# Analogue DC Drives

## 512C Series

## Up to 9 kW


## Description

Isolated control circuitry, a host of user facilities and extremely linear control loop make the 512C ideal for single motor or multi-drive low power applications. Designed for use on single phase supplies, the 512C is suitable for controlling permanent magnet or field wound DC motors in speed or torque control.

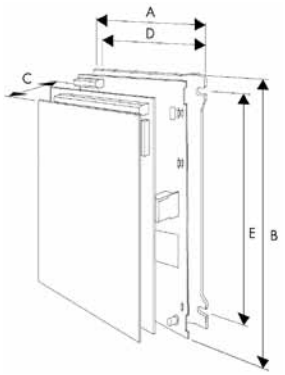
Typical applications include:

- Centrifugal fans and pumps
- Extruders and mixers
- Small paper converting machines

**Fully isolated control circuits**
**110V – 415V AC supply selection by jumpers**
**CE marked and EMC compliant**
**Multiple input speed and current setpoints**
**Zero speed and drive healthy outputs**
**Extremely linear control loops**

## Standards

CE Marked EN61800-3 (EMC) with external filter EN50178 (safety, low voltage directive) UL and cUL




## Technical Specifications

| | |
|---|---|
| Supply Voltage | 110-115V, 220-240V or 380-415V ±10% ; 50-60Hz ±5%; single phase; selection by switch |
| Ambient | 0-40°C, Altitude max 1000m |
| Overload | 150% for 60 seconds |
| **Installation/diagnostics** | Jumper selection of supply |
| • Voltage selection | voltage |
| • Control | Speed or torque |
| • Output | Speed or torque |
| • Output | 3A DC field control |
| • Diagnostics | Power on, stall detect and overcurrent LEDs |
| • Protection | Electronic overcurrent protection |
| • Speed output | Buffered 10V, 10mA |
| • Current output | Buffered 7.5V, 10mA |
| • Ramp output | Buffered (master/slave) |
| • Reference supply | 10Vcc (10mA) |
| • Inputs | Total setpoint Off |
| • Drive Outputs | Drive Healthy |
| • Output speed / setpoint | Zero Speed / zero setpoint |
| **Potentiometer Adjustments** | maximum / minimum |
| • Speed | |
| • Current Limit | |
| • Speed stability | |
| • Time | . acceleration (1-15 seconds)<br>. deceleration (1-15 seconds) |
| • IR Compensation | |

| Supply Voltage Vac | Armature Voltage Vdc | Field Voltage Vdc |
|---|---|---|
| 110 | 90 | 100 |
| 240 | 180 | 210 |
| 415 | 320 | 360 |

| Order Code | Armature Current |
|---|---|
| 512C-04-00-00 | 4 |
| 512C-08-00-00 | 8 |
| 512C-16-00-00 | 16 |
| 512C-32-00-00 | 32 |

## Dimensions

| Type | A | B | C | D | E | Weight (Kg) |
|---|---|---|---|---|---|---|
| 512C-04, -08 or -16 | 160 | 240 | 85 | 148 | 210 | 1.5/1.6/1.6 |
| 512C-32 | 160 | 240 | 123 | 148 | 210 | 2.9 |

# EMC Filters

for DC Drives

## Description

A range of custom designed optional EMC (Electromagnetic Compatibility) filters are available for use with Parker SSD Drives product range.

They are used to help achieve conformance with the EMC directive BS EN 61800-3:2004 - "Adjustable speed electrical power drive systems - Part 3".

Installation of the drive must be in accordance with the installation guidelines in the product manual. The filters comply with the relevant standards as outlined in the following table.

**1st Environment** : Drives directly connected without intermediate transformers to a low voltage (<100V rms) supply network that is part of a network that also supplies buildings used for domestic purposes.

**2nd Environment** : Establishments where there is no direct connection to a low voltage supply network that also supplies buildings used for domestic purpose.

**TN Earthing** = Grounded neutral AC supply <460V ac

**IT Earthing** = Ungrounded neutral AC supply <500V ac

**Ext. Filter** = External filter

**Ext. Filter FP** = Footprint external filter

## EMC Filters

| DC Drives | Frame | Current | 2nd Environment (Industrial) | 1st Environment (Domestic) |
|---|---|---|---|---|
| 506,507,508 | | | External FP Filter C0389115 | External FP Filter C0389115 |
| 512,514C | | 4, 8, 16A | External FP Filter C0389113 | External FP Filter C0389113 |
| | | 32A | External FP Filter C0389114 | External FP Filter C0389114 |
| DC590+ | 1 | 15A | Standard with input capacitors | External Filter CO467844U015 |
| | | 35,40A | Standard with input capacitors | External Filter CO467844U040 |
| | 2 | 70A | Standard with input capacitors | External Filter CO467844U070 |
| | | 110A | Standard with input capacitors | External Filter CO467844U110 |
| | | 165A | Standard | External Filter CO467844U165 |
| | 3 | 180A | Standard | External Filter CO467844U180 |
| | | 270A | Standard | External Filter CO467844U340 |
| | 4, 5, H | | Standard | Refer to your local sales office |

Wall Mounting : Use the mounting kits below

| Filter | Mounting Kit |
|---|---|
| CO467842U020 | BA467840U020 |
| CO467842U044 | BA467840U044 |
| CO467842U084 | BA467840U084 |
| CO467842U105 | BA467840U105 |


Drive mounted on an external footprint filter

Acces.