SIEMENS

Data sheet US2:22FP32AG81



Reversing motor starter Size 2 Three phase full voltage Amb compensate bimetal OLrelay Contactor amp rating 45Amp 190-220/220-240V 50/60HZ coil Noncombination type Enclosure type (open)

Figure similar

| product brand name | Class 14 & 22 |
|---|--|
| design of the product | Full-voltage reversing motor starter |
| General technical data | |
| weight [lb] | 7.7 lb |
| Height x Width x Depth [in] | 8.94 × 10.5 × 4.11 in |
| touch protection against electrical shock | Not finger-safe |
| 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 | Mexico |
| Horsepower ratings | |
| yielded mechanical performance [hp] for 3-phase AC motor | |
| • at 200/208 V rated value | 10 hp |
| • at 220/230 V rated value | 15 hp |
| • at 460/480 V rated value | 25 hp |
| • at 575/600 V rated value | 25 hp |
| Contactor | |
| | |
| size of contactor | NEMA controller size 2 |
| size of contactor number of NO contacts for main contacts | NEMA controller size 2 3 |
| | |
| number of NO contacts for main contacts operating voltage for main current circuit at AC at 60 Hz | 3 |
| number of NO contacts for main contacts operating voltage for main current circuit at AC at 60 Hz maximum | 3 600 V |
| number of NO contacts for main contacts operating voltage for main current circuit at AC at 60 Hz maximum operational current at AC at 600 V rated value mechanical service life (operating cycles) of the main contacts | 3 600 V 45 A |
| number of NO contacts for main contacts operating voltage for main current circuit at AC at 60 Hz maximum operational current at AC at 600 V rated value mechanical service life (operating cycles) of the main contacts typical | 3 600 V 45 A |
| number of NO contacts for main contacts operating voltage for main current circuit at AC at 60 Hz maximum operational current at AC at 600 V rated value mechanical service life (operating cycles) of the main contacts typical Auxiliary contact | 3 600 V 45 A 10000000 |
| number of NO contacts for main contacts operating voltage for main current circuit at AC at 60 Hz maximum operational current at AC at 600 V rated value mechanical service life (operating cycles) of the main contacts typical Auxiliary contact number of NC contacts at contactor for auxiliary contacts | 3 600 V 45 A 10000000 |
| number of NO contacts for main contacts operating voltage for main current circuit at AC at 60 Hz maximum operational current at AC at 600 V rated value mechanical service life (operating cycles) of the main contacts typical Auxiliary contact number of NC contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts | 3 600 V 45 A 10000000 |
| number of NO contacts for main contacts operating voltage for main current circuit at AC at 60 Hz maximum operational current at AC at 600 V rated value mechanical service life (operating cycles) of the main contacts typical Auxiliary contact number of NC contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of total auxiliary contacts maximum | 3 600 V 45 A 10000000 0 1 |
| number of NO contacts for main contacts operating voltage for main current circuit at AC at 60 Hz maximum operational current at AC at 600 V rated value mechanical service life (operating cycles) of the main contacts typical Auxiliary contact number of NC contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of total auxiliary contacts maximum contact rating of auxiliary contacts of contactor according to UL | 3 600 V 45 A 10000000 0 1 |
| number of NO contacts for main contacts operating voltage for main current circuit at AC at 60 Hz maximum operational current at AC at 600 V rated value mechanical service life (operating cycles) of the main contacts typical Auxiliary contact number of NC contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of total auxiliary contacts maximum contact rating of auxiliary contacts of contactor according to UL Coil | 3 600 V 45 A 10000000 0 1 7 10A@600VAC (A600), 5A@600VDC (P600) |
| number of NO contacts for main contacts operating voltage for main current circuit at AC at 60 Hz maximum operational current at AC at 600 V rated value mechanical service life (operating cycles) of the main contacts typical Auxiliary contact number of NC contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of total auxiliary contacts maximum contact rating of auxiliary contacts of contactor according to UL Coil type of voltage of the control supply voltage | 3 600 V 45 A 10000000 0 1 7 10A@600VAC (A600), 5A@600VDC (P600) |
| number of NO contacts for main contacts operating voltage for main current circuit at AC at 60 Hz maximum operational current at AC at 600 V rated value mechanical service life (operating cycles) of the main contacts typical Auxiliary contact number of NC contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of total auxiliary contacts maximum contact rating of auxiliary contacts of contactor according to UL Coil type of voltage of the control supply voltage control supply voltage | 3 600 V 45 A 10000000 0 1 7 10A@600VAC (A600), 5A@600VDC (P600) |
| number of NO contacts for main contacts operating voltage for main current circuit at AC at 60 Hz maximum operational current at AC at 600 V rated value mechanical service life (operating cycles) of the main contacts typical Auxiliary contact number of NC contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of total auxiliary contacts maximum contact rating of auxiliary contacts of contactor according to UL Coil type of voltage of the control supply voltage control supply voltage • at AC at 50 Hz rated value | 3 600 V 45 A 10000000 0 1 7 10A@600VAC (A600), 5A@600VDC (P600) AC 190 220 V |

