SIEMENS

Data sheet

US2:83DUD95EH



Duplex starter w/o alternator, Size 1, Three phase full voltage, Solid-state overload relay, OLR amp range 5.5-22A, 380-440/440-480V 50/60Hz coil, Non-combination type, Enc NEMA type 4 painted steel, Water/dust tight for outdoors

Figure	simi	ar
--------	------	----

product brand name	Class 83
design of the product	Duplex controller without alternator
special product feature	ESP200 overload relay
General technical data	
weight [lb]	40 lb
Height x Width x Depth [in]	20 × 16 × 6 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	3 hp
• at 220/230 V rated value	3 hp
• at 460/480 V rated value	10 hp
• at 575/600 V rated value	10 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 (switching cycles) of the main contacts typical	1000000
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 UC has dealer At		0 01/
• • • • • • • • • • • • • • • • • • •	at DC rated value	0 0 V
Indiag power at AC minimum 8.6 W apparent Dick-up power of magnet coll at AC 248 VA apparent Didkup power of magnet coll at AC 25 VA Operating array factor control supply voltage rade value 0.85 1.1 Ordersday time 10 28 ms OPF-dudy time 10 28 ms Overload raise 10 28 ms Overload raise Yes example detection Yes example detection Yes example detection Yes example detection Yes esample detection Yes esample detection Yes estaf function Yes estaf function Yes reset function Yes estaf function Yes reset function Yes rest function Yes		
apparent plok-up power of magnet coli # AC 218 VA apparent holding power of magnet coli # AC 25 VA operating range factor cortorls supply vollage rated value of magnet coli 0.85 1.1 percential (top, out voltage of magnet coli # AC 26 VA QB-tabley time 19 28 ms OFF-delay time 10 24 ms Overload ratay Yes product function Yes • ophase failure detection Yes • ophase failure detection Yes • optimus of pote-size Yes <		
apparent holding power of magnet coil # AC 25 VA operating range factor control supply voltage raided value 0.85 1.1 of magnet coil percental drop-out voltage of magnet coil related to the finance of the power to the po		
operating range factor control supply voltage rated value of magnet coll 0.85 1.1 percental drop-out voltage of magnet coll related to the input voltage. 50 % CN-delay time 19 29 ms OVerload failur 19 24 ms Overload failur Yes overload failur Yes opprund fault delection Yes • asymmetry detection Yes • external reset Yes opprudut fault delection Yes • external reset Yes • external reset Yes reset function 3 % relativ repeat accuracy Yes product fault reprotective coaling on printed-circuit board 1% number of NC contacts of overload relay 1 operational current of auxiliary contacts of overload relay 5 Å a LD Cal 250 V 5 Å • at DC al 250 V 5 Å <t< td=""><td></td><td></td></t<>		
of magnit coli Display to visiting of magnet coli related to the procent al drop-out visiting of magnet coli related to the process failing of magnet coli related to the total set of the process failing of the process failing of the process failing of the coll of		
input voltage 1024 ms Overload relay 1024 ms Overload relay 1024 ms overload protection Yes • overload protection Yes • asymmetry detection Yes • ground fault detection Yes • ground fault detection Yes • external reset Yes reset function Yes • external reset Yes repart fault detection Yes • external reset Yes repart fault detection Yes • external reset Yes • product fault detection Yes • external reset Yes • total protection Manual, automatic and remote operational counter Se operational counted to auxiliary contacts of overload 1 • at DC at 280 V SA • at DC at 280 V SA • with multip-base operation at AC rated value NEMA 4 enclosure dearge of protection NEMA rating of the enclosure Maximal, austronol, waterproof Mounting withing <td></td> <td>0.85 1.1</td>		0.85 1.1
OPF-delay time 10 24 ms Overload relay product function • overload protection Yes • phase failure detection Yes • asymmetry detection Yes • asymmetry detection Yes • asymmetry detection Yes • test function Yes • external reset Yes reset function Manual. automatic and remote digutable current response value current of the current-dependent overload relases 5 22 A relative repeat accuracy 1 % product feature protective coaling on printed-circuit board 1 % number of NC contacts of auxiliary contacts of overload relay 5 Å • at DC at 250 V 1 Å orbits relative protection caling on printed-circuit board 1 velay • at DC at 250 V 5 Å • at DC at 250 V 5 Å • at DC at 250 V 5 Å • with multi-phase operation at AC rated value 600 V • with multi-phase operation at AC rated value 600 V • with multi-phase operation at AC rated value 5 Kreet for the brousing 00 V with m		50 %
Overload function Yes product function Yes • apymetry detection Yes • agymetry detection Yes • ground fault detection Yes • external reset Yes reset function Yes • external reset Yes reset function S adjustable current response value current of the current- dependent overload release S frighting time at phase-loss maximum 3 s refeative repeat accuracy 1% product feature protective costing on printed-circuit board Yes number of NC contacts of auxiliary contacts of overload 1 relaby • at CC at 800 V 5 A • at CC at 800 V 5 A • at CC at 280 V 5 A • with multi-phase operation at AC rated value 600 V • with multi-phase operation at AC rated value 600 V • with multi-phase operation at AC rated value 300 V Enclosure degree of protecton NEMA rating of the enclosure degree of protecton NEMA rating of the enclosure NEMA 4 enclosure degree	ON-delay time	19 29 ms
