

514C Regen

Up to 7.5 Hp

The regenerative 514C DC drive offers full four-quadrant control of dc motors from single-phase supplies. As such it is ideal for applications involving overhauling loads or where rapid and accurate deceleration is required. Together with the non-regenerative 512C, they offer the perfect solution for lower power single motor and multi-drive applications.



INPUTS/OUTPUTS

Analog Inputs - 6; Speed Setpoint / Positive Trim Setpoint / Negative Trim Setpoint / Current Demand ($\pm 10V$); Current Limit ($\pm 7.5VDC$); Tachometer Feedback ($\pm 350VDC$ max.)

Analog Outputs - 5; Ramp Setpoint / Total Setpoint / Speed / Current Demand ($\pm 10V$); Current Output ($\pm 5V$)

Digital Inputs - 3; Start-Run / Enable (24 VDC) / Stall Override (+10VDC)

Digital Outputs - 2; Health / Zero Speed (24 VDC 50mA)

LED Diagnostics - Power On, Stall Trip, Overcurrent Trip, PLL Lock, Current Limit

Reference Supplies - 3; -10VDC / +10VDC / 24 VDC

Thermistor - 1

Potentiometer Adjustments

Maximum Speed / Current Limit / Acceleration Ramp (0-40 seconds) / Deceleration Ramp (0-40 seconds) / IR Compensation / Speed Loop Gain - Proportional / Speed Loop Gain - Integral / Current Gain - Proportional / Current Gain - Integral / Zero Speed Offset / Zero Speed Threshold

Switch Adjustments

Armature Current Calibration / Armature Voltage Calibration / Tachometer Feedback / At Zero Speed/Setpoint / Current / Meter Output / Ramp Isolate / Standstill Logic / Current Demand / Overcurrent Trip / Setpoint Comparator / Supply Voltage Select - Jumpers

FOUR QUADRANT REGENERATIVE CONTROL

TORQUE OR SPEED CONTROL

MANY SYSTEM FEATURES

EXTREMELY LINEAR CONTROL LOOPS

5570 DIAGNOSTIC COMPATIBLE

110-460V Single Phase Controller

Type	Nominal Output Power KW/Hp			Output	
	120V Supply	230V Supply	460V Supply	Current A	Field VDC
506/03/240	0.2/0.2	0.25/0.3	—	3	100/200
507/06/240	0.25/0.3	0.75/1	—	6	
508/12/240	0.75/1	1.5/2	—	12	
512C/040/000	0.2/0.25	0.3/0.5	1.1/0.75	4	
512C/080/000	0.3/0.5	0.7/1	2.2/1.5	8	
512C/160/000	0.75/1	2.2/3	4.5/5	16	
512C/320/000	1.5/2	3.7/5	9/7.5	32	
514C/040/000	0.2/0.25	0.3/0.5	1.1/0.75	4	
514C/080/000	0.3/0.5	0.7/1	2.2/1.5	8	
514C/160/000	0.75/1	2.2/3	4.5/5	16	
514C/320/000	1.5/2	3.7/5	9/7.5	32	

TECHNICAL SPECIFICATION

506/507/508

Power Supply - Main supply; 110-240 VAC $\pm 10\%$; Single-phase 50-60 Hz ± 5 Hz

512C/514C

Power Supply - Main supply; 110-480 VAC $\pm 10\%$; Single-phase 50-60 Hz ± 5 Hz

Auxiliary supply; 110-120, 220-240, or 380-415 (512C only) VAC $\pm 10\%$ user selectable.

All Drives

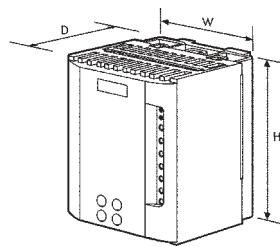
Field Supply - 0.9 X Main Supply voltage; 2A for 506/507/508 and 3A for 512C/514C maximum

Ambient - 0-45°C (32-113°F), up to 1000m (3280 ft) ASL without derating

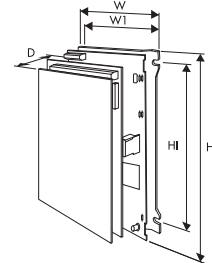
Overload - 150% for 60 seconds

Dimensions

Type	Size			Mounting		Weight Kg/Lbs
	H	W	D	H1	W1	
506 and 507 508	140/5.5	104/4.1	79/3.1 89/3.5	140/5.5	50/2.0	0.6/1.3 0.7/1.5
512C (4 and 8 A)	240/9.4	160/6.2	90/3.3	210/8.21	48/5.8	1.5/3.3
512C (16A)			1.6/3.5			
512C (32A)			1.6/3.5			
514C (4 and 8 A)			1.6/3.5			
514C (16 and 32 A)			130/4.8			3/6.6



506/507/508



512C/514C

STANDARDS

The 506/507/508, 512C and 514C series meets European and North American standards when installed in accordance with relevant product manual.

