


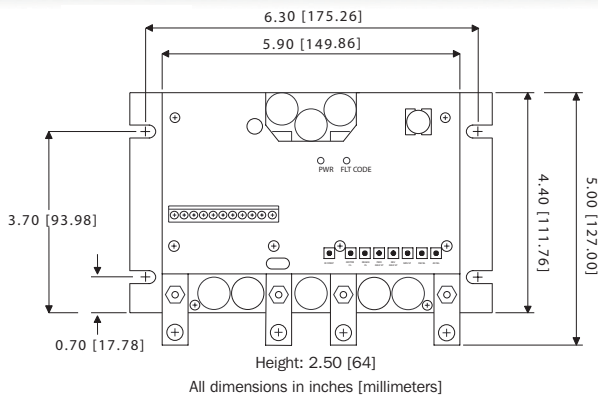


| Drive | Input Voltage (VDC) | Output Voltage Range (VDC) | Cont. Armature Current | 1 Min Peak Armature Current | HP Rating @ 12 or 36 VDC Output | HP Rating @ 24 or 48 VDC Output | Enclosure | Reversing | Field Supply (VDC) | UL Listed  | CSA  | CE TUV  |
|----------------|---------------------|----------------------------|------------------------|-----------------------------|---------------------------------|---------------------------------|-----------|-----------|--------------------|---|---|--|
| DC120-12/24-4Q | 12 / 24 | Up to 100% of input | 60 | 120 | 1/12 - 2/3 | 1/6 - 1 1/2 | CHASSIS | YES | - | - | - | - |
| DC250-12/24-4Q | 12 / 24 | Up to 100% of input | 120* | 250 | 1/6 - 1 1/2 | 1/3 - 3 | CHASSIS | YES | - | - | - | - |
| DC240-36/48-4Q | 36 / 48 | Up to 100% of input | 100** | 240 | 1/2 - 3 3/5 | 1 - 7 1/5 | CHASSIS | YES | - | - | - | - |

* Derate by 15% when mounted horizontally.
** Derate by 20% when mounted horizontally.

DC240-36/48-4Q & DC250-12/24-4Q DIMENSIONS



Dimensions of drives not shown above can be found on page 59.
Wiring diagrams can be found on page 69.

FEATURES

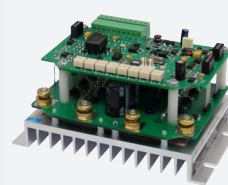
- **Low voltage motor operation:** Designed for 12, 24, 36, and 48 VDC motors.
- **4Q reversing:** Regenerative / 4 Quadrant drives have the ability to perform quick and contactorless braking and/or reversing on-the-fly! Change the 4Q to a 2Q for a lower cost regenerative stopping (no reversing) model.
- **Speed range, regulation, & form factor:** 1% of base speed regulation with a 100:1 (80:1 for DC120) speed range and a 1.01 form factor over the entire range.
- **High continuous current:** Up to 60, 100, or 120 amps continuous, robust bus bars used to handle the current. Adding fans for sufficient airflow can increase the current rating by more than 25%.
- **User adjustable calibration pots:** Minimum Speed, Forward Maximum Speed, Reverse Maximum Speed, Motor Current Limit, Regen Current Limit, IR Compensation, Acceleration and Deceleration.
- **Diagnostic LEDs:** Power, current limit, under voltage, over voltage, overheat and short circuit.
- **Stopping modes:** Brake (N.O.) or coast (N.O.) to a stop.
- **100% Duty Cycle:** Drive has capability of outputting 100% of battery voltage.
- **Short circuit protection:** Unit protects itself against a shorted motor.
- **Sleep mode:** Drive enters sleep mode when disabled to extend battery life.
- **Temperature sensor:** Current limit automatically reduced if controller heats up.
- **Ideal for battery powered equipment:** Maintains both set and/or variable speed even as battery voltage declines. Extends total running time of equipment.
- **RoHS:** All DC120, DC240 and DC250 series models are RoHS compliant.

The DC-4Q series of drives are DC in / DC out PWM chassis drives capable of four quadrant reversing and braking. This series of drives is ideal for portable battery powered equipment. The DC-4Q has a sleep mode for extended battery life while not in use. The four quadrant capability allows simple connections for fast reversing and/or braking without the need for bulky contactors or braking resistors.

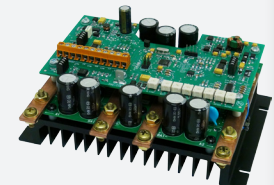
The DC-4Q series of drives have adjustments for IR Compensation, Motoring Current Limit, Regenerative Current Limit, Forward Max Speed, Reverse Max Speed, Min Speed, Deceleration and Acceleration Time. These drives are microprocessor based meaning these ranges can be reprogrammed to meet any custom needs. The DC-4Q Family also has Power and Fault LEDs, including current limit, under voltage, over voltage, overheat, and short circuit.

The DC-4Q series is available in three models, two for 12-24 VDC systems, the other is designed for 36-48 VDC systems. For simplicity and safety, no jumpers or switches are required for selecting voltages.

See page 53 for an in-depth comparison of the different low voltage drives.



DC120-12/24-4Q



DC250-12/24-4Q
DC240-36/48-4Q