



US Drives Inc.

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ENGINEERING DATA

REGEN MODULE

Electrical Specifications:

Rated Input Voltage:	200-250Vac, 380-500Vac, 500-600Vac -10% of minimum, +10% of maximum.
Frequency Tolerance:	47-63 Hz
Number of Phases:	3
Efficiency:	99% or greater
Max. Short Circuit Current Rating:	200,000A rms symmetrical, 600 volts (when used with AC input line fuses specified in tables 1 to 3).
Noise Immunity:	IEEE C62.41-1991 Category B (Formerly known as IEEE 587) - 6000V tests EN50082-1, 2 Generic Immunity Standards

Environmental Specifications:

Ambient Temperature:	-10°C to 55°C (14°F to 131°F) Nema type 1 enclosed.
Storage Temperature:	-40°C to 70°C (-40°F to 158°F) Nema type 1 enclosed.
Altitude:	Sea level to 3000 Feet [1000m] without derating.
Humidity:	95% relative humidity non-condensing.
Vibration:	9.8m/sec ² (1.0G) peak.

Physical attributes:

Mounting:	Though hole or panel mount.
Nema Rating:	Type 1 (IP20) as standard, Type 12 (IP54) optional.
Construction:	Steel construction (reduces E.M.I.)

Control I/O:

- 2 Digital Inputs: Regen Enable & Regen Reset
- 2 Digital Outputs: Dry contacts rated 115Vac @ 5A; 30Vdc @ 3.5A.
- 24Vdc source: Use to power operator pushbuttons and US Drives option boards: 24Vdc @ 100 mA max.

Protective Features:

- Peak output current monitoring to protect against line-to-line shorts and line-to-ground shorts.
- Ground fault monitoring.
- Heatsink over-temperature monitoring.
- AC line & DC bus over-voltage protection.
- AC line & DC bus under-voltage protection.
- Control power supply power ride-thru.
- Internal power supply monitoring.
- AC phase loss detection.

Standard Regen Features

- Latest generation IGBT.
- Nema type 1 (IP20) as standard for all models.
- 55°C ambient with standard Nema type 1 (IP20) enclosure.
- High voltage ratings: 250Vac+10% , 500Vac+10% models, and 600Vac+10% models
- Input line suppression: Metal oxide varistors for line-to-line and line-to-ground voltage surge protection.
- No programming or hardware jumper for all voltages.