

320 Series Relay
Ordering Information

Standard Motor Protection Relay Kits



About

The 320 - 327M Series of electronic motor protection relays provide comprehensive protection required by motors running constantly at full load and occasionally beyond their limitations. Motors driving crushers, ball mills or high inertia loads especially with long run-up starting times are ideal applications.

Thermal overload protection, running stall and jam protection, earth fault and short circuit protection along with selectable start attempt limitations are features of the relay. A built in motor load current transducer is useful for indicating the % motor load through the 420mA Loop.

Available in Amp calibration range from 0,8A to 1680A split over 7 Amperage selection bands. Also available in a % calibration with the maximum load setting expressed as the full load current divided by the C.T. ratio and multiplied by 100.

Protection Features:

- Thermal Overload Protection
- Locked Rotor Protection
- Running Stall Protection
- Jam Protection
- Unbalanced Current Protection
- Single Phasing Protection
- Earth Leakage Protection
- Earth Fault Protection
- Short Circuit Protection
- Starts per Hour Limitation
- 4-20mA Loop output





www.newelec.co.za sales@newelec.co.za

Fax: +27 (0)12 327 1733 Toll Assist: 0860 10 30 41



Complete Motor Protection Solution to Suite:

0.8 – 12 Amp Motor



Standard Kit

Product Code Description FPR0866 320MF110A1

Options

- F Immediate overload warning (Option I, O and P disallowed)
- **G** Earth Fault
- H Short Circuit
- I Transfer options G and H to auxiliary relay (option F and O disallowed) with 1s delay on main trip relay
- **J** 100ms trip time for options G and H (if not selected, 1 s delay will be selected)
- K Thermal memory override facility
- **L** Motor Load and thermal memory analogue indication meter (29m or 39m)
- M Auto-manual overload trip reset facility
- **N** Programmed limitation of start attempts (1, 2 or 3)
- O Phase unbalanced alarm trip function disabled (option I, O and P disallowed)
- P Slave auxiliary relay with main trip relay (option I, O and P disallowed)

About

The 320 - 327M Series of electronic motor protection relays provide comprehensive protection required by motors running constantly at full load and occasionally beyond their limitations. Motors driving crushers, ball mills or high inertia loads especially with long run-up starting times are ideal applications.

Thermal overload protection, running stall and jam protection, earth fault and short circuit protection along with selectable start attempt limitations are features of the relay. A built in motor load current transducer is useful for indicating the % motor load through the 420mA Loop.





Toll Assist: 0860 10 30 41 www.newelec.co.za sales@newelec.co.za



Complete Motor Protection Solution to Suite:

13 - 30 Amp Motor



Standard Kit

Product Code Description *321MF220A1*

Options

- F Immediate overload warning (Option I, O and P disallowed)
- **G** Earth Fault
- **H** Short Circuit
- Transfer options G and H to auxiliary relay (option F and O disallowed) with 1s delay on main trip relay
- **J** 100ms trip time for options G and H (if not selected, 1 s delay will be selected)
- **K** Thermal memory override facility
- **L** Motor Load and thermal memory analogue indication meter (29m or 39m)
- **M** Auto-manual overload trip reset facility
- **N** Programmed limitation of start attempts (1, 2 or 3)
- O Phase unbalanced alarm trip function disabled (option I, O and P disallowed)
- P Slave auxiliary relay with main trip relay (option I, O and P disallowed)

About

The 320 - 327M Series of electronic motor protection relays provide comprehensive protection required by motors running constantly at full load and occasionally beyond their limitations. Motors driving crushers, ball mills or high inertia loads especially with long run-up starting times are ideal applications.

Thermal overload protection, running stall and jam protection, earth fault and short circuit protection along with selectable start attempt limitations are features of the relay. A built in motor load current transducer is useful for indicating the % motor load through the 420mA Loop.





Fax: +27 (0)12 327 1733 Toll Assist: 0860 10 30 41



www.newelec.co.za sales@newelec.co.za

Complete Motor Protection Solution to Suite:

31 - 80 Amp Motor



Standard Kit

Product Code Description *322MC110A1*

Options

- **F** Immediate overload warning (Option I, O and P disallowed)
- **G** Earth Fault
- **H** Short Circuit
- Transfer options G and H to auxiliary relay (option F and O disallowed) with 1s delay on main trip relay
- **J** 100ms trip time for options G and H (if not selected, 1 s delay will be selected)
- **K** Thermal memory override facility
- **L** Motor Load and thermal memory analogue indication meter (29m or 39m)
- M Auto-manual overload trip reset facility
- **N** Programmed limitation of start attempts (1, 2 or 3)
- O Phase unbalanced alarm trip function disabled (option I, O and P disallowed)
- P Slave auxiliary relay with main trip relay (option I, O and P disallowed)

About

The 320 - 327M Series of electronic motor protection relays provide comprehensive protection required by motors running constantly at full load and occasionally beyond their limitations. Motors driving crushers, ball mills or high inertia loads especially with long run-up starting times are ideal applications.

