## SIEMENS

## Data sheet

## US2:18EUE82BA



Non-reversing motor starter Size 1 3/4 Three phase full voltage Solid-state overload relay OLRelay amp range 10-40a 110-120/220-240VAC 60HZ coil Combination type 40AMP circuit breaker Enclosure NEMA type 1 Indoor general purpose use Extra-wide 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; Half-size controller; Dual voltage coil			
General technical data				
Height x Width x Depth [in]	24 × 20 × 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			
<ul> <li>during operation</li> </ul>	-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	0 hp			
• at 220/230 V rated value	0 hp			
• at 460/480 V rated value	15 hp			
• at 575/600 V rated value	15 hp			
Contactor				
size of contactor	Controller half size 1 3/4			
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	40 A			
mechanical service life (operating cycles) of the main contacts typical	1000000			
Auxiliary contact				
number of NC contacts at contactor for auxiliary contacts	0			
number of NO contacts at contactor for auxiliary contacts	1			
number of total auxiliary contacts maximum	8			
contact rating of auxiliary contacts of contactor according to UL	10A@600VAC (A600), 5A@600VDC (P600)			
Coil				
type of voltage of the control supply voltage	AC			
control supply voltage				
• at AC at 60 Hz rated value	110 240 V			
holding power at AC minimum	8.6 W			
apparent pick-up power of magnet coil at AC	218 VA			
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			

