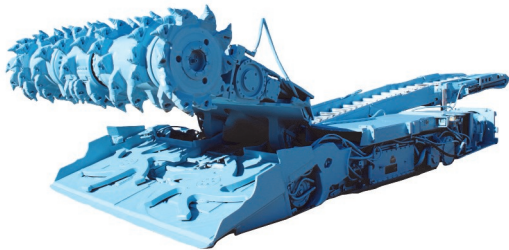




## JD400 DIGITAL AC / DC DRIVE

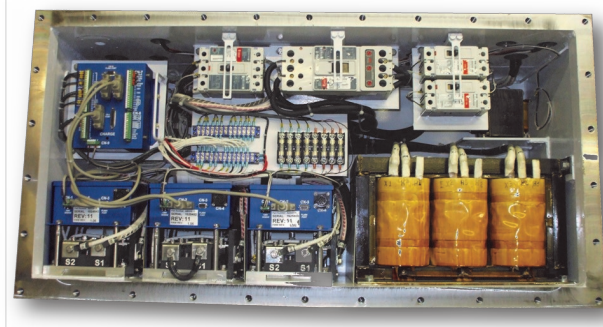
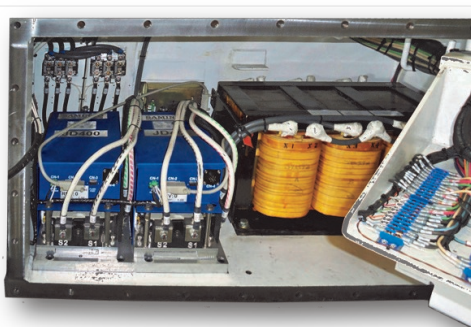
(FOR CONTINUOUS MINERS AND SHUTTLE CARS)



**Continuous Miner  
Two Drive System**



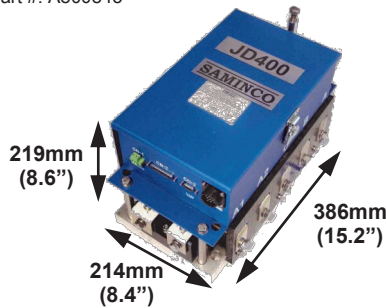
**Shuttle Car  
Three Drive System**



See videos of our products in operation at [www.samincoinc.com](http://www.samincoinc.com)