product function Yes • overload protection Yes • phase failure detection Yes • asymmetry detection Yes • external reset Yes • reset function Yes adjustable current response value current of the current- dependent overload release 5.522 A intripping time at phase-loss maximum 3 s product feature protection contacts of overload 1 relative repeat accuracy 1% product feature protective coating on printed-circuit board 1 relative repeat accuracy 1 relative repeat accuracy 1 ornatic rating of auxiliary contacts of overload relay 5 A • at DC at 250 V 1 A ontact rating of auxiliary contacts of overload relay 500 V according to UL 500 V • with multi-phase operation at AC rated value 600 V • with multi-phase operation at AC rated value 500 V • with multi-phase operation at AC rated value 500 V • ord electrical connection for supply voltage line-side 35 method Type of electrical connection for supply voltage line-s	OFF-delay time	10 24 ms
• overload protection Yes • phase failure detection Yes asymmetry detection Yes asymmetry detection Yes asymmetry detection Yes ves external reset Yes ves reset ves vetical concates of auxiliary contacts of overload relay vetical contacts of auxiliary contacts of overload relay vetical design of the tousing doubleroof, weterproof NEMA 4 enclosure design of the tousing vetical fastering method Surface mounting and installation Srew-type terminals type of concetable onductor for supply vetical fastering method supply supply Si Si Si Si Conservery terminals type of concetable onductor for load-side outgoing feeder material of the conductor for	Overload relay	
Phase failure detection Yes asymmetry detection Yes ground fault detection Yes ground fault detection Yes reset function Yes external reset Yes reset function So adjustable current response value current of the current- dependent overload release fripping time at phase-loss maximum 3 s relative repeat accuracy 1 % product feature protective coaling on printed-circuit board Yes reset function adjustable current of availiary contacts of overload relative repeat accuracy 1 % product feature protective coaling on printed-circuit board Yes number of NC contacts of auxiliary contacts of overload relay ended of auxiliary contacts of overload relay ended of auxiliary contacts of overload relay ended of auxiliary contacts of overload feag operational current of auxiliary contacts of overload relay ended of auxiliary contacts of overload relay according to U insulation voltage (UI) evith multi-phase operation at AC rated value 300 V Enclosure design of the housing dustproof, waterproof & weatherproof Mounting/wiring mounting position Vertical Sa is bin hype of connectable conductor for supply voltage line-side sit of compluse line roleside outgoing feeder Strew-type terminals fighternin groung [UF-In] for supply AL or CU type of electrical connection for load-side outgoing feeder matrial of the conductor for load-side outgoing feeder matrial of the cond	product function	
esymmetry detection yes ground fault detection Yes yes test function Yes vestemail reset ves external reset ves external reset ves ve	 overload protection 	Yes
• test function Yes • test function Yes reset function Manual, automatic and remote adjustable current response value current of the current- 5.522 A dependent overload release 5.522 A tripping time at phase-loss 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 1 relay at AC at 00 V 5 A • at DC at 250 V 1 A contact at 60 V 5A@@00VAC (B600), 1A@250VDC (R300) according fo UL 5A@@00VAC (B600), 1A@250VDC (R300) insuition votage (U) • with multi-phase operation at AC rated value 600 V • with multi-phase operation at AC rated value 600 V 300 V Enclosure despreof protection NEMA rating of the enclosure MEMA 4 enclosure degree of protection NEMA rating of the enclosure NEMA 4 enclosure 4ustrpmot X degree of protection NEMA rating ef thes enclosure Surface mounting and installation Sype of electical connection for supply woltage line-side if ghtening torque [bf-in] for supply AL or CU Serw-l	 phase failure detection 	Yes
• test function Yes • external reset Yes • external reset Yes reset function Manual, automatic and remote adjustable current response value current of the current- dependent overhaad release 5 22 A Import of NC contacts of auxiliary contacts of overhoad 1 % product feature protective coating on printed-circuit board 1 relative repeat accurrecy 1 % product feature protective coating on printed-circuit board 1 relative repeat accurrecy 1 % product feature protective coating on printed-circuit board 1 relaty operational current of auxiliary contacts of overload relay 5.A • at DC at 250 V 1 A contact rating of auxiliary contacts of overload relay 5.00 V according to UL 600 V • with single-phase operation at AC rated value 300 V Enclosure MEMA 4 enclosure design of the housing dustproof, waterproof & weatherproof Mounting position Vertical fastening method Surface mounting and installation type of electrical connection for supply vol	 asymmetry detection 	Yes
