## SIEMENS

## Data sheet

## US2:30GUGG32A2VA



2-speed 3-phase motor starter Size 2 1/2 One winding consequent pole Constant or variable torque Solid-state overload relays Low SPD OLR range 25-100A High SPD OLR range 25-100A 110-120/220-240VAC 60HZ coil Enclosure NEMA type (open) No enclosure

product brand name	Class 30
design of the product	Full-voltage two speed motor starter
special product feature	ESP200 overload relay; Half-size controller; Dual voltage coil
General technical data	
weight [lb]	10 lb
Height x Width x Depth [in]	9 × 16 × 4 in
touch protection against electrical shock	Not finger-safe
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	Mexico
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	6
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 (operating cycles) of the main contacts typical	1000000
Auxiliary contact	
number of NC contacts at contactor for auxiliary contacts	2
number of NO contacts at contactor for auxiliary contacts	2
number of total auxiliary contacts maximum	7
contact rating of auxiliary contacts of contactor according to UL	10A@600VAC (A600), 2.5A@300VDC (Q300)
Coil	
type of voltage of the control supply voltage	AC
control supply voltage	
• at AC at 60 Hz rated value	110 240 V
holding power at AC minimum	17 W
apparent pick-up power of magnet coil at AC	436 VA
apparent holding power of magnet coil at AC	50 VA

