

Pump control panel, Size 4, Three phase full voltage, Solid-state overload relay, OLR amp range 50-200A, 24VAC 50-60Hz coil, Standard type contactor, 150A circuit breaker, HOA Sel Sw. & Start P.B., Enclosure NEMA type 3/3R, Weather proof outdoor use



Figure similar

| | |
|-------------------------|-----------------------------|
| Product brand name | Class 87 |
| Design of the product | Pump control panel with MCP |
| Special product feature | ESP200 overload relay |

| General technical data | |
|--|--------------------------|
| Weight [lb] | 87 lb |
| Height x Width x Depth [in] | 41 × 24 × 8 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 maximum | 149 °F |
| • during operation maximum | 104 °F |
| Ambient temperature | |
| • during storage maximum | 65 °C |
| • during operation maximum | 40 °C |
| Country of origin | USA |

Horsepower ratings

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|--|--------|
| Yielded mechanical performance [hp] for three-phase AC motor | |
| <ul style="list-style-type: none"> • at 200/208 V rated value | 40 hp |
| <ul style="list-style-type: none"> • at 220/230 V rated value | 50 hp |
| <ul style="list-style-type: none"> • at 460/480 V rated value | 100 hp |
| <ul style="list-style-type: none"> • at 575/600 V rated value | 100 hp |

Contactors

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|---|------------------------|
| Size of contactor | NEMA controller size 4 |
| Number of NO contacts for main contacts | 3 |
| Operating voltage for main current circuit at AC at 60 Hz maximum | 600 V |
| Operating current at AC at 600 V rated value | 135 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

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| Type of voltage of the control supply voltage | AC |
| Control supply voltage | |
| <ul style="list-style-type: none"> • at DC rated value | 0 ... 0 V |
| <ul style="list-style-type: none"> • at AC at 50 Hz rated value | 24 ... 24 V |
| <ul style="list-style-type: none"> • at AC at 60 Hz rated value | 24 ... 24 V |
| Holding power at AC minimum | 22 W |
| Apparent pick-up power of magnet coil at AC | 510 V·A |
| Apparent holding power of magnet coil at AC | 51 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 | 18 ... 34 ms |
| Off-delay time | 10 ... 12 ms |

Overload relay

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| Product function | |
| <ul style="list-style-type: none"> • Overload protection | Yes |
| <ul style="list-style-type: none"> • Phase failure detection | Yes |
| <ul style="list-style-type: none"> • Phase unbalance | Yes |

| | |
|--|---|
| <ul style="list-style-type: none"> • Ground fault detection | Yes |
| <ul style="list-style-type: none"> • Test function | Yes |
| <ul style="list-style-type: none"> • 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 | 50 ... 200 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 | <ul style="list-style-type: none"> • 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 | <ul style="list-style-type: none"> • with single-phase operation at AC rated value 600 V • with multi-phase operation at AC rated value 300 V |

Enclosure

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

Standard Control Devices

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| Product component Hand-Off-Auto selector switch | Yes |
| Type of Hand-Off-Auto selector switch | 30mm metal housing with chrome finish |
| Product component Start push button | Yes |
| Type of start push button | 30mm metal housing with chrome finish |

Motor Circuit Protector (magnetic trip only)

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| 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

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| 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) |

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| 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 | 200 ... 200 lbf·in |
| Type of connectable conductor cross-sections at AWG conductors for load-side outgoing feeder single or multi-stranded | 1x (6 AWG ... 250 MCM) |
| Temperature of the conductor for load-side outgoing feeder maximum permissible | 75 °C |
| Material of the conductor for load-side outgoing feeder | 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

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| Design of the short-circuit trip | Instantaneous trip circuit breaker |
|----------------------------------|------------------------------------|

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| Maximum short-circuit current breaking capacity (Icu) | |
| <ul style="list-style-type: none"> • at 240 V • at 480 V • at 600 V | <p>100 kA</p> <p>100 kA</p> <p>25 kA</p> |
| Certificate of suitability | NEMA ICS 2; UL 508 |