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				
<ul> <li>overload protection</li> </ul>	Yes			
<ul> <li>phase failure detection</li> </ul>	Yes			
<ul> <li>asymmetry detection</li> </ul>	Yes			
<ul> <li>ground fault detection</li> </ul>	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	10 40 A			
make time with automatic start after power failure maximum	3s			
relative repeat accuracy	1%			
product feature protective coating on printed-circuit board	Yes			
number of NC contacts of auxiliary contacts of overload relay number of NO contacts of auxiliary contacts of overload relay	1			
operational current of auxiliary contacts of overload relay	1			
at AC at 600 V	5 A			
• at DC at 250 V	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			
Enclosure				
design of the housing	indoors, usable on a general basis			
Circuit Breaker				
	Motor circuit protector (magnetic trip only)			
Circuit Breaker				
Circuit Breaker type of the motor protection	Motor circuit protector (magnetic trip only)			
Circuit Breaker type of the motor protection operational current of motor circuit breaker rated value adjustable current response value current of instantaneous	Motor circuit protector (magnetic trip only) 40 A			
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	Motor circuit protector (magnetic trip only) 40 A			
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	Motor circuit protector (magnetic trip only) 40 A 115 375 A			
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	Motor circuit protector (magnetic trip only) 40 A 115 375 A Vertical			
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	Motor circuit protector (magnetic trip only) 40 A 115 375 A Vertical Surface mounting and installation			
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	Motor circuit protector (magnetic trip only) 40 A 115 375 A Vertical Surface mounting and installation Box lug			
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	Motor circuit protector (magnetic trip only) 40 A 115 375 A Vertical Surface mounting and installation Box lug 1x (10 AWG 1/0 AWG)			
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	Motor circuit protector (magnetic trip only) 40 A 115 375 A Vertical Surface mounting and installation Box lug 1x (10 AWG 1/0 AWG) 75 °C			
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	Motor circuit protector (magnetic trip only) 40 A 115 375 A Vertical Surface mounting and installation Box lug 1x (10 AWG 1/0 AWG) 75 °C AL or CU			
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	Motor circuit protector (magnetic trip only) 40 A 115 375 A Vertical Surface mounting and installation Box lug 1x (10 AWG 1/0 AWG) 75 °C AL or CU Screw-type terminals 45 45 lbf-in 1x (14 2 AWG)			
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	Motor circuit protector (magnetic trip only) 40 A 115 375 A Vertical Surface mounting and installation Box lug 1x (10 AWG 1/0 AWG) 75 °C AL or CU Screw-type terminals 45 45 lbf-in			
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         tightening torque [lbf-in] for load-side outgoing feeder         type of connectable conductor for supply multi-stranded         temperature of the conductor for load-side outgoing feeder         type of connectable conductor cross-sections for AWG cables for load-side outgoing feeder         tupe of the conductor for load-side outgoing feeder         tupe of the conductor for load-side outgoing feeder         material of the conductor for load-side outgoing feeder         maximum permissible         material of the conductor for load-side outgoing feeder	Motor circuit protector (magnetic trip only) 40 A 115 375 A Vertical Surface mounting and installation Box lug 1x (10 AWG 1/0 AWG) 75 °C AL or CU Screw-type terminals 45 45 lbf-in 1x (14 2 AWG) 75 °C AL or CU			
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 type of connectable conductor for supply material of the conductor for load-side outgoing feeder type of connectable conductor for load-side outgoing feeder type of lectrical connection for load-side outgoing feeder type of electrical connection of magnet coil	Motor circuit protector (magnetic trip only) 40 A 115 375 A Vertical Surface mounting and installation Box lug 1x (10 AWG 1/0 AWG) 75 °C AL or CU Screw-type terminals 45 45 lbf-in 1x (14 2 AWG) 75 °C AL or CU Screw-type terminals			
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 load-side outgoing feeder type of connectable conductor for load-side outgoing feeder type of load-side outgoing feeder type of connectable conductor for load-side outgoing feeder type of	Motor circuit protector (magnetic trip only)         40 A         115 375 A         Vertical         Surface mounting and installation         Box lug         1x (10 AWG 1/0 AWG)         75 °C         AL or CU         Screw-type terminals         45 45 lbf-in         1x (14 2 AWG)         75 °C         AL or CU         Screw-type terminals         5 12 lbf-in			
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 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	Motor circuit protector (magnetic trip only) 40 A 115 375 A Vertical Surface mounting and installation Box lug 1x (10 AWG 1/0 AWG) 75 °C AL or CU Screw-type terminals 45 45 lbf-in 1x (14 2 AWG) 75 °C AL or CU Screw-type terminals 5 12 lbf-in 2x (16 12 AWG)			
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 type of connectable conductor cross-sections for AWG cables for load-side outgoing feeder type of connectable conductor for supply type of electrical connection 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 electrical connection of no load-side outgoing feeder type of electrical connection 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	Motor circuit protector (magnetic trip only)         40 A         115 375 A         Vertical         Surface mounting and installation         Box lug         1x (10 AWG 1/0 AWG)         75 °C         AL or CU         Screw-type terminals         45 45 lbf-in         1x (14 2 AWG)         75 °C         AL or CU         Screw-type terminals         45 42 lbf-in         1x (14 2 AWG)         75 °C         AL or CU         Screw-type terminals			
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 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 electrical connection of magnet coil tightening torque [lbf-in] at magnet coil type of connectable conductor at magnet coil maximum	Motor circuit protector (magnetic trip only) 40 A 115 375 A Vertical Surface mounting and installation Box lug 1x (10 AWG 1/0 AWG) 75 °C AL or CU Screw-type terminals 45 45 lbf-in 1x (14 2 AWG) 75 °C AL or CU Screw-type terminals 5 12 lbf-in 2x (16 12 AWG)			
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 for load-side outgoing feeder         tightening torque [lbf-in] for load-side outgoing feeder         type of electrical connection of nagnet coil         temperature of the conductor for load-side outgoing feeder         maximum permissible         material of the conductor for load-side outgoing feeder         type of electrical connection of magnet coil         type of connectable conductor cross-sections of magnet coil for         AWG cables single or multi-stranded         temperature of the conductor at magnet coil         type of connectable conductor at magnet coil m	Motor circuit protector (magnetic trip only)         40 A         115 375 A         Vertical         Surface mounting and installation         Box lug         1x (10 AWG 1/0 AWG)         75 °C         AL or CU         Screw-type terminals         45 45 lbf in         1x (14 2 AWG)         75 °C         AL or CU         Screw-type terminals         5 12 lbf in         2x (16 12 AWG)         75 °C         CU         Screw-type terminals         5 12 kWG)         75 °C         CU         Screw-type terminals			
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         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 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 <td>Motor circuit protector (magnetic trip only)         40 A         115 375 A         Vertical         Surface mounting and installation         Box lug         1x (10 AWG 1/0 AWG)         75 °C         AL or CU         Screw-type terminals         45 45 lbf in         1x (14 2 AWG)         75 °C         AL or CU         Screw-type terminals         5 12 lbf in         2x (16 12 AWG)         75 °C         CU         Screw-type terminals         10 15 lbf in         2x (16 line 12 AWG)</td>	Motor circuit protector (magnetic trip only)         40 A         115 375 A         Vertical         Surface mounting and installation         Box lug         1x (10 AWG 1/0 AWG)         75 °C         AL or CU         Screw-type terminals         45 45 lbf in         1x (14 2 AWG)         75 °C         AL or CU         Screw-type terminals         5 12 lbf in         2x (16 12 AWG)         75 °C         CU         Screw-type terminals         10 15 lbf in         2x (16 line 12 AWG)			
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 for load-side outgoing feeder         tightening torque [lbf-in] for load-side outgoing feeder         type of electrical connection of nagnet coil         temperature of the conductor for load-side outgoing feeder         maximum permissible         material of the conductor for load-side outgoing feeder         type of electrical connection of magnet coil         type of connectable conductor cross-sections of magnet coil for         AWG cables single or multi-stranded         temperature of the conductor at magnet coil         type of connectable conductor at magnet coil m	Motor circuit protector (magnetic trip only)         40 A         115 375 A         Vertical         Surface mounting and installation         Box lug         1x (10 AWG 1/0 AWG)         75 °C         AL or CU         Screw-type terminals         45 45 lbf in         1x (14 2 AWG)         75 °C         AL or CU         Screw-type terminals         5 12 lbf in         2x (16 12 AWG)         75 °C         CU         Screw-type terminals         5 12 kWG)         75 °C         CU         Screw-type terminals			