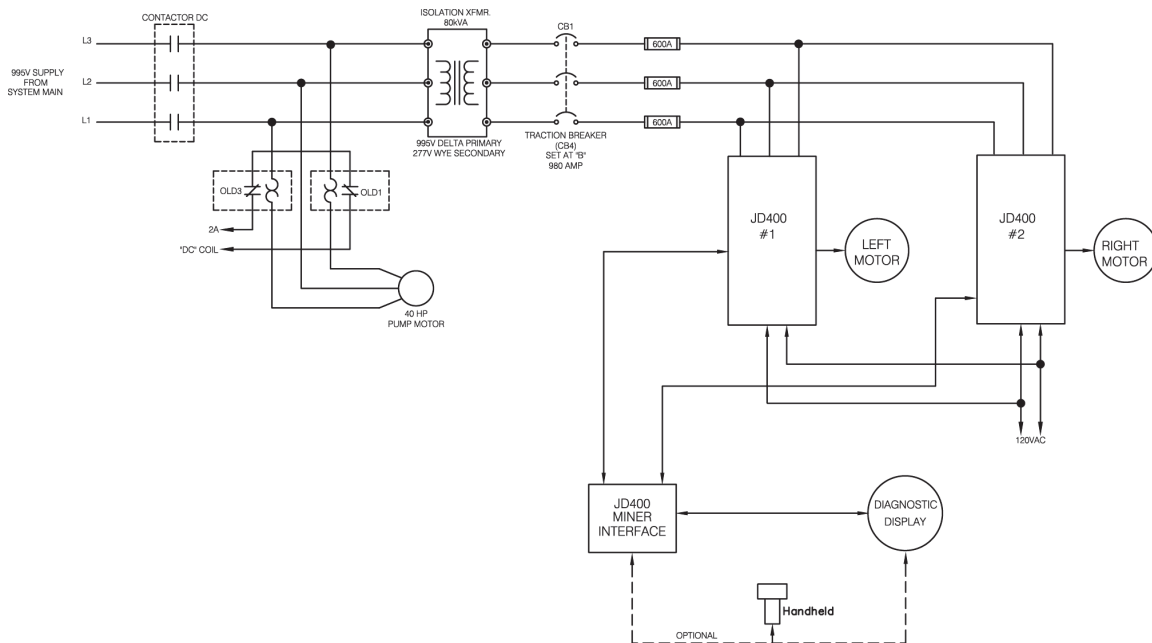
**JD400 TRACTION DRIVE FOR CONTINUOUS MINERS**  
**ELECTRICAL SPECIFICATIONS**

Part #: A800843



Rated Power	JD400 Continuous Miner	
	Input (AC)	Output (DC)
Power @ Rated Volts	68kVA @ 480V	50kW @ 500V
Frequency Range	50/60 Hz	DC
Voltage Range	3PH 480VAC	0 - 500VDC
AMPS @ Rated Power	82A @ 68kVA	100A @ 50kW (400 peak)

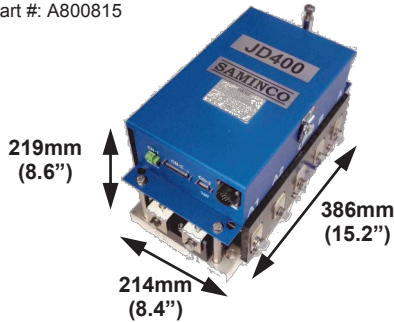
**SUGGESTED CONNECTION DRAWING (SYSTEM # A800822)**



Description	Specifications for Continuous Miner System (800843)
<b>Power</b>	
Output Current	140 A Continuous (40HP Motor)
20 Seconds Overload Capability	300% (400A) Continuous Rating Heatsink Temperature <90°C
Main Voltage	240V to 550VAC 3 phase 50/60Hz
Control Supply	120VAC
<b>Control I/O</b>	
Eight Control Discrete Inputs	120VAC Rating (Control Inputs)
One Analog Input	200:5 / 100:5 Cutterhead Feedback
<b>Communication</b>	
CAN-BUS	System communication, Handheld programmer
RS-232	Firmware update programming port (CN3 on the JD400)
<b>Protective Functions</b>	
Thermal Protection	Heat Sink Over-temperature Alarm at 90C and Shutdown at 95°C
Motor Overload	Electronic Time trip
Overcurrent Protection	Instantaneous electronic over current protection (600A)

