

Reduced voltage pump panel, Two step part winding, Size 3, 230V 3-phase motor voltage, Solid-state overload relay, OLR amp range 25-100A, 110V 50Hz / 120V 60Hz coil, 150A circuit breaker, HOA Sel Sw. & Start P.B., Enclosure NEMA type 3/3R, Weather proof outdoor use

| General technical data                                       |                          |
|--------------------------------------------------------------|--------------------------|
| Weight [lb]                                                  | 168 lb                   |
| Height x Width x Depth [in]                                  | 55 × 28 × 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          |
| 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                                                                                                                             |                                                  |
| <ul style="list-style-type: none"> <li>• at 200/208 V rated value</li> <li>• at 220/230 V rated value</li> <li>• at 460/480 V rated value</li> <li>• at 575/600 V rated value</li> </ul> | <p>0 hp</p> <p>50 hp</p> <p>0 hp</p> <p>0 hp</p> |

| Contactor                                                               |         |
|-------------------------------------------------------------------------|---------|
| Number of NO contacts for main contacts                                 | 3       |
| Operating voltage for main current circuit at AC at 60 Hz maximum       | 230 V   |
| Operating current at AC at 600 V rated value                            | 90 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                                                   |               |
| • at DC rated value                                                      | 0 ... 0 V     |
| • at AC at 60 Hz rated value                                             | 120 ... 120 V |
| • at AC at 50 Hz rated value                                             | 110 ... 110 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                                                           |                                      |
| • Overload protection                                                      | Yes                                  |
| • Phase failure detection                                                  | Yes                                  |
| • Phase unbalance                                                          | Yes                                  |
| • Ground fault detection                                                   | Yes                                  |
| • Test function                                                            | Yes                                  |
| • External reset                                                           | Yes                                  |
| Reset function                                                             | Manual, automatic and remote         |
| Trip class                                                                 | Class 5 / 10 (factory set) / 20 / 30 |
| Adjustable pick-up value current of the current-dependent overload release | 25 ... 100 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                  |                                      |
| • 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                                                         |                                      |
| • with single-phase operation at AC rated value                            | 600 V                                |

- with multi-phase operation at AC rated value

300 V

### Enclosure

|                                                   |                               |
|---------------------------------------------------|-------------------------------|
| Degree of protection NEMA rating of the enclosure | NEMA 3/3R                     |
| Design of the housing                             | Weather proof for outdoor use |

### Motor Circuit Protector (magnetic trip only)

|                                                                           |                |
|---------------------------------------------------------------------------|----------------|
| Operating current of motor circuit breaker rated value                    | 150 A          |
| Adjustable pick-up value current of instantaneous short-circuit trip unit | 800 ... 1500 A |

### Mounting/wiring

|                                                                                                                             |                                                      |
|-----------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|
| Mounting position                                                                                                           | Vertical                                             |
| Mounting type                                                                                                               | Surface mounting and installation                    |
| Type of electrical connection for supply voltage line-side                                                                  | Box lug                                              |
| Type of connectable conductor cross-sections at line-side at AWG conductors single or multi-stranded                        | 1x (6 AWG ... 350 Kcmil) or 1x (4 AWG ... 350 Kcmil) |
| 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                      | 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 at contactor 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 | 1x (12 AWG), 2x (16 ... 14 AWG), 2x (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 | 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 short-circuit trip                                                                     | Instantaneous trip 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> | 100 kA<br>100 kA<br>25 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=US2:88HUGP2MF>

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

<https://support.industry.siemens.com/cs/US/en/ps/US2:88HUGP2MF>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=US2:88HUGP2MF&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:88HUGP2MF&lang=en)

**Certificates/approvals**

<https://support.industry.siemens.com/cs/US/en/ps/US2:88HUGP2MF/certificate>

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