## **SIEMENS**

Data sheet US2:84DUC920DF



Pump control panel, Duplex controller NEMA size 1 Solid-state overload relay, OLR amp range 3-12A, 120 VAC coil, Fusible disconnect HOA Sel Sw. and Start P.B., Enclosure NEMA type 3/3R,12 Weather proof outdoor use

product brand name	Class 84
design of the product	Duplex controller with two non-fusible disconnect switches with 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	
during storage	-30 +65 °C
during operation	-20 +40 °C
country of origin	USA
Horsepower ratings	
yielded mechanical performance [hp] for 3-phase AC motor	
• at 200/208 V rated value	2 hp
• at 220/230 V rated value	2 hp
• at 460/480 V rated value	5 hp
• at 575/600 V rated value	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	
at DC rated value	0 0 V
• at AC at 50 Hz rated value	110 110 V
at AC at 60 Hz rated value	120 120 V
holding power at AC minimum	8.6 W

apparent holding power of magnet coil at AC poperating range become holding supply voltage rated value of insignet coil properating range become holding of magnet coil related to the input voltage of magnet coil and included to the input voltage of magnet coil related voltage of the input voltage of magnet coil related voltage of the input voltage of magnet coil related voltage of the input voltage of magnet coil related voltage of the input voltage of magnet coil related voltage of the input voltage i	apparent pick up power of magnet sell at AO	210 \/A
Second Company Control Supply voltage rated value of magnet coll related to the input voltage of the collection of	apparent helding power of magnet coil at AC	218 VA
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voltage OFF-delay time OFF-delay tim	magnet coil	
Overload rollsy  Product function  • overload protection  • or overload protection  • asymmetry detection  • costmain reset  • cest function  • costmain reset  * Yes  • costmain reset  * Yes  • costmain reset  * Yes  • costmain reset  * Try class  • CLASS 5 / 10 / 20 (factory set) / 30  • cligitable current response value current of the current- dependent overload release  * tripping time at phase-loss maximum  relefive repeat accuracy  • an IV Contacts of auxiliary contacts of overload relay  • an IV Contacts of auxiliary contacts of overload relay  • at IV Contacts of auxiliary contacts of overload relay  • at IV Contacts of auxiliary contacts of overload relay  • at IV Contacts of auxiliary contacts of overload relay  • at IV Contacts of auxiliary contacts of overload relay  • at IV Contact and iverload release  • with simple-phase operation at AC rated value  • with multi-phase ope		50 %
Overload rately product function  Overload protection Overs Overload protection Overs Over	ON-delay time	19 29 ms
product function  • overload protection • phase failure detection • phase failure detection • phase failure detection • product function • cyround failure detection • cyround failure • cyround • cyrou	OFF-delay time	10 24 ms
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ground fault detection     external reset     external reset     external reset     ves     ves     external reset     ves     ves     ves     external reset     ves	phase failure detection	Yes
* test function     * external reset     * ext	asymmetry detection	Yes
reset function Manual, automatic and remote trip class CLASS \$7.10 / 20 (factory set) / 30 adjustable current response value current of the current dependent overload release tripping time at phase-loss maximum 3 s reletive repeat accuracy 1% contacts of auxiliary contacts of overload relay 1 number of NC contacts of auxiliary contacts of overload relay 1 number of NC contacts of auxiliary contacts of overload relay 1 operational current of auxiliary contacts of overload relay 1 operational current of auxiliary contacts of overload relay 1 operational current of auxiliary contacts of overload relay 1 A contact starting of auxiliary contacts of overload relay 1 A contact starting of auxiliary contacts of overload relay according to 1 A C at 500 V 5 A 5 A 5 A 5 A 5 A 5 A 5 A 5 A 5 A 5	<ul> <li>ground fault detection</li> </ul>	Yes
