

Non-reversing motor starter Size 3 1/2 Three phase full voltage  
Solid-state overload relay OLRelay amp range 50-200A 110-  
120/220-240VAC 60HZ coil Combination type No enclosure



Figure similar

| General technical data                                       |                       |
|--------------------------------------------------------------|-----------------------|
| Weight [lb]                                                  | 8 lb                  |
| Height x Width x Depth [in]                                  | 9.78 × 6.75 × 5.19 in |
| Protection against electrical shock                          | Not finger-safe       |
| Installation altitude [ft] at height above sea level maximum | 6560 ft               |
| Ambient temperature [°F] during storage                      | -22 ... +149 °F       |
| Ambient temperature [°F] during operation                    | -4 ... +104 °F        |
| Ambient temperature during storage                           | -30 ... +65 °C        |
| Ambient temperature during operation                         | -20 ... +40 °C        |
| Country of origin                                            | Mexico                |
| 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

## Contactor

|                                                                         |         |
|-------------------------------------------------------------------------|---------|
| Number of NO contacts for main contacts                                 | 3       |
| Operating voltage for main current circuit at AC at 60 Hz maximum       | 600 V   |
| Operating current at AC at 600 V rated value                            | 115 A   |
| Mechanical service life (switching cycles) of the main contacts typical | 5000000 |

## 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                        | 7                                   |
| 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                                                         |               |
| <ul style="list-style-type: none"> <li>• at DC rated value</li> </ul>          | 0 ... 0 V     |
| <ul style="list-style-type: none"> <li>• at AC at 60 Hz rated value</li> </ul> | 110 ... 240 V |
| <ul style="list-style-type: none"> <li>• at AC at 50 Hz rated value</li> </ul> | 0 ... 0 V     |
| Holding power at AC minimum                                                    | 14 W          |
| Apparent pick-up power of magnet coil at AC                                    | 310 V·A       |
| Apparent holding power of magnet coil at AC                                    | 26 V·A        |
| 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 %          |
| Switch-on delay time                                                           | 26 ... 41 ms  |
| Off-delay time                                                                 | 14 ... 19 ms  |

## Overload relay

|                                                                             |                                      |
|-----------------------------------------------------------------------------|--------------------------------------|
| Product function                                                            |                                      |
| <ul style="list-style-type: none"> <li>• Overload protection</li> </ul>     | Yes                                  |
| <ul style="list-style-type: none"> <li>• Phase failure detection</li> </ul> | Yes                                  |
| <ul style="list-style-type: none"> <li>• Phase unbalance</li> </ul>         | Yes                                  |
| <ul style="list-style-type: none"> <li>• Ground fault detection</li> </ul>  | Yes                                  |
| <ul style="list-style-type: none"> <li>• Test function</li> </ul>           | Yes                                  |
| <ul style="list-style-type: none"> <li>• External reset</li> </ul>          | No                                   |
| 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 %                                |
| 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                                  |
| Operating current of auxiliary contacts of overload relay <ul style="list-style-type: none"> <li>• at AC at 600 V</li> <li>• at DC at 250 V</li> </ul>                       | 5 A<br>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"> <li>• with single-phase operation at AC rated value</li> <li>• with multi-phase operation at AC rated value</li> </ul> | 600 V<br>300 V                     |

#### Enclosure

|                                                   |                            |
|---------------------------------------------------|----------------------------|
| Degree of protection NEMA rating of the enclosure | Open device (no enclosure) |
| Design of the housing                             | NA                         |

#### 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                                                                                 | 120 ... 120 lbf·in                |
| Type of connectable conductor cross-sections at line-side at AWG conductors single or multi-stranded                  | 1x(14 - 2/0 AWG)                  |
| 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                           | 2 x (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 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      | 1 x (12 AWG), 2 x (16 - 14 AWG), 2 x (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 | 2 x (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) |
| Design of the short-circuit trip                                                                                                                           | Thermal magnetic circuit breaker                    |
| Maximum short-circuit current breaking capacity (Icu) <ul style="list-style-type: none"> <li>• at 240 V</li> <li>• at 480 V</li> <li>• at 600 V</li> </ul> | 14 kA<br>10 kA<br>10 kA                             |

