

# Analogue DC Drives

506/507/508 Series

Up to 2kW



## Description

The 506, 507 and 508 series drives break new ground in cost-effective DC motor control. Available in 3, 6 or 12A armature ratings, the feature packed minimum footprint design is ideal for speed or torque control of permanent magnet or shunt wound DC motors fed from single phase supplies.

Typical applications include:

- Conveyors, Basic speed control
- Packaging machinery

**Low cost high featured design**

**IP20 protected covers**

**Compact footprint and DIN rail mounting**

**Selectable 110V or 230V supply**

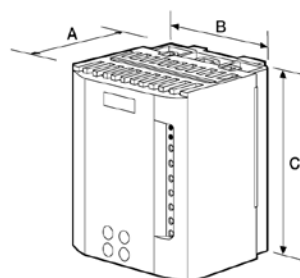
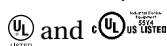
**Selectable tacho or armature voltage feedback**

## Standards

CE Marked

EN61800-3 (EMC) with external filter

EN50178 (safety, low voltage directive)



## Technical Specification

Supply voltage	110-120V, or 220-240V $\pm 10\%$ single phase 50-60Hz $\pm 5\%$
Ambient	0-45°C, Altitude 1000m
<b>Installation/diagnostics</b>	
• Environment	IP20 Protection
• Mounting	DIN rail
• Control	speed or torque
• Output	2A DC field control
• Detection	15 second stall detect
• Protection	Electronic overcurrent protection
• Signal	Drive healthy and zero speed
• Inputs	Main and trim setpoint inputs
• Ramps	Independent acceleration and deceleration ramps
• Diagnostics	Via LED
<b>Potentiometer Adjustments</b>	
• Speed	maximum / minimum
• Current limit	
• Speed stability	
• Time	. acceleration (1-15 seconds) . deceleration (1-15 seconds)
• IR compensation	
<b>Switch selectable</b>	
• Supply voltage	110/120V or 220/240V
• Speed Feedback	Tachogenerator / armature voltage feedback
• Calibration	Speed and Current

## Characteristics

Order Code	Armature Current Adc	Supply Voltage Vac	Armature Voltage Vdc	Field Voltage Vdc
506-00-20-00	0-3	110-120	90	100
	0-3	220-240	180	210
507-00-20-00	0-6	110-120	90	100
	0-6	220-240	180	210
508-00-20-00	0-12	110-120	90	100
	0-12	220-240	180	210

## Dimensions

Type	A	B	C	Weight (Kg)
506	80	105	140	0.59
507	80	105	140	0.59
508	90	105	140	0.70

# 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.

**1<sup>st</sup> 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.

**2<sup>nd</sup> 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

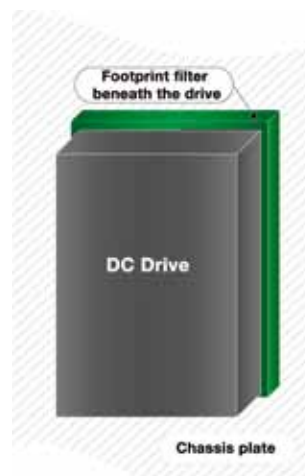
**Ext. Filter FP** = Footprint external filter

## EMC Filters

DC Drives	Frame	Current	2 <sup>nd</sup> Environment (Industrial)	1 <sup>st</sup> 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
	3	165A	Standard	External Filter CO467844U165
		180A	Standard	External Filter CO467844U180
	4, 5, H	270A	Standard	External Filter CO467844U340
				Standard

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