

Non-reversing motor starter, Size 5, Three phase full voltage, Solid-state overload relay, OLRelay amp range 55-250A, 110-127V 50-60HZ/DC coil, Non-combination type, Enclosure type 12, Dust/drip proof for indoors, Standard width enclosure



Figure similar

|                       |  |
|-----------------------|--|
| Product brand name    | Class 14                                 |
| Design of the product | Full-voltage non-reversing motor starter |

| General technical data                                       |                            |
|--|----------------------------|
| Weight [lb]  | 113 lb                     |
| Height x Width x Depth [in]                                  | 40 × 20 × 11 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   | -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 three-phase AC motor                 |        |
| <ul style="list-style-type: none"> <li>• at 200/208 V rated value</li> </ul> | 75 hp  |
| <ul style="list-style-type: none"> <li>• at 220/230 V rated value</li> </ul> | 100 hp |
| <ul style="list-style-type: none"> <li>• at 460/480 V rated value</li> </ul> | 200 hp |
| <ul style="list-style-type: none"> <li>• at 575/600 V rated value</li> </ul> | 200 hp |

### Contactors

|   |                        |
|---|------------------------|
| Size of contactor   | NEMA controller size 5 |
| 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                            | 270 A                  |
| Mechanical service life (switching cycles) of the main contacts typical | 10000000               |

### 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 | 10A@240VAC (A300), 2.5A@250VDC (Q300) |

### Coil

|  |               |
|--|---------------|
| Type of voltage of the control supply voltage                                  | AC/DC         |
| Control supply voltage   |               |
| <ul style="list-style-type: none"> <li>• at DC rated value</li> </ul>          | 110 ... 127 V |
| <ul style="list-style-type: none"> <li>• at AC at 50 Hz rated value</li> </ul> | 110 ... 127 V |
| <ul style="list-style-type: none"> <li>• at AC at 60 Hz rated value</li> </ul> | 110 ... 127 V |
| Holding power at AC minimum  | 7.4 W         |
| Apparent pick-up power of magnet coil at AC                                    | 590 V·A       |
| Apparent holding power of magnet coil at AC                                    | 6.7 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         | 60 %          |
| Switch-on delay time   | 30 ... 95 ms  |
| Off-delay time   | 40 ... 80 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>                        | No                                 |
| <ul style="list-style-type: none"> <li>• Test function</li> </ul>                                 | Yes                                |
| <ul style="list-style-type: none"> <li>• External RESET</li> </ul>                                | Yes                                |
| Reset function  | Manual and automatic               |
| Trip class  | Class 20                           |
| Adjustable pick-up value current of the current-dependent overload release                        | 55 ... 250 A                       |
| Product feature Protective coating on printed-circuit board                                       | No                                 |
| 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> </ul>                                | 5 A                                |
| <ul style="list-style-type: none"> <li>• at DC at 250 V</li> </ul>                                | 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> </ul> | 600 V                              |
| <ul style="list-style-type: none"> <li>• with multi-phase operation at AC rated value</li> </ul>  | 300 V                              |

#### Enclosure

|   |                                       |
|---|---------------------------------------|
| Degree of protection NEMA rating of the enclosure | NEMA Type 12                          |
| Design of the housing                             | Dust tight and drip proof for indoors |

#### 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   | 180 ... 195 lbf·in   |
| Type of connectable conductor cross-sections at line-side at AWG conductors single or multi-stranded                  | 3/0 AWG - 600 MCM (front only) or 250 - 500 MCM (back only) or 2 x 2/0 AWG - 2 x 500 MCM (both front & back) |
| Temperature of the conductor for supply maximum permissible   | 75 °C  |
| Type of electrical connection for load-side outgoing feeder   | Box lug  |
| Tightening torque [lbf·in] for load-side outgoing feeder  | 180 ... 220 lbf·in   |
| Type of connectable conductor cross-sections at AWG conductors for load-side outgoing feeder single or multi-stranded | 2 x 2/0 AWG - 500 MCM  |
| 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  | 7 ... 10 lbf-in            |
| Type of connectable conductor cross-sections of magnet coil at AWG conductors single or multi-stranded                           | 2 x (18 - 14 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   | 7 ... 10 lbf-in            |
| Type of connectable conductor cross-sections at contactor at AWG conductors for auxiliary contacts single or multi-stranded      | 2x (20 - 16), 2x (18 - 14) |
| 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  | 14kA@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>14 kA<br>14 kA                             |
| Certificate of suitability   | NEMA ICS 2; UL 508                                  |