reset function Manual, automatic and remote trip class CLASS 57 10 / 20 (factory set) / 30 adjustable current response value current of the current-dependent overload release tripping time at phase-loss maximum 3 s. relative repeat accuracy 1 typing time at phase-loss maximum 1 s. and tripping time at AC at 40 contacts of auxiliary contacts of overload relay 1 s. and the tripping time at AC at 50 V 5 A at Class 150 V 5 A A A	• test function	Yes
trip class adjustable current response value current of the current-dependent overload release tripping time at phase-loss maximum  3 s relative repeat accuracy 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 1 operational current of auxiliary contacts of overload relay 1 operational current of auxiliary contacts of overload relay 1 operational current of auxiliary contacts of overload relay 1 operational current of auxiliary contacts of overload relay 1 operational current of auxiliary contacts of overload relay 2 of AC at 500 V 2 of AC at 500 V 3 fA 3 fA 4 fA 4 fA 5 fA 4 fA 5 fA 4 fA 5 fA 5 fA 4 fA 5	external reset	Yes
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dependent overload release tripping time at phase-loss maximum relative repeat accuracy number of NC contacts of auxiliary contacts of overload relay number of NC contacts of auxiliary contacts of overload relay at AC at 600 V at DC at 250 V 5 A contact rating of auxiliary contacts of overload relay with single-phase operation at AC rated value on-fusible response value of switch disconnector design of fuse holder non-fusible poperating class of the fuse link non-fusible poperating class of the fuse link non-fusible	trip class	CLASS 5 / 10 / 20 (factory set) / 30
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number of NC contacts of auxiliary contacts of overload relay number of NO contacts of auxiliary contacts of overload relay at AC at 600 V at DC at 250 V  At DC at 250 V  at DC at 250 V  by e of the contacts of overload relay according to the single-phase operation at AC rated value with multi-phase operation at AC rated value with mu	tripping time at phase-loss maximum	3 s
number of NO contacts of auxiliary contacts of overload relay  • at AC at 600 V • at DC at 250 V 1A  contact rating of auxiliary contacts of overload relay  • with single-phase operation at AC rated value • with single-phase operation at AC rated value • with multi-phase operation at AC rated value • with multi-phase operation at AC rated value • with multi-phase operation at AC rated value • with single-phase operation at AC rated value • with multi-phase operation at AC rated value • with multi-phase operation at AC rated value • with multi-phase operation at AC rated value  • with multi-phase operation at AC rated value • with multi-phase operation at AC rated value  • with multi-phase oper	· · · · · · · · · · · · · · · · · · ·	1 %
e at AC at 600 V  • at DC at 250 V  1 A  contact rating of auxiliary contacts of overload relay according to U.I  insulation voltage (UI)  • with single-phase operation at AC rated value  • with multi-phase operation at AC rated value  • onor-fusible  response value of switch disconnector  design of fuse holder  operating class of the fuse link  non-fusible  operating of sas of the fuse link  portation of supply to the enclosure  degree of protection NEMA rating of the enclosure  degree of protection NEMA rating of the enclosure  Mounting/wirring  mounting position  Vertical  fastening method  surface mounting and installation  type of electrical connection for supply voltage line-side  Box lug  style of connectable conductor cross-sections at line-side for  AWG cables single or multi-stranded  type of electrical connection for load-side outgoing feeder  stylene of electrical connection for load-side outgoing feeder  material of the conductor for load-side outgoing feeder  stylene of electrical connection for load-side outgoing feeder  material of the conductor for load-side outgoing feeder  material of the conductor for load-side outgoing feeder  stylene of electrical connection of magnet coil  type of connectable conductor for load-side outgoing feeder  material of the conductor for load-side outgoing feeder  material of the conductor for load-side outgoing feeder  material of the conductor for load-side outgoing feeder  stylene of electrical connection of magnet coil  type of connectable conductor for load-side outgoing feeder  stylene of electrical connection of magnet coil  type of	number of NC contacts of auxiliary contacts of overload relay	1
