

# DCH401-1.5

## 4Q PWM Microprocessor-based Chassis Adjustable Speed Drive for Low Voltage PMDC Brushed Motors

The DCH Series combines an AC to DC switching power supply with a regenerative PWM drive, creating an all in one solution to applications requiring control of 12 or 24 VDC motors when only 115 or 230 VAC power is available. The microprocessor design allows the drive to be programmed for custom applications or routines to meet OEM needs. With an isolated front end, this series is compatible with a 0-5 or 0-10 VDC analog from any PLC and with its 8-bit on-board microprocessor, the DCH can be customized in many applications to even replace a PLC.



RoHS COMPLIANT

Model Number	Enclosure	Input Voltage (VAC)	Output Voltage (VDC)	Maximum Current (ADC)	Peak Current (ADC)*	Power Range		Reversing	Isolation
						HP	kW		
DCH401-1.5	Chassis	115	0 - 12	3.0	4.0	1/50 - 1/25	.02 - .03	Regenerative	0 - 5 VDC
			0 - 24	1.5	2.0				
		230	0 - 12	3.0	4.0				
			0 - 24	1.5	2.0				

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DC DRIVES (LOW VOLTAGE) - 4Q Chassis AC Input

### SPECIFICATIONS

AC Line Voltage..... 115 / 230 VAC, ± 10%, 50/60 Hz, 1Ø  
 Accel / Decel Time Range..... 0.5 - 15 seconds  
 Form Factor .....1.05  
 Speed Range ..... 80:1  
 Load Regulation ..... 1% of base speed or better  
 Input Impedance ..... >1M Ω  
 Analog Signal Range ..... 0 - 5, 0 - 10 VDC  
 Ambient Temperature Range..... 10°C - 40°C

### FEATURES

- Microprocessor-based:** Allows custom programming for OEMs (1 Analog, 4 Digital)
- All-in-One Package:** Combines a custom regen-capable switching power supply with a low voltage drive
- True Low Voltage Output:** Allows control over low voltage motors without the negative effects of current spikes or a large BUS voltage associated with typical 115/230 VAC SCR and PWM controls
- 4Q Reversing:** Regenerative / 4-Quadrant drives have the ability to perform quick and contactorless braking and/or reversing-on-the-fly
- Isolated Logic:** Allows floating or grounded 0 - 5 or 0 - 10 VDC signals
- Stopping Modes:** Forward and reverse inhibits can be set for N.O. or N.C. to brake to a stop. Can be used for rapid starting and stopping
- Diagnostic LEDs:** Power, Current Limit

### TRIM POTS

Forward Acceleration	Reverse Acceleration
Forward Current Limit	Reverse Current Limit
Forward Maximum Speed	Reverse Maximum Speed
IR Compensation	

### ACCESSORIES

- KTP-0001:** Potentiometer kit
- KTP-0013 (Included):** Connector and mounting kit