#### Further information

##### Industrial Controls - Product Overview (Catalogs, Brochures,...)

[www.usa.siemens.com/iccatalog](http://www.usa.siemens.com/iccatalog)

##### Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/us/Catalog/product?mlfb=US2:14IUH32AA>

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

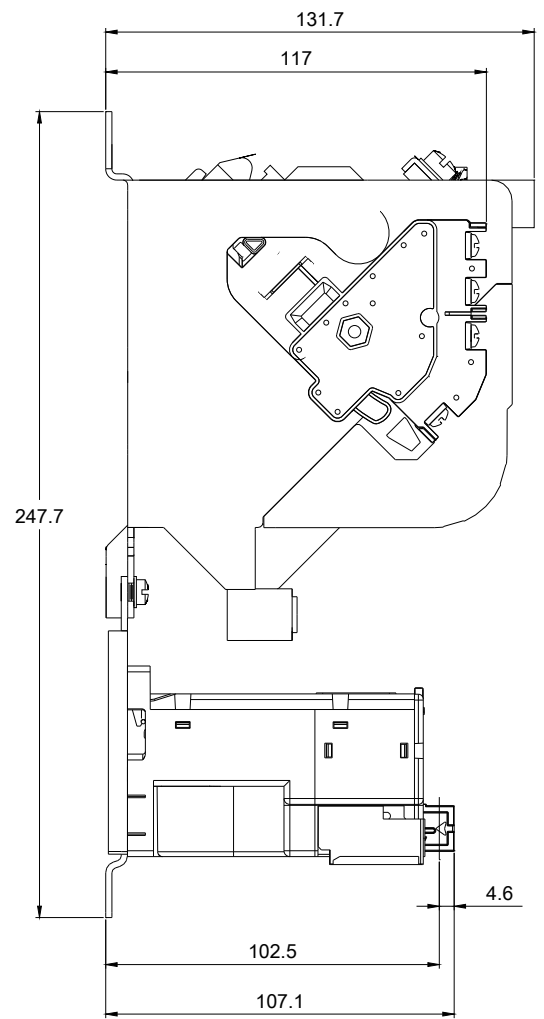
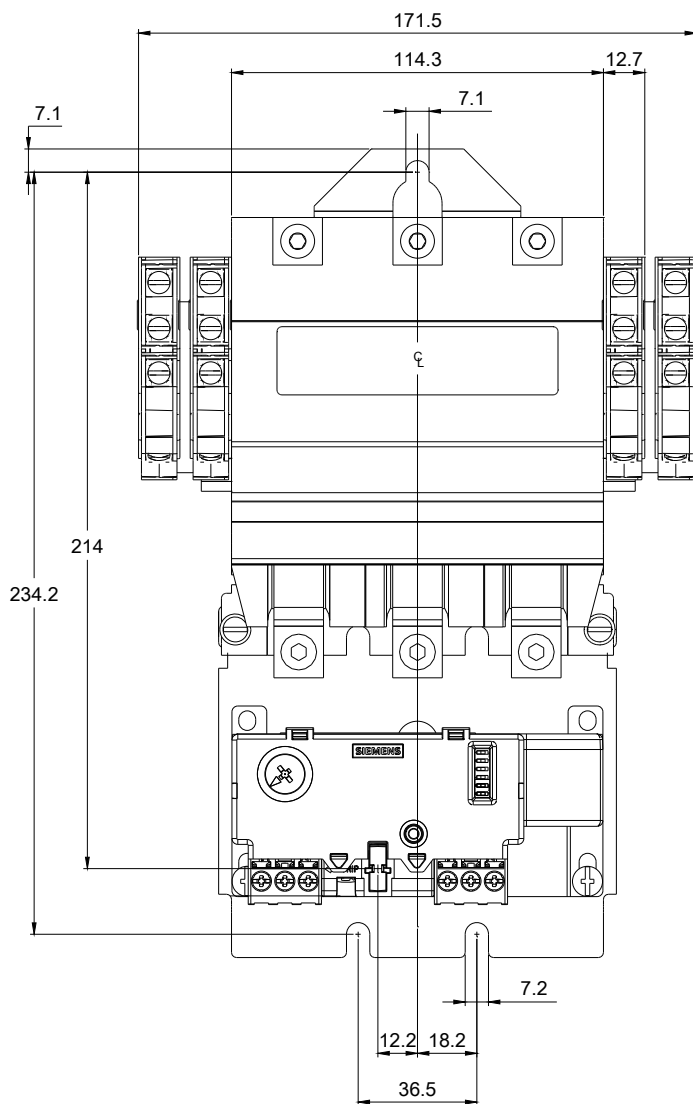
<https://support.industry.siemens.com/cs/US/en/ps/US2:14IUH32AA>

