SIEMENS

Data sheet US2:18DUD92BL



Non-reversing motor starter Size 1 Three phase full voltage Solid-state overload relay OLRelay amp range 5.5-22A 240V 50HZ / 277V 60HZ coil Combination type 25Amp circuit breaker Enclosure NEMA type 1 Indoor general purpose use Standard width 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]	24 × 11 × 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	3 hp
• at 220/230 V rated value	3 hp
• at 460/480 V rated value	10 hp
• at 575/600 V rated value	10 hp
Contactor	
size of contactor	NEMA controller size 1
number of NO contacts for main contacts	3
operating voltage for main current circuit at AC at 60 Hz maximum	600 V
operational current at AC at 600 V rated value	27 A
mechanical service life (operating cycles) of the main contacts typical	10000000
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 50 Hz rated value 	240 V
at AC at 60 Hz rated value	277 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	0.85 1.1

magnet coil	ED 0/
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	Yes
reset function	Manual, automatic and remote
trip class	CLASS 5 / 10 / 20 (factory set) / 30
adjustable current response value current of the current-	5.5 22 A
dependent overload release	0.0 ZET
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	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 	300 V
Enclosure	
design of the housing	indoors, usable on a general basis
design of the housing Circuit Breaker	indoors, usable on a general basis
	indoors, usable on a general basis Motor circuit protector (magnetic trip only)
Circuit Breaker	
Circuit Breaker type of the motor protection	Motor circuit protector (magnetic trip only)
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) 25 A
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) 25 A
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) 25 A 55 180 A
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) 25 A 55 180 A Vertical
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) 25 A 55 180 A Vertical Surface mounting and installation
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) 25 A 55 180 A Vertical Surface mounting and installation Box lug
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) 25 A 55 180 A Vertical Surface mounting and installation Box lug 1x (14 AWG 10 AWG) or 1x (12 AWG 10 AWG)
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) 25 A 55 180 A Vertical Surface mounting and installation Box lug 1x (14 AWG 10 AWG) or 1x (12 AWG 10 AWG) 75 °C
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) 25 A 55 180 A Vertical Surface mounting and installation Box lug 1x (14 AWG 10 AWG) or 1x (12 AWG 10 AWG) 75 °C AL or CU
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	Motor circuit protector (magnetic trip only) 25 A 55 180 A Vertical Surface mounting and installation Box lug 1x (14 AWG 10 AWG) or 1x (12 AWG 10 AWG) 75 °C AL or CU Screw-type terminals
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) 25 A 55 180 A Vertical Surface mounting and installation Box lug 1x (14 AWG 10 AWG) or 1x (12 AWG 10 AWG) 75 °C AL or CU Screw-type terminals 35 35 lbf·in
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	Motor circuit protector (magnetic trip only) 25 A 55 180 A Vertical Surface mounting and installation Box lug 1x (14 AWG 10 AWG) or 1x (12 AWG 10 AWG) 75 °C AL or CU Screw-type terminals 35 35 lbf-in 1x (14 2 AWG)
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 type of the conductor for load-side outgoing feeder type of connectable conductor for load-side outgoing feeder maximum permissible	Motor circuit protector (magnetic trip only) 25 A 55 180 A Vertical Surface mounting and installation Box lug 1x (14 AWG 10 AWG) or 1x (12 AWG 10 AWG) 75 °C AL or CU Screw-type terminals 35 35 lbf·in 1x (14 2 AWG)
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	Motor circuit protector (magnetic trip only) 25 A 55 180 A Vertical Surface mounting and installation Box lug 1x (14 AWG 10 AWG) or 1x (12 AWG 10 AWG) 75 °C AL or CU Screw-type terminals 35 35 lbf·in 1x (14 2 AWG) 75 °C AL or CU
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	Motor circuit protector (magnetic trip only) 25 A 55 180 A Vertical Surface mounting and installation Box lug 1x (14 AWG 10 AWG) or 1x (12 AWG 10 AWG) 75 °C AL or CU Screw-type terminals 35 35 lbf-in 1x (14 2 AWG) 75 °C AL or CU Screw-type terminals
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	Motor circuit protector (magnetic trip only) 25 A 55 180 A Vertical Surface mounting and installation Box lug 1x (14 AWG 10 AWG) or 1x (12 AWG 10 AWG) 75 °C AL or CU Screw-type terminals 35 35 lbf·in 1x (14 2 AWG) 75 °C AL or CU Screw-type terminals 5 12 lbf·in
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	Motor circuit protector (magnetic trip only) 25 A 55 180 A Vertical Surface mounting and installation Box lug 1x (14 AWG 10 AWG) or 1x (12 AWG 10 AWG) 75 °C AL or CU Screw-type terminals 35 35 lbf-in 1x (14 2 AWG) 75 °C AL or CU Screw-type terminals 35 31 lbf-in 2x (16 12 AWG)
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 emperature of the conductor at magnet coil maximum permissible	Motor circuit protector (magnetic trip only) 25 A 55 180 A Vertical Surface mounting and installation Box lug 1x (14 AWG 10 AWG) or 1x (12 AWG 10 AWG) 75 °C AL or CU Screw-type terminals 35 35 lbf-in 1x (14 2 AWG) 75 °C AL or CU Screw-type terminals 5 12 lbf-in 2x (16 12 AWG)
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 maximum permissible	Motor circuit protector (magnetic trip only) 25 A 55 180 A Vertical Surface mounting and installation Box lug 1x (14 AWG 10 AWG) or 1x (12 AWG 10 AWG) 75 °C AL or CU Screw-type terminals 35 35 lbf-in 1x (14 2 AWG) 75 °C AL or CU Screw-type terminals 5 12 lbf-in 2x (16 12 AWG)
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 maximum permissible	Motor circuit protector (magnetic trip only) 25 A 55 180 A Vertical Surface mounting and installation Box lug 1x (14 AWG 10 AWG) or 1x (12 AWG 10 AWG) 75 °C AL or CU Screw-type terminals 35 35 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

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 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/iccatalog

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/us/Catalog/product?mlfb=US2:18DUD92BL

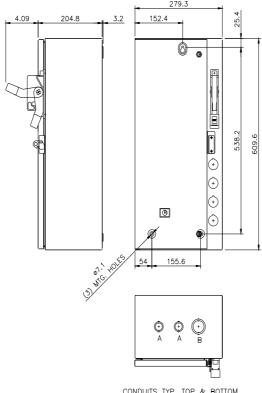
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

https://support.industry.siemens.com/cs/US/en/ps/US2:18DUD92BL

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:18DUD92BL&lang=en

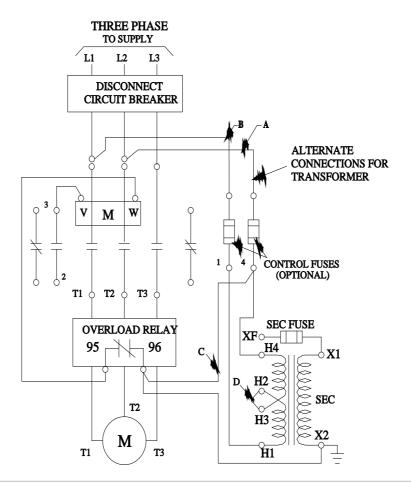
Certificates/approvals

https://support.industry.siemens.com/cs/US/en/ps/US2:18DUD92BL/certificate



CONDUITS TYP. TOP & BOTTOM

LETTER	CONDUIT SIZE		
Α	ø12.7 & ø19 CONDUIT		
В	ø25.4 & ø31.8 CONDUIT		



last modified: 8/1/2023 🖸