## SIEMENS

## Data sheet

## US2:83GUG95EH



Duplex starter w/o alternator, Size 2 1/2, Three phase full voltage, Solidstate overload relay, OLR amp range 25-100A, 380-440/440-480V 50/60Hz coil, Non-combination type, Enc NEMA type 4 painted steel, Water/dust tight for outdoors

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product brand name	Class 83
design of the product	Duplex controller without alternator
special product feature	Half-size controller; ESP200 overload relay
General technical data	
weight [lb]	57 lb
Height x Width x Depth [in]	25 × 17 × 7 in
touch protection against electrical shock	NA for enclosed products
installation altitude [ft] at height above sea level maximum	6560 ft
ambient temperature [°F]	
<ul> <li>during storage</li> </ul>	-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	15 hp
• at 220/230 V rated value	20 hp
• at 460/480 V rated value	30 hp
• at 575/600 V rated value	30 hp
Contactor	
size of contactor	Controller half size 2 1/2
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	60 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	7
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	

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• A/ AC at 601 Hz minet value         440         .440 v40           holding power at magnet coll at AC         218 VA         29 VA           apparent holding power of magnet coll at AC         218 VA         29 VA           apparent holding power of magnet coll at AC         218 VA         29 VA           apparent holding power of magnet coll related to the hold voltage of magnet coll related to the hold voltage of magnet coll related to the form to voltage of magnet coll related to the form to voltage of magnet coll related to the form to voltage of magnet coll related to the form to voltage of magnet coll related to the form to voltage of magnet coll related to the form to voltage of magnet coll related to the form to voltage of magnet coll related to the form to voltage of magnet coll related to the form to voltage of magnet coll related to the form to voltage of magnet coll related to the form to voltage of magnet coll related to the form to voltage of magnet coll related to the form to voltage of magnet coll related to the form to voltage of magnet coll related to the form to voltage of magnet coll related to the form to voltage of magnet coll related to the form to voltage of magnet coll related to the current of the current-digendent ovortage related relates         Yes           application form to prove the current of the current-digendent ovortage related relates         Yes         Yes           relative (repard acreater delates of overlaad related of overlaad relates         1         1           relative (road acreater delates of overlaad relates         1         1           relative (road acreate delated voltage doverlaad relase	at DC rated value	0 0 V
holding power at AC minimum     8.6 W       apparent holding power of magnet coil at AC     25 VA       operating range factor control supply voltage rated value     0.85 1.1       off-delay time     0.9 20 ms       OFF-delay time     10 24 ms       Overload protection     Yes       asymmetry detection     Yes       reset function     Yes       eater frequency     Yes       reset function     Yes       reset funct		
apparent pick-up power of magnet coll at AC         248 VA           apparent holding power of magnet coll at AC         25 VA           operating magnet factor control supply voltage rated value         0.85 1.1           of magnet coll         0.95 1.1           of magnet coll         0.95 1.1           operating magnet factor control supply voltage rated value         0.85 1.1           of reflection         0.9 24 ms           OFF-dealy time         10 24 ms           Overtical active         Yes           + apparent reletion         Yes           - apparent re		
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           precental drop-out voltage of magnet coil related to the input voltage.         90 %           ON-Adeisy time         10 20 ms           OFF-delay time         10 20 ms           Overload protection         Yes           • symmetry detection         Yes           • asymmetry detection         Yes           • symmetry detection         Yes           • esternal reset         Yes           • esternal reset         Yes           • esternal reset         Yes           • esternal reset         Yes           • product finally detection         Yes           • esternal reset         Yes           • esternal reset         Yes           • esternal reset         Yes           • product finature protection actaing on printed-circlic board         1           robust of voltage actuality contacts of overload         1           rebust         robust of auxiliary contacts of overload relay           • al Co at 280 V         1           Insultation voltage (III)         SA@BEOUVAC (B600), 1A@250VDC (R300)           • al Co at 280 V         1 <tr< td=""><td></td><td></td></tr<>		
operating range factor control supply voltage rated value         0.851.1           of magnite coll         50 %           CM-detay time         1929 ms           OPer-detay time         1024 ms           Overload rates         7           overload protection         Yes           • overload protection         Yes           • overload protection         Yes           • ground fault detection         Yes           • total function         Yes           reset function         Manual, automatic and remote           adjustable current response value current of the current-         25		