• external reset Yes reset function Manual, automatic and remote adjustable current response value current of the current- dependent overload release 522 A tripping time at phase-loss 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 1 relative repeat accuracy 1 operational current of auxiliary contacts of overload relay 1 • at DC at 250 V 5 A • at DC at 250 V 1 A insulation voltage (Ui) 5 A(@B00VAC (B600), 1A@250VDC (R300) • with multi-phase operation at AC rated value 600 V • with multi-phase operation at AC rated value 500 V • with multi-phase operation at AC rated value 500 V • with multi-phase operation at AC rated value 500 V • with multi-phase operation at AC rated value 500 V • auxiliary contacts of overload relay 500 V • auxiliary contacts of overload relay 500 V • auxiliary contacts of overload relay 500 V • with multi-phase o	 ground fault detection 	Yes
reset function Manual, automatic and remote adjustable current response value current of the current- dependent overload release 5.5 22 A tripping time at phase-loss maximum 3 s relative repeat accuracy 1 % product feature protective costing on printed-circuit board Yes number of NC contacts of auxiliary contacts of overload 1 relay eat AC at 600 V 5.A • at AC at 600 V 5.A • at AC at 250 V 1.A contact rating of auxiliary contacts of overload relay 5A according to UL insulation voltage (Ui) • with single-phase operation at AC rated value 600 V • with single-phase operation at AC rated value 600 V gere of protection NEMA rating of the enclosure NEMA 4 enclosure design of the housing Surface mounting and installation Mounting/wiring Surface mounting and installation Type of electrical connection for supply voltage line-side 35	test function	Yes
adjustable current response value current of the current- dependent overload release 5.5 22 A tripping time at phase-loss maximum 3 s relative repeat accuracy 1 % product feature protective coating on printed-circuit board relay 1 % onumber of NC contacts of auxiliary contacts of overload relay 1 operational current of auxiliary contacts of overload relay eaccording to UL 5.5 22 A ontact at 00 V 1 ontact at 260 V 1 A contact rating-of auxiliary contacts of overload relay according to UL 5.4 insultion voltage (UI) 4 • with multi-phase operation at AC rated value 600 V • with multi-phase operation at AC rated value 600 V degree of protection NEMA rating of the enclosure NEMA 4 enclosure design of the housing Vertical mounting position Surface mounting and installation type of electrical connection for supply voltage line-side Surface mounting and installation type of electrical connection for supply maximum permissible 75 °C material of the conductor for supply maximum permissible 75 °C temperature of the conductor for supply maximum permissible 75 °C ty	external reset	Yes
dependent overload release 3 s tripping time at phase-loss 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 1 relay 1 operational current of auxiliary contacts of overload 1 eat DC at 250 V 1 Å contact rating of auxiliary contacts of overload relay 5 Å eat DC at 250 V 1 Å contact rating of auxiliary contacts of overload relay 5 Å according to UL 500 V insulation voltage (U) 600 V e with multi-phase operation at AC rated value 600 V e with multi-phase operation at AC rated value 300 V Enclosuro Mounting/wiring mounting on file enclosure dustproof, waterproof & weatherproof Mounting/wiring Surface mounting and installation type of electrical connection for supply voltage line-side Surface mounting and installation type of electrical connection for supply maximum 75 °C material of the conductor for supply maximum 75 °C temperature of the conductor for supply maximu	reset function	Manual, automatic and remote
relative repeat accuracy 1 % product feature protective coating on printed-circuit board Yes number of NC contacts of auxiliary contacts of overload 1 relay 1 operational current of auxiliary contacts of overload relay 5 A • at AC at 600 V 5 A • at C at 250 V 1 A contact rating of auxiliary contacts of overload relay according to UL 600 V insulation voltage (Ui) 600 V • with multi-phase operation at AC rated value 600 V Mounting/wring Mcstproof & weatherproof mounting position Surface mounting and installation Type of electrical connection for supply voltage line-side Surface mounting and installation <td< td=""><td>, , , , , , , , , , , , , , , , , , , ,</td><td>5.5 22 A</td></td<>	, , , , , , , , , , , , , , , , , , , ,	5.5 22 A
