay ESP200 overload rela	product brand name	Class 17 & 25
Height x Width x Depth [in] 24 × 20 × 8 in (NA for enclosed products) installation altitude [ft] at height above sea level maximum ambient temperature ["F] 4 +104 "F 4 +104 "F 4 +104 "C 4	design of the product	Full-voltage non-reversing motor starter with non-fusible disconnect
Height x Width x Depth [in] touch protection against electrical shock installation altitude [it] at height above sea level maximum ambient temperature [*F] • during storage • during operation	special product feature	ESP200 overload relay
touch protection against electrical shock installation altitude [ft] at height above sea level maximum ambient temperature [°F] • during storage	General technical data	
installation altitude [ft] at height above sea level maximum ambient temperature [°F] • during storage • during operation ambient temperature • during storage • during operation -30 +65 °C -20 +40 °C Horsepower ratings yielded mechanical performance [hp] for 3-phase AC motor • at 200/208 V rated value • at 220/230 V rated value • at 460/480 V rated value • at 460/480 V rated value • at 575/600 V rated value • at 575/600 V rated value • at 576/600 V rated value • at 80 Nemark of the following operation operation of the following operation of the following operation operation of the following operation operation of the following operation operatio	Height x Width x Depth [in]	24 × 20 × 8 in
ambient temperature [°F] • during storage • during operation ambient temperature • during storage • during storage • during storage • during operation • during storage • during operation • during operation • during operation • 20 +40 °C Horsepower ratings yielded mechanical performance [hp] for 3-phase AC motor • at 200/208 V rated value • at 220/230 V rated value • at 260/480 V rated value • at 460/480 V rated value • ohp Contactor size of contactor number of NO contacts for main contacts operational current at AC at 600 V rated value 18 A mechanical service life (switching cycles) of the main contacts typical Auxiliary contact number of NC contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of Not contacts at contactor for auxiliary contacts number of Not contacts at contactor for auxiliary contacts number of Not contacts at contactor for auxiliary contacts number of Not contacts at contactor for auxiliary contacts number of Not contacts at contactor for auxiliary contacts number of Not contacts at contactor for auxiliary contacts number of Not contacts at contactor for auxiliary contacts number of Not contacts at contactor for auxiliary contacts number of Not contacts at contactor for auxiliary contacts number of Not contacts at contactor for auxiliary contacts number of Not contacts at contactor for auxiliary contacts number of Not contacts at contactor for auxiliary contacts number of Not contacts at contactor for auxiliary contacts number of Not contacts at contactor for auxiliary contacts number of Not contacts at contactor for auxiliary contacts number of Not contacts at contactor for auxiliary contacts number of Not contacts at contactor for auxiliary contacts numb	touch protection against electrical shock	(NA for enclosed products)
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 during operation during storage during storage during operation during operat	ambient temperature [°F]	
ambient temperature	during storage	-22 +149 °F
during storage during operation during operation Horsepower ratings yielded mechanical performance [hp] for 3-phase AC motor at 200/208 V rated value at 220/230 V rated value at 460/480 V rated value at 460/480 V rated value at 575/600 V rated value o hp Contactor size of contactor number of NC contacts for main contacts operational current at AC at 600 V rated value mechanical service life (switching cycles) of the main contacts typical Auxiliary contact number of NC contacts at contactor for auxiliary contacts number of NC contacts at contactor for auxiliary contacts number of total auxiliary contacts maximum contact rating of auxiliary contacts of contactor according to UL Coil type of voltage of the control supply voltage AC control supply voltage	during operation	-4 +104 °F
• during operation Forsepower ratings yielded mechanical performance [hp] for 3-phase AC motor • at 200/208 V rated value • at 220/230 V rated value • at 460/480 V rated value • at 575/600 V rated value Size of contactor size of contacts for main contacts 3 operational current at AC at 600 V rated value 18 A mechanical service life (switching cycles) of the main contacts typical Auxiliary contact number of NC contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of total auxiliary contacts maximum 8 contact rating of auxiliary contacts of contactor according to UL Coil type of voltage of the control supply voltage AC control supply voltage	ambient temperature	
Horsepower ratings	during storage	-30 +65 °C
yielded mechanical performance [hp] for 3-phase AC motor • at 200/208 V rated value • at 220/230 V rated value • at 460/480 V rated value • at 575/600 V rated value Contactor size of contactor number of NO contacts for main contacts operational current at AC at 600 V rated value mechanical service life (switching cycles) of the main contacts typical Auxiliary contact number of NC contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of total auxiliary contacts maximum contact rating of auxiliary contacts of contactor according to UL Coil type of voltage of the control supply voltage control supply voltage AC AC Control supply voltage	 during operation 	-20 +40 °C
motor • at 200/208 V rated value • at 220/230 V rated value • at 460/480 V rated value • at 575/600 V rated value • at 575/600 V rated value • at 575/600 V rated value • o hp Contactor size of contactor number of NO contacts for main contacts operational current at AC at 600 V rated value mechanical service life (switching cycles) of the main contacts typical Auxillary contact number of NC contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of total auxiliary contacts maximum sometic rating of auxiliary contacts of contactor according to UL Coil type of voltage of the control supply voltage AC control supply voltage	Horsepower ratings	