of magnit call       B0 %         precental dropout voltage of magnet coll related to the input voltage       B0 %         ON-delay time       10 24 ms         Overload relay       product function         • voreford protection       Yes         • apyment full reductorian       Yes         • atternal reset       Yes         • external reset       Yes         • adjustable current response value current of the current-dependent voltad relaase       25 100 Å         dependent voltad relaase       25 100 Å         reset function       Yes         reset function       Yes         relative repeat accuracy       1 %         product flavities contacts of availiany contacts of overload relay       1         ortacts of availiany contacts of overload relay       5 Å         • at DC at 260 V       1 Å         contacts of availiany contacts of overload relay       5 Åage600VAC (B600), 1 Åag250VDC (R300)         accontring to UL       5 Åage600VAC (B600), 1 Åag250VDC (R300)		
input voltage         1929 ms           OH-delay time         1024 ms           Overload roles         1024 ms           Overload roles         1024 ms           overload protection         Yes           • overload protection         Yes           • asymmetry detection         Yes           • ground fault detection         Yes           • external reset         Yes           • external reset         Yes           reset function         Manual, automatic and remote           25 - 100 A         40           dependent overload release         3 s           reteart function         3 s           retaitive representive coating on printed-circuit baard         1           retaitive representive coating on printed-circuit baard         1           operational current of auxiliary contacts of overload         1           retaitive representive coating on printed-circuit baard         1           orticat rating of auxiliary contacts of overload         1           insultation voltage (U)         5 A           • at DC at 250 V         5 A           insultation voltage (U)         • at DC at 250 V           • with multip-base operation at AC rated value         600 V           voltar rating of a		0.85 1.1
OPEF-delay time     10 _ 24 ms       Overload relay     Product function       • overload protection     Yes       • phase failure detection     Yes       • asymmetry detection     Yes       • asymmetry detection     Yes       • external reset     Yes       • external reset     Yes       • detection     Manual, automatic and remote       25 _ 100 A     1%       product feature protective coding on printed-circuit board     Yes       number of NC contacts of auxiliary contacts of overload relay     3 s       • at DC at 250 V     1 h       • at DC at 250 V     5 A       • at DC at 250 V     5 A       • at DC at 250 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     600 V       • 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     75 °C       Protection NEMA rating of the enclosure		50 %
Overload roley         Yes           product function         Yes           • pase failure detection         Yes           • asymmetry detection         Yes           • ground fault detection         Yes           • external reset         Yes           • reduct accuracy         1 %           • product fatury contacts of overload relay         1           • at C at 50 V         1 A           contact rating of auxiliary contacts of overload relay         5 A           • at C at 280 V         1 A           inclosure		
product function         Yes           • overfad protection         Yes           • phase failure detection         Yes           • asymmetry detection         Yes           • ground fault detection         Yes           • external reset         Yes           • external reset         Yes           • external reset         Yes           reset function         Manual, automatic and remote           adjustable current response value current of the current- dependent overload release         Yes           product feature protective coating on printed-circuit board         1%           product feature protective coating on printed-circuit board         1           rumbor of NC contacts of auxiliary contacts of overload         1           relay         eat 06 at 260 V         1A           contact rating of auxiliary contacts of overload relay         5A           a 1D Cai 250 V         1A           instation voltage (U)         5A           instation voltage (U)         800 V           with multi-phase operation at AC rated value         800 V           econtary         design of the enclosure           design of the housing         Mounting writing and installation           type of electrical connectrion for supply voltage line side         1x (14 2	OFF-delay time	10 24 ms
• overload protection     Yes     • phase failure detection     Yes     asymmetry detection     Yes     ground fault detection     Yes     ves     external reset     Yes     ves     vesternal reset     Yes     ves	Overload relay	
	product function	
