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Data sheet US2:83DP95BD81

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Figure similar

Duplex starter W/O alternator Size 1 Three phase full voltage Amb compensate bimetal OLrelay Contactor amp rating 27Amp 208VAC 60HZ coil Non-combination type Enclosure NEMA type 1 Indoor general purpose use

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

Horsepower ratings	
Yielded mechanical performance [hp] for three-phase	
AC motor	
• at 200/208 V rated value	7.5 hp
• at 220/230 V rated value	7.5 hp
● at 460/480 V rated value	10 hp

● at 575/600 V rated value	10 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	27 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 DC rated value	0 0 V
• at AC at 60 Hz rated value	208 208 V
• at AC at 50 Hz rated value	0 0 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
Test function	Yes
External reset	Yes
Reset function	Manual and automatic
Adjustment range of thermal overload trip unit	0.85 1.15
Number of NC contacts of auxiliary contacts of overload relay	1.
Number of NO contacts of auxiliary contacts of overload relay	0

Operating current of auxiliary contacts of overload	
relay	
• at AC at 600 V	10 A
• at DC at 250 V	5 A
Contact rating of auxiliary contacts of overload relay according to UL	10A@600VAC (A600), 5A@250VDC (P300)

Enclosure	
Degree of protection NEMA rating of the enclosure	NEMA 1 enclosure
Design of the housing	Indoor general purpose use

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 35 35 lbf·in Type of connectable conductor cross-sections at lineside at AWG conductors single or multi-stranded 1x (14 2 AWG) Temperature of the conductor for supply maximum permissible AL or CU Material of the conductor for load-side outgoing feeder Screw-type terminals Tightening torque [lbf·in] for load-side outgoing feeder 35 50 lbf·in 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 multistranded 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 auxiliany Screw-type terminals		
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Type of connectable conductor cross-sections at line-side at AWG conductors single or multi-stranded Temperature of the conductor for supply maximum permissible Material of the conductor for supply Type of electrical connection for load-side outgoing feeder Tightening torque [lbf-in] for load-side outgoing feeder Type of electrical connection of magnet coil Screw-type terminals Screw-type terminals Screw-type terminals Screw-type terminals Screw-type terminals 1 × (14 2 AWG) AL or CU Screw-type terminals Screw-type terminals Screw-type terminals Tightening torque [lbf-in] at magnet coil Type of connectable conductor cross-sections of magnet coil at AWG conductors single or multi-stranded Temperature of the conductor at magnet coil Material of the conductor at magnet coil CU	side	
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Temperature of the conductor for supply maximum permissible Material of the conductor for supply Type of electrical connection for load-side outgoing feeder Tightening torque [lbf-in] for load-side outgoing feeder Type of electrical connection of magnet coil Type of electrical connection of magnet coil Tightening torque [lbf-in] at magnet coil Type of connectable conductor cross-sections of magnet coil at AWG conductors single or multistranded Temperature of the conductor at magnet coil Material of the conductor at magnet coil CU To CU AL or CU Screw-type terminals Screw-type terminals 5 12 lbf-in 2x (16 12 AWG)	Type of connectable conductor cross-sections at line-	1x (14 2 AWG)
Material of the conductor for supply Type of electrical connection for load-side outgoing feeder Tightening torque [lbf-in] for load-side outgoing feeder Type of electrical connection of magnet coil Screw-type terminals 35 50 lbf-in Screw-type terminals Tightening torque [lbf-in] at magnet coil Screw-type terminals 5 12 lbf-in Type of connectable conductor cross-sections of magnet coil at AWG conductors single or multistranded Temperature of the conductor at magnet coil Material of the conductor at magnet coil CU	side at AWG conductors single or multi-stranded	
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feeder Type of electrical connection of magnet coil Screw-type terminals Tightening torque [lbf·in] at magnet coil Type of connectable conductor cross-sections of magnet coil at AWG conductors single or multistranded Temperature of the conductor at magnet coil Material of the conductor at magnet coil CU Screw-type terminals 5 12 lbf·in 2x (16 12 AWG) 75 °C CU CU		Screw-type terminals
Tightening torque [lbf·in] at magnet coil Type of connectable conductor cross-sections of magnet coil at AWG conductors single or multi-stranded Temperature of the conductor at magnet coil maximum permissible Material of the conductor at magnet coil CU		35 50 lbf·in
Type of connectable conductor cross-sections of magnet coil at AWG conductors single or multi-stranded Temperature of the conductor at magnet coil maximum permissible Material of the conductor at magnet coil CU	Type of electrical connection of magnet coil	Screw-type terminals
magnet coil at AWG conductors 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	5 12 lbf·in
Stranded Temperature of the conductor at magnet coil maximum permissible Material of the conductor at magnet coil CU	Type of connectable conductor cross-sections of	2x (16 12 AWG)
maximum permissible Material of the conductor at magnet coil CU		
Material of the conductor at magnet coil CU	Temperature of the conductor at magnet coil	75 °C
<u> </u>	maximum permissible	
Type of electrical connection at contactor for auxiliary Screw-type terminals	Material of the conductor at magnet coil	CU
contacts	Type of electrical connection at contactor for auxiliary contacts	Screw-type terminals
Tightening torque [lbf·in] at contactor for auxiliary 10 15 lbf·in		10 15 lbf·in
contacts Type of compatible conductor area positions at the (42 ANC) 24 (45 AAANC) 24 (46 AAANC)		4(42.4)(40) 2(40
Type of connectable conductor cross-sections at contactor at AWG conductors for auxiliary contacts		1x (12 AVVG), 2x (16 14 AVVG), 2x (18 16 AVVG)
single or multi-stranded		
Temperature of the conductor at contactor for 75 °C		75 °C
auxiliary contacts maximum permissible	•	
Material of the conductor at contactor for auxiliary CU	Material of the conductor at contactor for auxiliary	CU
contacts	contacts	
Type of electrical connection at overload relay for Screw-type terminals	Type of electrical connection at overload relay for	Screw-type terminals
auxiliary contacts	auxiliary contacts	

