SIEMENS

Data sheet US2:18HUG82BL



Non-reversing motor starter, Size 3, Three phase full voltage, Solid-state overload relay, OLR amp range 25-100A, 240V 50Hz / 277V 60Hz coil, Combination type, 125A circuit breaker, Enclosure NEMA type 1, Indoor general purpose use, Extrawide enclosure

product brand name	Class 18 & 26
design of the product	Full-voltage non-reversing motor starter with motor circuit protector
special product feature	ESP200 overload relay
General technical data	
Height x Width x Depth [in]	36 × 24 × 8 in
touch protection against electrical shock	NA for enclosed products
installation altitude [ft] at height above sea level maximum	6560 ft
ambient temperature [°F]	
during storage	-22 +149 °F
 during operation 	-4 +104 °F
ambient temperature	
during storage	-30 +65 °C
 during operation 	-20 +40 °C
Horsepower ratings	
yielded mechanical performance [hp] for 3-phase AC motor	
• at 200/208 V rated value	25 hp
• at 220/230 V rated value	30 hp
• at 460/480 V rated value	50 hp
at 575/600 V rated value	50 hp
Contactor	
size of contactor	NEMA controller size 3
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	90 A
mechanical service life (operating cycles) of the main contacts typical	5000000
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	
• at AC at 50 Hz rated value	240 V
at AC at 60 Hz rated value	277 V
holding power at AC minimum	14 W
apparent pick-up power of magnet coil at AC	310 VA
apparent holding power of magnet coil at AC	26 VA
operating range factor control supply voltage rated value of	0.85 1.1

