## SIEMENS

## Data sheet

## US2:30DUDC32B1VF



2-speed 3-phase motor starter Size 1 Two separate windings Constant or variable torque Solid-state overload relays Low SPD OLR range 3-12A High SPD OLR range 5.5-22A 110V 50HZ / 120V 60HZ coil Enclosure NEMA type 1 Indoor general purpose use

product brand name	Class 30
design of the product	Full-voltage two speed motor starter
special product feature	ESP200 overload relay
General technical data	
weight [lb]	24 lb
Height x Width x Depth [in]	20 × 12 × 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]	
<ul> <li>during storage</li> </ul>	-22 +149 °F
<ul> <li>during operation</li> </ul>	-4 +104 °F
ambient temperature	
during storage	-30 +65 °C
<ul> <li>during operation</li> </ul>	-20 +40 °C
country of origin	USA
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	6
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	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	8
contact rating of auxiliary contacts of contactor according to UL	345VA@115VAC / 768VA@240VAC
Coil	
type of voltage of the control supply voltage	AC
control supply voltage	
• at AC at 50 Hz rated value	110 V
• at AC at 60 Hz rated value	120 V
holding power at AC minimum	8 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	01
magnet coil	0 I
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 overload relay	
<ul> <li>for low rotational speed</li> </ul>	3 12 A
<ul> <li>for high rotational speed</li> </ul>	5 22 A
tripping time at phase-loss maximum	3 s
relative repeat accuracy	1 %
product feature protective coating on printed-circuit board	Yes
number of NC contacts of auxiliary contacts of overload 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	5
insulation voltage (Ui)	
<ul> <li>with single-phase operation at AC rated value</li> </ul>	600 V
<ul> <li>with single-phase operation at AC rated value</li> <li>with multi-phase operation at AC rated value</li> </ul>	600 V 300 V
with multi-phase operation at AC rated value Enclosure	
with multi-phase operation at AC rated value Enclosure design of the housing	
with multi-phase operation at AC rated value Enclosure	300 V
with multi-phase operation at AC rated value Enclosure design of the housing	300 V indoors, usable on a general basis vertical
with multi-phase operation at AC rated value  Enclosure  design of the housing  Mounting/wiring  mounting position fastening method	300 V indoors, usable on a general basis vertical Surface mounting and installation
with multi-phase operation at AC rated value Enclosure design of the housing Mounting/wiring mounting position fastening method type of electrical connection for supply voltage line-side	300 V indoors, usable on a general basis vertical Surface mounting and installation Screw-type terminals
with multi-phase operation at AC rated value  Enclosure  design of the housing  Mounting/wiring  mounting position fastening method type of electrical connection for supply voltage line-side tightening torque [lbf-in] for supply	300 V indoors, usable on a general basis vertical Surface mounting and installation Screw-type terminals 35 35 lbf-in
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with multi-phase operation at AC rated value  Enclosure  design of the housing  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	300 V indoors, usable on a general basis vertical Surface mounting and installation Screw-type terminals 35 35 lbf-in 1 75 °C
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with multi-phase operation at AC rated value     Enclosure     design of the housing     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 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 electrical connection of magnet coil     tightening torque [lbf-in] at magnet coil     type of connectable conductor cross-sections of magnet coil for	300 V indoors, usable on a general basis vertical Surface mounting and installation Screw-type terminals 35 35 lbf in 1 75 °C AL or CU Screw-type terminals 35 35 lbf in 1 75 °C AL or CU Screw-type terminals 5 12 lbf in
with multi-phase operation at AC rated value     Enclosure     design of the housing     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 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 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 cross-sections of magnet coil for     AWG cables single or multi-stranded	300 V indoors, usable on a general basis vertical Surface mounting and installation Screw-type terminals 35 35 lbf·in 1 75 °C AL or CU Screw-type terminals 35 35 lbf·in 1 75 °C AL or CU Screw-type terminals 35 12 lbf·in 2
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with multi-phase operation at AC rated value     Enclosure     design of the housing     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 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	300 V indoors, usable on a general basis vertical Surface mounting and installation Screw-type terminals 35 35 lbf in 1 75 °C AL or CU Screw-type terminals 35 35 lbf in 1 75 °C AL or CU Screw-type terminals 5 12 lbf in 2 75 °C CU Screw-type terminals
with multi-phase operation at AC rated value     Enclosure     design of the housing     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 electrical connection for load-side outgoing feeder     type of connectable conductor for supply     type of connectable conductor for load-side outgoing feeder     type of connectable conductor for load-side outgoing feeder     type of electrical connection of magnet coil     temperature of the conductor for load-side outgoing feeder     type of electrical connection of magnet coil     type of connectable conductor cross-sections of magnet coil     type of connectable conductor for load-side outgoing feeder     type of electrical connection of magnet coil     type of connectable conductor 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     type of connectable conductor cross-sections at contactor for	300 V         indoors, usable on a general basis         vertical         Surface mounting and installation         Screw-type terminals         35 35 lbf in         1         75 °C         AL or CU         Screw-type terminals         35 35 lbf in         1         75 °C         AL or CU         Screw-type terminals         35 35 lbf in         1         75 °C         AL or CU         Screw-type terminals         5 12 lbf in         2         75 °C         CU         Screw-type terminals         1         2         75 °C         CU         Screw-type terminals         10 15 lbf in

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	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	

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=US2:30DUDC32B1VF

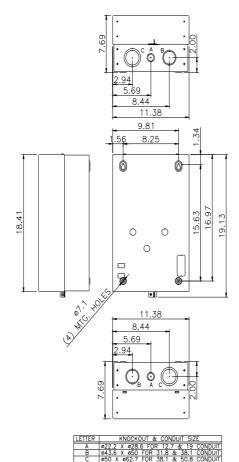
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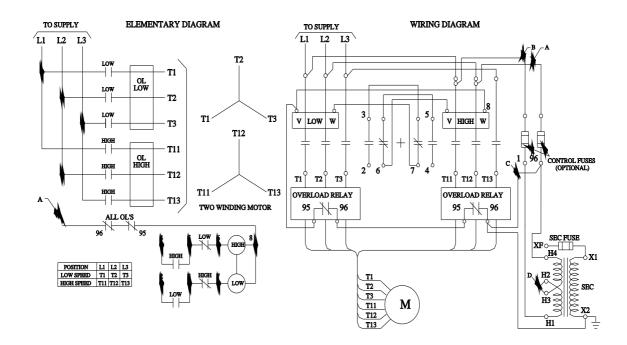
https://support.industry.siemens.com/cs/US/en/ps/US2:30DUDC32B1VF

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=US2:30DUDC32B1VF&lang=en

Certificates/approvals

https://support.industry.siemens.com/cs/US/en/ps/US2:30DUDC32B1VF/certificate





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