

GV2P10KD09G7

Motor Starter Kit, TeSys, LC1D09G7 contactor,
GV2P10 motor starter protector, 120 VAC
50/60 Hz coil, 4 to 6.3A trip





Main

| | |
|---------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range | TeSys |
| Product or component type | Motor starter |
| Contactor application | Resistive load Motor control |
| Utilisation category | AC-3 AC-1 AC-4 |
| Poles description | 3P |
| Power pole contact composition | 3 NO |
| [Ue] rated operational voltage | Power circuit <= 690 V AC 25...400 Hz Power circuit: <= 300 V DC |
| [Ie] rated operational current | 9 A 140 °F (60 °C) <= 440 V AC AC-3 power circuit 25 A 140 °F (60 °C) <= 440 V AC AC-1 power circuit |
| Motor power kW | 2.2 KW 220...230 V AC 50/60 Hz AC-3) 4 KW 380...400 V AC 50/60 Hz AC-3) 4 KW 415...440 V AC 50/60 Hz AC-3) 5.5 KW 500 V AC 50/60 Hz AC-3) 5.5 KW 660...690 V AC 50/60 Hz AC-3) 2.2 kW 400 V AC 50/60 Hz AC-4) |
| Motor power HP (UL / CSA) | 1 Hp 230/240 V at AC 50/60 Hz for 1 phase 2 Hp 200/208 V at AC 50/60 Hz for 3 phase 2 Hp 230/240 V at AC 50/60 Hz for 3 phase 5 Hp 460/480 V at AC 50/60 Hz for 3 phase 7.5 Hp 575/600 V at AC 50/60 Hz for 3 phase 0.33 hp 115 V at AC 50/60 Hz for 1 phase |
| Control circuit type | AC 50/60 Hz |
| [Uc] control circuit voltage | 120 V AC 50/60 Hz |
| Auxiliary contact composition | 1 NO + 1 NC |
| [Uimp] rated impulse withstand voltage | 6 kV IEC 60947 |
| Overvoltage category | III |
| [Ith] conventional free air thermal current | 25 A 140 °F (60 °C) power circuit 10 A 140 °F (60 °C) signalling circuit |
| Irms rated making capacity | 250 A 440 V power circuit IEC 60947 140 A AC signalling circuit IEC 60947-5-1 250 A DC signalling circuit IEC 60947-5-1 |
| Rated breaking capacity | 250 A 440 V power circuit IEC 60947 |
| [Icw] rated short-time withstand current | 105 A 104 °F (40 °C) - 10 s power circuit 210 A 104 °F (40 °C) - 1 s power circuit 30 A 104 °F (40 °C) - 10 min power circuit 61 A 104 °F (40 °C) - 1 min power circuit 100 A - 1 s signalling circuit 120 A - 500 ms signalling circuit 140 A - 100 ms signalling circuit |
| Associated fuse rating | 10 A gG signalling circuit IEC 60947-5-1 25 A gG <= 690 V type 1 power circuit 20 A gG <= 690 V type 2 power circuit |
| Average impedance | 2.5 mOhm - Ith 25 A 50 Hz power circuit |
| [Ui] rated insulation voltage | Power circuit 690 V IEC 60947-4-1 Power circuit 600 V CSA Power circuit 600 V UL Signalling circuit 690 V IEC 60947-1 Signalling circuit 600 V CSA Signalling circuit 600 V UL |
| Electrical durability | 0.6 Mcycles 25 A AC-1 <= 440 V 2 Mcycles 9 A AC-3 <= 440 V |
| Power dissipation per pole | 1.56 W AC-1 0.2 W AC-3 |
| Safety cover | With |
| Mounting support | Rail Plate |