magnet coil	F0.0/
percental drop-out voltage of magnet coil related to the input voltage	50 %
ON-delay time	26 41 ms
OFF-delay time	14 19 ms
Overload relay	
product function	
 overload protection 	Yes
phase failure detection	Yes
asymmetry detection	Yes
ground fault detection	Yes
• test function	Yes
external reset	Yes
reset function	Manual, automatic and remote
trip class	CLASS 5 / 10 / 20 (factory set) / 30
adjustable current response value current of the current- dependent overload release	25 100 A
make time with automatic start after power failure 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 relay	1
number of NO contacts of auxiliary contacts of overload relay	1
operational current of auxiliary contacts of overload relay	
• at AC at 600 V	5 A
• at DC at 250 V	1A
contact rating of auxiliary contacts of overload relay according to UL	5A@600VAC (B600), 1A@250VDC (R300)
insulation voltage (Ui)	
 with single-phase operation at AC rated value 	600 V
with multi-phase operation at AC rated value	300 V
Forelessons	
Enclosure	
degree of protection NEMA rating	1
degree of protection NEMA rating design of the housing	1 indoors, usable on a general basis
degree of protection NEMA rating design of the housing Circuit Breaker	indoors, usable on a general basis
degree of protection NEMA rating design of the housing Circuit Breaker type of the motor protection	indoors, usable on a general basis Motor circuit protector (magnetic trip only)
degree of protection NEMA rating design of the housing Circuit Breaker	indoors, usable on a general basis
degree of protection NEMA rating design of the housing Circuit Breaker type of the motor protection operational current of motor circuit breaker rated value	indoors, usable on a general basis Motor circuit protector (magnetic trip only) 125 A
degree of protection NEMA rating design of the housing Circuit Breaker type of the motor protection operational current of motor circuit breaker rated value adjustable current response value current of instantaneous	indoors, usable on a general basis Motor circuit protector (magnetic trip only) 125 A
degree of protection NEMA rating design of the housing Circuit Breaker type of the motor protection operational current of motor circuit breaker rated value adjustable current response value current of instantaneous short-circuit trip unit	indoors, usable on a general basis Motor circuit protector (magnetic trip only) 125 A
degree of protection NEMA rating design of the housing Circuit Breaker type of the motor protection operational current of motor circuit breaker rated value adjustable current response value current of instantaneous short-circuit trip unit Mounting/wiring	indoors, usable on a general basis Motor circuit protector (magnetic trip only) 125 A 500 1250 A Vertical Surface mounting and installation
design of the housing Circuit Breaker type of the motor protection operational current of motor circuit breaker rated value adjustable current response value current of instantaneous short-circuit trip unit Mounting/wiring mounting position fastening method type of electrical connection for supply voltage line-side	indoors, usable on a general basis Motor circuit protector (magnetic trip only) 125 A 500 1250 A Vertical Surface mounting and installation Box lug
degree of protection NEMA rating design of the housing Circuit Breaker type of the motor protection operational current of motor circuit breaker rated value adjustable current response value current of instantaneous short-circuit trip unit Mounting/wiring mounting position fastening method type of electrical connection for supply voltage line-side type of connectable conductor cross-sections at line-side for AWG cables single or multi-stranded	indoors, usable on a general basis Motor circuit protector (magnetic trip only) 125 A 500 1250 A Vertical Surface mounting and installation Box lug 1x (10 AWG 1/0 AWG)
degree of protection NEMA rating design of the housing Circuit Breaker type of the motor protection operational current of motor circuit breaker rated value adjustable current response value current of instantaneous short-circuit trip unit Mounting/wiring mounting position fastening method type of electrical connection for supply voltage line-side type of connectable conductor cross-sections at line-side for AWG cables single or multi-stranded temperature of the conductor for supply maximum permissible	indoors, usable on a general basis Motor circuit protector (magnetic trip only) 125 A 500 1250 A Vertical Surface mounting and installation Box lug 1x (10 AWG 1/0 AWG) 75 °C
degree of protection NEMA rating design of the housing Circuit Breaker type of the motor protection operational current of motor circuit breaker rated value adjustable current response value current of instantaneous short-circuit trip unit Mounting/wiring mounting position fastening method type of electrical connection for supply voltage line-side type of connectable conductor cross-sections at line-side for AWG cables single or multi-stranded	indoors, usable on a general basis Motor circuit protector (magnetic trip only) 125 A 500 1250 A Vertical Surface mounting and installation Box lug 1x (10 AWG 1/0 AWG)
degree of protection NEMA rating design of the housing Circuit Breaker type of the motor protection operational current of motor circuit breaker rated value adjustable current response value current of instantaneous short-circuit trip unit Mounting/wiring mounting position fastening method type of electrical connection for supply voltage line-side type of connectable conductor cross-sections at line-side for AWG cables single or multi-stranded temperature of the conductor for supply maximum permissible	indoors, usable on a general basis Motor circuit protector (magnetic trip only) 125 A 500 1250 A Vertical Surface mounting and installation Box lug 1x (10 AWG 1/0 AWG) 75 °C AL or CU Box lug
design of the housing Circuit Breaker type of the motor protection operational current of motor circuit breaker rated value adjustable current response value current of instantaneous short-circuit trip unit Mounting/wiring mounting position fastening method type of electrical connection for supply voltage line-side 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	indoors, usable on a general basis Motor circuit protector (magnetic trip only) 125 A 500 1250 A Vertical Surface mounting and installation Box lug 1x (10 AWG 1/0 AWG) 75 °C AL or CU Box lug 120 120 lbf-in
degree of protection NEMA rating design of the housing Circuit Breaker type of the motor protection operational current of motor circuit breaker rated value adjustable current response value current of instantaneous short-circuit trip unit Mounting/wiring mounting position fastening method type of electrical connection for supply voltage line-side 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	indoors, usable on a general basis Motor circuit protector (magnetic trip only) 125 A 500 1250 A Vertical Surface mounting and installation Box lug 1x (10 AWG 1/0 AWG) 75 °C AL or CU Box lug 120 120 lbf-in 1x (14 2/0 AWG)
