SIEMENS

Data sheet US2:83CUD950J

SIEMENS

Figure similar

Duplex starter W/O alternator Size 0 Three phase full voltage Solidstate overload relay OLRelay amp range 5.5-22A 24VAC 50-60HZ coil Non-combination type Enclosure NEMA type 12 Dust/drip proof for indoors

General technical data	
Weight [lb]	40 lb
Height x Width x Depth [in]	20 × 16 × 6 in
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
Ambient temperature [°F] during operation	-4 +104 °F
Ambient temperature during storage	-30 +65 °C
Ambient temperature during operation	-20 +40 °C
Country of origin	USA

3 hp
3 hp
0 hp

● at 575/600 V rated value	0 hp
Contactor	
Number of NO contacts for main contacts	3
Operating voltage for main current circuit at AC at 60 Hz maximum	600 V
Operating current at AC at 600 V rated value	18 A
Mechanical service life (switching cycles) of the main	10000000
contacts typical	
Auxiliary contact	
Number of NC contacts at contactor for auxiliary	0
contacts	
Number of NO contacts at contactor for auxiliary contacts	1
	8
Number of total auxiliary contacts maximum	
Contact rating of auxiliary contacts of contactor according to UL	10A@600VAC (A600), 5A@600VDC (P600)
assorating to 52	
Coil	
Type of voltage of the control supply voltage	AC
Control supply voltage	
at DC rated value	0 0 V
 at AC at 60 Hz rated value 	24 24 V
● at AC at 50 Hz rated value	24 24 V
Holding power at AC minimum	8.6 W
Apparent pick-up power of magnet coil at AC	218 V·A
Apparent holding power of magnet coil at AC	25 V·A
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 %
Switch-on delay time	19 29 ms
Off-delay time	10 24 ms
Overload relay	
Product function	
 Overload protection 	Yes
Phase failure detection	Yes
Phase unbalance	Yes
Ground fault detection	Yes
Test function	Yes
External reset	Yes
Reset function	Manual, automatic and remote
Adjustable pick-up value current of the current- dependent overload release	5.5 22 A

Trip time at phase-loss maximum	3 s
Relative repeat accuracy	1 %
Product feature Protective coating on printed-circuit	Yes
board	
Number of NC contacts of auxiliary contacts of	1
overload relay	
Number of NO contacts of auxiliary contacts of	1
overload relay	
Operating 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	5A@600VAC (B600), 1A@250VDC (R300)
according to UL	
Insulation voltage	
 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 of the enclosure	NEMA 12 enclosure
Design of the housing	Dust tight and drip proof for indoors

Mounting/wiring	
(mounting position)	Vertical
(mounting type)	Surface mounting and installation
Type of electrical connection for supply voltage lineside	Screw-type terminals
Tightening torque [lbf·in] for supply	20 20 lbf·in
Type of connectable conductor cross-sections at line- side at AWG conductors 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 conductors 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 conductors 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 at contactor 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 conductors 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 conductors 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	10kA@600V (Class H or K); 100kA@600V (Class R or J)
the main circuit required	
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

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=US2:83CUD950J

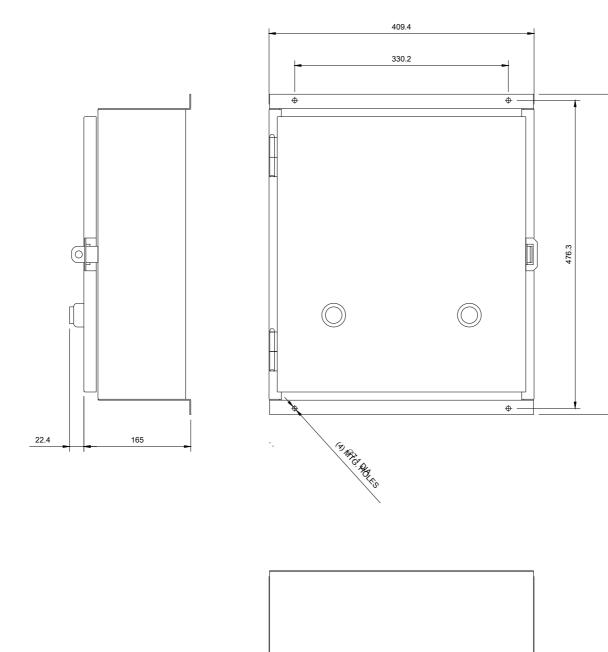
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

https://support.industry.siemens.com/cs/US/en/ps/US2:83CUD950J

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:83CUD950J&lang=en

Certificates/approvals

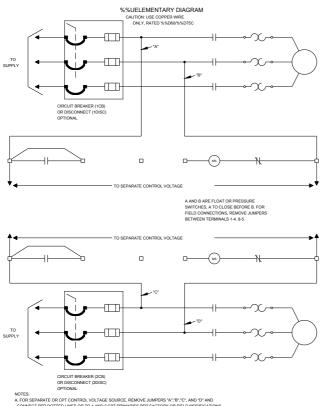
https://support.industry.siemens.com/cs/US/en/ps/US2:83CUD950J/certificate



495.3

%%USCHEMATIC DIAGRAM

Class 83 & 84 Duplex W/Manual Alternation Size 0-4



- CONNECT PER DOTTED LINES OR TO 1 AND 2 CPT PRIMARIES PER FACTORY OR FIELD MODIFICATIONS.

 B. FOR PROTECTION OF INTERNAL CONTROL CIRCUIT CONDUCTORS IN ACCORDANCE WITH THE N.E.C., USE
- FUSE KIT 49MAFB4.
 C. TO USE THIS CONTROLLER W/O SELECTOR SWITCHES, JUMPER BETWEEN THE FOLLOWING PAIRS OF

D68077003

last modified: 05/08/2019