e asymmetry detection         Yes         yes         external reset         Yes         external reset         Yes         external reset         Yes         external reset         Yes         reset function         adjustable current reponse value current of the current-         dependent overload release         Triping time at phase-loss maxinum         3 s         relative repeat accuracy         product feature protective coating on printed-circuit brand         relay         rumber of NC contacts of auxiliary contacts of overload         1         rumber of NC contacts of auxiliary contacts of overload         1         rumber of NC contacts of auxiliary contacts of overload         1         relay         operation fauture, protective coating on printed-circuit brand         relay         ourber of NC contacts of auxiliary contacts of overload         1         rumber of NC contacts of auxiliary contacts of overload         1         contact rating of auxiliary contacts of overload relay         • al A Cat 600 V         5 A         • al A Cat 600 V         • al A Cat 280 V         5 A         • al A Cat 280 V         5 A         • al A Cat 600 V         • with single-phase operation at AC rated value         600 V         • with single-phase operation at AC rated value         sol V         with single-phase operation at AC rated value         with single-phase operation at AC rated value         sol V         surface mounting and installation         type of contactable for outcotor for supply voltage line-side         at AVC Cables single or multi-         standed         theremature lifetin for supply voltage line-side         at AVC Cables single or multi-         standed         toruge lifetin for supply         AL or CU         type of contactable conductor for load-side outgoing feeder         materinal of the conductor for load-side	<ul> <li>overload protection</li> </ul>	Yes
	<ul> <li>phase failure detection</li> </ul>	Yes
test function         Yes         external reset         Yes         instruction         digutable current response value current of the current-         dependent overload release         fipping time at phase-loss maximum         3 s         relative repeat accuracy         1%         product feature protective coating on printed-circuit board         relay         renter protective coating on printed-circuit board         relay         rumber of NC contacts of auxiliary contacts of overload         relay         eart AC at 600 V              s.	<ul> <li>asymmetry detection</li> </ul>	Yes
• external reset         Yes           reset function         Manual, automatic and remote           adjustable current response value current of the current- dependent overload release         25100 A           tripping time at phase-loss maximum         3 s           relative repretective coating on printed-circuit board relay         1 %           product feature protective coating on printed-circuit board relay         1 %           operational current of auxiliary contacts of overload relay         1           operational current of auxiliary contacts of overload relay         5 A           • at DC at 250 V         1 A           contact reling of auxiliary contacts of overload relay         5 A@600VAC (B600), 1A@250VDC (R300)           according to UL         5 A@600VAC (B600), 1A@250VDC (R300)           according to UL         5 A@600VAC (B600), 1A@250VDC (R300)           according to UL         600 V           • with multi-phase operation at AC rated value         600 V           • with multi-phase operation at AC rated value         800 V           • with multi-phase operation at AC rated value         800 V           • with single-phase operation at AC rated value         800 V           • with multi-phase operation at AC rated value         800 V           • other housing         dustproof, waterproof & weatherproof           <	<ul> <li>ground fault detection</li> </ul>	Yes
reset function       Manual, automatic and remote         adjustable current response value current of the current- dependent overload release       25 100 A         tripping time at phase-loss maximum       3 s         relative repeat accuracy       1 %         product feature protective coaling on printed-circuit board       1 %         number of NC contacts of auxiliary contacts of overload       1         relay       ext AC at 600 V       5 A         • ett AC at 600 V       5 A         • ett AC at 600 V       5 A         • ett AC at 250 V       1 A         contact rating of auxiliary contacts of overload relay       5A@@00VAC (B600), 1A@250VDC (R300)         according to UL       insulation voltage (Ui)         • with single-phase operation at AC rated value       600 V         solor V       5 A         edegree of protection NEMA rating of the enclosure       NEMA 4 enclosure         design of the housing       Surface mounting and installation         Type of electrical connection for supply voltage line-side       1x (14 2 AWG)         tightening torque [bithin for supply maximum permissible       75 °C         material of the conductor for load-side outgoing feeder       45 45 lib*in         Type of electrical connection for load-side outgoing feeder       75 °C	test function	Yes
