SIEMENS

Data sheet US2:88HUGT2MG

Reduced voltage pump panel, Auto transformer, Size 3, 230V 3-phase motor voltage, Solid-state overload relay, OLR amp range 25-100A, 190-220/220-240V 50/60Hz coil, 100A circuit breaker, HOA Sel Sw. & Start P.B., Enclosure NEMA type 3/3R, Weather proof outdoor use

| General technical data | |
|--|--------------------------|
| Weight [lb] | 239 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

• at 575/600 V rated value

AC motor

• at 200/208 V rated value

• at 220/230 V rated value

• at 460/480 V rated value

0 hp

| 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 |

0 hp

| 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 | 220 240 V | | |
| • at AC at 50 Hz rated value | 190 220 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 | | | |
| | Yes | | |
| Overload protection Dhose failure detection | Yes | | |
| Phase failure detection | | | |
| 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

| with multi-phase operation at AC rated value | | |
|---|-----------------------------------|--|
| 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 | 100 A | |
| Adjustable pick-up value current of instantaneous | 315 1000 A | |
| short-circuit trip unit | | |
| Mounting/wiring | | |
| Mounting position | Vertical | |
| Mounting type | Surface mounting and installation | |
| Type of electrical connection for supply voltage lineside | Box lug | |
| Type of connectable conductor cross-sections at line- | 1x (10 AWG 1/0 AWG) | |
| side at AWG conductors single or multi-stranded | () | |
| Temperature of the conductor for supply maximum | 75 °C | |
| permissible | | |
| 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 | 1x (14 2/0 AWG) | |
| AWG conductors for load-side outgoing feeder single or multi-stranded | | |
| Temperature of the conductor for load-side outgoing | 75 °C | |
| feeder maximum permissible | | |
| Material of the conductor for load-side outgoing | AL or CU | |
| feeder | | |
| 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 | 75 °C | |
| | | |

CU

Screw-type terminals

10 ... 15 lbf·in

contacts

contacts

maximum permissible

single or multi-stranded

Material of the conductor at magnet coil

Type of electrical connection at contactor for auxiliary

Tightening torque [lbf·in] at contactor for auxiliary

Type of connectable conductor cross-sections at

contactor at AWG conductors for auxiliary contacts

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 |

| Sho | rt- | circuit | curr | ent | r | ating |
|-----|-----|---------|------|-----|---|-------|
| _ | | | | | | |

| 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 |

Further information

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=US2:88HUGT2MG

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

https://support.industry.siemens.com/cs/US/en/ps/US2:88HUGT2MG

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:88HUGT2MG&lang=en

Certificates/approvals

 $\underline{\text{https://support.industry.siemens.com/cs/US/en/ps/US2:88HUGT2MG/certificate}}$

last modified: 05/20/2019