## **SIEMENS**

Data sheet US2:84DUC950DG



Duplex starter w/o alternator Size 1 Three phase full voltage Solid-state overload relay OLR amp range 3-12A Combination type Two 30A disconnect switches Enclosure NEMA type 4/12 Water/dust tight weather proof

product brand name	Class 84
design of the product	Duplex controller with two non-fusible disconnect switches without alternator
special product feature	ESP200 overload relay
General technical data	
weight [lb]	70 lb
Height x Width x Depth [in]	34 × 25 × 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	
<ul><li>during storage</li></ul>	-30 +65 °C
<ul> <li>during operation</li> </ul>	-20 +40 °C
country of origin	USA
Horsepower ratings	
yielded mechanical performance [hp] for 3-phase AC motor	
<ul><li>at 200/208 V rated value</li></ul>	2 hp
• at 220/230 V rated value	2 hp
• at 460/480 V rated value	5 hp
<ul><li>at 575/600 V rated value</li></ul>	5 hp
Contactor	
size of contactor	NEMA controller size 1
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	27 A
mechanical service life (operating 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	
<ul> <li>at DC rated value</li> </ul>	0 0 V
<ul> <li>at AC at 50 Hz rated value</li> </ul>	190 220 V
at AC at 60 Hz rated value	220 240 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     test function	Yes 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-	3 12 A
dependent overload release	
tripping time at phase-loss maximum relative repeat accuracy	3 s 1 %
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	1A
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
<ul> <li>with multi-phase operation at AC rated value</li> </ul>	300 V
with multi-phase operation at AC rated value     Disconnect Switch	300 V
	300 V 30A / 600V
Disconnect Switch	
Disconnect Switch response value of switch disconnector design of fuse holder operating class of the fuse link	30A / 600V
Disconnect Switch response value of switch disconnector design of fuse holder	30A / 600V non-fusible
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Disconnect Switch response value of switch disconnector design of fuse holder operating class of the fuse link Enclosure degree of protection NEMA rating of the enclosure design of the housing Mounting/wiring	30A / 600V non-fusible non-fusible  NEMA Type 12 dustproof and drip-proof for indoor use
Disconnect Switch response value of switch disconnector design of fuse holder operating class of the fuse link Enclosure degree of protection NEMA rating of the enclosure design of the housing Mounting/wiring mounting position	30A / 600V non-fusible non-fusible  NEMA Type 12 dustproof and drip-proof for indoor use
Disconnect Switch response value of switch disconnector design of fuse holder operating class of the fuse link Enclosure degree of protection NEMA rating of the enclosure design of the housing Mounting/wiring mounting position fastening method	30A / 600V non-fusible non-fusible  NEMA Type 12 dustproof and drip-proof for indoor use  Vertical Surface mounting and installation
response value of switch disconnector design of fuse holder operating class of the fuse link  Enclosure degree of protection NEMA rating of the enclosure design of the housing  Mounting/wiring mounting position fastening method type of electrical connection for supply voltage line-side	30A / 600V non-fusible non-fusible  NEMA Type 12 dustproof and drip-proof for indoor use  Vertical Surface mounting and installation Box lug
response value of switch disconnector design of fuse holder operating class of the fuse link  Enclosure degree of protection NEMA rating of the enclosure design of the housing  Mounting/wiring mounting position fastening method type of electrical connection for supply voltage line-side tightening torque [lbf-in] for supply	30A / 600V non-fusible non-fusible  NEMA Type 12 dustproof and drip-proof for indoor use  Vertical Surface mounting and installation Box lug 35 35 lbf-in
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tightening torque [lbf·in] at contactor for auxiliary contacts	10 15 lbf·in
type of connectable conductor cross-sections at contactor for 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 for 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=US2:84DUC950DG

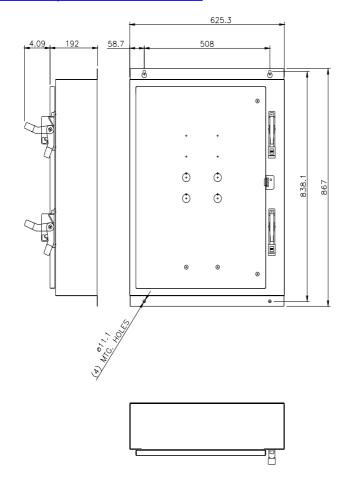
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

https://support.industry.siemens.com/cs/US/en/ps/US2:84DUC950DG

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=US2:84DUC950DG&lang=en">http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=US2:84DUC950DG&lang=en</a>

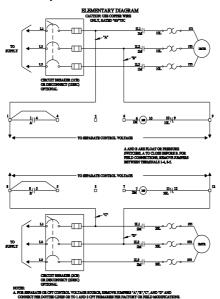
Certificates/approvals

https://support.industry.siemens.com/cs/US/en/ps/US2:84DUC950DG/certificate



## SCHEMATIC DIAGRAM

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



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