product feature protective coating on printed-circuit board Yes 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 according to UL 5.A insultation voltage (Ui) • at DC at 250 V • with single-phase operation at AC rated value 600 V = broksure 600 V • with single-phase operation at AC rated value 600 V = broksure 600 V • with multi-phase operation at AC rated value 600 V = broksure Mounting/wiring mounting position Vertical fastening method Surface mounting and installation type of connectaic connection for supply voltage line-side at AWG cables single or multi-stranded 35 35 lbr/in temperature of the conductor for supply maximum permissible 75 °C material of the conductor for load-side outgoing feeder 75 °C type of electrical connection for load-side outgoing feeder 75 °C type of electrical connection for load-side outgoing feeder 75 °C type of electrical connection for load-side outgoing feeder 75 °C <t< td=""><td>tripping time at phase-loss maximum</td><td>3 s</td></t<>	tripping time at phase-loss maximum	3 s
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 • at AC at 600 V 5 A • at AC at 200 V 1 A contact rating of auxiliary contacts of overload relay according to UL 5A insulation voltage (UI) 600 V • with single-phase operation at AC rated value 600 V eere of protection NEMA rating of the enclosure 600 V degree of protection NEMA rating of the enclosure 000 V design of the housing dustproof, waterproof & weatherproof Mounting/wiring Surface mounting and installation Type of electrical connection for supply voltage line-side Screw-type terminals tightening torque [Ibf-in] for supply 35 35 Ibf-in type of electrical connector for supply maximum permissible 75 °C material of the conductor for supply maximum permissible 35 35 Ibf-in type of electrical connector for load-side outgoing feeder tightening torque [Ibf-in] for load-side outgoing feeder 35 35 Ibf-in type of electrical connector for load-side outgoing feeder 35 32 Ibf-in type of electrical connector for load-si	relative repeat accuracy	1 %
relay 1 number of NO contacts of auxiliary contacts of overload relay 1 operational current of auxiliary contacts of overload relay 1 • 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) insultation voltage (UI) 600 V • with single-phase operation at AC rated value 600 V • with multi-phase operation at AC rated value 600 V • with multi-phase operation at AC rated value 800 V • degree of protection NEMA rating of the enclosure NEMA 4 enclosure design of the housing dustproof, waterproof & weatherproof Mounting/wiring mounting position fastening method Surface mounting and installation type of electrical connection for supply voltage line-side Screw-type terminals tightening torque [IbFin] for supply 35 35 IbFin type of electrical connection for supply maximum permissible 75 °C material of the conductor for supply maximum permissible 53 35 IbFin tightening torque [IbFin] for load-side outgoing feeder 35 35 IbFin type of connectable conductor cross-sections at AWG c	product feature protective coating on printed-circuit board	Yes
relay operational current of auxiliary contacts of overload relay • at AC at 600 V • at DC at 250 V 1 A contact rating of auxiliary contacts of overload relay according to UL insulation voltage (Ui) • with single-phase operation at AC rated value 600 V • with multi-phase operation at AC rated value degree of protection NEMA rating of the enclosure dustproof, waterproof & weatherproof Mounting/wiring mounting position fastening method type of electrical connection for supply voltage line-side tightening torque [IbF in] for supply 35 35 IbF in type of electrical connection for supply maximum permissible material of the conductor for supply maximum per electrical connection for load-side outgoing feeder tightening torque [IbF in] for load-side outgoing feeder tightening torque [IbF in] for load-side outgoing feeder tightening torque [IbF in] for load-side outgoing feeder		1
operational current of auxiliary contacts of overload relay 5 A • at DC at 250 V 1 A contact rating of auxiliary contacts of overload relay 5 A@@00VAC (B600), 1A@250VDC (R300) according to UL insulation voltage (Ui) • with multi-phase operation at AC rated value 600 V • with multi-phase operation at AC rated value 600 V • with multi-phase operation at AC rated value 600 V fectosure 600 V degree of protection NEMA rating of the enclosure Mexterproof & weatherproof Mounting/wiring Vertical mounting position Vertical fastening method Surface mounting and installation Vype of electrical connection for supply voltage line-side 1x (14 2 AWG) at AWG cables single or multi-stranded 1x (14 2 AWG) temperature of the conductor for supply maximum 75 °C pred electrical connection for load-side outgoing feeder 1x (14 2 AWG) tightening torque [IbFin] for load-side outgoing feeder 35 35 IbFin type of electrical connection for load-side outgoing feeder 1x (14 2 AWG) material of the conductor for load-side outgoing feeder 1x (14 2 AWG) tightening torque [IbFin]		1
• 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 single-phase operation at AC rated value 600 V 300 V Enclosure degree of protection NEMA rating of the enclosure NEMA 4 enclosure design of the housing dustproof, waterproof & weatherproof Mounting/wiring mounting position Vertical fastening method Surface mounting and installation type of electrical connection for supply voltage line-side tightening torgue [lbFin] for supply 35		