operating range factor control supply voltage rated value of	01
magnet coil	50.07
percental drop-out voltage of magnet coil related to the input voltage	50 %
ON-delay time	19 29 ms
OFF-delay time	10 24 ms
Overload relay	
product function	
overload protection	Yes
phase failure detection	Yes
asymmetry detection	Yes
ground fault detection	Yes
test function	Yes
external reset	No Manual automatic and annata
reset function	Manual, automatic and remote
trip class	CLASS 5 / 10 / 20 (factory set) / 30
adjustable current response value current of overload relay	25 100 A
for low rotational speed     for high rotational speed	25 100 A 25 100 A
for high rotational speed	25 100 A 3 s
tripping time at phase-loss maximum	3 S 1 %
relative repeat accuracy product feature protective coating on printed-circuit board	Yes
number of NC contacts of auxiliary contacts of overload relay	1
number of NO contacts of auxiliary contacts of overload relay	1
operational current of auxiliary contacts of overload relay	
• at AC at 600 V	5 A
• at DC at 250 V	1A
contact rating of auxiliary contacts of overload relay according to	5
UL	
insulation voltage (Ui)	
<ul> <li>with single-phase operation at AC rated value</li> </ul>	600 V
with multi-phase operation at AC rated value	300 V
	300 V
with multi-phase operation at AC rated value	300 V vertical
with multi-phase operation at AC rated value Mounting/wiring	
with multi-phase operation at AC rated value Mounting/wiring mounting position	vertical
with multi-phase operation at AC rated value  Mounting/wiring  mounting position fastening method type of electrical connection for supply voltage line-side tightening torque [lbf-in] for supply	vertical Surface mounting and installation Box lug 45 45 lbf in
with multi-phase operation at AC rated value  Mounting/wiring  mounting position fastening method type of electrical connection for supply voltage line-side	vertical Surface mounting and installation Box lug
with multi-phase operation at AC rated value  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	vertical Surface mounting and installation Box lug 45 45 lbf-in
with multi-phase operation at AC rated value      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 maximum permissible     material of the conductor for supply	vertical Surface mounting and installation Box lug 45 45 lbf·in 1 75 °C AL or CU
with multi-phase operation at AC rated value  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 maximum permissible material of the conductor for supply type of electrical connection for load-side outgoing feeder	vertical Surface mounting and installation Box lug 45 45 lbf·in 1 75 °C AL or CU Box lug
with multi-phase operation at AC rated value  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 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	vertical Surface mounting and installation Box lug 45 45 lbf-in 1 75 °C AL or CU Box lug 45 45 lbf-in
with multi-phase operation at AC rated value  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 maximum permissible material of the conductor for supply type of electrical connection for load-side outgoing feeder tightening torque [lbf-in] for load-side outgoing feeder type of connectable conductor cross-sections for AWG cables for load-side outgoing feeder	vertical Surface mounting and installation Box lug 45 45 lbf in 1 75 °C AL or CU Box lug 45 45 lbf in 1
with multi-phase operation at AC rated value  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 maximum permissible material of the conductor for supply type of electrical connection for load-side outgoing feeder tightening torque [lbf-in] for load-side outgoing feeder type of connectable conductor cross-sections for AWG cables	vertical Surface mounting and installation Box lug 45 45 lbf-in 1 75 °C AL or CU Box lug 45 45 lbf-in
with multi-phase operation at AC rated value  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 maximum permissible material of the conductor for supply type of electrical connection for load-side outgoing feeder tightening torque [lbf-in] for load-side outgoing feeder type of connectable conductor cross-sections for AWG cables 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	vertical Surface mounting and installation Box lug 45 45 lbf in 1 75 °C AL or CU Box lug 45 45 lbf in 1
with multi-phase operation at AC rated value      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 maximum permissible     material of the conductor for supply      type of electrical connection for load-side outgoing feeder      tightening torque [lbf-in] for load-side outgoing feeder      type of connectable conductor cross-sections for AWG cables     for load-side outgoing feeder      type of connectable conductor for supply      type of connectable conductor cross-sections for AWG cables     for load-side outgoing feeder      type of connectable conductor for load-side outgoing feeder      type of connectable conductor for load-side outgoing feeder      type of the conductor for load-side outgoing feeder      temperature of the conductor for load-side outgoing feeder      type of electrical connection of magnet coil	vertical         Surface mounting and installation         Box lug         45 45 lbf-in         1         75 °C         AL or CU         Box lug         45 45 lbf-in         1         75 °C         AL or CU         Box lug         45 45 lbf-in         1         75 °C         AL or CU         Screw-type terminals
with multi-phase operation at AC rated value      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 maximum permissible      material of the conductor for supply      type of electrical connection for load-side outgoing feeder      tightening torque [lbf-in] for load-side outgoing feeder      type of connectable conductor cross-sections for AWG cables     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 connectable conductor for load-side outgoing feeder      type of load-side outgoing feeder      type of electrical connection of magnet coil      tightening torque [lbf-in] at magnet coil	vertical         Surface mounting and installation         Box lug         45 45 lbf-in         1         75 °C         AL or CU         Box lug         45 45 lbf-in         1         75 °C         AL or CU         Box lug         45 45 lbf-in         1         75 °C         AL or CU         Screw-type terminals         5 12 lbf-in
with multi-phase operation at AC rated value      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 maximum permissible     material of the conductor for supply      type of electrical connection for load-side outgoing feeder      tightening torque [lbf-in] for load-side outgoing feeder      type of connectable conductor cross-sections for AWG cables     for load-side outgoing feeder      type of connectable conductor for supply      type of connectable conductor cross-sections for AWG cables     for load-side outgoing feeder      type of connectable conductor for load-side outgoing feeder      type of connectable conductor for load-side outgoing feeder      type of the conductor for load-side outgoing feeder      temperature of the conductor for load-side outgoing feeder      type of electrical connection of magnet coil	vertical         Surface mounting and installation         Box lug         45 45 lbf-in         1         75 °C         AL or CU         Box lug         45 45 lbf-in         1         75 °C         AL or CU         Box lug         45 45 lbf-in         1         75 °C         AL or CU         Screw-type terminals
with multi-phase operation at AC rated value      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 maximum permissible     material of the conductor for supply      type of electrical connection for load-side outgoing feeder      tightening torque [lbf·in] for load-side outgoing feeder      type of connectable conductor cross-sections for AWG cables     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 the conductor for load-side outgoing feeder      type 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	vertical         Surface mounting and installation         Box lug         45 45 lbf-in         1         75 °C         AL or CU         Box lug         45 45 lbf-in         1         75 °C         AL or CU         Box lug         45 45 lbf-in         1         75 °C         AL or CU         Screw-type terminals         5 12 lbf-in