■ at AC at 600 V ■ at DC at 250 V 1A contact rating of auxiliary contacts of overload relay according to UL insulation voltage (UI) ■ with single-phase operation at AC rated value ■ with multi-phase operation at AC rated value ■ with multi-phase operation at AC rated value ■ with multi-phase operation at AC rated value ■ 300 V  Disconnect Switch response value of switch disconnector ■ 30A / 600V ■ design of fuse holder ■ operating class of the fuse link ■ non-fusible  Enclosure ■ degree of protection NEMA rating of the enclosure ■ design of the housing ■ dustproof and drip-proof for indoor use  Mounting/wiring ■ wounting position ■ Vertical  fastening method  ype of electrical connection for supply voltage line-side # dightening torque [lbf-in] for supply  ype of connectable conductor cross-sections at line-side for  AUXG cables single or multi-stranded  temperature of the conductor for supply maximum permissible  fastering lorque [lbf-in] for load-side outgoing feeder  stype of electrical connection for load-side outgoing feeder  material of the conductor for load-side outgoing feeder  material of the conductor for load-side outgoing feeder  stype of electrical connection for load-side outgoing feeder  material of the conductor for load-side outgoing feeder  material of the conductor for load-side outgoing feeder  stype of electrical connection of magnet coil  screw-type terminals  tightening torque [lbf-in] at magnet coil  screw-type terminals  tightening torque [lbf-in] at magnet coil  screw-type terminals  style in in the magnet coil  screw-type terminals	·	1
e at DC at 250 V  contact rating of auxiliary contacts of overload relay according to UL  insulation voltage (UI)  e with single-phase operation at AC rated value e with multi-phase operation at AC rated value 300 V  Disconnect Switch  response value of switch disconnector design of fuse holder operating class of the fuse link non-fusible operating class of the fuse link  Recolosure  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 [Ibf-in] for supply  AWG cables single or multi-stranded  temperature of the conductor for supply maximum permissible response value of switch disconnector 30A / 600V  600 V  90A / 600V  600 V  90A / 600V  90	operational current of auxiliary contacts of overload relay	
contact rating of auxiliary contacts of overload relay according to UL  insulation voltage (UI)  with single-phase operation at AC rated value  with multi-phase operation at AC rated value  Disconnect Switch  response value of switch disconnector  design of fuse holder operating class of the fuse link  non-fusible operating class of the fuse link  Including wiring  mounting position fastening method type of electrical connection for supply voltage line-side tightening torque [Ibf-in] for supply type of connectable conductor for load-side outgoing feeder type of connectable conductor or oss-sections for AWG cables for load-side outgoing feeder type of electrical connection for load-side outgoing feeder type of electrical connection for load-side outgoing feeder type of electrical connector for load-side outgoing feeder material of the conductor for load-side outgoing feeder type of electrical connection for load-side outgoing feeder type of electrical connection for load-side outgoing feeder type of electrical connectable conductor or oss-sections for AWG cables for load-side outgoing feeder type of electrical connectable conductor or load-side outgoing feeder type of electrical connectable conductor or load-side outgoing feeder type of electrical connectable conductor or load-side outgoing feeder stightening torque [Ibf-in] for load-side outgoing feeder stightening torque [Ibf-in] at magnet coil screw-type terminals tightening torque [Ibf-in] at magnet coil screw-type terminals	• at AC at 600 V	5 A