Thermal overload protection, running stall and jam protection, earth fault and short circuit protection along with selectable start attempt limitations are features of the relay. A built in motor load current transducer is useful for indicating the % motor load through the 420mA Loop.





Toll Assist: 0860 10 30 41 www.newelec.co.za sales@newelec.co.za



Complete Motor Protection Solution to Suite:

80 - 160 Amp Motor



Standard Kit

Product Code Description FPR0114 323MF110A1

Programming Kit

- **F** Immediate overload warning (Option I, O and P disallowed)
- **G** Earth Fault
- **H** Short Circuit
- Transfer options G and H to auxiliary relay (option F and O disallowed) with 1s delay on main trip relay
- **J** 100ms trip time for options G and H (if not selected, 1 s delay will be selected)
- **K** Thermal memory override facility
- **L** Motor Load and thermal memory analogue indication meter (29m or 39m)
- M Auto-manual overload trip reset facility
- **N** Programmed limitation of start attempts (1, 2 or 3)
- O Phase unbalanced alarm trip function disabled (option I, O and P disallowed)
- P Slave auxiliary relay with main trip relay (option I, O and P disallowed)

About

The 320 - 327M Series of electronic motor protection relays provide comprehensive protection required by motors running constantly at full load and occasionally beyond their limitations. Motors driving crushers, ball mills or high inertia loads especially with long run-up starting times are ideal applications.

Thermal overload protection, running stall and jam protection, earth fault and short circuit protection along with selectable start attempt limitations are features of the relay. A built in motor load current transducer is useful for indicating the % motor load through the 420mA Loop.





Fax: +27 (0)12 327 1733

Toll Assist: 0860 10 30 41 www.newelec.co.za sales@newelec.co.za



Complete Motor Protection Solution to Suite:

160 – 400 Amp Motor



Standard Kit

Product Code Description FPR0235 324MF110A5

Programming Kit

- *Immediate overload warning (Option I, O and P disallowed)*
- G Earth Fault
- Н **Short Circuit**
- Transfer options G and H to auxiliary relay (option F and O disallowed) with 1s delay on main trip relay
- 100ms trip time for options G and H (if not selected, 1 s delay will be selected)
- Thermal memory override facility
- Motor Load and thermal memory analogue indication meter (29m or 39m)
- Auto-manual overload trip reset facility
- *Programmed limitation of start attempts (1, 2 or 3)*
- Phase unbalanced alarm trip function disabled (option I, O and P disallowed) 0
- Slave auxiliary relay with main trip relay (option I, O and P disallowed)

About

The 320 - 327M Series of electronic motor protection relays provide comprehensive protection required by motors running constantly at full load and occasionally beyond their limitations. Motors driving crushers, ball mills or high inertia loads especially with long run-up starting times are ideal applications.

Thermal overload protection, running stall and jam protection, earth fault and short circuit protection along with selectable start attempt limitations are features of the relay. A built in motor load current transducer is useful for indicating the % motor





Toll Assist: 0860 10 30 41 www.newelec.co.za sales@newelec.co.za



Complete Motor Protection Solution to Suite:

400 - 800 Amp Motor



Standard Kit

Product Code Description 525MC220A5

Programming Kit

- **F** *Immediate overload warning (Option I, O and P disallowed)*
- **G** Earth Fault
- **H** Short Circuit
- Transfer options G and H to auxiliary relay (option F and O disallowed) with 1s delay on main trip relay
- **J** 100ms trip time for options G and H (if not selected, 1 s delay will be selected)
- K Thermal memory override facility
- L Motor Load and thermal memory analogue indication meter (29m or 39m)
- M Auto-manual overload trip reset facility
- **N** Programmed limitation of start attempts (1, 2 or 3)
- O Phase unbalanced alarm trip function disabled (option I, O and P disallowed)
- P Slave auxiliary relay with main trip relay (option I, O and P disallowed)

About

The 320 - 327M Series of electronic motor protection relays provide comprehensive protection required by motors running constantly at full load and occasionally beyond their limitations. Motors driving crushers, ball mills or high inertia loads especially with long run-up starting times are ideal applications.

Thermal overload protection, running stall and jam protection, earth fault and short circuit protection along with selectable start attempt limitations are features of the relay. A built in motor load current transducer is useful for indicating the % motor load through the 420mA Loop.