with multi-phase operation at AC rated value  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 maximum permissible material of the conductor for supply type of electrical connection for load-side outgoing feeder tightening torque [lbf-in] for load-side outgoing feeder type of 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 electrical connection of 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 temperature of the conductor for supply attention of magnet coil for type of connectable conductor cross-sections of magnet coil for AWG cables single or multi-stranded temperature of the conductor cross-sections of magnet coil for AWG cables single or multi-stranded temperature of the conductor cross-sections of magnet coil for AWG cables single or multi-stranded temperature of the conductor cross-sections of magnet coil for AWG cables single or multi-stranded temperature of the conductor at magnet coil maximum	vertical Surface mounting and installation Box lug 45 45 lbf-in 1 75 °C AL or CU Box lug 45 45 lbf-in 1 75 °C AL or CU Screw-type terminals 5 12 lbf-in 2
with multi-phase operation at AC rated value  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 maximum permissible material of the conductor for supply type of electrical connection for load-side outgoing feeder tightening torque [lbf-in] for load-side outgoing feeder type of 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 for load-side outgoing feeder type of electrical connection of magnet coil tightening torque [lbf-in] at magnet coil type of connectable conductor at magnet coil temperature of the conductor at magnet coil type of electrical connection for auxiliary contacts	vertical         Surface mounting and installation         Box lug         45 45 lbf-in         1         75 °C         AL or CU         Box lug         45 45 lbf-in         1         75 °C         AL or CU         Box lug         45 45 lbf-in         1         75 °C         AL or CU         Screw-type terminals         5 12 lbf-in         2         75 °C         CU         Screw-type terminals         5 12 lbf-in         2         75 °C         CU         Screw-type terminals
with multi-phase operation at AC rated value  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 maximum permissible material of the conductor for supply type of electrical connection for load-side outgoing feeder tightening torque [lbf-in] for load-side outgoing feeder type of 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 for load-side outgoing feeder type of electrical connection of magnet coil tightening torque [lbf-in] at magnet coil type of connectable conductor at magnet coil maximum permissible material of the conductor at magnet coil type of electrical connection for auxiliary contacts type of electrical connection for auxiliary contacts type of connectable conductor at magnet coil type of electrical connection for auxiliary contacts type of connectable conductor cross-sections at contactor for	vertical         Surface mounting and installation         Box lug         45 45 lbf in         1         75 °C         AL or CU         Box lug         45 45 lbf in         1         75 °C         AL or CU         Box lug         45 45 lbf in         1         75 °C         AL or CU         Screw-type terminals         5 12 lbf in         2         75 °C         CU
with multi-phase operation at AC rated value  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 maximum permissible material of the conductor for supply type of electrical connection for load-side outgoing feeder tightening torque [lbf-in] for load-side outgoing feeder type of 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 for load-side outgoing feeder type of electrical connection of no load-side outgoing feeder type of electrical connection of no load-side outgoing feeder type of electrical connection of magnet coil tightening torque [lbf-in] at magnet coil type of connectable conductor at magnet coil type of electrical connection for auxiliary contacts tightening torque [lbf-in] at contactor for auxiliary contacts	vertical         Surface mounting and installation         Box lug         45 45 lbf-in         1         75 °C         AL or CU         Box lug         45 45 lbf-in         1         75 °C         AL or CU         Box lug         45 45 lbf-in         1         75 °C         AL or CU         Screw-type terminals         5 12 lbf-in         2         75 °C         CU         Screw-type terminals         10 15 lbf-in
with multi-phase operation at AC rated value  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 maximum permissible material of the conductor for supply type of electrical connection for load-side outgoing feeder tightening torque [lbf-in] for load-side outgoing feeder type of 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 for load-side outgoing feeder type of electrical connection of magnet coil tightening torque [lbf-in] at magnet coil type of connectable conductor at magnet coil maximum permissible material of the conductor at magnet coil type of electrical connection for auxiliary contacts type of connectable conductor cross-sections at contactor for AWG cables single or multi-stranded temperature of the conductor at magnet coil maximum permissible material of the conductor cross-sections at contacts type of connectable conductor cross-sections at contacts type of electrical connection for auxiliary contacts type of connectable conductor cross-sections at contactor for AWG cables for auxiliary contacts single or multi-stranded temperature of the conductor cross-sections at contactor for AWG cables for auxiliary contacts single or multi-stranded temperature of the conductor cross-sections at contactor for AWG cables for auxiliary contacts single or multi-stranded temperature of the conductor cross-sections at contactor for AWG cables for auxiliary contacts single or multi-stranded temperature of the conductor at contactor for auxiliary contacts max	vertical   Surface mounting and installation   Box lug   45 45 lbf in   1   75 °C   AL or CU   Box lug   45 45 lbf in   1   75 °C   AL or CU   Screw-type terminals   5 12 lbf in   2   75 °C   CU   Screw-type terminals   10 15 lbf in   1
with multi-phase operation at AC rated value  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 maximum permissible material of the conductor for supply type of electrical connection for load-side outgoing feeder tightening torque [lbf-in] for load-side outgoing feeder type of connectable conductor for load-side outgoing feeder type of electrical connection of magnet coil temperature 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 at magnet coil maximum permissible material of the conductor at magnet coil type of electrical connection for auxiliary contacts type of connectable conductor cross-sections at contactor for AWG cables single or multi-stranded temperature of the conductor at magnet coil maximum permissible material of the conductor at magnet coil type of electrical connection for auxiliary contacts type of connectable conductor cross-sections at contactor for AWG cables for auxiliary contacts type of electrical connection for auxiliary contacts type of connectable conductor cross-sections at contactor for AWG cables for auxiliary contacts type of connectable conductor at contactor for auxiliary contacts type of connectable conductor at contactor for auxiliary co	vertical         Surface mounting and installation         Box lug         45 45 lbf in         1         75 °C         AL or CU         Box lug         45 45 lbf in         1         75 °C         AL or CU         Screw-type terminals         5 12 lbf in         2         75 °C         CU         Screw-type terminals         10 15 lbf in         1         1         75 °C         1         75 °C          1          75 °C

