



2-speed 3-phase motor starter, Size 4, Two separate windings, Constant or variable torque, Solid-state overload relays, Low Spd OLR range 50-200A, High Spd OLR range 50-200A, 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]	44 lb
Height x Width x Depth [in]	25 × 14 × 9 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
country of origin	USA
Horsepower ratings	
yielded mechanical performance [hp] for 3-phase AC motor	
• at 200/208 V rated value	40 hp
• at 220/230 V rated value	50 hp
• at 460/480 V rated value	100 hp
• at 575/600 V rated value	100 hp
Contactors	
size of contactor	NEMA controller size 4
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	135 A
mechanical service life (operating cycles) of the main contacts typical	5000000
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 50 Hz rated value	110 V
• at AC at 60 Hz rated value	120 V
holding power at AC minimum	22 W
apparent pick-up power of magnet coil at AC	510 VA

apparent holding power of magnet coil at AC	51 VA
operating range factor control supply voltage rated value of magnet coil	0 ... 1
percentual drop-out voltage of magnet coil related to the input voltage	50 %
ON-delay time	18 ... 34 ms
OFF-delay time	10 ... 12 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 overload relay	
• for low rotational speed	50 ... 200 A
• for high rotational speed	50 ... 200 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)	
• with single-phase operation at AC rated value	600 V
• with multi-phase operation at AC rated value	300 V
Enclosure	
degree of protection NEMA rating	1
design of the housing	indoors, usable on a general basis
Mounting/wiring	
mounting position	vertical
fastening method	Surface mounting and installation
type of electrical connection for supply voltage line-side	Box lug
tightening torque [lbf-in] for supply	200 ... 200 lbf-in
type of connectable conductor cross-sections at line-side for AWG cables single or multi-stranded	1
temperature of the conductor for supply maximum permissible	75 °C
material of the conductor for supply	CU
type of electrical connection for load-side outgoing feeder	Box lug
tightening torque [lbf-in] for load-side outgoing feeder	200 ... 200 lbf-in
type of connectable conductor cross-sections for AWG cables for load-side outgoing feeder single or multi-stranded	1
temperature of the conductor for load-side outgoing feeder maximum permissible	75 °C
material of the conductor for load-side outgoing feeder	CU
type of electrical connection of magnet coil	Screw-type terminals
tightening torque [lbf-in] at magnet coil	5 ... 12 lbf-in
type of connectable conductor cross-sections of magnet coil for AWG cables single or multi-stranded	2
temperature of the conductor at magnet coil maximum permissible	75 °C
material of the conductor at magnet coil	CU
type of electrical connection for auxiliary contacts	Screw-type terminals
tightening torque [lbf-in] at contactor for auxiliary contacts	10 ... 15 lbf-in
type of connectable conductor cross-sections at contactor for AWG cables for auxiliary contacts single or multi-stranded	1

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	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) <ul style="list-style-type: none"> • at 240 V • at 480 V • at 600 V 	10 kA 10 kA 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=US2:30JUHH32B1VF>

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

<https://support.industry.siemens.com/cs/US/en/ps/US2:30JUHH32B1VF>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:30JUHH32B1VF&lang=en

Certificates/approvals

<https://support.industry.siemens.com/cs/US/en/ps/US2:30JUHH32B1VF/certificate>