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=US2:87JUH6MJ>

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

<https://support.industry.siemens.com/cs/US/en/ps/US2:87JUH6MJ>

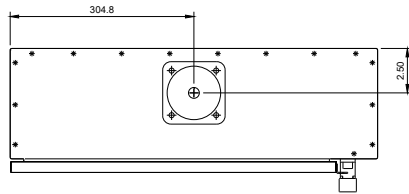
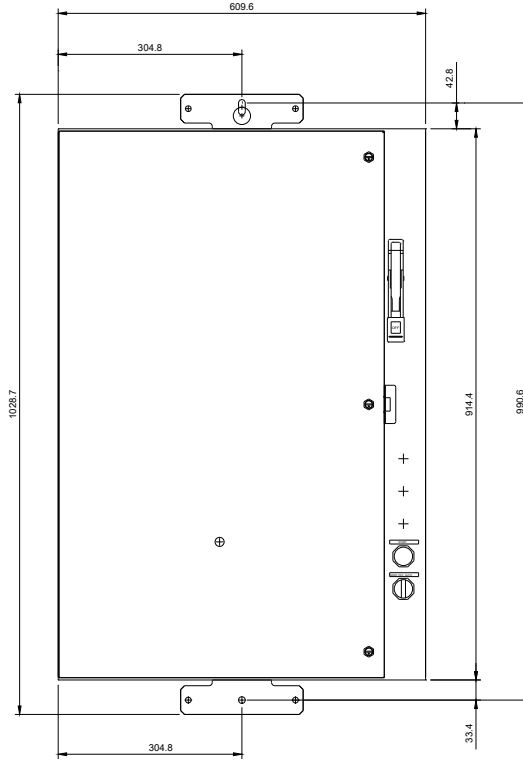
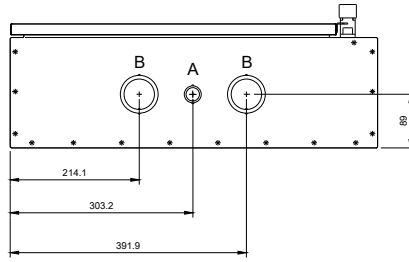
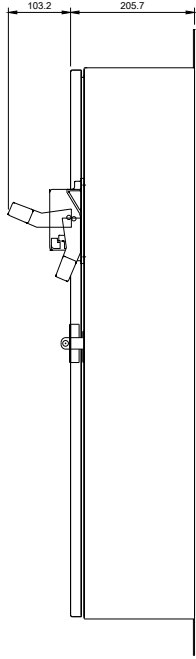
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:87JUH6MJ&lang=en

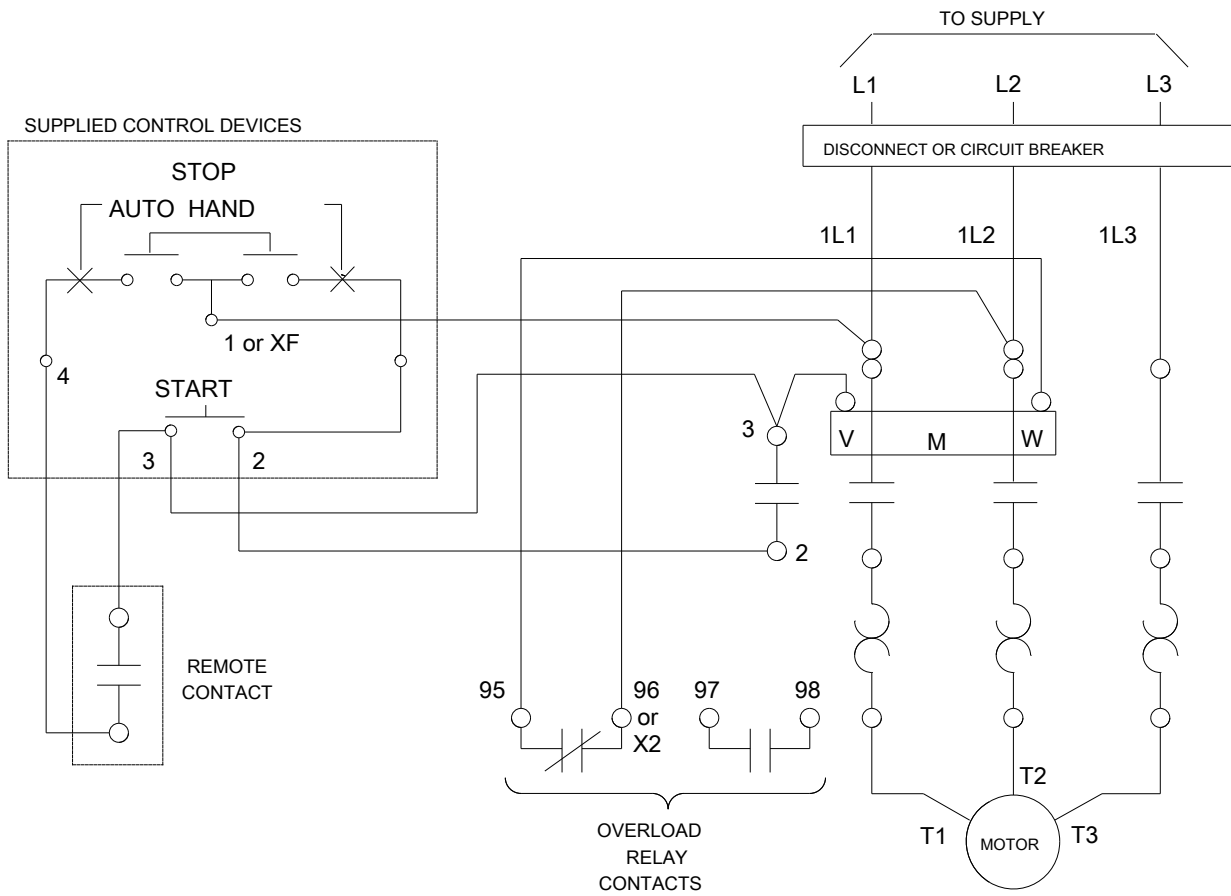
Certificates/approvals

<https://support.industry.siemens.com/cs/US/en/ps/US2:87JUH6MJ/certificate>

| LETTER | CONDUIT SIZE |
|--------|---------------------------|
| A | %%C22.2 & %%C28.6 CONDUIT |
| B | Ø50 & Ø62.7 CONDUIT |



CONDUIT HUB COVER



D63677012

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