Analog DC Drives

512C Series Up to 32A



Description

Isolated control circuitry, a host of features, and extremely linear control loop make the 512C ideal for single motor or multi-drive applications. The 512C is suitable for controlling permanent magnet or field wound DC motors in speed or torque control, and can be used "open loop" with armature voltage feedback, or with DC tach feedback for enhanced regulation and speed range. Chassis mount, IP00 rating.

Typical applications include:

- Centrifugal fans and pumps
- Extruders and mixers
- Conveyors

| Part Number | Armature Current |
|--------------|------------------|
| 512C/040/000 | 4A |
| 512C/080/000 | 8A |
| 512C/160/000 | 16A |
| 512C/320/000 | 32A |

Technical Specifications

| AC Supply Voltage | 110-115V, 220-240V or | | |
|---------------------------|---------------------------------------|--|--|
| Single Phase | 380-415V ±10%; 50-60Hz ±5% | | |
| Ambient | 0-40°C, Altitude max 1000m | | |
| Overload | 150% for 60 seconds | | |
| Speed range | 20:1 (arm v f/b), 100:1 (tach fb) | | |
| Voltage selection | Jumper selection of supply voltage | | |
| Control | Speed or torque | | |
| Diagnostic LED's | Power on, Stall, Overcurrent trip | | |
| Protection | Electronic overcurrent protection | | |
| Analog Inputs | Setpoint ramp 0-10V | | |
| | Auxiliary speed setpoint 0-10V | | |
| | Current limit 0-7.5V | | |
| | Tach gen input 0-350VDC | | |
| Analog Outputs (Buffered) | Speed 0-10V, 5mA | | |
| | Current 0-5V, 5mA | | |
| | Ramped setpoint 0-10V, 5mA | | |
| Reference supply | 10VDC (5mA) | | |
| Digital Inputs (2) | Run, Stall override | | |
| Digital Outputs (2) | Drive Healthy, Zero Spd/Zero Setpt | | |
| Potentiometer Adjustments | | | |
| Speed (2) | Maximum/Minimum | | |
| Current limit | 0-110% | | |
| Speed stability | | | |
| Ramp time (2) | Accel, Decel (1-40 seconds) | | |
| IR Compensation | | | |
| Zero speed offset | | | |

Common Specifications: 512C and 514C

Voltage Ratings:

| Supply Voltage | Armature Voltage | Field Voltage |
|----------------|------------------|---------------|
| 110 VAC | 90 VDC | 3A @ 100 VDC |
| 240 VAC | 180 VDC | 3A @ 210 VDC |
| 415-480 VAC | 320 VDC | 3A @ 360 VDC |

Standards:

C € Marked EN61800-3 (EMC) with external filter EN50178 (safety, low voltage directive)





