



RoHS COMPLIANT

# DCN Series

## 1Q PWM Microprocessor-based Adjustable Speed Drive for Low Voltage PMDC Brushed Motors

The DCN Series of drives are reliable low voltage drives that provide both speed control and current limiting in low HP applications. Roughly the size of a quarter, these drives are being implemented in applications in which the customer traditionally powers the motor directly off a power supply or battery, which doesn't allow for control or protection of the motor. The drive allows the OEM speed control of their motor, but also provides a current limit trim pot to protect the motor in the case of an overload or jam.

Model Number	Enclosure	Maximum Current (ADC)	Peak Current (ADC)*	Input Voltage (VAC)	Output Voltage (VDC)	Power Range		Reversing	Isolation
						HP	kW		
DCN100-1.5	Chassis	1	1.5	12	0-12**	1/100 - 1/60	.01 - .02	No	No
DCN200-1.5	Chassis	1	1.5	24	0-24**	1/50 - 1/30	.02 - .03	No	No
DCN300-6	Chassis	3	6	12	0-12	1/100 - 1/30	.01 - .02	No	No
				24	0-12	1/100 - 1/30	.01 - .02		
					0-24	1/50 - 1/15	.02 - .05		

\*Peak time of 1 minute. \*\*Output Voltage = Input Voltage - 1 VDC



### SPECIFICATIONS

Source Voltage DCN100 .....	8 - 16 VDC
DCN200 .....	16 - 32 VDC
DCN300 .....	10 - 32 VDC
Accel/Decel Time .....	0.5 seconds
Form Factor .....	1.01
Speed Range .....	80:1
Load Regulation .....	1% of base speed
Input Impedance .....	>100K Ω
Analog Signal Range (DCNx00-1.5) .....	0 - 3.3 VDC
Analog Signal Range (DCN300-6) .....	0 - 5 VDC
Ambient Temperature Range .....	10°C - 40°C

### TRIM POTS

- Current Limit
- Maximum Speed (DCN300 model)

### FEATURES

- Microprocessor-based:** Allows custom programming for OEMs
- Diagnostic LEDs:** Power, Current Limit
- Compact Footprint:** Fits in places where you never thought a drive could
- Ideal for Battery Powered Equipment:** Maintains both set and / or variable speed even as battery voltage declines  
Extends total running time of equipment
- Reverse Polarity Protection:** Drive is not damaged when connected to the battery or power supply backwards
- Smart Fuse:** Limits the torque to prevent plastic gears from stripping in small gearmotors

### ACCESSORIES

- KTP-0130 (DCNx00-1.5):** Potentiometer and wire harness kit
- KTP-0149 (DCN300-6):** Potentiometer kit