> Fax: +27 (0)12 327 1733 Toll Assist: 0860 10 30 41

www.newelec.co.za sales@newelec.co.za



Complete Motor Protection Solution to Suite:

800 – 1680 Amp Motor



Standard Kit

Product Code Description FPR0882 326MF220A5

Programming Kit

- *Immediate overload warning (Option I, O and P disallowed)*
- Earth Fault G
- **Short Circuit**
- Transfer options G and H to auxiliary relay (option F and O disallowed) with 1s delay on main trip relay
- 100ms trip time for options G and H (if not selected, 1 s delay will be selected) J
- Thermal memory override facility
- Motor Load and thermal memory analogue indication meter (29m or 39m)
- Auto-manual overload trip reset facility
- *Programmed limitation of start attempts (1, 2 or 3)*
- Phase unbalanced alarm trip function disabled (option I, O and P disallowed)

About

The 320 - 327M Series of electronic motor protection relays provide comprehensive protection required by motors running constantly at full load and occasionally beyond their limitations. Motors driving crushers, ball mills or high inertia loads especially with long run-up starting times are ideal applications.

Thermal overload protection, running stall and jam protection, earth fault and short circuit protection along with selectable start attempt limitations are features of the relay. A built in motor load current transducer is useful for indicating the % motor





Toll Assist: 0860 10 30 41 www.newelec.co.za sales@newelec.co.za



Complete Motor Protection Solution to Suite:

18.5 - 150 KW Motor



Standard Kit

Product Code Description FPR0056 327MF110A1

Programming Kit

- **F** Immediate overload warning (Option I, O and P disallowed)
- **G** Earth Fault
- **H** Short Circuit
- Transfer options G and H to auxiliary relay (option F and O disallowed) with 1s delay on main trip relay
- **J** 100ms trip time for options G and H (if not selected, 1 s delay will be selected)
- K Thermal memory override facility
- L Motor Load and thermal memory analogue indication meter (29m or 39m)
- M Auto-manual overload trip reset facility
- **N** Programmed limitation of start attempts (1, 2 or 3)
- O Phase unbalanced alarm trip function disabled (option I, O and P disallowed)
- P Slave auxiliary relay with main trip relay (option I, O and P disallowed)

About

The 320 - 327M Series of electronic motor protection relays provide comprehensive protection required by motors running constantly at full load and occasionally beyond their limitations. Motors driving crushers, ball mills or high inertia loads especially with long run-up starting times are ideal applications.

Thermal overload protection, running stall and jam protection, earth fault and short circuit protection along with selectable start attempt limitations are features of the relay. A built in motor load current transducer is useful for indicating the % motor load through the 420mA Loop.





> Fax: +27 (0)12 327 1733 Toll Assist: 0860 10 30 41

www.newelec.co.za sales@newelec.co.za



Complete Motor Protection Solution to Suite:

Accessories:

Current Transformers Class 5P10 5VA



20:1 or 20:5 with 0,8 to 12 Amps 50:1 or 50:1 with 13 to 30 Amps 100:1 or 100:5 with 31 to 80 Amps 200:1 or 200:5 with 80 to 160 Amps

500:1 or 500:5 with 160 to 400 Amps 1000:1 or 1000:5 with 400 to 800 2000:1 or 2000:5 above 1680 Amps

Option L:





About

The 320 - 327M Series of electronic motor protection relays provide comprehensive protection required by motors running constantly at full load and occasionally beyond their limitations. Motors driving crushers, ball mills or high inertia loads especially with long run-up starting times are ideal applications.

Thermal overload protection, running stall and jam protection, earth fault and short circuit protection along with selectable start attempt limitations are features of the relay. A built in motor load current transducer is useful for indicating the % motor load through the 420mA Loop.





Physical Address: 298 Soutter Street, Pretoria West Tel: +27 12 327 1729 Fax: +27 (0)12 327 1733 Toll Assist: 0860 10 30 41

www.newelec.co.za sales@newelec.co.za



Complete Motor Protection Solution to Suite:

About

The 320 - 327M Series of electronic motor protection relays provide comprehensive protection required by motors running constantly at full load and occasionally beyond their limitations. Motors driving crushers, ball mills or high inertia loads especially with long run-up starting times are ideal applications.

Thermal overload protection, running stall and jam protection, earth fault and short circuit protection along with selectable start attempt limitations are features of the relay. A built in motor load current transducer is useful for indicating the % motor load through the 420mA Loop.









Physical Address:

298 Soutter Street, Pretoria West

Tel: +27 12 327 1729

Fax: +27 (0)12 327 1733

Toll Assist: 0860 10 30 41

www.newelec.co.za

sales@newelec.co.za