insulation voltage (UI)  • with single-phase operation at AC rated value  • with multi-phase operation at AC rated value  • with multi-phase operation at AC rated value  300 V  Disconnect Switch  response value of switch disconnector  design of fuse holder  operating class of the fuse link  non-fusible  Factoria  deerge of protection NEMA rating of the enclosure  deerge of protection NEMA rating of the enclosure  MEMA Type 12  design of the housing  mounting position  Vertical  fastening method  fastening method  Surface mounting and installation  type of electrical connection for supply voltage line-side  tightening torque [lbf-in] for supply  type of connectable conductor cross-sections at line-side for  AWG cables single or multi-stranded  temperature of the conductor for supply maximum permissible  material of the conductor for supply  type of connectable conductor cross-sections for AWG cables for load-side outgoing feeder  fype of connectable conductor cross-sections for AWG cables for load-side outgoing feeder  screw-type terminals  tightening torque [lbf-in] for load-side outgoing feeder  for COU  type of electrical connection for load-side outgoing feeder  screw-type terminals  tightening torque [lbf-in] for load-side outgoing feeder  for COU  type of connectable conductor for load-side outgoing feeder  screw-type terminals  tightening torque [lbf-in] at magnet coil  Screw-type terminals	• at DC at 250 V	1 A
with multi-phase operation at AC rated value with multi-phase operation at AC rated value 300 V  Disconnect Switch  response value of switch disconnector design of fuse holder operating class of the fuse link non-fusible  perating class of the fuse link non-fusible  Brocosure  degree of protection NEMA rating of the enclosure design of the housing Mounting/wiring  mounting position fastening method Surface mounting and installation type of electrical connection for supply voltage line-side temperature of the conductor for supply maximum permissible material of the conductor for supply maximum permissible for load-side outgoing feeder type of electrical connection for load-side outgoing feeder type of connectable conductor cross-sections for AVG cables for load-side outgoing feeder stype of connectable conductor for supply AL or CU type of connectable conductor for supply Type of connectable conductor for supply AL or CU type of connectable conductor for supply Type of connectable conductor for load-side outgoing feeder Type of electrical connection of magnet coil Type of electrical connection of magnet coil Type of connectable conductor cross-sections of magnet coil of connectable conductor cross-sections of magnet coil		5A@600VAC (B600), 1A@250VDC (R300)
with multi-phase operation at AC rated value   300 V	insulation voltage (Ui)	
Pisconnect Switch  response value of switch disconnector  design of fuse holder operating class of the fuse link non-fusible  peroconnectable conductor for load-side outgoing feeder maximum permissible  30A / 600V  30A / 6	<ul> <li>with single-phase operation at AC rated value</li> </ul>	600 V
response value of switch disconnector  design of fuse holder operating class of the fuse link non-fusible  reclosure  degree of protection NEMA rating of the enclosure  design of the housing  mounting writing  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  MC ables single or multi-stranded  temperature of the conductor for supply maximum permissible  tightening torque [lbf-in] for load-side outgoing feeder stightening torque [lbf-in] for load-side outgoing feeder  fasterior of the conductor cross-sections of a MC cables for load-side outgoing feeder  fasterior of the conductor for supply  AL or CU  Screw-type terminals  1x (14 2 AWG)	<ul> <li>with multi-phase operation at AC rated value</li> </ul>	300 V
design of fuse holder operating class of the fuse link non-fusible  Enclosure  degree of protection NEMA rating of the enclosure design of the housing Mounting/wiring mounting position fastening method Surface mounting and installation type of electrical connection for supply voltage line-side Box lug tightening torque [lbf-in] for supply 4 S 35 lbf-in 1 x (14 2 AWG) AL or CU type of electrical connection for supply maximum permissible for load-side outgoing feeder 35 35 lbf-in 1 x (14 2 AWG)  AL or CU type of connectable conductor cross-sections of magnet coil temperature of the conductor for supply AL or CU type of connectable conductor for supply The conductor for supply AL or CU type of electrical connection for load-side outgoing feeder To "C" To "	Disconnect Switch	