| | |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Standards | CSA C22.2 No 14 EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1 UL 508 |
| Product certifications | RINA DNV GOST LROS (Lloyds register of shipping) UL GL BV CCC CSA |
| Connections - terminals | Power circuit screw clamp terminals 1 0.00...0.01 in ² (1...4 mm ²)flexible without cable end Power circuit screw clamp terminals 2 0.00...0.01 in ² (1...4 mm ²)flexible without cable end Power circuit screw clamp terminals 1 0.00...0.01 in ² (1...4 mm ²)flexible with cable end Power circuit screw clamp terminals 2 0.00...0.00 in ² (1...2.5 mm ²)flexible with cable end Power circuit screw clamp terminals 1 0.00...0.01 in ² (1...4 mm ²)solid without cable end Power circuit screw clamp terminals 2 0.00...0.01 in ² (1...4 mm ²)solid without cable end Control circuit screw clamp terminals 1 0.00...0.01 in ² (1...4 mm ²)flexible without cable end Control circuit screw clamp terminals 2 0.00...0.01 in ² (1...4 mm ²)flexible without cable end Control circuit screw clamp terminals 1 0.00...0.01 in ² (1...4 mm ²)flexible with cable end Control circuit screw clamp terminals 2 0.00...0.00 in ² (1...2.5 mm ²)flexible with cable end Control circuit screw clamp terminals 1 0.00...0.01 in ² (1...4 mm ²)solid without cable end Control circuit screw clamp terminals 2 0.00...0.01 in ² (1...4 mm ²)solid without cable end |
| Tightening torque | Power circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals flat Ø 6 mm Power circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals Philips No 2 Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals flat Ø 6 mm Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals Philips No 2 |
| Operating time | 12...22 ms closing 4...19 ms opening |
| Safety reliability level | B10d = 1369863 cycles contactor with nominal load EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1 |
| Mechanical durability | 15 Mcycles |
| Maximum operating rate | 3600 cyc/h 60 °C |
| Trip unit rating | 4...6.3 A |
| Trip unit technology | Thermal-magnetic |
| Suitability for isolation | Yes conforming to IEC 60947-1 |
| Phase failure sensitivity | Yes conforming to IEC 60947-4-1 |

Complementary

| | |
|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Coil technology | Without built-in suppressor module |
| Control circuit voltage limits | Drop-out 0.3...0.6 U _c AC 50/60 Hz 140 °F (60 °C)) Operational 0.8...1.1 U _c AC 50 Hz 140 °F (60 °C)) Operational 0.85...1.1 U _c AC 60 Hz 140 °F (60 °C)) |
| Inrush power in VA | 70 VA 60 Hz 0.75 68 °F (20 °C)) 70 VA 50 Hz 0.75 68 °F (20 °C)) |
| Hold-in power consumption in VA | 7.5 VA 60 Hz 0.3 68 °F (20 °C)) 7 VA 50 Hz 0.3 68 °F (20 °C)) |
| Heat dissipation | 2...3 W 50/60 Hz |
| Auxiliary contacts type | Type mechanically linked 1 NO + 1 NC conforming to IEC 60947-5-1 Type mirror contact 1 NC conforming to IEC 60947-4-1 |

| | |
|-----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Signalling circuit frequency | 25...400 Hz |
| Minimum switching current | 5 mA signalling circuit |
| Minimum switching voltage | 17 V signalling circuit |
| Non-overlap time | 1.5 Ms on de-energisation between NC and NO contact 1.5 ms on energisation between NC and NO contact |
| Insulation resistance | > 10 MOhm for signalling circuit |
| Contact compatibility | M2 |
| Motor power range | 0...0.5 KW 100...120 V 3 phase 0.55...1 KW 100...120 V 3 phase 0...0.5 KW 200...240 V 3 phase 0.55...1 KW 200...240 V 3 phase 1.1...2 KW 200...240 V 3 phase 0...0.5 KW 380...440 V 3 phase 0.55...1 KW 380...440 V 3 phase 1.1...2 KW 380...440 V 3 phase 2.2...3 KW 380...440 V 3 phase 4...6 KW 380...440 V 3 phase 0...0.5 KW 480...500 V 3 phase 0.55...1 KW 480...500 V 3 phase 1.1...2 KW 480...500 V 3 phase 2.2...3 KW 480...500 V 3 phase 4...6 KW 480...500 V 3 phase 0...0.5 KW 525...690 V 3 phase 0.55...1 KW 525...690 V 3 phase 1.1...2 KW 525...690 V 3 phase 2.2...3 KW 525...690 V 3 phase 4...6 KW 525...690 V 3 phase |
| Motor starter type | Direct on-line contactor |
| Utilisation category | AC-3 conforming to IEC 60947-4-1 Category A conforming to IEC 60947-2 |
| Network frequency | 50/60 Hz conforming to IEC 60947-4-1 |
| Fixing mode | 35 mm symmetrical DIN rail: clipped Panel: screwed (with 2 x M4 screws) |
| Operating position | Any position |
| Motor power kW | 2.2 KW 400/415 V AC 50/60 Hz 3 KW 500 V AC 50/60 Hz 4 kW 690 V AC 50/60 Hz |
| Breaking capacity | 100 KA Icu 230/240 V AC 50/60 Hz IEC 60947-2 100 KA Icu 400/415 V AC 50/60 Hz IEC 60947-2 100 KA Icu 440 V AC 50/60 Hz IEC 60947-2 100 KA Icu 500 V AC 50/60 Hz IEC 60947-2 6 kA Icu 690 V AC 50/60 Hz IEC 60947-2 |
| [Ics] rated service short-circuit breaking capacity | 100 % 690 V AC 50/60 Hz IEC 60947-2 100 % 500 V AC 50/60 Hz IEC 60947-2 100 % 230/240 V AC 50/60 Hz IEC 60947-2 100 % 440 V AC 50/60 Hz IEC 60947-2 100 % 400/415 V AC 50/60 Hz IEC 60947-2 |
| Control type | Rotary knob |
| Line Rated Current | 6.3 A |
| Magnetic tripping current | 78 A |
| [Ue] rated operational voltage | 690 V AC 50/60 Hz conforming to IEC 60947-2 |
| [Ui] rated insulation voltage | 690 V AC 50/60 Hz IEC 60947-2 |
| [Ith] conventional free air thermal current | 6.3 A IEC 60947-4-1 |
| [Uimp] rated impulse withstand voltage | 6 kV IEC 60947-2 |
| Power dissipation per pole | 2.5 W |
| Mechanical durability | 100000 cycles |
| Electrical durability | 100000 cycles AC-3 440 V |
| Maximum operating rate | 25 cyc/h |
| Rated duty | Continuous conforming to IEC 60947-4-1 |
| Direct connector | Without |
| Connections - terminals | Screw clamp terminals 2 0.00...0.01 in ² (1...6 mm ²) solid Screw clamp terminals 2 0.00...0.01 in ² (1.5...6 mm ²) flexible without cable end Screw clamp terminals 2 0.00...0.01 in ² (1...4 mm ²) flexible with cable end |
| Tightening torque | 15.05 lbf.in (1.7 N.m) screw clamp terminals |