#### 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=US2:14LPU320F>

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

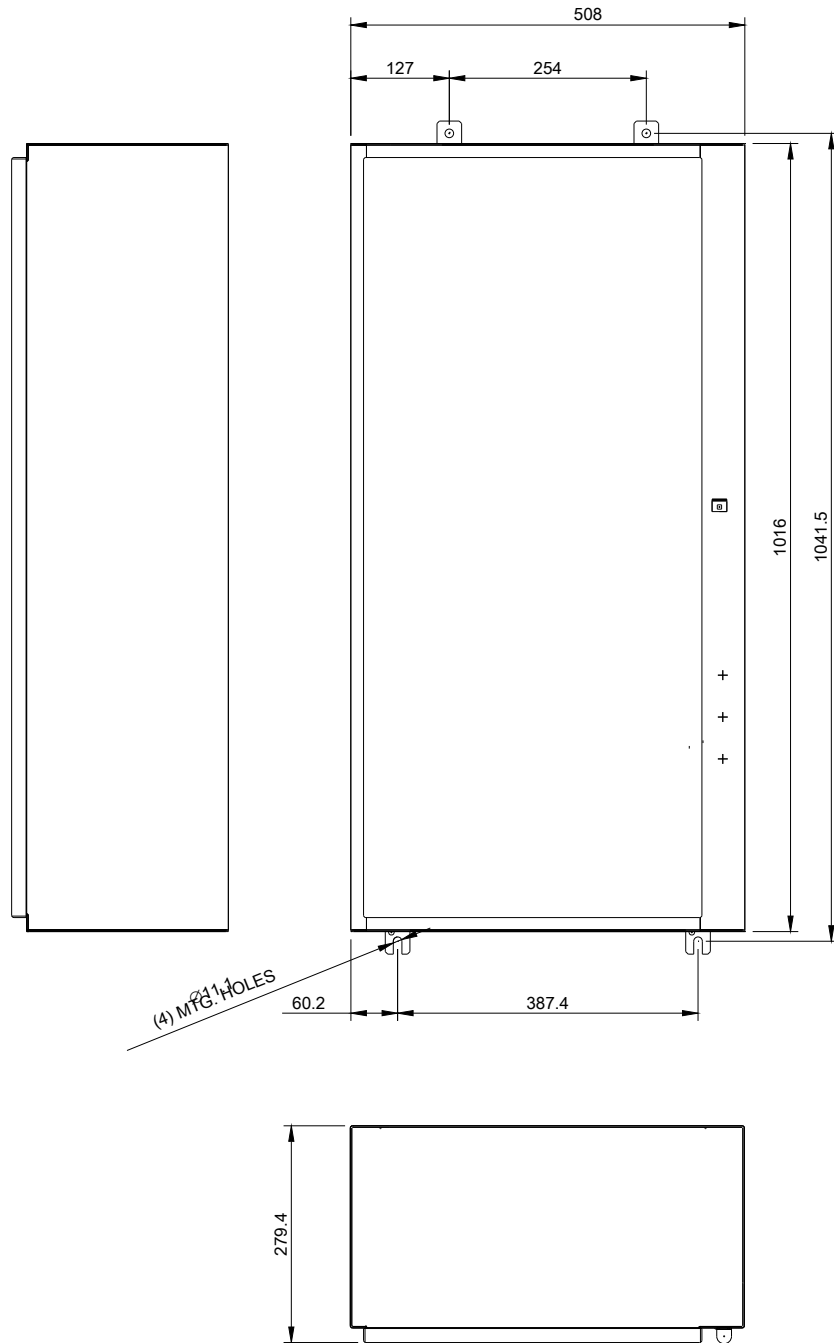
<https://support.industry.siemens.com/cs/US/en/ps/US2:14LPU320F>

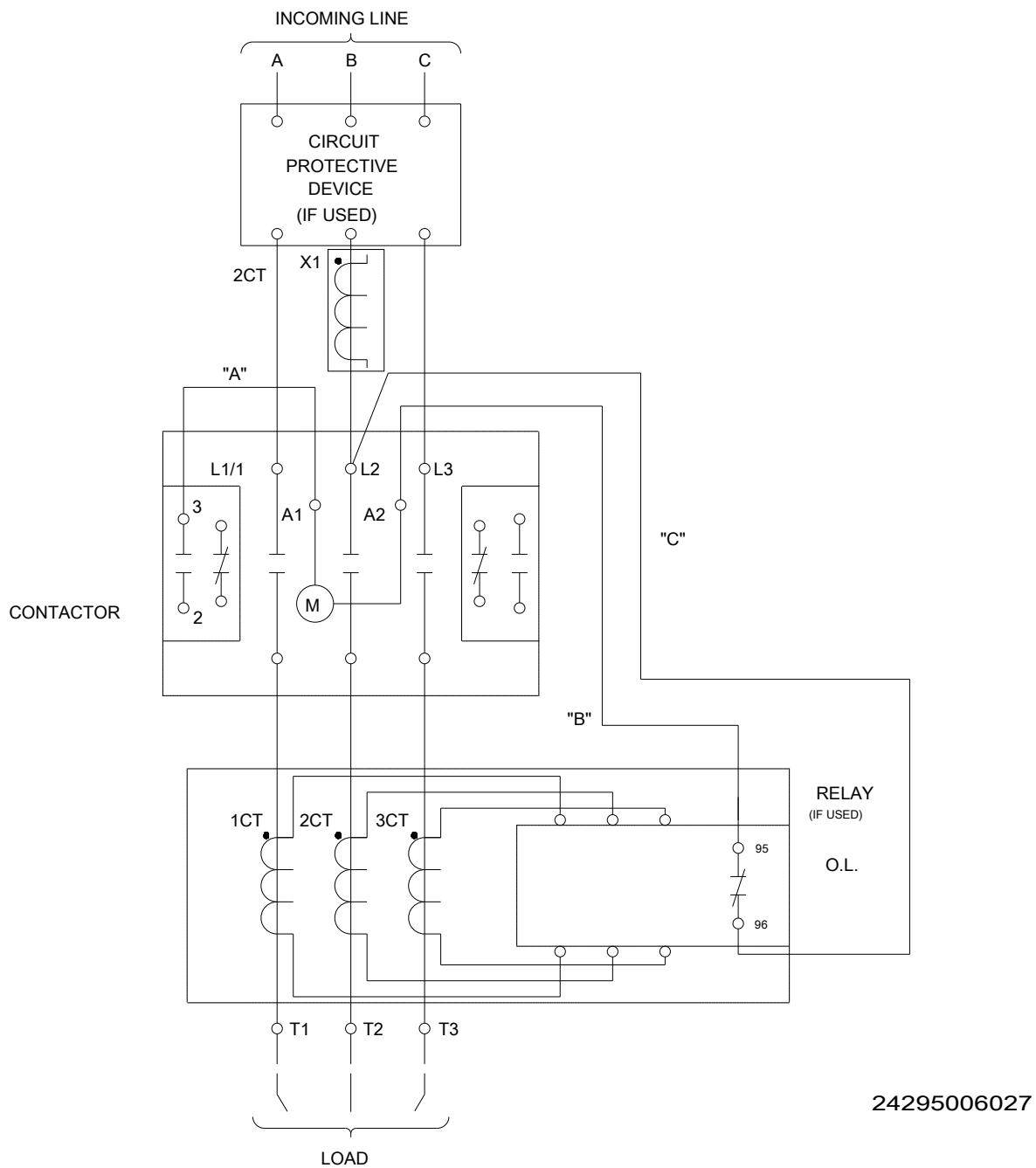
**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)**

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=US2:14LPU320F&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:14LPU320F&lang=en)

**Certificates/approvals**

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