

Analog DC Drives

514C Series
Up to 32A



Description

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. 514C can be used “open loop” with armature voltage feedback, or with DC tach feedback for enhanced regulation and speed range. Chassis mount, IP00 rating.

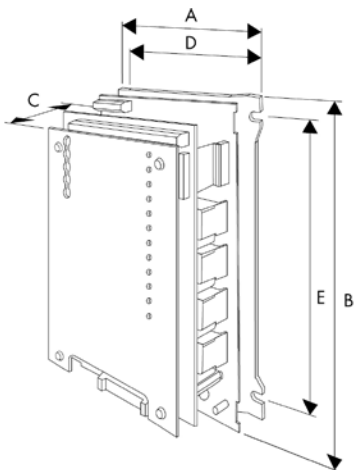
Typical applications include:

- Machine tool spindles
- Wire drawing machines
- Winders/Reelers

Part Number	Armature Current
514C/040/000	4A
514C/080/000	8A
514C/160/000	16A
514C/320/000	32A

Technical Specification

AC Supply Voltage Single Phase	110-480V ±10%; 50-60Hz ±5%
Ambient	0-40°C, Altitude max 1000m
Overload	150% for 60 seconds
Voltage selection	Jumper selection of supply voltage
Speed Control	20:1 (arm v f/b), 100:1 (tach fb)
Torque Control	2% accuracy, closed loop w/PI
Diagnostic LED's	Power on, Stall, Overcurrent, PLL lock, Current limit
Protection	Electronic overcurrent protection
Analog Inputs	Setpoint ramp 0-10V Pos/neg trim setpoint 0-10V Current limit 0-7.5V Current demand 0-10V Thermistor <200Ω OK, >1800Ω overtemp Tach gen input +/-350VDC
Analog Outputs (Buffered)	Setpoint ramp +/-10V, 5mA Total setpoint +/-10V, 5mA Speed +/- 10V, 5mA Current demand +/-10V, 5mA Current meter +/-5V, 5mA
Reference supply (2)	+10VDC, -10VDC (5mA)
Digital Inputs (3)	Run, Enable, Stall override
Digital Outputs (2)	Drive Healthy, Zero Spd/Zero Setpt
Potentiometer Adjustments	
Speed (3)	Maximum, Zero, Zero threshold
Current limit	0-110%
Speed loop (2)	Proportional, Integral
Ramp time (2)	Accel, Decel (1-40 seconds)
IR Compensation	
Current loop (2)	Proportional, Integral



Dimensions (in/mm):

Type	A	B	C	D	E	Wt (lb/kg)
512C/040, /080, /160, 514C/040, /080	6.3/160	9.4/240	3.5/90	5.8/148	8.3/210	3.5/1.6
512C/320, 514C/160, /320	6.3/160	9.4/240	5.1/130	5.8/148	8.3/210	6.6/3.0

Note: Color of front panel may vary from illustration