Environment

| | |
|-------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| IP degree of protection | IP20 front face conforming to IEC 60529 |
| Protective treatment | TH conforming to IEC 60068-2-30 |
| Pollution degree | 3 |
| Ambient air temperature for operation | 23...140 °F (-5...60 °C) |
| Ambient air temperature for storage | -76...176 °F (-60...80 °C) |
| Permissible ambient air temperature around the device | -40...158 °F (-40...70 °C) at Uc |
| Operating altitude | 3000 m without derating |
| Fire resistance | 1562 °F (850 °C) IEC 60695-2-1 |
| Flame retardance | V1 conforming to UL 94 |
| Mechanical robustness | Vibrations contactor open: 2 Gn, 5...300 Hz Vibrations contactor closed: 4 Gn, 5...300 Hz Shocks contactor open: 10 Gn for 11 ms Shocks contactor closed: 15 Gn for 11 ms |
| Height | 3.03 in (77 mm) |
| Width | 1.77 in (45 mm) |
| Depth | 3.39 in (86 mm) |
| Net Weight | 0.71 lb(US) (0.32 kg) |
| Standards | IEC 60947-4-1 CSA C22.2 VDE 0113 VDE 0660 UL 508 IEC 60947-1 NF C 79-130 NF C 63-120 EN 60204 IEC 60947-2 NF C 63-650 |
| Product certifications | DNV UL 508 type E LROS (Lloyds register of shipping) EZU CCC UL TSE RINA CSA EAC ATEX BV GL |
| Protective treatment | TH |
| IP degree of protection | IP20 conforming to IEC 60529 |
| IK degree of protection | IK04 |
| Ambient air temperature for operation | -4...140 °F (-20...60 °C) |
| Ambient air temperature for storage | -40...176 °F (-40...80 °C) |
| Operating altitude | 2000 m |
| Height | 3.50 in (89 mm) |
| Width | 1.77 in (45 mm) |
| Depth | 3.82 in (97 mm) |

Ordering and shipping details

| | |
|-----------------------|---------------------------------------|
| Category | 22368 - TESYS GV2P & LC1D STARTER KIT |
| Discount Schedule | I11 |
| Nbr. of units in pkg. | 1 |
| Package weight(Lbs) | 1 lb(US) (0.45 kg) |
| Returnability | No |

Offer Sustainability

| | |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status | Green Premium product |
| California proposition 65 | WARNING: This product can expose you to chemicals including: Antimony oxide & Antimony trioxide, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov |
| REACH Regulation | REACH Declaration |
| EU RoHS Directive | Compliant EU RoHS Declaration |
| Mercury free | Yes |
| RoHS exemption information | Yes |
| China RoHS Regulation | China RoHS Declaration |
| Environmental Disclosure | Product Environmental Profile |