adjustable current response value current of the current- dependent overtoal release       25 100 Å         tripping time a phase-loss maximum       3 s         relative repeat accuracy       1%         product feature protective coating on printed-circuit board relay       1%         number of NC contacts of auxiliary contacts of overload relay       1         operational current of auxiliary contacts of overload relay according to UL       1         outstart rating of auxiliary contacts of overload relay according to UL       5 Å         inisultation voltage (U)       5 Å         • eit AC at 600 V       1 Å         contact rating of auxiliary contacts of overload relay according to UL       5 Å         inisultation voltage (U)       600 V         • 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 design of the housing       NEMA 4 enclosure dustproof, waterproof & weatherproof         Mounting voisition       Surface mounting and installation         Type of electrical connection for supply voltage line-side dat AVG cables single or multi-stranded       75 °C         temperature of the conductor for supply maximum permissible       75 °C         Vype of electrical connection for load-side outgoing feeder       75 °C         vy	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 relay       5 A         • at DC at 250 V       1 A         contact rating 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         according to UL       500 V         insulation voltage (U)       600 V         • with single-phase operation at AC rated value       600 V         • with multi-phase operation at AC rated value       300 V         Enclosure       Meximum         degree of protection NEMA rating of the enclosure       dustproof, waterproof & weatherproof         Mounting/witing       Surface mounting and installation         Type of electrical connection for supply voltage line-side       Box lug         tightening torque [IbFin] for supply       45 45 IbFin         Type of electrical connection for supply maximum       76 °C         permissible       76 °C </td <td>reset function</td> <td>Manual, automatic and remote</td>	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       1         etal CA ta 600 V       5 A         insulation voltage (UI)       600 V         ewith single-phase operation at AC rated value       600 V         with multi-phase operation at AC rated value       300 V         Enclosure       Mustragevice         design of the housing       Mustragevice         mounting position       Surface mounting and installation         Type of electrical connection for supply voltage line-side       Box lug         tightening torque [Ibf-In] for supply       45 45 lbf-In         type of electrical connection for supply waximum permissible       75 °C         material of the conductor for supply maximum permissible       75 °C         material of the conductor for load-side outgoing feeder       75 °C         type of electrical connectable conductor cross-sections at AWG ablof-In       11 (14 2 AWG) <td></td> <td>25 100 A</td>		25 100 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         5.A           • at DC at 250 V         1.A           contact rating of auxiliary contacts of overload relay according to UL         5.A           insulation voltage (Ui)         • with single-phase operation at AC rated value         600 V           • with single-phase operation at AC rated value         600 V           degree of protection NEMA rating of the enclosure         NEMA 4 enclosure           degree of protection NEMA rating of the enclosure         NemA4 enclosure           degree of protection NEMA rating of the enclosure         NemA4 enclosure           degree of protection NEMA rating of the enclosure         NemA4 enclosure           degree of protection NEMA rating of the enclosure         NemA4 enclosure           degree of protection NEMA rating of the enclosure         NemA4 enclosure           degree of protection NEMA rating of the enclosure         Netara enclosure           degree of protection NEMA rating of the enclosure         Netara enclosure           tightening torque [Ubf in] f	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 according to UL       1         contact rating of auxiliary contacts of overload relay according to UL       5 A         insulation voltage (UI)       6 A         • with single-phase operation at AC rated value       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       600 V         • with multi-phase operation at AC rated value       800 V         Enclosure       600 V         degree of protection NEMA rating of the enclosure       600 V         design of the housing       dustproof, waterproof & weatherproof         Mounting/wiring       Surface mounting and installation         Type of electrical connection for supply voltage line-side       Box lug         tightening torque [lbf-in] for supply woltage line-side       As 45 lbf-in         type of electrical connection for supply maximum permissible       75 °C         material of the conductor for supply maximum permissible       75 °C         material of the conductor for load-side outgoing feeder type of electrical connectable conductor cross-sec	relative repeat accuracy	1 %