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at 460/480 V rated value at 575/600 V rated value o hp Contactor size of contactor number of NO contacts for main contacts operational current at AC at 600 V rated value mechanical service life (switching cycles) of the main contacts typical Auxiliary contact number of NC contacts at contactor for auxiliary contacts number of NC contacts at contactor for auxiliary contacts number of total auxiliary contacts at contactor for auxiliary contacts number of total auxiliary contacts of contactor according to UL Coil type of voltage of the control supply voltage AC O hp O had O had O hp O had O h	at 200/208 V rated value	3 hp
• at 575/600 V rated value Contactor size of contactor number of NO contacts for main contacts operational current at AC at 600 V rated value mechanical service life (switching cycles) of the main contacts typical Auxiliary contact number of NC contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of total auxiliary contacts maximum contact rating of auxiliary contacts of contactor according to UL Coil type of voltage of the control supply voltage AC NEMA controller size 0 NEMA controller size 0 18 A 100000000 100000000 10000000000000	at 220/230 V rated value	3 hp
size of contactor number of NO contacts for main contacts operational current at AC at 600 V rated value mechanical service life (switching cycles) of the main contacts typical Auxiliary contact number of NC contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of total auxiliary contacts maximum contact rating of auxiliary contacts of contactor according to UL Coil type of voltage of the control supply voltage AC control supply voltage	at 460/480 V rated value	0 hp
size of contactor number of NO contacts for main contacts operational current at AC at 600 V rated value mechanical service life (switching cycles) of the main contacts typical Auxiliary contact number of NC contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of total auxiliary contacts maximum contact rating of auxiliary contacts of contactor according to UL Coil type of voltage of the control supply voltage AC control supply voltage	at 575/600 V rated value	0 hp
number of NO contacts for main contacts operational current at AC at 600 V rated value mechanical service life (switching cycles) of the main contacts typical Auxiliary contact number of NC contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of total auxiliary contacts maximum secontact rating of auxiliary contacts of contactor according to UL Coil type of voltage of the control supply voltage AC control supply voltage	Contactor	
operational current at AC at 600 V rated value mechanical service life (switching cycles) of the main contacts typical Auxiliary contact number of NC contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of total auxiliary contacts maximum contact rating of auxiliary contacts of contactor according to UL Coil type of voltage of the control supply voltage AC control supply voltage	size of contactor	NEMA controller size 0
mechanical service life (switching cycles) of the main contacts typical Auxiliary contact number of NC contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of total auxiliary contacts maximum contact rating of auxiliary contacts of contactor according to UL Coil type of voltage of the control supply voltage AC control supply voltage	number of NO contacts for main contacts	3
contacts typical Auxiliary contact number of NC contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of total auxiliary contacts maximum contact rating of auxiliary contacts of contactor according to UL Coil type of voltage of the control supply voltage AC control supply voltage	operational current at AC at 600 V rated value	18 A
number of NC contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of total auxiliary contacts maximum contact rating of auxiliary contacts of contactor according to UL Coil type of voltage of the control supply voltage AC control supply voltage		10000000
number of NO contacts at contactor for auxiliary contacts number of total auxiliary contacts maximum contact rating of auxiliary contacts of contactor according to UL Coil type of voltage of the control supply voltage AC control supply voltage	Auxiliary contact	
number of total auxiliary contacts maximum contact rating of auxiliary contacts of contactor according to UL Coil type of voltage of the control supply voltage control supply voltage AC	number of NC contacts at contactor for auxiliary contacts	0
contact rating of auxiliary contacts of contactor according to UL Coil type of voltage of the control supply voltage control supply voltage AC	number of NO contacts at contactor for auxiliary contacts	1
to UL Coil type of voltage of the control supply voltage AC control supply voltage	number of total auxiliary contacts maximum	8
type of voltage of the control supply voltage AC control supply voltage	·	10A@600VAC (A600), 5A@600VDC (P600)
control supply voltage	Coil	
	type of voltage of the control supply voltage	AC
e at AC at 50 Hz rated value 24 V		
₹ at no at our intration value	at AC at 50 Hz rated value	24 V
at AC at 60 Hz rated value 24 V	 at AC at 60 Hz rated value 	24 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		218 VA

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 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
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	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
Disconnect Switch	
response value of switch disconnector	30A / 600V
design of fuse holder	non-fusible
operating class of the fuse link	non-fusible
Enclosure	
degree of protection NEMA rating	1
design of the housing	Extra-wide
design of the housing	indoors, usable on a general basis
Mounting/wiring	
mounting position	vertical
fastening method	Surface mounting and installation
type of electrical connection for supply voltage line-side	Box lug
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	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 fuse link for short-circuit protection of the main circuit required	10kA@600V (Class H or K); 100kA@600V (Class R or J)
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=US2:17CUD82BJ

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

https://support.industry.siemens.com/cs/US/en/ps/US2:17CUD82BJ

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax de.aspx?mlfb=US2:17CUD82BJ&lang=en

Certificates/approvals

https://support.industry.siemens.com/cs/US/en/ps/US2:17CUD82BJ/certificate

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