

Duplex starter W/O alternator Size 3.5 Three phase full voltage Solid-state overload relay OLRelay amp range 50-200A 24VAC 50-60HZ coil Combination type Two 200A disconnect switches Encl NEMA type 4 painted steel Water/dust tight weather proof



Figure similar

Product brand name	Class 84
Design of the product	Duplex controller with two non-fusible disconnect switches without alternator
Special product feature	ESP200 overload relay; Half-size controller

General technical data	
Weight [lb]	106 lb
Height x Width x Depth [in]	56 × 29 × 10 in
Protection against electrical shock	NA for enclosed products
Installation altitude [ft] at height above sea level maximum	6560 ft
Ambient temperature [°F]	
• during storage maximum	149 °F
• during operation maximum	104 °F
Ambient temperature	
• during storage maximum	65 °C
• during operation maximum	40 °C
Country of origin	USA

Horsepower ratings

Yielded mechanical performance [hp] for three-phase AC motor

- | | |
|----------------------------|-------|
| • at 200/208 V rated value | 30 hp |
| • at 220/230 V rated value | 40 hp |
| • at 460/480 V rated value | 75 hp |
| • at 575/600 V rated value | 75 hp |

Contactors

Size of contactor	Controller half size 3 1/2
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Number of NO contacts for main contacts	3
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Operating voltage for main current circuit at AC at 60 Hz maximum	600 V
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Operating current at AC at 600 V rated value	115 A
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Mechanical service life (switching cycles) of the main contacts typical	5000000
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Auxiliary contact

Number of NC contacts at contactor for auxiliary contacts	0
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Number of NO contacts at contactor for auxiliary contacts	1
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Number of total auxiliary contacts maximum	7
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Contact rating of auxiliary contacts of contactor according to UL	10A@600VAC (A600), 5A@600VDC (P600)
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Coil

Type of voltage of the control supply voltage	AC
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Control supply voltage	
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|------------------------------|-------------|
| • at DC rated value | 0 ... 0 V |
| • at AC at 50 Hz rated value | 24 ... 24 V |
| • at AC at 60 Hz rated value | 24 ... 24 V |

Holding power at AC minimum	14 W
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Apparent pick-up power of magnet coil at AC	310 V·A
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Apparent holding power of magnet coil at AC	26 V·A
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Operating range factor control supply voltage rated value of magnet coil	0.85 ... 1.1
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Percental drop-out voltage of magnet coil related to the input voltage	50 %
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Switch-on delay time	26 ... 41 ms
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Off-delay time	14 ... 19 ms
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Overload relay

Product function	
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|---------------------------|-----|
| • Overload protection | Yes |
| • Phase failure detection | Yes |

• Phase unbalance	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 pick-up value current of the current-dependent overload release	50 ... 200 A
Trip time at phase-loss maximum	3 s
Relative repeat accuracy	1 %
Number of NC contacts of auxiliary contacts of overload relay	1
Number of NO contacts of auxiliary contacts of overload relay	1
Operating current of auxiliary contacts of overload relay	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • with single-phase operation at AC rated value 600 V • with multi-phase operation at AC rated value 300 V

Disconnect Switch

Rated response values of switch disconnector	200A / 600V
Design of fuse holder	non-fusible
Operating class of the fuse link	non-fusible

Enclosure

Degree of protection NEMA rating of the enclosure	NEMA Type 4
Design of the housing	Dust-tight, watertight & weather proof

Mounting/wiring

Mounting position	Vertical
Mounting type	Surface mounting and installation
Type of electrical connection for supply voltage line-side	Box lug
Tightening torque [lbf·in] for supply	275 ... 275 lbf·in
Type of connectable conductor cross-sections at line-side at AWG conductors single or multi-stranded	1x (6 AWG ... 300 Kcmil)
Temperature of the conductor for supply maximum permissible	75 °C
Material of the conductor for supply	AL or CU
Type of electrical connection for load-side outgoing feeder	Box lug