degree of protection NEMA rating design of the housing Circuit Breaker type of the motor protection operational current of motor circuit breaker rated value adjustable current response value current of instantaneous short-circuit trip unit Mounting/wiring mounting position fastening method type of electrical connection for supply voltage line-side 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	indoors, usable on a general basis Motor circuit protector (magnetic trip only) 125 A 500 1250 A Vertical Surface mounting and installation Box lug 1x (10 AWG 1/0 AWG) 75 °C AL or CU Box lug 120 120 lbf-in
design of the housing Circuit Breaker type of the motor protection operational current of motor circuit breaker rated value adjustable current response value current of instantaneous short-circuit trip unit Mounting/wiring mounting position fastening method type of electrical connection for supply voltage line-side type of connectable conductor cross-sections at line-side for AWG cables single or multi-stranded temperature of the conductor for supply maximum permissible material of the conductor for load-side outgoing feeder tightening torque [lbf-in] for load-side outgoing feeder type of connectable conductor cross-sections for AWG cables for load-side outgoing feeder	indoors, usable on a general basis Motor circuit protector (magnetic trip only) 125 A 500 1250 A Vertical Surface mounting and installation Box lug 1x (10 AWG 1/0 AWG) 75 °C AL or CU Box lug 120 120 lbf-in 1x (14 2/0 AWG)
design of the housing Circuit Breaker type of the motor protection operational current of motor circuit breaker rated value adjustable current response value current of instantaneous short-circuit trip unit Mounting/wiring mounting position fastening method type of electrical connection for supply voltage line-side 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 maximum permissible	indoors, usable on a general basis Motor circuit protector (magnetic trip only) 125 A 500 1250 A Vertical Surface mounting and installation Box lug 1x (10 AWG 1/0 AWG) 75 °C AL or CU Box lug 120 120 lbf-in 1x (14 2/0 AWG)
design of the housing Circuit Breaker type of the motor protection operational current of motor circuit breaker rated value adjustable current response value current of instantaneous short-circuit trip unit Mounting/wiring mounting position fastening method type of electrical connection for supply voltage line-side 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 connectable conductor cross-sections for AWG cables for load-side outgoing feeder single or multi-stranded temperature of the conductor for load-side outgoing feeder maximum permissible material of the conductor for load-side outgoing feeder type of electrical connection of magnet coil tightening torque [lbf-in] at magnet coil	indoors, usable on a general basis Motor circuit protector (magnetic trip only) 125 A 500 1250 A Vertical Surface mounting and installation Box lug 1x (10 AWG 1/0 AWG) 75 °C AL or CU Box lug 120 120 lbf-in 1x (14 2/0 AWG) 75 °C AL or CU Screw-type terminals 5 12 lbf-in
design of the housing Circuit Breaker type of the motor protection operational current of motor circuit breaker rated value adjustable current response value current of instantaneous short-circuit trip unit Mounting/wiring mounting position fastening method type of electrical connection for supply voltage line-side 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 maximum permissible material of the conductor for load-side outgoing feeder type of electrical connection of magnet coil	indoors, usable on a general basis Motor circuit protector (magnetic trip only) 125 A 500 1250 A Vertical Surface mounting and installation Box lug 1x (10 AWG 1/0 AWG) 75 °C AL or CU Box lug 120 120 lbf-in 1x (14 2/0 AWG) 75 °C AL or CU Screw-type terminals
design of the housing Circuit Breaker type of the motor protection operational current of motor circuit breaker rated value adjustable current response value current of instantaneous short-circuit trip unit Mounting/wiring mounting position fastening method type of electrical connection for supply voltage line-side 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 maximum permissible material of the conductor for load-side outgoing feeder type of electrical connection of magnet coil tightening torque [lbf-in] at magnet coil	indoors, usable on a general basis Motor circuit protector (magnetic trip only) 125 A 500 1250 A Vertical Surface mounting and installation Box lug 1x (10 AWG 1/0 AWG) 75 °C AL or CU Box lug 120 120 lbf-in 1x (14 2/0 AWG) 75 °C AL or CU Screw-type terminals 5 12 lbf-in
design of the housing Circuit Breaker type of the motor protection operational current of motor circuit breaker rated value adjustable current response value current of instantaneous short-circuit trip unit Mounting/wiring mounting position fastening method type of electrical connection for supply voltage line-side 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 maximum permissible material of the conductor for load-side outgoing feeder type of electrical connection of magnet coil tightening torque [lbf-in] at magnet coil type of connectable conductor cross-sections of magnet coil for AWG cables single or multi-stranded temperature of the conductor at magnet coil maximum	indoors, usable on a general basis Motor circuit protector (magnetic trip only) 125 A 500 1250 A Vertical Surface mounting and installation Box lug 1x (10 AWG 1/0 AWG) 75 °C AL or CU Box lug 120 120 lbf-in 1x (14 2/0 AWG) 75 °C AL or CU Screw-type terminals 5 12 lbf-in 2x (16 12 AWG)
design of the housing Circuit Breaker type of the motor protection operational current of motor circuit breaker rated value adjustable current response value current of instantaneous short-circuit trip unit Mounting/wiring mounting position fastening method type of electrical connection for supply voltage line-side 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 maximum permissible material of the conductor for load-side outgoing feeder type of electrical connection of magnet coil tightening torque [lbf-in] at magnet coil 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 at magnet coil maximum permissible	indoors, usable on a general basis Motor circuit protector (magnetic trip only) 125 A 500 1250 A Vertical Surface mounting and installation Box lug 1x (10 AWG 1/0 AWG) 75 °C AL or CU Box lug 120 120 lbf-in 1x (14 2/0 AWG) 75 °C AL or CU Screw-type terminals 5 12 lbf-in 2x (16 12 AWG) 75 °C
design of the housing Circuit Breaker type of the motor protection operational current of motor circuit breaker rated value adjustable current response value current of instantaneous short-circuit trip unit Mounting/wiring mounting position fastening method type of electrical connection for supply voltage line-side 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 maximum permissible material of the conductor for load-side outgoing feeder type of electrical connection of magnet coil tightening torque [lbf-in] at magnet coil type of connectable conductor cross-sections of magnet coil for AWG cables single or multi-stranded temperature of the conductor at magnet coil maximum permissible material of the conductor at magnet coil	indoors, usable on a general basis Motor circuit protector (magnetic trip only) 125 A 500 1250 A Vertical Surface mounting and installation Box lug 1x (10 AWG 1/0 AWG) 75 °C AL or CU Box lug 120 120 lbf-in 1x (14 2/0 AWG) 75 °C AL or CU Screw-type terminals 5 12 lbf-in 2x (16 12 AWG) 75 °C CU