Tightening torque [lbf·in] at overload relay for auxiliary contacts	5 12 lbf·in
Type of connectable conductor cross-sections at overload relay at AWG conductors for auxiliary contacts single or multi-stranded	2x (16 12 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=US2:83DP95BD81

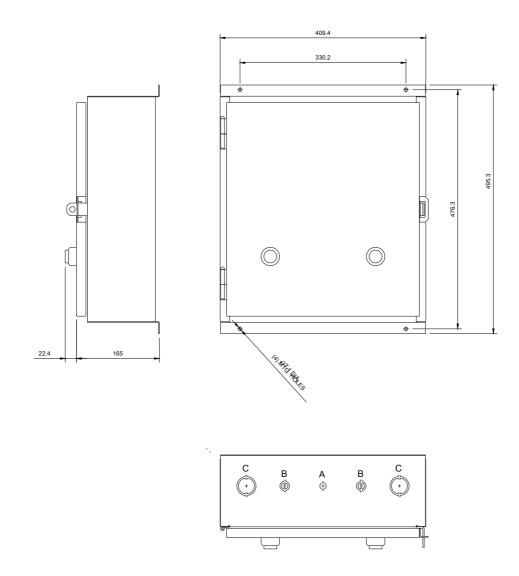
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

https://support.industry.siemens.com/cs/US/en/ps/US2:83DP95BD81

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:83DP95BD81&lang=en

Certificates/approvals

https://support.industry.siemens.com/cs/US/en/ps/US2:83DP95BD81/certificate

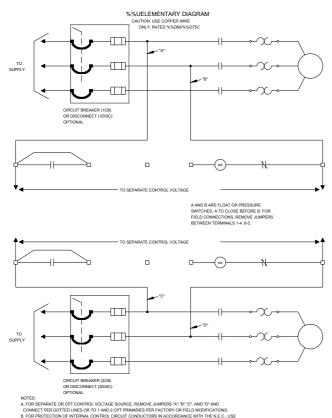


\LCONDUITS TYP. TOP & BOTTOM

LETTER	CONDUIT SIZE
Α	%%C12.7 DIA. CONDUIT
В	%%C12.7 & %%C19 DIA. CONDUIT
С	%%C31.8 & %%C38.1 DIA. CONDUIT

%%USCHEMATIC DIAGRAM

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



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