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.

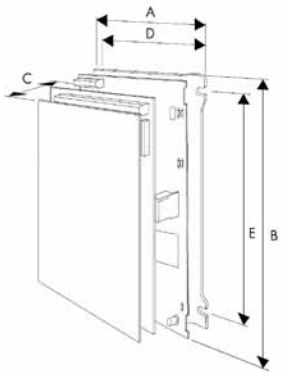
Typical applications include:

- 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) . 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