Non-reversing motor starter

Class 14
Full-voltage non-reversing motor starter
ESP200 overload relay

<table>
<thead>
<tr>
<th>General technical data</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>weight [lb]</td>
<td>3 lb</td>
</tr>
<tr>
<td>Height x Width x Depth [in]</td>
<td>7.44 × 5.75 × 3.75 in</td>
</tr>
<tr>
<td>touch protection against electrical shock</td>
<td>Not finger-safe</td>
</tr>
<tr>
<td>installation altitude [ft] at height above sea level maximum</td>
<td>6560 ft</td>
</tr>
<tr>
<td>ambient temperature [°F]</td>
<td></td>
</tr>
<tr>
<td>● during storage</td>
<td>-22 ... +149 °F</td>
</tr>
<tr>
<td>● during operation</td>
<td>-4 ... +104 °F</td>
</tr>
<tr>
<td>ambient temperature [°C]</td>
<td></td>
</tr>
<tr>
<td>● during storage</td>
<td>-30 ... +65 °C</td>
</tr>
<tr>
<td>● during operation</td>
<td>-20 ... +40 °C</td>
</tr>
<tr>
<td>country of origin</td>
<td>Mexico</td>
</tr>
</tbody>
</table>

| Horsepower ratings            |         |
| yielded mechanical performance [hp] for 3-phase AC motor |         |
| ● at 200/208 V rated value    | 0.5 hp  |
| ● at 220/230 V rated value    | 0.75 hp |
| ● at 460/480 V rated value    | 1.5 hp  |
| ● at 575/600 V rated value    | 2 hp    |

| Contactor                     |         |
| size of contactor             | NEMA controller size 00 |
| 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 | 9 A |
| mechanical service life (switching cycles) of the main contacts typical | 10000000 |

<p>| 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 | 8 |
| contact rating of auxiliary contacts of contactor according to UL | 10A@600VAC (A600), 5A@600VDC (P600) |</p>
<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of voltage of the control supply voltage</td>
<td>AC</td>
</tr>
<tr>
<td>Control supply voltage</td>
<td>110 V, 120 V</td>
</tr>
<tr>
<td>Holding power at AC minimum</td>
<td>8.6 W</td>
</tr>
<tr>
<td>Apparent pick-up power of magnet coil at AC</td>
<td>218 V·A</td>
</tr>
<tr>
<td>Apparent holding power of magnet coil at AC</td>
<td>25 V·A</td>
</tr>
<tr>
<td>Operating range factor control supply voltage rate value of magnet coil</td>
<td>0.85 ... 1.1</td>
</tr>
<tr>
<td>Percental drop-out voltage of magnet coil related to the input voltage</td>
<td>50 %</td>
</tr>
<tr>
<td>Switch ON delay time</td>
<td>19 ... 29 ms</td>
</tr>
<tr>
<td>OFF delay time</td>
<td>10 ... 24 ms</td>
</tr>
</tbody>
</table>

**Overload relay**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overload protection</td>
<td>Yes</td>
</tr>
<tr>
<td>Phase failure detection</td>
<td>Yes</td>
</tr>
<tr>
<td>Asymmetry detection</td>
<td>Yes</td>
</tr>
<tr>
<td>Ground fault detection</td>
<td>Yes</td>
</tr>
<tr>
<td>Test function</td>
<td>Yes</td>
</tr>
<tr>
<td>External reset</td>
<td>No</td>
</tr>
<tr>
<td>Reset function</td>
<td>Manual, automatic and remote</td>
</tr>
<tr>
<td>Adjustable current response value current of the current-dependent overload release</td>
<td>0.75 ... 3.4 A</td>
</tr>
<tr>
<td>Tripping time at phase-loss maximum</td>
<td>3 s</td>
</tr>
<tr>
<td>Relative repeat accuracy</td>
<td>1 %</td>
</tr>
<tr>
<td>Number of NC contacts of auxiliary contacts of overload relay</td>
<td>1</td>
</tr>
<tr>
<td>Number of NO contacts of auxiliary contacts of overload relay</td>
<td>1</td>
</tr>
<tr>
<td>Operational current of auxiliary contacts of overload relay</td>
<td>5 A, 1 A</td>
</tr>
<tr>
<td>Contact rating of auxiliary contacts of overload relay according to UL</td>
<td>5A@600VAC (B600), 1A@250VDC (R300)</td>
</tr>
<tr>
<td>Insulation voltage</td>
<td>600 V, 300 V</td>
</tr>
</tbody>
</table>

