## SIEMENS

## Data sheet

## US2:22LPU320L



Reversing motor starter, Size 5, Three phase full voltage, Solid-state overload relay, OLR amp range 55-250A, 240-277V 50-60Hz/DC coil, Non-combination type, Enclosure type 12, Dust/drip proof for indoors, Standard width enclosure

| Fi | au | re | si | mi | lar   |
|----|----|----|----|----|-------|
|    | yu | 16 | 21 | un | 1 CIL |

| product brand name  | Class 22                              |  |  |  |
|---|---------------------------------------|--|--|--|
| design of the product   | Full-voltage reversing motor starter  |  |  |  |
| General technical data  |                                       |  |  |  |
| weight [lb]   | 134 lb                                |  |  |  |
| Height x Width x Depth [in]   | 40 × 20 × 11 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   |                                       |  |  |  |
| <ul> <li>during storage</li> </ul>                                      | -30 +65 °C                            |  |  |  |
| during operation  | -20 +40 °C                            |  |  |  |
| country of origin   | USA                                   |  |  |  |
| Horsepower ratings  |                                       |  |  |  |
| yielded mechanical performance [hp] for 3-phase AC motor                |                                       |  |  |  |
| <ul> <li>at 200/208 V rated value</li> </ul>                            | 75 hp                                 |  |  |  |
| <ul> <li>at 220/230 V rated value</li> </ul>                            | 100 hp                                |  |  |  |
| <ul> <li>at 460/480 V rated value</li> </ul>                            | 200 hp                                |  |  |  |
| <ul> <li>at 575/600 V rated value</li> </ul>                            | 200 hp                                |  |  |  |
| Contactor   |                                       |  |  |  |
| 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                                 |  |  |  |
| operational current at AC at 600 V rated value                          | 270 A                                 |  |  |  |
| mechanical service life (switching 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       | 10A@240VAC (A300), 2.5A@250VDC (Q300) |  |  |  |
| Coil  |                                       |  |  |  |
| type of voltage of the control supply voltage                           | AC/DC                                 |  |  |  |
| control supply voltage  |                                       |  |  |  |
| <ul> <li>at DC rated value</li> </ul>                                   | 240 277 V                             |  |  |  |

| • at AC at 50 Hz rated value   | 240 277 V   |  |  |
|--|---|--|--|
| at AC at 60 Hz rated value   | 240 277 V   |  |  |
| holding power at AC minimum  | 7.4 W   |  |  |
| apparent pick-up power of magnet coil at AC  | 590 VA  |  |  |
| apparent holding power of magnet coil at AC  | 6.7 VA  |  |  |
| operating range factor control supply voltage rated value<br>of magnet coil  | 0.85 1.1  |  |  |
| percental drop-out voltage of magnet coil related to the<br>input voltage  | 60 %  |  |  |
| ON-delay time  | 30 95 ms  |  |  |
| OFF-delay time   | 40 80 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>   | No  |  |  |
| test function  | Yes   |  |  |
| external reset   | Yes   |  |  |
| reset function   | Manual and automatic  |  |  |
| trip class   | CLASS 20  |  |  |
| adjustable current response value current of the current-  | 55 250 A  |  |  |
| dependent overload release   |   |  |  |
| product feature protective coating on printed-circuit board  | No  |  |  |
| number of NC contacts of auxiliary contacts of overload<br>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   | 5A@600VAC (B600), 1A@250VDC (R300)                            |  |  |
| insulation voltage (Ui)  |   |  |  |
| <ul> <li>with single-phase operation at AC rated value</li> </ul>  | 600 V   |  |  |
| <ul> <li>with multi-phase operation at AC rated value</li> </ul>   | 300 V   |  |  |
| Enclosure  |   |  |  |
| degree of protection NEMA rating   | 12  |  |  |
| design of the housing  | dustproof and drip-proof for indoor use                       |  |  |
| Mounting/wiring  |   |  |  |
|  | Vertical  |  |  |
| mounting position  |   |  |  |
| fastening method type of electrical connection for supply voltage line-side  | Surface mounting and installation                             |  |  |
| tightening torque [lbf-in] for supply  | Box lug<br>180 195 lbf·in                                     |  |  |
| type of connectable conductor cross-sections at line-side  | 3/0 AWG 600 MCM (front only) or 250 500 MCM (back only) or 2x |  |  |
| at AWG cables single or multi-stranded   | 2/0 AWG 2x 500 MCM (both front & back)                        |  |  |
| temperature of the conductor for supply maximum<br>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<br>cables for load-side outgoing feeder single or multi-<br>stranded | 2x 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 cables single or multi-stranded                       | 2x (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<br>at AWG cables for auxiliary contacts single or multi-<br>stranded   | 2x (20 16 AWG), 2x (18 14 AWG)                      |  |  |  |
| temperature of the conductor at contactor for auxiliary<br>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 cables for auxiliary contacts single or multi-<br>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<br>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                    |  |  |  |
| breaking capacity maximum short-circuit current (Icu)  |   |  |  |  |
| • at 240 V   | 14 kA   |  |  |  |
| • at 480 V   | 14 kA   |  |  |  |
| • at 600 V   | 14 kA   |  |  |  |
| certificate of suitability   | NEMA ICS 2; UL 508                                  |  |  |  |
| Further information  |   |  |  |  |
| Industrial Controls Broduct Overview (Cotalera Brochurca )   |   |  |  |  |

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=US2:22LPU320L

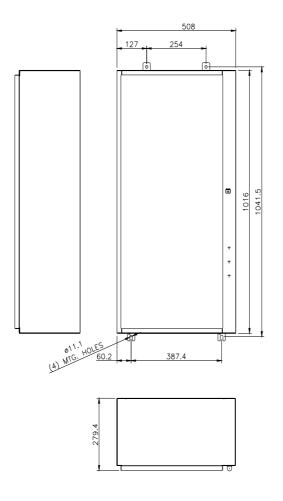
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

https://support.industry.siemens.com/cs/US/en/ps/US2:22LPU320L

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=US2:22LPU320L&lang=en

Certificates/approvals

https://support.industry.siemens.com/cs/US/en/ps/US2:22LPU320L/certificate



last modified:

1/25/2022 🖸