contact rating of auxiliary contacts of overload relay according to UL 5A@600VAC (B600), 1A@250VDC (R300) insulation voltage (Ui) 600 V • with single-phase operation at AC rated value 600 V • with multi-phase operation at AC rated value 600 V etclosure 800 V degree of protection NEMA rating of the enclosure NEMA 4 enclosure design of the housing dustproof, waterproof & weatherproof Mounting/wiring mounting to supply voltage line-side fastening method Surface mounting and installation type of electrical connection for supply voltage line-side Screw-type terminals tightening torque [lbf-in] for supply 35 35 lbf in type of connectable conductor for supply maximum permissible 75 °C material of the conductor for supply maximum permissible Screw-type terminals tightening torque [lbf-in] for load-side outgoing feeder 35 35 lbf in type of connectable conductor for supply AL or CU type of connectable conductor rose-sections at AWG cables ingle or multi-stranded 1x (14 2 AWG) temperature of the conductor for load-side outgoing feeder 35 35 lbf in type of connectable conductor for load-side outgoing feeder 1x (14 2 AWG) <		5 A
according to UL insulation voltage (Ui) • with single-phase operation at AC rated value 600 V • with single-phase operation at AC rated value 300 V Enclosure 00 V degree of protection NEMA rating of the enclosure NEMA 4 enclosure design of the housing dustproof, waterproof & weatherproof Mounting/wiring 00 V mounting position Vertical fastening method Surface mounting and installation type of electrical connection for supply voltage line-side Screw-type terminals tightening torque [lbf-in] for supply 35 35 lbf-in type of connectable conductor for supply maximum 75 °C material of the conductor for supply AL or CU type of connectable conductor rors-sections at AWG Screw-type terminals tightening torque [lbf-in] for load-side outgoing feeder 35 35 lbf-in type of connectable conductor rors-sections at AWG 1x (14 2 AWG) temperature of the conductor for load-side outgoing feeder 35 35 lbf-in type of connectable conductor for load-side outgoing feeder 35 35 lbf-in type of electrical connection for load-side outgoing feeder 75 °C maximum permissible	• at DC at 250 V	1A
insulation voltage (Ui) • with single-phase operation at AC rated value 600 V • with multi-phase operation at AC rated value 300 V Enclosure 300 V degree of protection NEMA rating of the enclosure MEMA 4 enclosure design of the housing dustproof, waterproof & weatherproof Mounting/wiring mounting position restension Vertical fastening method Surface mounting and installation type of electrical connection for supply voltage line-side 35 35 lbrin type of electrical connection for supply voltage line-side 1x (14 2 AWG) temperature of the conductor for supply maximum 75 °C material of the conductor for load-side outgoing feeder 35 35 lbrin type of connectable conductor for load-side outgoing feeder 35 35 lbrin type of connectable conductor for load-side outgoing feeder 35 35 lbrin type of connectable conductor for load-side outgoing feeder 35 35 lbrin type of connectable conductor for load-side outgoing feeder 35 35 lbrin type of connectable conductor for load-side outgoing feeder 35 35 lbrin type of connectable conductor for load-side outgoing feeder 35 25 lbrin type o		5A@600VAC (B600), 1A@250VDC (R300)
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 Fnclosure degree of protection NEMA rating of the enclosure design of the housing dustproof, waterproof & weatherproof Mounting/wiring mounting position fastening method Surface mounting and installation type of electrical connection for supply voltage line-side tightening torque [lbf-in] for supply at AWG cables single or multi-stranded temperature of the conductor for supply maximum permissible material of the conductor for load-side outgoing feeder tightening torque [lbf-in] for load-side outgoing feeder 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 electrical connection of magnet coil type of connectable conductor for load-side outgoing feeder type of connectable conductor for load-side outgoing feeder type of electrical connection of magnet coil type of electrical connection of magne		
with multi-phase operation at AC rated value 300 V Enclosure degree of protection NEMA rating of the enclosure design of the housing dustproof, waterproof & weatherproof Mounting/wiring mounting position fastening method Surface mounting and installation type of electrical connection for supply voltage line-side at AWG cables single or multi-stranded temperature of the conductor for supply maximum permissible matrial of the conductor for load-side outgoing feeder type of connectable 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 connectable conductor for load-side outgoing feeder type of electrical connection of magnet coil type of connectable conductor for load-side outgoing feeder type of electrical connection of magnet coil type of conn	• • • <i>i</i>	600 V