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	2
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	10
design of the short-circuit trip	Thermal magnetic circuit breaker
maximum short-circuit current breaking capacity (Icu)	
• at 240 V	14 kA
• at 480 V	10 kA
• at 600 V	10 kA
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=US2:30GUGG32A2VA

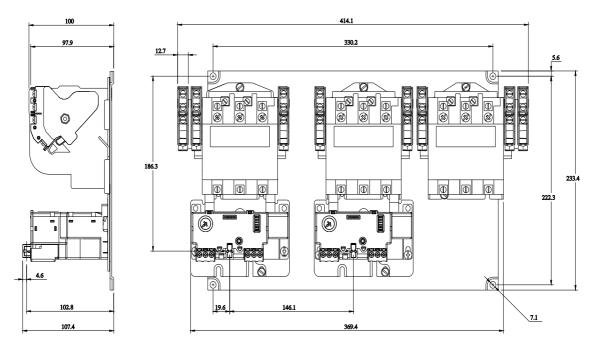
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

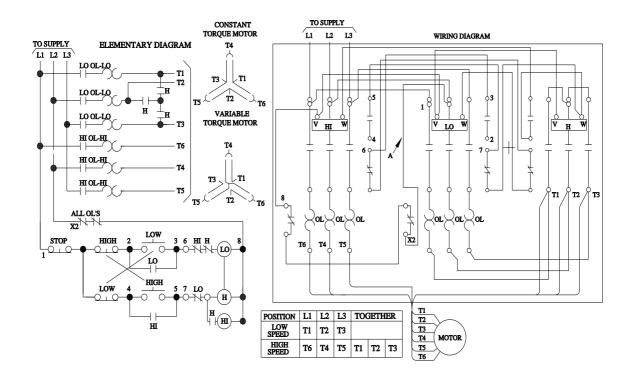
https://support.industry.siemens.com/cs/US/en/ps/US2:30GUGG32A2VA

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=US2:30GUGG32A2VA&lang=en

Certificates/approvals

https://support.industry.siemens.com/cs/US/en/ps/US2:30GUGG32A2VA/certificate





D26434001

last modified:

12/3/2022 🖸