perating class of the fuse link non-fusible  Enclosure  degree of protection NEMA rating of the enclosure dustproof and drip-proof for indoor use  Mounting/wiring  mounting position 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 for A/WG cables single or multi-stranded temperature of the conductor for supply maximum permissible  tightening torque [lbf-in] for load-side outgoing feeder Screw-type terminals  tightening torque [lbf-in] for load-side outgoing feeder Tos Screw-type terminals  to the conductor for supply Screw-type terminals  to the conductor for load-side outgoing feeder Tos Screw-type terminals  to the material of the conductor for load-side outgoing feeder Tos Screw-type terminals  to the conductor for load-side outgoing feeder Tos Screw-type terminals  to the conductor for load-side outgoing feeder Tos Screw-type terminals  to the conductor for load-side outgoing feeder Tos Screw-type terminals  to the conductor for load-side outgoing feeder Tos Screw-type terminals  to the conductor for load-side outgoing feeder Tos Screw-type terminals  to the conductor for load-side outgoing feeder Tos Screw-type terminals  to the conductor for load-side outgoing feeder Tos Screw-type terminals  to the conductor for load-side outgoing feeder Tos Screw-type terminals  to the conductor for load-side outgoing feeder Tos Screw-type terminals  to the conductor for load-side outgoing feeder Tos Screw-type terminals  to the conductor for load-side outgoing feeder Tos Screw-type terminals  to the conductor for load-side outgoing feeder Tos Screw-type terminals  to the conductor for load-side outgoing feeder Tos Screw-type terminals  to the conductor for load-side outgoing feeder Tos Screw-type terminals  to the conductor for load-side outgoing feeder Tos Screw-type terminals  to the conductor for load-side outgoing feeder Tos Screw-type terminals  to	response value of switch disconnector	30A / 600V
degree of protection NEMA rating of the enclosure design of the housing dustproof and drip-proof for indoor use  Mounting/wiring  mounting position  fastening method type of electrical connection for supply voltage line-side tightening torque [lbf-in] for supply type of connectable conductor cross-sections at line-side for AWG cables single or multi-stranded  temperature of the conductor for supply type of electrical connection for load-side outgoing feeder maximum permissible material of the conductor for load-side outgoing feeder for load-side outgoing feeder single or multi-stranded  temperature of the conductor for load-side outgoing feeder for load-side outgoing feeder single or multi-stranded  temperature of the conductor for load-side outgoing feeder for load-side outgoing feeder single or multi-stranded  temperature of the conductor for load-side outgoing feeder for load-side outgoing feeder single or multi-stranded  temperature of the conductor for load-side outgoing feeder  maximum permissible material of the conductor for load-side outgoing feeder maximum permissible material of the conductor for load-side outgoing feeder  maximum permissible material of the conductor for load-side outgoing feeder  maximum permissible material of the conductor for load-side outgoing feeder  maximum permissible material of the conductor for load-side outgoing feeder  maximum permissible material of the conductor for load-side outgoing feeder  maximum permissible  material of the conductor for load-side outgoing feeder  maximum permissible  material of the conductor for load-side outgoing feeder  maximum permissible  material of the conductor for load-side outgoing feeder  maximum permissible  material of the conductor for load-side outgoing feeder  maximum permissible  material of the conductor for load-side outgoing feeder  maximum permissible  material of the conductor for load-side outgoing feeder  maximum permissible  material of the conductor for load-side outgoing feeder  maximum permissible  material of the con	design of fuse holder	non-fusible