| apparent holding power of magnet coil at AC | 25 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 | 19 29 ms |
| OFF-delay time | 10 24 ms |
| Overload relay | |
| product function | |
| overload protection | Yes |
| • test function | Yes |
| external reset | No |
| reset function | Manual and automatic |
| adjustment range of thermal overload trip unit | 0.85 1.15 |
| number of NC contacts of auxiliary contacts of overload relay | 1 |
| number of NO contacts of auxiliary contacts of overload relay | 0 |
| operational current of auxiliary contacts of overload relay | |
| • at AC at 600 V | 10 A |
| • at DC at 250 V | 5 A |
| contact rating of auxiliary contacts of overload relay according to UL | 10A@600VAC (A600), 5A@250VDC (P300) |
| Enclosure Enclosure | |
| degree of protection NEMA rating | Open device (no enclosure) |
| design of the housing | NA |
| Mounting/wiring | |
| mounting position | Vertical |
| fastening method | Surface mounting and installation |
| type of electrical connection for supply voltage line-side | Box lug |
| tightening torque [lbf-in] for supply | 45 45 lbf·in |
| 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 | Screw-type terminals |
| tightening torque [lbf·in] for load-side outgoing feeder | 35 50 lbf-in |
| 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 cables 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 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 cables 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 | 5 12 lbf·in |
| type of connectable conductor cross-sections at overload relay at AWG cables for auxiliary contacts single or multi-stranded | 2x (16 12 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 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 |
| maximum short-circuit current breaking capacity (lcu) | |
| • 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/iccatalog

Industry Mall (Online ordering system)

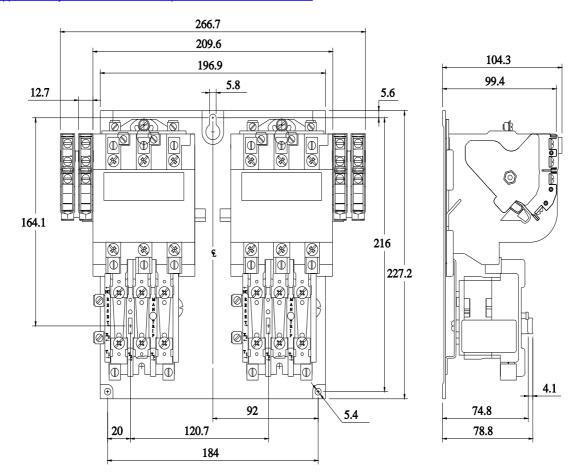
all.industry.siemens.com/mall/en/us/Catalog/product?mlfb=US2:22FP32AG81

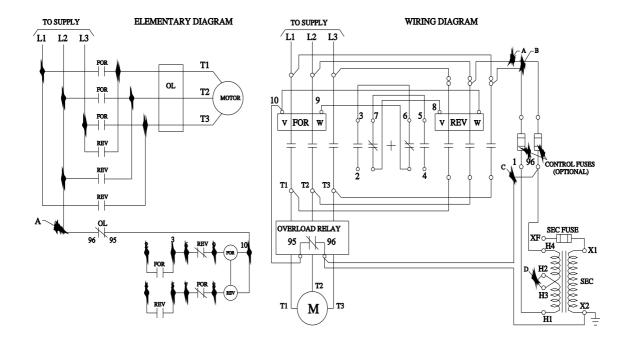
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/US/en/ps/US2:22FP32AG81

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:22FP32AG81&lang=en

Certificates/approvals

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last modified: 4/27/2021 🖸