**Enclosure**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree of protection NEMA rating</td>
<td>Open device (no enclosure)</td>
</tr>
<tr>
<td>Design of the housing</td>
<td>NA</td>
</tr>
</tbody>
</table>

**Mounting/wiring**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mounting position</td>
<td>Vertical</td>
</tr>
<tr>
<td>Fastening method</td>
<td>Surface mounting and installation</td>
</tr>
<tr>
<td>Type of electrical connection for supply voltage line-side</td>
<td>Screw-type terminals</td>
</tr>
<tr>
<td>Tightening torque [lbf-in] for supply</td>
<td>20 ... 20 lbf-in</td>
</tr>
<tr>
<td>Type of connectable conductor cross-sections at line-side</td>
<td>1x(14 - 2 AWG)</td>
</tr>
<tr>
<td>Temperature of the conductor for supply maximum permissible</td>
<td>75 °C</td>
</tr>
<tr>
<td>Material of the conductor for supply</td>
<td>AL or CU</td>
</tr>
<tr>
<td>Type of electrical connection for load-side outgoing feeder</td>
<td>Screw-type terminals</td>
</tr>
<tr>
<td>Tightening torque [lbf-in] for load-side outgoing feeder</td>
<td>20 ... 24 lbf-in</td>
</tr>
<tr>
<td>Type of connectable conductor cross-sections at AWG cables for load-side outgoing feeder single or multi-stranded</td>
<td>2 x (14 - 10 AWG)</td>
</tr>
<tr>
<td>Temperature of the conductor for load-side outgoing feeder maximum permissible</td>
<td>75 °C</td>
</tr>
<tr>
<td>Material of the conductor for load-side outgoing feeder</td>
<td>CU</td>
</tr>
<tr>
<td>Type of Electrical Connection of Magnet Coil</td>
<td>Screw-Type Terminals</td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>Tightening Torque [lbf·in] at Magnet Coil</td>
<td>5 ... 12 lbf·in</td>
</tr>
<tr>
<td>Type of Connectable Conductor Cross-Sections of Magnet Coil at AWG Cables Single or Multi-Stranded</td>
<td>2 x (16 - 12 AWG)</td>
</tr>
<tr>
<td>Temperature of the Conductor at Magnet Coil Maximum Permissible</td>
<td>75 °C</td>
</tr>
<tr>
<td>Material of the Conductor at Magnet Coil</td>
<td>CU</td>
</tr>
<tr>
<td>Type of Electrical Connection for Auxiliary Contacts</td>
<td>Screw-Type Terminals</td>
</tr>
<tr>
<td>Tightening Torque [lbf·in] at Contactor for Auxiliary Contacts</td>
<td>10 ... 15 lbf·in</td>
</tr>
<tr>
<td>Type of Connectable Conductor Cross-Sections at Contactor at AWG Cables for Auxiliary Contacts Single or Multi-Stranded</td>
<td>1 x (12 AWG), 2 x (16 - 14 AWG), 2 x (18 - 16 AWG)</td>
</tr>
<tr>
<td>Temperature of the Conductor at Contactor for Auxiliary Contacts Maximum Permissible</td>
<td>75 °C</td>
</tr>
<tr>
<td>Material of the Conductor at Contactor for Auxiliary Contacts</td>
<td>CU</td>
</tr>
<tr>
<td>Type of Electrical Connection at Overload Relay for Auxiliary Contacts</td>
<td>Screw-Type Terminals</td>
</tr>
<tr>
<td>Tightening Torque [lbf·in] at Overload Relay for Auxiliary Contacts</td>
<td>7 ... 10 lbf·in</td>
</tr>
<tr>
<td>Type of Connectable Conductor Cross-Sections at Overload Relay at AWG Cables for Auxiliary Contacts Single or Multi-Stranded</td>
<td>2 x (20 - 14 AWG)</td>
</tr>
<tr>
<td>Temperature of the Conductor at Overload Relay for Auxiliary Contacts Maximum Permissible</td>
<td>75 °C</td>
</tr>
<tr>
<td>Material of the Conductor at Overload Relay for Auxiliary Contacts</td>
<td>CU</td>
</tr>
</tbody>
</table>

**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
- Breaking Capacity Maximum Short-circuit Current (Icu)
  - at 240 V: 14 kA
  - at 480 V: 10 kA
  - at 600 V: 10 kA
- 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/icatalog](http://www.usa.siemens.com/icatalog)
- Industry Mall (Online ordering system):
- Service & Support (Manuals, Certificates, Characteristics, FAQs,...):
- Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...):
- Certificates/approvals: