SIEMENS

Data sheet US2:88IUHT2MG

| | Reduced voltage pump panel, Auto transformer, Size 3 1/2, 230V 3-phase motor voltage, Solid-state overload relay, OLR amp range 50-200A, 190-220/220-240V 50/60Hz coil, 125A circuit breaker, HOA Sel Sw. <(>&<)> Start P.B., Enclosure NEMA type 3/3R, Weather proof outdoor use |
|--|---|
| product brand name | Class 88 |
| design of the product | Reduced voltage pump panel with MCP - Auto transformer |
| special product feature | Half-size controller; ESP200 overload relay |
| General technical data | |
| weight [lb] | 254 lb |
| Height x Width x Depth [in] | 55 × 28 × 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 | |
| during storage | -30 +65 °C |
| during operation | -20 +40 °C |
| country of origin | USA |
| Horsepower ratings | 33/1 |
| yielded mechanical performance [hp] for 3-phase AC motor | |
| at 200/208 V rated value | 0 hp |
| • at 220/230 V rated value | 40 hp |
| • at 460/480 V rated value | · |
| | 0 hp |
| • at 575/600 V rated value | 0 hp |
| Contactor | 0 1 1 1 1 1 1 0 1 0 |
| size of contactor | Controller half size 3 1/2 |
| number of NO contacts for main contacts | 3 |
| operating voltage for main current circuit at AC at 60 Hz maximum | 230 V |
| operational current at AC at 600 V rated value | 115 A |
| mechanical service life (operating 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 50 Hz rated value | 190 220 V |
| at AC at 60 Hz rated value | 220 240 V |
| holding power at AC minimum | 14 W |
| apparent pick-up power of magnet coil at AC | 310 VA |
| apparent holding power of magnet coil at AC | 26 VA |
| 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 % |
| ON-delay time | 26 41 ms |
| OFF-delay time | 14 19 ms |
| Overload relay | |
| | |

| product function | |
|--|--|
| overload protection | Yes |
| phase failure detection | Yes |
| asymmetry detection | 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 current response value current of the current- dependent overload release | 50 200 A |
| tripping 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 |
| 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) | |
| 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 |
| Circuit Breaker | |
| type of the motor protection | Motor circuit protector (magnetic trip only) |
| operational current of motor circuit breaker rated value | 125 A |
| adjustable current response value current of instantaneous | 500 1250 A |
| short-circuit trip unit | |
| Mounting/wiring | |
| mounting position | Vertical |
| fastening method | Surface mounting and installation |
| type of electrical connection for supply voltage line-side | Box lug |
| type of connectable conductor cross-sections at line-side for AWG cables single or multi-stranded | 1x (10 AWG 1/0 AWG) |
| 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 |
| | 120 120 101111 |
| type of connectable conductor cross-sections for AWG cables for load-side outgoing feeder single or multi-stranded | 1x (14 2/0 AWG) |
| ** | |
| for load-side outgoing feeder single or multi-stranded temperature of the conductor for load-side outgoing feeder | 1x (14 2/0 AWG) |
| for load-side outgoing feeder single or multi-stranded temperature of the conductor for load-side outgoing feeder maximum permissible | 1x (14 2/0 AWG) 75 °C |
| for load-side outgoing feeder single or multi-stranded temperature of the conductor for load-side outgoing feeder maximum permissible material of the conductor for load-side outgoing feeder | 1x (14 2/0 AWG) 75 °C AL or CU |
| for load-side outgoing feeder single or multi-stranded temperature of the conductor for load-side outgoing feeder maximum permissible material of the conductor for load-side outgoing feeder type of electrical connection of magnet coil | 1x (14 2/0 AWG) 75 °C AL or CU Screw-type terminals |
| for load-side outgoing feeder single or multi-stranded temperature of the conductor for load-side outgoing feeder maximum permissible material of the conductor for load-side outgoing feeder type of electrical connection of magnet coil tightening torque [lbf·in] at magnet coil type of connectable conductor cross-sections of magnet coil for | 1x (14 2/0 AWG) 75 °C AL or CU Screw-type terminals 5 12 lbf-in |
| for load-side outgoing feeder single or multi-stranded temperature of the conductor for load-side outgoing feeder maximum permissible material of the conductor for load-side outgoing feeder type of electrical connection of magnet coil tightening torque [lbf·in] at magnet coil type of connectable conductor cross-sections of magnet coil for AWG cables single or multi-stranded temperature of the conductor at magnet coil maximum | 1x (14 2/0 AWG) 75 °C AL or CU Screw-type terminals 5 12 lbf-in 2x (16 12 AWG) |
| for load-side outgoing feeder single or multi-stranded temperature of the conductor for load-side outgoing feeder maximum permissible material of the conductor for load-side outgoing feeder type of electrical connection of magnet coil tightening torque [lbf-in] at magnet coil type of connectable conductor cross-sections of magnet coil for AWG cables single or multi-stranded temperature of the conductor at magnet coil maximum permissible | 1x (14 2/0 AWG) 75 °C AL or CU Screw-type terminals 5 12 lbf·in 2x (16 12 AWG) 75 °C |
| for load-side outgoing feeder single or multi-stranded temperature of the conductor for load-side outgoing feeder maximum permissible material of the conductor for load-side outgoing feeder type of electrical connection of magnet coil tightening torque [lbf-in] at magnet coil type of connectable conductor cross-sections of magnet coil for AWG cables single or multi-stranded temperature of the conductor at magnet coil maximum permissible material of the conductor at magnet coil | 1x (14 2/0 AWG) 75 °C AL or CU Screw-type terminals 5 12 lbf-in 2x (16 12 AWG) 75 °C CU |
| for load-side outgoing feeder single or multi-stranded temperature of the conductor for load-side outgoing feeder maximum permissible material of the conductor for load-side outgoing feeder type of electrical connection of magnet coil tightening torque [lbf·in] at magnet coil type of connectable conductor cross-sections of magnet coil for AWG cables single or multi-stranded temperature of the conductor at magnet coil maximum permissible material of the conductor at magnet coil type of electrical connection at contactor for auxiliary contacts | 1x (14 2/0 AWG) 75 °C AL or CU Screw-type terminals 5 12 lbf-in 2x (16 12 AWG) 75 °C CU Screw-type terminals |
| for load-side outgoing feeder single or multi-stranded temperature of the conductor for load-side outgoing feeder maximum permissible material of the conductor for load-side outgoing feeder type of electrical connection of magnet coil tightening torque [lbf-in] at magnet coil type of connectable conductor cross-sections of magnet coil for AWG cables single or multi-stranded temperature of the conductor at magnet coil maximum permissible material of the conductor at magnet coil type of electrical connection at contactor for auxiliary contacts tightening torque [lbf-in] at contactor for auxiliary contacts type of connectable conductor cross-sections at contactor for | 1x (14 2/0 AWG) 75 °C AL or CU Screw-type terminals 5 12 lbf·in 2x (16 12 AWG) 75 °C CU Screw-type terminals 10 15 lbf·in |
| for load-side outgoing feeder single or multi-stranded temperature of the conductor for load-side outgoing feeder maximum permissible material of the conductor for load-side outgoing feeder type of electrical connection of magnet coil tightening torque [lbf-in] at magnet coil type of connectable conductor cross-sections of magnet coil for AWG cables single or multi-stranded temperature of the conductor at magnet coil maximum permissible material of the conductor at magnet coil type of electrical connection at contactor for auxiliary contacts tightening torque [lbf-in] at contactor for auxiliary contacts type of connectable conductor cross-sections at contactor for AWG cables for auxiliary contacts single or multi-stranded temperature of the conductor at contactor for auxiliary contacts | 1x (14 2/0 AWG) 75 °C AL or CU Screw-type terminals 5 12 lbf·in 2x (16 12 AWG) 75 °C CU Screw-type terminals 10 15 lbf·in 1x (12 AWG), 2x (16 14 AWG), 2x (18 16 AWG) |
| for load-side outgoing feeder single or multi-stranded temperature of the conductor for load-side outgoing feeder maximum permissible material of the conductor for load-side outgoing feeder type of electrical connection of magnet coil tightening torque [lbf·in] at magnet coil type of connectable conductor cross-sections of magnet coil for AWG cables single or multi-stranded temperature of the conductor at magnet coil maximum permissible material of the conductor at magnet coil type of electrical connection at contactor for auxiliary contacts tightening torque [lbf·in] at contactor for auxiliary contacts type of connectable conductor cross-sections at contactor for AWG cables for auxiliary contacts single or multi-stranded temperature of the conductor at contactor for auxiliary contacts maximum permissible | 1x (14 2/0 AWG) 75 °C AL or CU Screw-type terminals 5 12 lbf·in 2x (16 12 AWG) 75 °C CU Screw-type terminals 10 15 lbf·in 1x (12 AWG), 2x (16 14 AWG), 2x (18 16 AWG) 75 °C |
| for load-side outgoing feeder single or multi-stranded temperature of the conductor for load-side outgoing feeder maximum permissible material of the conductor for load-side outgoing feeder type of electrical connection of magnet coil tightening torque [lbf·in] at magnet coil type of connectable conductor cross-sections of magnet coil for AWG cables single or multi-stranded temperature of the conductor at magnet coil maximum permissible material of the conductor at magnet coil type of electrical connection at contactor for auxiliary contacts tightening torque [lbf·in] at contactor for auxiliary contacts type of connectable conductor cross-sections at contactor for AWG cables for auxiliary contacts single or multi-stranded temperature of the conductor at contactor for auxiliary contacts maximum permissible material of the conductor at contactor for auxiliary contacts type of electrical connection at overload relay for auxiliary | 1x (14 2/0 AWG) 75 °C AL or CU Screw-type terminals 5 12 lbf·in 2x (16 12 AWG) 75 °C CU Screw-type terminals 10 15 lbf·in 1x (12 AWG), 2x (16 14 AWG), 2x (18 16 AWG) 75 °C CU |

| type of connectable conductor cross-sections at overload relay for AWG cables 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) | |
| • at 240 V | 100 kA |
| ● at 480 V | 100 kA |
| ● at 600 V | 25 kA |
| certificate of suitability | NEMA ICS 2; UL 508; CSA 22.2, No.14 |
| Further information | |

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www.usa.siemens.com/iccatalog

Industry Mall (Online ordering system)
https://mall.industry.siemens.com/mall/en/us/Catalog/product?mlfb=US2:88IUHT2MG

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

https://support.industry.siemens.com/cs/US/en/ps/US2:88IUHT2MG

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:88IUHT2MG&lang=en

Certificates/approvals

https://support.industry.siemens.com/cs/US/en/ps/US2:88IUHT2MG/certificate

| last modified: | 11/29/2021 | 7 |
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