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 [libf-in] for supply type of connectable conductor cross-sections at line-side for AWG cables single or multi-stranded  temperature of the conductor for load-side outgoing feeder type of connectable conductor cross-sections for AWG cables for load-side outgoing feeder single or multi-stranded  temperature of the conductor for load-side outgoing feeder tightening torque [libf-in] for load-side outgoing feeder type of connectable conductor for special outgoing feeder attemperature of the conductor for load-side outgoing feeder type of connectable conductor for load-side outgoing feeder attemperature of the conductor for load-side outgoing feeder attemperature of the conductor for load-side outgoing feeder attemperature of the conductor for load-side outgoing feeder material of the conductor for load-side outgoing feeder mater	operating class of the fuse link	non-fusible
design of the housing  Mounting/wiring  mounting position  Vertical fastening method  type of electrical connection for supply voltage line-side  tightening torque [lbf-in] for supply  type of connectable conductor cross-sections at line-side for AWG cables single or multi-stranded  temperature of the conductor for supply  type of electrical connection for load-side outgoing feeder  tightening torque [lbf-in] for load-side outgoing feeder  toghtening torque [lbf-in] for load-side outgoing feeder  tightening torque [lbf-in] for load-side outgoing feeder  type of connectable conductor cross-sections for AWG cables for load-side outgoing feeder  type of connectable conductor for load-side outgoing feeder  maximum permissible  temperature of the conductor for load-side outgoing feeder  maximum permissible  material of the conductor for load-side outgoing feeder  type of electrical connection of magnet coil  type of electrical connection of magnet coil  screw-type terminals  1x (14 2 AWG)  75 °C  2x (16 12 AWG)	Enclosure	
mounting position fastening method type of electrical connection for supply voltage line-side tightening torque [lbf-in] for supply type of connectable conductor cross-sections at line-side for AWG cables single or multi-stranded temperature of the conductor for supply type of electrical connection for load-side outgoing feeder type of electrical connection for load-side outgoing feeder for load-side outgoing feeder single or multi-stranded temperature of the conductor for supply type of electrical connection for load-side outgoing feeder stightening torque [lbf-in] for load-side outgoing feeder type of connectable conductor cross-sections for AWG cables for load-side outgoing feeder single or multi-stranded temperature of the conductor for load-side outgoing feeder maximum permissible material of the conductor 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 for AWG cables single or multi-stranded	degree of protection NEMA rating of the enclosure	NEMA Type 12
mounting position  fastening method  Surface mounting and installation  type of electrical connection for supply voltage line-side  tightening torque [lbf·in] for supply  type of connectable conductor cross-sections at line-side for AWG cables 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  temperature of the conductor cross-sections for AWG cables for load-side outgoing feeder maximum permissible  material of the conductor for load-side outgoing feeder  type of cennectable conductor cross-sections for AWG cables for load-side outgoing feeder maximum permissible  material of the conductor for load-side outgoing feeder  type of electrical connection of magnet coil  type of electrical connection of magnet coil  screw-type terminals  1x (14 2 AWG)  1x (14 2 AWG)  75 °C  2x (16 12 AWG)	design of the housing	dustproof and drip-proof for indoor use
fastening method  type of electrical connection for supply voltage line-side  tightening torque [lbf-in] for supply  type of connectable conductor cross-sections at line-side for AWG cables single or multi-stranded  temperature of the conductor for supply maximum permissible  material of the conductor for load-side outgoing feeder  type of electrical connection for load-side outgoing feeder  type of connectable conductor cross-sections for AWG cables for load-side outgoing feeder single or multi-stranded  temperature of the conductor for load-side outgoing feeder  type of connectable conductor cross-sections for AWG cables for load-side outgoing feeder single or multi-stranded  temperature of the conductor for load-side outgoing feeder maximum permissible  material of the conductor for load-side outgoing feeder type of electrical connection of magnet coil  type of electrical connection of magnet coil  type of connectable conductor cross-sections of magnet coil for AWG cables single or multi-stranded  2x (16 12 AWG)	Mounting/wiring	