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       5 A         insulation voltage (U)       • Ad Boo V         • with single-phase operation at AC rated value       600 V         • with multi-phase operation at AC rated value       300 V         Enclosure       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       Box lug         tightening torque [lbf-in] for supply       45 45 lbf-in         type of electrical connection for supply maximum permissible       75 °C         material of the conductor for supply       AL or CU         type of connectable conductor for supply       AL or CU         type of electrical connection of rolad-side outgoing feeder       45 45 lbf-in         type of electrical connection for load-side outing feeder       45 45 lbf-in	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         degree of protection NEMA rating of the enclosure         degree of protection NEMA rating of the enclosure         design of the housing         mounting position         fastening method         type of electrical connection for supply voltage line-side         tightening torque [IbF in] for supply         type of connectable conductor for supply maximum         permissible         material of the conductor for supply maximum         per of electrical connection for supply         AL or CU         type of electrical connection for supply         tightening torque [IbF in] for load-side outgoing feeder         t		1
operational current of auxiliary contacts of overload relay <ul> <li>at AC at 800 V</li> <li>at DC at 250 V</li> <li>1 A</li> <li>Contact rating of auxiliary contacts of overload relay according to UL</li> <li>insulation voltage (Ui)</li> <li>with single-phase operation at AC rated value</li> <li>600 V</li> <li>with multi-phase operation at AC rated value</li> <li>000 V</li> <li>Enclosure</li> <li>degree of protection NEMA rating of the enclosure</li> <li>Mexima AC rated value</li> <li>NEMA 4 enclosure</li> <li>degree of protection NEMA rating of the enclosure</li> <li>Mounting/wiring</li> <li>Mounting/wiring</li> <li>Mounting/wiring</li> <li>Vertical</li> <li>Surface mounting and installation</li> <li>type of electrical connection for supply voltage line-side at AVG cables single or multi-stranded</li> <li>Tx (14 2 AWG)</li> <li>AL or CU</li> <li>type of connectable conductor for supply maximum premissible</li> <li>material of the conductor for supply maximum preport for ad-side outgoing feeder</li> <li>type of connectable conductor rose-sections at AWG cables for load-side outgoing feeder</li> <li>tx (14 2 AWG)</li> <li>type of electrical connection for load-side outgoing feeder</li> <li>type of electrical connection for load-side outgoing feeder</li> <li>type of electrical connection for load-side outgoing feeder</li> <li>type of electrical connection of magnet coil</li></ul>		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 multi-phase operation at AC rated value       600 V         • with multi-phase operation at AC rated value       300 V         Enclosure       Mextmatch         degree of protection NEMA rating of the enclosure       NEMA 4 enclosure         design of the housing       mounting working         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       45 45 lbf in         type of connectable conductor for supply maximum       75 °C         permissible       Box lug         material of the conductor for supply maximum       For °C         per of connectable conductor for supply maximum       For °C         material of the conductor for supply maximum       75 °C         per electrical connection for load-side outgoing feeder       45 45 lbf in         tightening torque [lbf-in] for load-side outgoing feeder       1x (14 2 AWG) <td></td> <td></td>		
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         degree of protection NEMA rating of the enclosure design of the housing       NEMA 4 enclosure dustproof, waterproof & weatherproof         Mounting/wiring       mounting position       Vertical         fastening method       Surface mounting and installation         type of electrical connection for supply voltage 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 supply maximum permissible       75 °C         type of connectable conductor ross-sections at AWG cables for load-side outgoing feeder       45 45 lbfin         type of connectable conductor for supply       AL or CU         type of connectable conductor ross at AWG cables for load-side outgoing feeder       75 °C         material 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         temperature of the conductor for load-side outgoing feeder		5 A
according to UL       insulation voltage (Ui)         • with single-phase operation at AC rated value       600 V         • with multi-phase operation at AC rated value       300 V         Enclosure       degree of protection NEMA rating of the enclosure       NEMA 4 enclosure         design of the housing       dustproof, waterproof & weatherproof         Mounting/wiring       mounting/wiring         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       45 45 lbf-in         type of connectable conductor cross-sections at line-side       1x (14 2 AWG)         et meperature of the conductor for supply maximum       75 °C         permissible       Box lug         tightening torque [lbf-in] for load-side outgoing feeder       45 45 lbf-in         type of electrical connection for load-side outgoing feeder       45 45 lbf-in         type of connectable conductor cross-sections at AWG       1x (14 2 AWG)         cables for load-side outgoing feeder       45 45 lbf-in         type of connectable conductor cross-sections at AWG       1x (14 2 AWG)         cables for load-side outgoing feeder       75 °C         maximum permis	• at DC at 250 V	1 A