degree of protection NEMA rating of the enclosure NEMA 4 enclosure design of the housing dustproof, waterproof & weatherproof Mounting/wiring Vertical mounting position Vertical fastening method Surface mounting and installation type of electrical connection for supply voltage line-side Screw-type terminals tightening torque [lbf-in] for supply 35 35 lbf-in type of connectable conductor cross-sections at line-side 1x (14 2 AWG) at AWG cables single or multi-stranded Ts °C material of the conductor for supply AL or CU type of electrical connectable conductor cross-sections at AWG Screw-type terminals tightening torque [lbf-in] for load-side outgoing feeder 35 35 lbf-in type of connectable conductor for load-side outgoing feeder 35 35 lbf-in type of connectable conductor for load-side outgoing feeder 35 35 lbf-in type of connectable conductor for load-side outgoing feeder 35 35 lbf-in type of electrical connection for load-side outgoing feeder 35 35 lbf-in type of electrical connection for load-side outgoing feeder 35 35 lbf-in type of electrical connection of magnet coil <td> with multi-phase operation at AC rated value </td> <td>300 V</td>	 with multi-phase operation at AC rated value 	300 V
degree of protection NEMA rating of the enclosure NEMA 4 enclosure design of the housing dustproof, waterproof & weatherproof Mounting/wiring Vertical mounting position Vertical fastening method Surface mounting and installation type of electrical connection for supply voltage line-side Screw-type terminals tightening torque [lbf-in] for supply 35 35 lbf-in type of connectable conductor cross-sections at line-side 1x (14 2 AWG) at AWG cables single or multi-stranded Ts °C material of the conductor for supply AL or CU type of electrical connectable conductor cross-sections at AWG Screw-type terminals tightening torque [lbf-in] for load-side outgoing feeder 35 35 lbf-in type of connectable conductor for load-side outgoing feeder 35 35 lbf-in type of connectable conductor for load-side outgoing feeder 35 35 lbf-in type of connectable conductor for load-side outgoing feeder 35 35 lbf-in type of electrical connection for load-side outgoing feeder 35 35 lbf-in type of electrical connection for load-side outgoing feeder 35 35 lbf-in type of electrical connection of magnet coil <td>Enclosure</td> <td></td>	Enclosure	
design of the housing dustproof, waterproof & weatherproof Mounting/wiring mounting position Vertical fastening method Surface mounting and installation type of electrical connection for supply voltage line-side Screw-type terminals 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 load-side outgoing feeder 35 35 lbf-in type of connectable conductor cross-sections at AWG cables single outgoing feeder 35 35 lbf-in type of electrical connection for load-side outgoing feeder 35 35 lbf-in type of connectable conductor for supply AL or CU type of connectable conductor rorss-sections at AWG cables for load-side outgoing feeder 35 35 lbf-in type of connectable conductor for load-side outgoing feeder 75 °C maximum permissible 75 °C material of the conductor for load-side outgoing feeder 1x (14 2 AWG) tore cube of the conductor for load-side outgoing feeder 75 °C material of the conductor for load-side outgoing feeder 1x (14 2 AWG)		NEMA 4 enclosure
Mounting/wiring mounting position Vertical fastening method Surface mounting and installation type of electrical connection for supply voltage line-side Screw-type terminals 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 load-side outgoing feeder 35 35 lbf-in tightening torque [lbf-in] for load-side outgoing feeder 35 35 lbf-in tightening torque [lbf-in] for load-side outgoing feeder 1x (14 2 AWG) tightening torque [lbf-in] for load-side outgoing feeder 1x (14 2 AWG) tightening torque [lbf-in] for load-side outgoing feeder 1x (14 2 AWG) temperature of the conductor for load-side outgoing feeder 1x (14 2 AWG) temperature of the conductor for load-side outgoing feeder 75 °C material of the conductor for load-side outgoing feeder 75 °C material of the conductor for load-side outgoing feeder 75 °C material of the conductor for load-side outgoing feeder 1x (14 2 AWG) tightening torque [lbf-in] at magnet coil 5 12 lbf-in <td></td> <td></td>		
mounting positionVerticalfastening methodSurface mounting and installationtype of electrical connection for supply voltage line-sideScrew-type terminalstightening torque [lbf-in] for supply35 35 lbf-intype of connectable conductor cross-sections at line-side at AWG cables single or multi-stranded1x (14 2 AWG)temperature of the conductor for supply maximum permissible75 °Cmaterial of the conductor for supplyAL or CUtype of electrical connection for load-side outgoing feeder35 35 lbf-intype of connectable conductor for supplyAL or CUtype of connectable conductor cross-sections at AWG cables for load-side outgoing feeder35 35 lbf-intype of connectable conductor for load-side outgoing feeder1x (14 2 AWG)temperature of the conductor for load-side outgoing feeder1x (14 2 AWG)temperature of the conductor for load-side outgoing feeder75 °Cmaterial of the conductor for load-side outgoing feeder1x (14 2 AWG)temperature of the conductor for load-side outgoing feeder75 °Cmaterial of the conductor for load-side outgoing feeder75 °Cmaterial of the conductor for load-side outgoing feeder75 °Cmaterial of the conductor for load-side outgoing feeder75 °Ctype of electrical connection of magnet coilScrew-type terminalstightening torque [lbf-in] at magnet coil5 12 lbf-intype of connectable conductor cross-sections of magnet2x (16 12 AWG)	5 5	