type of electrical connection for supply voltage line-side  tightening torque [lbf-in] for supply  35 35 lbf-in  1x (14 2 AWG)  AWG cables single or multi-stranded  temperature of the conductor for supply maximum permissible  temperature of the conductor for supply maximum permissible  75 °C  material of the conductor for load-side outgoing feeder  tightening torque [lbf-in] for load-side outgoing feeder  type of connectable conductor cross-sections for AWG cables for load-side outgoing feeder single or multi-stranded  temperature of the conductor for load-side outgoing feeder  material of the conductor for load-side outgoing feeder  material of the conductor for load-side outgoing feeder  material of the conductor for load-side outgoing feeder  type of electrical connection of magnet coil  type of electrical connection of magnet coil  type of connectable conductor cross-sections of magnet coil for  AWG cables single or multi-stranded	mounting position	Vertical
tightening torque [lbf-in] for supply  type of connectable conductor cross-sections at line-side for AWG cables single or multi-stranded  temperature of the conductor for supply maximum permissible  temperature of the conductor for supply maximum permissible  type of electrical connection for load-side outgoing feeder  type of electrical connection for load-side outgoing feeder  type of connectable conductor cross-sections for AWG cables for load-side outgoing feeder single or multi-stranded  temperature of the conductor for load-side outgoing feeder maximum permissible  material of the conductor for load-side outgoing feeder  type of electrical connection of magnet coil  type of electrical connection of magnet coil  type of connectable conductor cross-sections of magnet coil for AWG cables single or multi-stranded  2x (16 12 AWG)	fastening method	Surface mounting and installation
type of connectable conductor cross-sections at line-side for AWG cables single or multi-stranded  temperature of the conductor for supply maximum permissible 75 °C  material of the conductor for load-side outgoing feeder Screw-type terminals  tightening torque [lbf-in] for load-side outgoing feeder 35 35 lbf-in  type of connectable conductor cross-sections for AWG cables for load-side outgoing feeder maximum permissible or multi-stranded  temperature of the conductor for load-side outgoing feeder maximum permissible material of the conductor for load-side outgoing feeder AL or CU  type of electrical connection of magnet coil 5 12 lbf-in  type of connectable conductor cross-sections of magnet coil for AWG cables single or multi-stranded	type of electrical connection for supply voltage line-side	Box lug
AWG cables single or multi-stranded  temperature of the conductor for supply maximum permissible  rype of electrical connection for load-side outgoing feeder  tightening torque [lbf-in] for load-side outgoing feeder  type of connectable conductor cross-sections for AWG cables for load-side outgoing feeder single or multi-stranded  temperature of the conductor for load-side outgoing feeder  maximum permissible  material of the conductor for load-side outgoing feeder  type of electrical connection of magnet coil  type of connectable conductor cross-sections of magnet coil for AWG cables single or multi-stranded  2x (16 12 AWG)	tightening torque [lbf·in] for supply	35 35 lbf-in
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 connectable conductor cross-sections for AWG cables for load-side outgoing feeder single or multi-stranded  temperature of the conductor for load-side outgoing feeder maximum permissible  material of the conductor for load-side outgoing feeder type of electrical connection of magnet coil  type of connectable conductor cross-sections of magnet coil for AWG cables single or multi-stranded  AL or CU  Screw-type terminals  5 12 lbf-in  2x (16 12 AWG)	7.	1x (14 2 AWG)
type of electrical connection for load-side outgoing feeder  tightening torque [lbf-in] for load-side outgoing feeder  type of connectable conductor cross-sections for AWG cables for load-side outgoing feeder single or multi-stranded  temperature of the conductor for load-side outgoing feeder maximum permissible  material of the conductor for load-side outgoing feeder type of electrical connection of magnet coil  tightening torque [lbf-in] at magnet coil  type of connectable conductor cross-sections of magnet coil for AWG cables single or multi-stranded  Screw-type terminals  5 12 lbf-in  2x (16 12 AWG)	temperature of the conductor for supply maximum permissible	75 °C