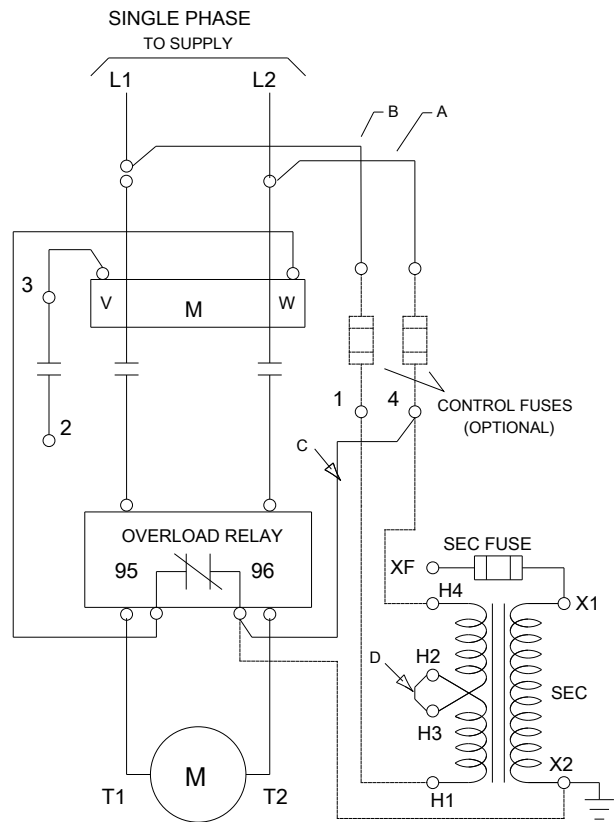
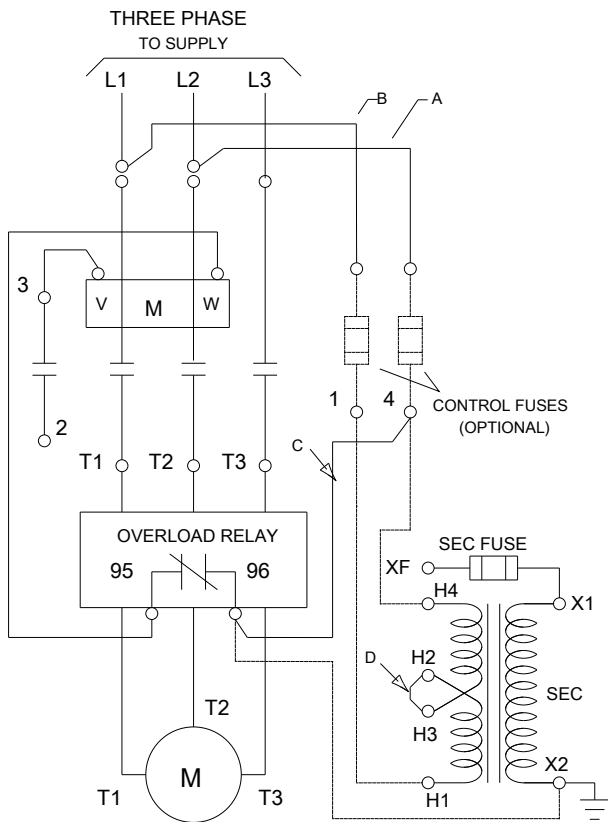
##### Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=US2:14IUH32AA&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:14IUH32AA&lang=en)

##### Certificates/approvals

<https://support.industry.siemens.com/cs/US/en/ps/US2:14IUH32AA/certificate>





D46590001

last modified:

10/24/2018