Tightening torque [lbf·in] for load-side outgoing feeder	120 ... 120 lbf·in
Type of connectable conductor cross-sections at AWG conductors for load-side outgoing feeder single or multi-stranded	1x (14 ... 2/0 AWG)
Temperature of the conductor for load-side outgoing feeder maximum permissible	75 °C
Material of the conductor for load-side outgoing feeder	AL or 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 at AWG conductors single or multi-stranded	2x (16 ... 12 AWG)
Temperature of the conductor at magnet coil maximum permissible	75 °C
Material of the conductor at magnet coil	CU
Type of electrical connection at contactor 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 at AWG conductors for auxiliary contacts single or multi-stranded	1x (12 AWG), 2x (16 ... 14 AWG), 2x (18 ... 16 AWG)
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 at AWG conductors 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 fuse link for short-circuit protection of the main circuit required	10kA@600V (Class H or K); 100kA@600V (Class R or J)
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=US2:84IUH95EDJ>

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

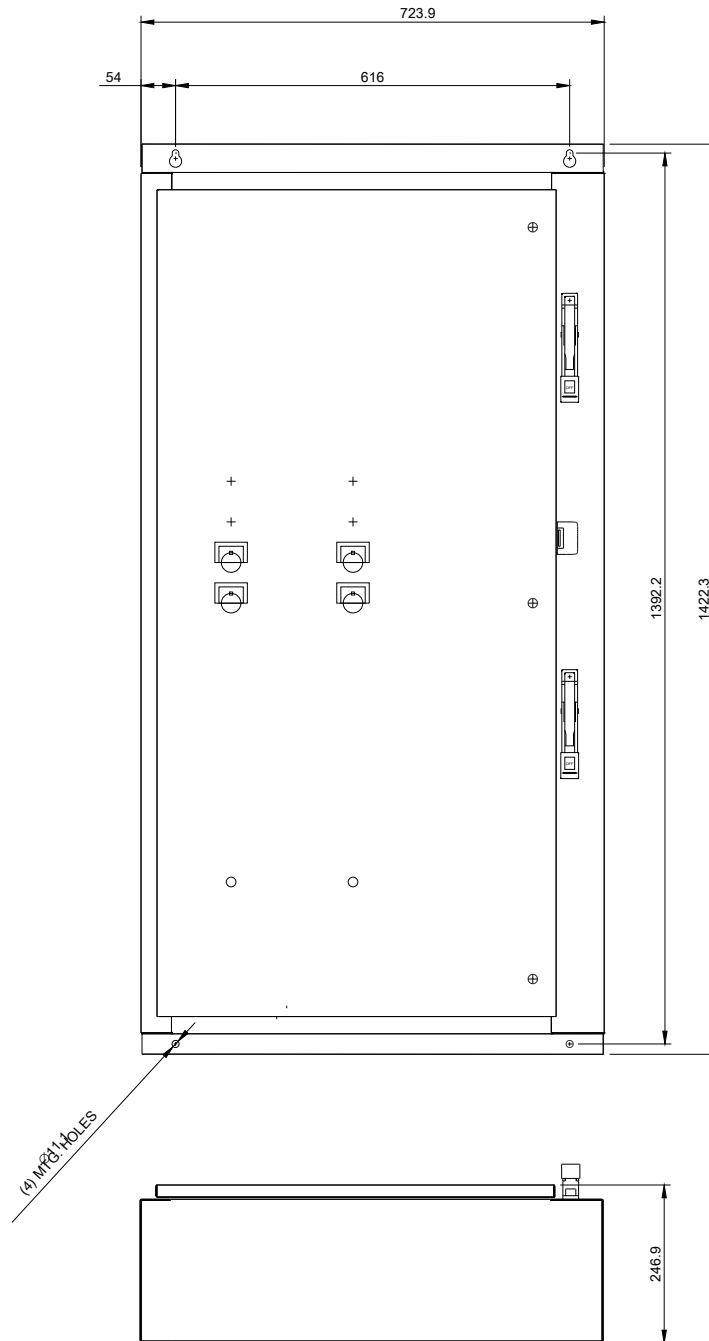
<https://support.industry.siemens.com/cs/US/en/ps/US2:84IUH95EDJ>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:84IUH95EDJ&lang=en

Certificates/approvals

<https://support.industry.siemens.com/cs/US/en/ps/US2:84IUH95EDJ/certificate>



%%USCHEMATIC DIAGRAM

Class 83 & 84 Duplex W/Manual Alternation Size 0-4



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