tightening torque [lbf-in] for load-side outgoing feeder  type of connectable conductor cross-sections for AWG cables for load-side outgoing feeder single or multi-stranded  temperature of the conductor for load-side outgoing feeder material of the conductor for load-side outgoing feeder  type of electrical connection of magnet coil  tightening torque [lbf-in] at magnet coil  type of connectable conductor cross-sections of magnet coil for AWG cables single or multi-stranded  35 35 lbf-in  1x (14 2 AWG)  75 °C  AL or CU  Screw-type terminals  5 12 lbf-in  2x (16 12 AWG)	material of the conductor for supply	AL or CU
type of connectable conductor cross-sections for AWG cables for load-side outgoing feeder single or multi-stranded  temperature of the conductor for load-side outgoing feeder maximum permissible  material of the conductor for load-side outgoing feeder  type of electrical connection of magnet coil  tightening torque [lbf-in] at magnet coil  type of connectable conductor cross-sections of magnet coil for AWG cables single or multi-stranded  1x (14 2 AWG)  75 °C  AL or CU  Screw-type terminals  5 12 lbf-in  2x (16 12 AWG)	type of electrical connection for load-side outgoing feeder	Screw-type terminals
for load-side outgoing feeder single or multi-stranded  temperature of the conductor for load-side outgoing feeder maximum permissible  material of the conductor for load-side outgoing feeder  type of electrical connection of magnet coil  tightening torque [lbf-in] at magnet coil  type of connectable conductor cross-sections of magnet coil for AWG cables single or multi-stranded  75 °C  AL or CU  Screw-type terminals  5 12 lbf-in  2x (16 12 AWG)	tightening torque [lbf·in] for load-side outgoing feeder	35 35 lbf-in
maximum permissible  material of the conductor for load-side outgoing feeder  type of electrical connection of magnet coil  tightening torque [lbf-in] at magnet coil  type of connectable conductor cross-sections of magnet coil for AWG cables single or multi-stranded  AL or CU  Screw-type terminals  5 12 lbf-in  2x (16 12 AWG)	7.	1x (14 2 AWG)
material of the conductor for load-side outgoing feeder  type of electrical connection of magnet coil  tightening torque [lbf-in] at magnet coil  type of connectable conductor cross-sections of magnet coil for AWG cables single or multi-stranded  AL or CU  Screw-type terminals  5 12 lbf-in  2x (16 12 AWG)		75 °C
tightening torque [lbf-in] at magnet coil  type of connectable conductor cross-sections of magnet coil for AWG cables single or multi-stranded  5 12 lbf-in  2x (16 12 AWG)	material of the conductor for load-side outgoing feeder	AL or CU
type of connectable conductor cross-sections of magnet coil for AWG cables single or multi-stranded  2x (16 12 AWG)	type of electrical connection of magnet coil	Screw-type terminals
type of connectable conductor cross-sections of magnet coil for AWG cables single or multi-stranded	·	5 12 lbf·in
·	type of connectable conductor cross-sections of magnet coil for	2x (16 12 AWG)
permissible	temperature of the conductor at magnet coil maximum	75 °C
material of the conductor at magnet coil CU	material of the conductor at magnet coil	cu
type of electrical connection at contactor for auxiliary contacts  Screw-type terminals	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 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=US2:84DUC920DF

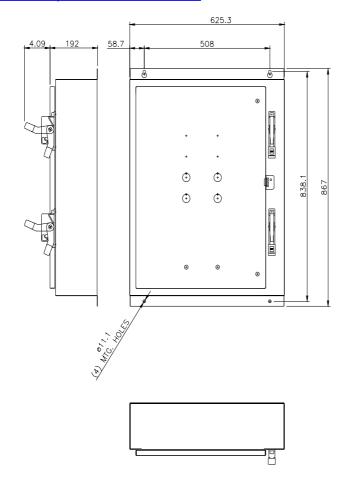
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

https://support.industry.siemens.com/cs/US/en/ps/US2:84DUC920DF

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=US2:84DUC920DF&lang=en">http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=US2:84DUC920DF&lang=en</a>

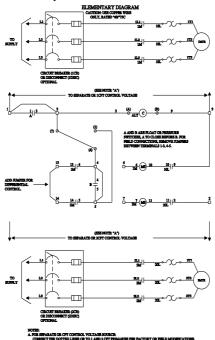
Certificates/approvals

https://support.industry.siemens.com/cs/US/en/ps/US2:84DUC920DF/certificate



## SCHEMATIC DIAGRAM

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



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