design of the short-circuit trip Instantaneous trip circuit breaker maximum short-circuit current breaking capacity (Icu) • at 240 V • at 480 V • at 600 V 25 kA certificate of suitability Instantaneous trip circuit breaker 100 kA 100 kA 25 kA		
maximum permissible material of the conductor at contactor for auxiliary contacts type of electrical connection at overload relay for auxiliary contacts tightening torque [lbf-in] at overload relay for auxiliary contacts type of connectable conductor cross-sections at overload relay for AWG cables for auxiliary contacts single or multi-stranded temperature of the conductor at overload relay for auxiliary contacts maximum permissible material of the conductor at overload relay for auxiliary contacts Short-circuit current rating design of the short-circuit trip maximum short-circuit current breaking capacity (Icu) • at 240 V • at 480 V • at 480 V • at 600 V certificate of suitability NEMA ICS 2; UL 508; CSA 22.2, No.14	AWG cables for auxiliary contacts single or multi-stranded	
type of electrical connection at overload relay for auxiliary contacts tightening torque [lbf-in] at overload relay for auxiliary contacts type of connectable conductor cross-sections at overload relay for AWG cables for auxiliary contacts single or multi-stranded temperature of the conductor at overload relay for auxiliary contacts maximum permissible material of the conductor at overload relay for auxiliary contacts Short-circuit current rating design of the short-circuit trip maximum short-circuit current breaking capacity (Icu) • at 240 V • at 480 V • at 600 V certificate of suitability Screw-type terminals 7 10 lbf-in 2x (20 14 AWG) 75 °C CU Short-circuit current rating Instantaneous trip circuit breaker 100 kA 100 kA 25 kA NEMA ICS 2; UL 508; CSA 22.2, No.14		75 °C
tightening torque [lbf-in] at overload relay for auxiliary contacts type of connectable conductor cross-sections at overload relay for AWG cables for auxiliary contacts single or multi-stranded temperature of the conductor at overload relay for auxiliary contacts maximum permissible material of the conductor at overload relay for auxiliary contacts Short-circuit current rating design of the short-circuit trip Instantaneous trip circuit breaker maximum short-circuit current breaking capacity (Icu) • at 240 V • at 480 V • at 600 V certificate of suitability NEMA ICS 2; UL 508; CSA 22.2, No.14	material of the conductor at contactor for auxiliary contacts	CU
type of connectable conductor cross-sections at overload relay for AWG cables for auxiliary contacts single or multi-stranded temperature of the conductor at overload relay for auxiliary contacts maximum permissible material of the conductor at overload relay for auxiliary contacts Short-circuit current rating design of the short-circuit trip Instantaneous trip circuit breaker maximum short-circuit current breaking capacity (Icu) • at 240 V • at 480 V • at 600 V certificate of suitability NEMA ICS 2; UL 508; CSA 22.2, No.14	,,	Screw-type terminals
for AWG cables for auxiliary contacts single or multi-stranded temperature of the conductor at overload relay for auxiliary contacts maximum permissible material of the conductor at overload relay for auxiliary contacts CU Short-circuit current rating design of the short-circuit trip maximum short-circuit current breaking capacity (Icu) • at 240 V • at 480 V • at 600 V certificate of suitability NEMA ICS 2; UL 508; CSA 22.2, No.14	tightening torque [lbf·in] at overload relay for auxiliary contacts	7 10 lbf-in
contacts maximum permissible material of the conductor at overload relay for auxiliary contacts CU Short-circuit current rating design of the short-circuit trip maximum short-circuit current breaking capacity (Icu) • at 240 V • at 480 V • at 600 V certificate of suitability NEMA ICS 2; UL 508; CSA 22.2, No.14		2x (20 14 AWG)
design of the short-circuit trip Instantaneous trip circuit breaker maximum short-circuit current breaking capacity (Icu) at 240 V at 480 V at 600 V certificate of suitability Instantaneous trip circuit breaker 100 kA 100 kA 25 kA NEMA ICS 2; UL 508; CSA 22.2, No.14		75 °C
design of the short-circuit trip Instantaneous trip circuit breaker maximum short-circuit current breaking capacity (Icu) • at 240 V • at 480 V • at 600 V 25 kA certificate of suitability Instantaneous trip circuit breaker 100 kA 100 kA 25 kA	material of the conductor at overload relay for auxiliary contacts	CU
maximum short-circuit current breaking capacity (Icu) • at 240 V • at 480 V • at 600 V certificate of suitability 100 kA 25 kA NEMA ICS 2; UL 508; CSA 22.2, No.14	Short-circuit current rating	
 at 240 V at 480 V at 600 V certificate of suitability 100 kA 25 kA NEMA ICS 2; UL 508; CSA 22.2, No.14 	design of the short-circuit trip	Instantaneous trip circuit breaker
● at 480 V 100 kA ■ at 600 V 25 kA certificate of suitability NEMA ICS 2; UL 508; CSA 22.2, No.14	maximum short-circuit current breaking capacity (Icu)	
at 600 V 25 kA certificate of suitability NEMA ICS 2; UL 508; CSA 22.2, No.14	● at 240 V	100 kA
certificate of suitability NEMA ICS 2; UL 508; CSA 22.2, No.14	● at 480 V	100 kA
•	● at 600 V	25 kA
Further information	certificate of suitability	NEMA ICS 2; UL 508; CSA 22.2, No.14
	Further information	

