



Quad Plus™

5000 HP 24 Pulse DC Drive System Specs

| <u>Motor</u> | <u>Transformer</u> | <u>Drive Enclosure (Two total)</u> |
|--|---|---|
| <ul style="list-style-type: none">• 5000 HP Shunt Wound DC (Qty 2 – Tandem)• 40,385 lbs./ft. Torque (constant torque from 0 RPM to 650 RPM)• 700 VDC• 5800 DC FLA Armature (total)• 40 DC FLA Field (site dependent setting)• 650 RPM base speed• Insulation Class F• Originally manufactured by EMD as locomotive generator• Re-engineered by Quad Plus to be used as a recycling duty DC motor | <ul style="list-style-type: none">• 6000 KVA• Medium voltage primary<ul style="list-style-type: none">◇ Site dependent. Transformer is custom designed per site specs• Special Rectifier duty design• Impedance as specified by Quad Plus• Two single 3000 KVA three winding transformers• 600 VAC Secondaries | <ul style="list-style-type: none">• 24 Pulse Design• Four custom designed DC chokes (mounted external to drive enclosure)• 600 VAC Input• Designed for 150% maximum overload• 72 ° Ambient Temp |

Operational Data (Entire System)

Note: Values are listed in DC Amps and AC KVA. Use KVA to calculate primary AC amps as required.

| | |
|------------------------------|--------------------------|
| FLA: | 5800 DC Amps (4704 KVA) |
| Empty Mill Starting Current: | 1740 DC Amps (1412 KVA) |
| Average Running Current: | 4930 DC Amps (3998 KVA) |
| Maximum Potential Overload: | 8120 DC Amps (6586 KVA)* |
| Average Power Factor: | 0.90** |
| Voltage Tolerance: | +/- 10% |

*Maximum overload allowed for 60 continuous seconds once every 15 minutes.

**DC motor power factor is directly proportional to RPM of the machine. Power Factor is dependent on operation of the machine.

System is available as 12 pulse or 24 pulse (as listed) designs. Design type is chosen with completion of power study.

About Quad Plus

Quad Plus provides industrial control systems, solutions, and services. We offer an uncompromising level of service and expertise to maintain our customers' productivity. Our extensive process knowledge spans from the utility pole to the motor shaft. With an on-going commitment to follow-up service, parts, and repairs, we are all you need for continued success.

We are recognized in the field as a leader in drive and motor control. Solutions are designed in-house through research and development tailored to meet each client's specific needs. Our design staff includes electrical, mechanical, civil/structural, chemical, and controls.



FACILITIES

- Chicago, IL
- Atlanta, GA
- Appleton, WI
- Houston, TX

SATELLITE FACILITIES

- Boston, MA
- Evansville, IN
- Fort Myers, FL
- Mobile, AL
- St. Louis, MO
- Bend, OR
- Los Angeles, CA
- Kansas City, MO

LARGE DRIVES - AUTO SHREDDING



INDUSTRIAL APPLICATIONS



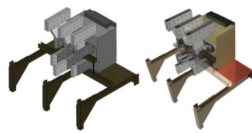
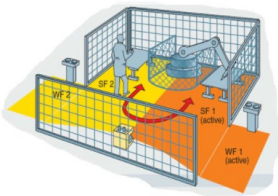
OIL, GAS and MARINE



POWER SERVICES



INDUSTRIAL SAFETY SERVICES



**Modern Thinking
Better Design**



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