# **SIEMENS**

## Data sheet

### US2:14FP820D91



Non-reversing motor starter Size 2 Three phase full voltage Amb compensate bimetal OLrelay Contactor amp rating 45Amp 208VAC 60HZ coil Non-combination type Enclosure NEMA type 12 Dust/drip proof for indoors Extra-wide enclosure

Figure similar

| General technical data                                       |                          |
|--|--------------------------|
| Weight [lb]  | 18.5 lb                  |
| Height x Width x Depth [in]                                  | 16 × 13 × 6 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              |
| 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  | USA                      |
| Horsepower ratings   |                          |
| Yielded mechanical performance [hp] for three-phase          |                          |
| AC motor   |                          |
| • at 200/208 V rated value                                   | 10 hp                    |
| • at 220/230 V rated value                                   | 15 hp                    |
| • at 460/480 V rated value                                   | 25 hp                    |

| • at 575/600 V | rated value |
|----------------|-------------|
|----------------|-------------|

25 hp

| • at 575/600 V rated value   | 25 np                               |
|--|-------------------------------------|
| Contactor  |                                     |
| Number of NO contacts for main contacts                                  | 3                                   |
| Operating voltage for main current circuit at AC at 60<br>Hz maximum     | 600 V                               |
| Operating current at AC at 600 V rated value                             | 45 A                                |
| Mechanical service life (switching cycles) of the main contacts typical  | 1000000                             |
| Auxiliary contact  |                                     |
| Number of NC contacts at contactor for auxiliary contacts                | 0                                   |
| Number of NO contacts at contactor for auxiliary<br>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   |                                     |
| • at DC rated value  | 0 0 V                               |
| • at AC at 60 Hz rated value   | 208 208 V                           |
| • at AC at 50 Hz rated value   | 0 0 V                               |
| Holding power at AC minimum  | 8.6 W                               |
| Apparent pick-up power of magnet coil at AC                              | 218 V·A                             |
| Apparent holding power of magnet coil at AC                              | 25 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   | 19 29 ms                            |
| Off-delay time   | 10 24 ms                            |
| Overload relay   |                                     |
| Product function   |                                     |
| <ul> <li>Overload protection</li> </ul>                                  | Yes                                 |
| • Test function  | Yes                                 |
| • External reset   | Yes                                 |
| Reset function   | Manual and automatic                |
| Adjustment range of thermal overload trip unit                           | 0.85 1.15                           |
| Number of NC contacts of auxiliary contacts of<br>overload relay         | 1                                   |
| Number of NO contacts of auxiliary contacts of overload relay            | 1                                   |

| Operating current of auxiliary contacts of overload relay   |   |
|---|---|
| ● at AC at 600 V  | 10 A  |
| ● at DC at 250 V  | 5 A   |
| Contact rating of auxiliary contacts of overload relay according to UL  | 10A@600VAC (A600), 5A@250VDC (P300)         |
| 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-<br>side  | Box lug                                     |
| Tightening torque [lbf·in] for supply   | 45 45 lbf·in                                |
| 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   | Screw-type terminals                        |
| Tightening torque [lbf·in] for load-side outgoing feeder  | 35 50 lbf·in                                |
| 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<br>magnet coil at AWG conductors single or multi-<br>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 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<br>contactor at AWG conductors for auxiliary contacts<br>single or multi-stranded | 1x (12 AWG), 2x (16 14 AWG), 2x (18 16 AWG) |
| Temperature of the conductor at contactor for<br>auxiliary contacts maximum permissible   | 75 ℃  |
| Material of the conductor at contactor for auxiliary contacts   | CU  |
| Type of electrical connection at overload relay for<br>auxiliary contacts   | Screw-type terminals                        |
| Tightening torque [lbf·in] at overload relay for auxiliary contacts   | 5 12 lbf·in                                 |

| Type of connectable conductor cross-sections at<br>overload relay at AWG conductors for auxiliary<br>contacts single or multi-stranded | 2x (16 12 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)  |   |
| maximum energy energy (rea)  |   |
| • at 240 V   | 14 kA   |
|  | 14 kA<br>10 kA                                      |

#### Further information

Industrial Controls - Product Overview (Catalogs, Brochures,...) www.usa.siemens.com/iccatalog

Industry Mall (Online ordering system)

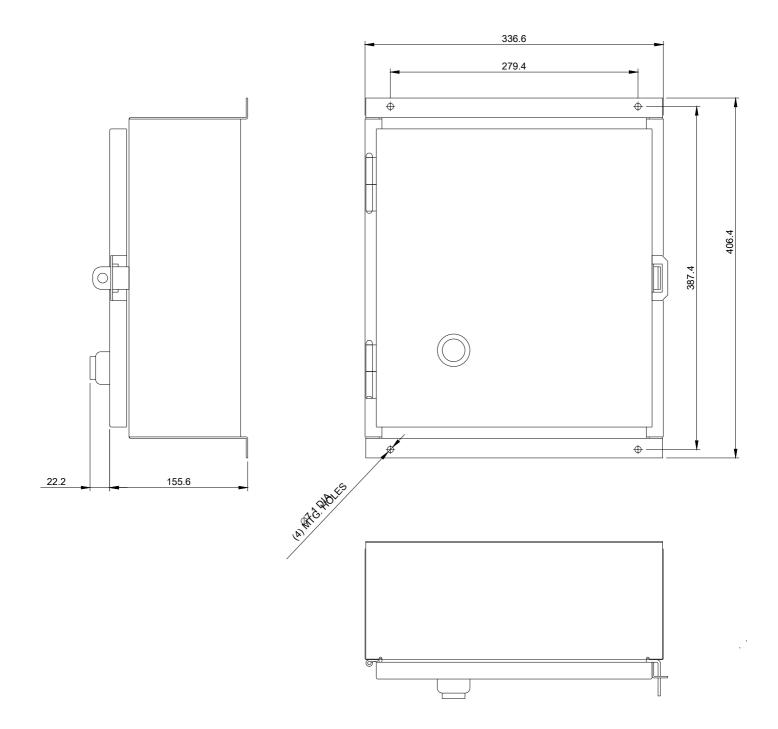
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Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/US/en/ps/US2:14FP820D91

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=US2:14FP820D91&lang=en

#### Certificates/approvals

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