Industrial Controls - Product Overview (Catalogs, Brochures,...)

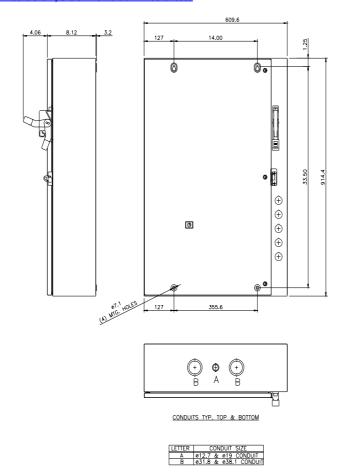
Industry Mall (Online ordering system)
https://mall.industry.siemens.com/mall/en/us/Catalog/product?mlfb=US2:18HUG82BL

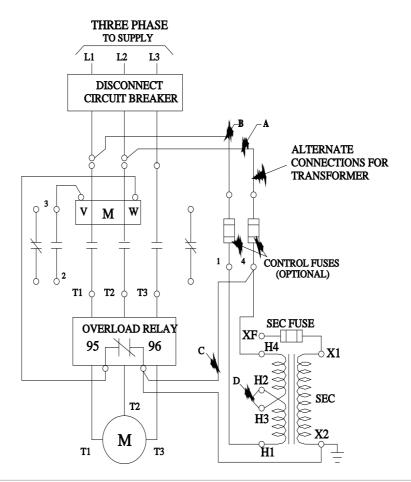
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

https://support.industry.siemens.com/cs/US/en/ps/US2:18HUG82B

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:18HUG82BL&lang=en

Certificates/approvals
https://support.industry.siemens.com/cs/US/en/ps/US2:18HUG82BL/certificate





last modified: 1/25/2022 🖸