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       Vertical         mounting position       Vertical         fastening method       Surface mounting and installation         type of electrical connection for supply voltage line-side       Box lug         tightening torque [lbFin] for supply       45 45 lbFin         type of electrical connection for supply maximum       75 °C         material of the conductor for supply maximum       75 °C         material of the conductor for supply maximum       75 °C         tightening torque [lbFin] for load-side outgoing feeder       45 45 lbFin         type of electrical connection for load-side outgoing feeder       45 45 lbFin         type of connectable conductor for supply maximum       75 °C         material of the conductor for load-side outgoing feeder       45 45 lbFin         type of electrical connection for load-side outgoing feeder       45 45 lbFin         type of electrical connector for load-side outgoing feeder       75 °C		5A@600VAC (B600), 1A@250VDC (R300)
with single-phase operation at AC rated value     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     temperature of the conductor cross-sections at line-side     tightening torque [lbf-in] for load-side outgoing feeder     tightening torque [lbf-in] for load-side outgoing feeder     tightening torque [lbf-in] for load-side outgoing feeder     type of connectable conductor for load-side outgoing feeder     tightening torque of the conductor for load-side outgoing feeder     type of connectable conductor for load-side outgoing feeder     tightening torque of the conductor for load-side outgoing feeder     type of connectable conductor for load-side outgoing feeder     tightening torque [lbf-in] at magnet coil     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 connectable conductor for load-side outgoing feeder     type of electrical connection of magnet coil		
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     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     tightening torque fibring tor load-side outgoing feeder     temperature of the conductor for load-side outgoing feeder     temperature of the conductor for load-side outgoing feeder     temperature of the conductor for load-side outgoing feeder     type of electrical connection of magnet coil     type of electrical conductor for load-side outgoing feeder     temperature of the conductor 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 ses-sections of magnet     type of connectable conductor for ses-sections of magnet     type of connectable conductor for ses-sections of magnet     type of connectable con		600 V
Enclosure           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         Box lug           tightening torque [lbf-in] for supply         45 45 lbf-in           type of connectable conductor cross-sections at line-side         1x (14 2 AWG)           at AWG cables single or multi-stranded         75 °C           material of the conductor for supply         AL or CU           type of electrical connection for load-side outgoing feeder         5 45 lbf-in           type of connectable conductor cross-sections at AWG         1x (14 2 AWG)           cables for load-side outgoing feeder         45 45 lbf-in           type of connectable conductor for load-side outgoing feeder         1x (14 2 AWG)           temperature of the conductor for load-side outgoing feeder         45 45 lbf-in           type of electrical connection for load-side outgoing feeder         45 45 lbf-in           type of connectable conductor for load-side outgoing feeder         75 °C           material of the conductor for load-side outgoing feeder         75 °C           material of the c		
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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       Box lug         tightening torque [lbf-in] for supply       45 45 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       Box lug         type of connectable conductor cross-sections at AWG cables for load-side outgoing feeder       45 45 lbf-in         type of connectable conductor for load-side outgoing feeder       Box lug         type of connectable conductor for supply       AL or CU         type of connectable conductor rorss-sections at AWG cables for load-side outgoing feeder       1x (14 2 AWG)         transimum permissible       75 °C         material of the conductor for load-side outgoing feeder       1x (14 2 AWG)         type of electrical connection of nagnet coil       5 12 lbf-in         type of electrical connection of magnet coil       5 12 lbf-in         tightening torque [lbf-in] at magnet coil       5 12 lbf-in         type of connectable conductor cros		NEMA 4 enclosure
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maximum permissible       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)	cables for load-side outgoing feeder single or multi-	1x (14 2 AWG)
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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 (lcu)					
• 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, Broch	ures,)				
www.usa.siemens.com/iccatalog					
https://mall.industry.siemens.com/mall/en/us/Catalog/product	Industry Mall (Online ordering system) https://mall.industry.siemens.com/mall/en/us/Catalog/product?mlfb=US2:83GUG95EH				
Service&Support (Manuals, Certificates, Characteristics, FAQs,) https://support.industry.siemens.com/cs/US/en/ps/US2:83GUG95EH					
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros,) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:83GUG95EH⟨=en					
Certificates/approvals https://support.industry.siemens.com/cs/US/en/ps/US2:83GUG95EH/certificate					

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