fastening methodSurface mounting and installationtype of electrical connection for supply voltage line-sideScrew-type terminalstightening torque [lbf-in] for supply35 35 lbf-intype of connectable conductor cross-sections at line-side at AWG cables single or multi-stranded1x (14 2 AWG)temperature of the conductor for supply maximum permissible75 °Cmaterial of the conductor for supplyAL or CUtype of electrical connectable conductor cross-sections at AWG cables for load-side outgoing feeder35 35 lbf-intype of connectable conductor for supply1x (14 2 AWG)temperature of the conductor for supplyAL or CUtype of connectable conductor cross-sections at AWG cables for load-side outgoing feeder35 35 lbf-intype of connectable conductor for load-side outgoing feeder1x (14 2 AWG)temperature of the conductor for load-side outgoing feeder1x (14 2 AWG)temperature of the conductor for load-side outgoing feeder75 °Ctemperature of the conductor for load-side outgoing feeder1x (14 2 AWG)temperature of the conductor for load-side outgoing feeder75 °Cmaterial of the conductor for load-side outgoing feederAL or CUtype of electrical connection of magnet coilScrew-type terminalstightening torque [lbf-in] at magnet coil5 12 lbf-intype of connectable conductor cross-sections of magnet2x (16 12 AWG)		Vertical
type of electrical connection for supply voltage line-sideScrew-type terminalstightening torque [lbf-in] for supply35 35 lbf-intype of connectable conductor cross-sections at line-side at AWG cables single or multi-stranded1x (14 2 AWG)temperature of the conductor for supply maximum permissible75 °Cmaterial of the conductor for supplyAL or CUtype of electrical connection for load-side outgoing feederScrew-type terminalstightening torque [lbf-in] for load-side outgoing feeder35 35 lbf-intype of connectable conductor cross-sections at AWG cables for load-side outgoing feeder1x (14 2 AWG)temperature of the conductor for load-side outgoing feeder35 35 lbf-intype of connectable conductor cross-sections at AWG cables for load-side outgoing feeder1x (14 2 AWG)temperature of the conductor for load-side outgoing feeder75 °Cmaterial of the conductor for load-side outgoing feeder75 °Cmaximum permissible75 °Cmaterial of the conductor for load-side outgoing feeder75 °Ctype of electrical connection of magnet coilScrew-type terminalstightening torque [lbf-in] at magnet coilScrew-type terminalstightening torque [lbf-in] at magnet coil5 12 lbf-intype of connectable conductor cross-sections of magnet2x (16 12 AWG)		
tightening torque [lbf-in] for supply35 35 lbf-intype of connectable conductor cross-sections at line-side at AWG cables single or multi-stranded1x (14 2 AWG)temperature of the conductor for supply maximum permissible75 °Cmaterial of the conductor for supplyAL or CUtype of electrical connection for load-side outgoing feeder tightening torque [lbf-in] for load-side outgoing feeder35 35 lbf-intype of connectable conductor cross-sections at AWG cables for load-side outgoing feeder35 35 lbf-intype of connectable conductor for load-side outgoing feeder temperature of the conductor for load-side outgoing feeder1x (14 2 AWG)temperature of the conductor for load-side outgoing feeder maximum permissible75 °Cmaterial of the conductor for load-side outgoing feeder maximum permissible75 °Cmaterial of the conductor for load-side outgoing feeder maximum permissible1x (14 2 AWG)temperature of the conductor for load-side outgoing feeder maximum permissible75 °Cmaterial of the conductor for load-side outgoing feeder maximum permissible75 °Cmaterial of the conductor for load-side outgoing feeder material of the conductor for load-side outgoing feederAL or CUtype of electrical connection of magnet coilScrew-type terminalstightening torque [lbf-in] at magnet coil5 12 lbf-intype of connectable conductor cross-sections of magnet2x (16 12 AWG)		
type of connectable conductor cross-sections at line-side at AWG cables single or multi-stranded1x (14 2 AWG)temperature of the conductor for supply maximum permissible75 °Cmaterial of the conductor for supplyAL or CUtype of electrical connection for load-side outgoing feeder tightening torque [lbf·in] for load-side outgoing feederScrew-type terminalstype of connectable conductor for load-side outgoing feeder temperature of the conductor for load-side outgoing feeder1x (14 2 AWG)temperature of the conductor for load-side outgoing feeder tightening torque [lbf·in] for load-side outgoing feeder1x (14 2 AWG)temperature of the conductor for load-side outgoing feeder maximum permissible75 °Cmaterial of the conductor for load-side outgoing feeder stranded75 °Ctemperature of the conductor for load-side outgoing feeder maximum permissible75 °Cmaterial of the conductor for load-side outgoing feeder maximum permissible75 °Cmaterial of the conductor for load-side outgoing feeder maximum permissible75 °Cmaterial of the conductor for load-side outgoing feeder maximum permissible75 °Ctype of electrical connection of magnet coilScrew-type terminalstightening torque [lbf·in] at magnet coil5 12 lbf·intype of connectable conductor cross-sections of magnet type of connectable conductor cross-sections of magnet2x (16 12 AWG)		