material of the conductor at contactor for auxiliary contacts	CU		
type of electrical connection at overload relay for auxiliary contacts	Screw-type terminals		
tightening torque [lbf-in] at overload relay for auxiliary contacts	7 10 lbf·in		
type of connectable conductor cross-sections at overload relay for AWG cables for auxiliary contacts single or multi-stranded	2x (20 14 AWG)		
temperature of the conductor at overload relay for auxiliary contacts maximum permissible	75 °C		
material of the conductor at overload relay for auxiliary contacts	CU		
Short-circuit current rating			
design of the short-circuit trip	Instantaneous trip circuit breaker		
maximum short-circuit current breaking capacity (Icu)			
• at 240 V	100 kA		
• at 480 V	100 kA		
• at 600 V	25 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/iccatal

Industry Mall (Online ordering system)

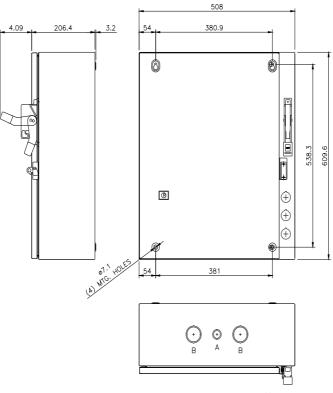
https://mall.industry.siemens.com/mall/en/us/Catalog/product?mlfb=US2:18EUE82BA

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/US/en/ps/US2:18EUE82BA

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=US2:18EUE82BA&lang=en

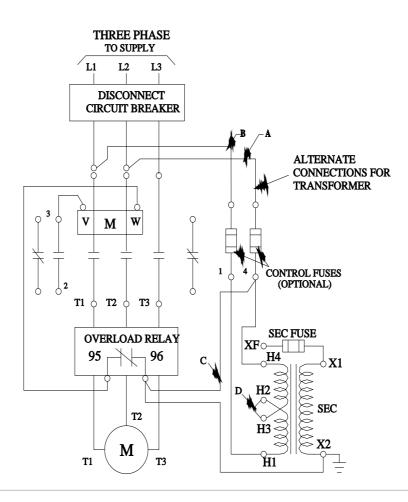
Certificates/approvals

https://support.industry.siemens.com/cs/US/en/ps/US2:18EUE82BA/certificate



CONDUITS TYP. TOP & BOTTOM

LETTER	CC	DNI	DUIT	SIZE
A				CONDUIT
В	ø31.8	&	ø38.	1 CONDUIT



last modified:

1/25/2022 🖸