temperature of the conductor for supply maximum permissible75 °Cmaterial of the conductor for supplyAL or CUtype of electrical connection for load-side outgoing feederScrew-type terminalstightening torque [lbf·in] for load-side outgoing feeder35 35 lbf·intype of connectable conductor cross-sections at AWG cables for load-side outgoing feeder single or multi- stranded1x (14 2 AWG)temperature of the conductor for load-side outgoing feeder maximum permissible75 °Cmaterial of the conductor for load-side outgoing feeder for load-side outgoing feeder75 °Cmaterial of the conductor for load-side outgoing feeder maximum permissibleAL or CUtype of electrical connection of magnet coilScrew-type terminalstightening torque [lbf·in] at magnet coil5 12 lbf·intype of connectable conductor cross-sections of magnet2x (16 12 AWG)	type of connectable conductor cross-sections at line-side	
material of the conductor for supplyAL or CUtype of electrical connection for load-side outgoing feederScrew-type terminalstightening torque [lbf·in] for load-side outgoing feeder35 35 lbf·intype of connectable conductor cross-sections at AWG cables for load-side outgoing feeder single or multi- stranded1x (14 2 AWG)temperature of the conductor for load-side outgoing feeder maximum permissible75 °Cmaterial of the conductor for load-side outgoing feeder type of electrical connection of magnet coilAL or CUtype of electrical connection of magnet coilScrew-type terminalstightening torque [lbf·in] at magnet coil5 12 lbf·intype of connectable conductor cross-sections of magnet2x (16 12 AWG)	temperature of the conductor for supply maximum	75 °C
type of electrical connection for load-side outgoing feederScrew-type terminalstightening torque [lbf-in] for load-side outgoing feeder35 35 lbf-intype of connectable conductor cross-sections at AWG cables for load-side outgoing feeder single or multi- stranded1x (14 2 AWG)temperature of the conductor for load-side outgoing feeder maximum permissible75 °Cmaterial of the conductor for load-side outgoing feeder type of electrical connection of magnet coilAL or CUtype of electrical connection of magnet coil5 12 lbf-intype of connectable conductor cross-sections of magnet2x (16 12 AWG)	-	AL or CLL
tightening torque [lbf-in] for load-side outgoing feeder35 35 lbf-intype of connectable conductor cross-sections at AWG cables for load-side outgoing feeder single or multi- stranded1x (14 2 AWG)temperature of the conductor for load-side outgoing feeder maximum permissible75 °Cmaterial of the conductor for load-side outgoing feeder type of electrical connection of magnet coilAL or CUtightening torque [lbf-in] at magnet coil5 12 lbf-intype of connectable conductor cross-sections of magnet type of connectable conductor cross-sections of magnet2x (16 12 AWG)		
type of connectable conductor cross-sections at AWG cables for load-side outgoing feeder single or multistranded 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 2x (16 12 AWG)		
temperature of the conductor for load-side outgoing feeder maximum permissible75 °Cmaterial of the conductor for load-side outgoing feederAL or CUtype of electrical connection of magnet coilScrew-type terminalstightening torque [lbf·in] at magnet coil5 12 lbf·intype of connectable conductor cross-sections of magnet2x (16 12 AWG)	type of connectable conductor cross-sections at AWG cables for load-side outgoing feeder single or multi-	
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 2x (16 12 AWG)	temperature of the conductor for load-side outgoing feeder	75 °C
type of electrical connection of magnet coilScrew-type terminalstightening torque [lbf·in] at magnet coil5 12 lbf·intype of connectable conductor cross-sections of magnet2x (16 12 AWG)		AL or CU
tightening torque [lbf·in] at magnet coil5 12 lbf·intype of connectable conductor cross-sections of magnet2x (16 12 AWG)		Screw-type terminals
type of connectable conductor cross-sections of magnet 2x (16 12 AWG)		
	type of connectable conductor cross-sections of magnet	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 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)		
design of the short-circuit trip	Thermal magnetic circuit breaker		
breaking capacity maximum short-circuit current (Icu)			
• at 240 V	14 kA		
• at 480 V	10 kA		
• at 600 V	10 kA		
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=US2:83DUD95EH			
Service&Support (Manuals, Certificates, Characteristics, FAQs,)			
https://support.industry.siemens.com/cs/US/en/ps/US2:83DUD95EH			
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros,) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:83DUD95EH⟨=en			
Certificates/approvals	Certificates/approvals		

https://support.industry.siemens.com/cs/US/en/ps/US2:83DUD95EH/certificate

last modified:

1/25/2022 🖸