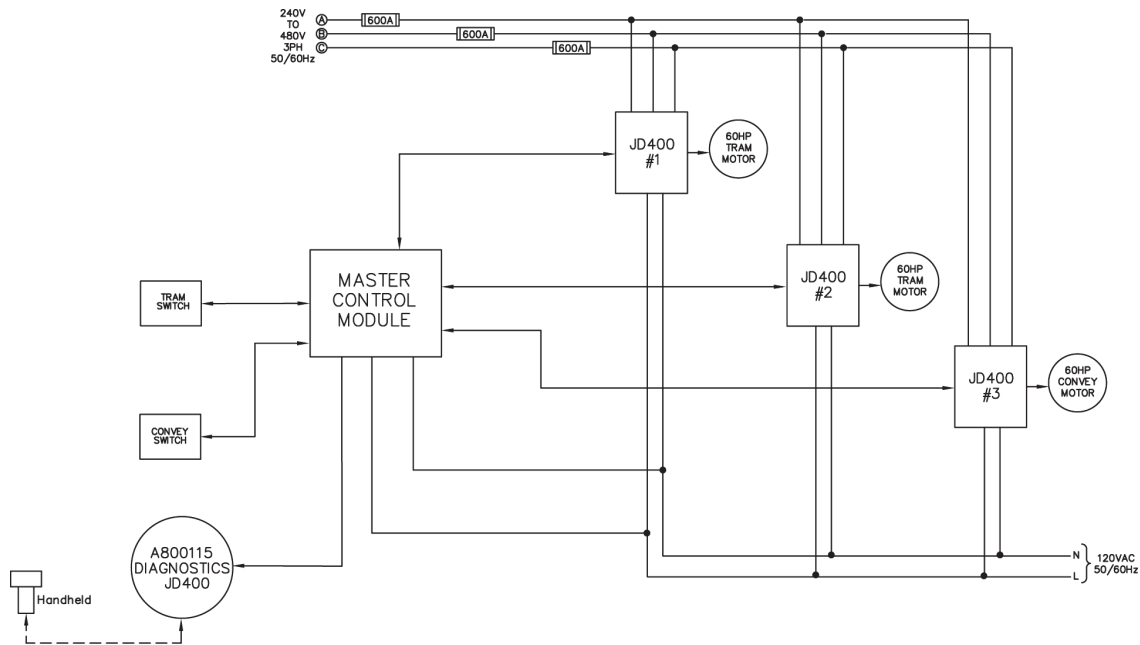
**JD400 TRACTION DRIVE FOR SHUTTLE CARS**  
**ELECTRICAL SPECIFICATIONS**

Part #: A800815



Rated Power	JD400 Shuttle Car	
	Input (AC)	Output (DC)
Power @ Rated Volts	68kVA @480V	50kW@500V
Frequency Range	50/60 Hz	DC
Voltage Range	3PH 480VAC	0 - 500VDC
AMPS @ Rated Power	82A @ 68kVA	100A @ 50kW (400 peak)

**SUGGESTED CONNECTION DRAWING (SYSTEM # A800821)**



Description	Specifications for Shuttle Car System (A800815)
<b>Power</b>	
Output Current	140 A Continuous (40HP Motor)
20 Seconds Overload Capability	300% (400A) Continuous Rating Heatsink Temperature <90°C
Main Voltage	240V to 480VAC 3 phase 50/60Hz
Grounding Configuration	Full Floating, Grounded Positive, or Grounded Negative
Control Mode	Phase angle control
<b>Control I/O</b>	
Three Discrete Inputs	24V DC Rating (FWD, REV, Neutral)
Two Analog Inputs	0 to 4V DC (Reference Tram RHT and LHT, Reference Conveyor)
<b>Communication</b>	
CAN-BUS	System communication, Handheld programmer
RS-232	Firmware update programming port (CN3 on the JD400)
<b>Protective Functions</b>	
Thermal Protection	Heat Sink Over-temperature Alarm at 90C and Shutdown at 95C
Motor Overload	Electronic Time trip
Over current Protection	Instantaneous electronic over current protection (600A)

**OPTIONS\* FOR THE  
JD400**

Part Name	Description	SAMINCO Part Number
<b>JD400 Continuous Miner</b>		<b>A800822</b>
Drive	Digital 240-550VAC	A800843
Interface	Master Control Module	A800817
Diagnostic Display	Diagnostic Display with programming port	A800348
Cable	Cable JD400 to MCM	W6004-067
Cable	Cable 25CON Sub-D 36"	W6004-001
Cable	Cable 25CON Sub-D 72"	W6004-067
<b>JD400 Shuttle Car</b>		<b>A800821</b>
Traction Drive	Digital 240-550VAC	A800815
MCM	Master Control Module	A800816
MCM	Master Control Module with Proximity Detection Feature	A800825
MCM with joystick	Optional Master Control Module with joystick	A800826
Cable	Cable 25CON Sub-D 36"	W6004-001
Cable	Cable Foot Switch to MCM 4CON 22AWG 30'	W6004-181
Cable	<i>If replacing JS400 system:</i> CM to JD400 drive 18CON 22AWG 16pin 72"	W6004-160
Cable	<i>If replacing JS400 system:</i> MCM to JD400 18CON 22AWG 16pin 72" with flying leads	W6004-161
Fuse	Fuse 600A 300VDC	F9002-086
FS400	Foot Switch	A800498
CS300	Conveyor speed control hand switch (speed reference + FWD/REV + Neutral)	A800300
CS305	Conveyor speed control hand switch detented travel 13 position	A800305
Diagnostic Display	Diagnostic Display with programming port	A800115
<b>Parts Available for both systems</b>		
Handheld Programmer	Provides read and write access to firmware parameter sets	A800220-1

\*See your salesperson for all available options and configurations.

**HIGHLIGHTS OF THE JD400**

- Microprocessor controlled DC motor drive with advanced diagnostics and programmable features
- Regenerative braking capability and solid state reversing included in compact module
- Dual mode operation:
  - Current control for torque sharing (shuttle cars)
  - Voltage control for dual traction (continuous miners)

**GENERAL SPECIFICATIONS OF THE JD400**

**Input Supply:** 240-550VAC, 3 phase, 50/60 HZ \*  
**Max Output Voltage:** 0-99% of rectified input voltage (adjustable)  
**Regen Current:** up to 80% of motor rating or 100A  
**Control Supply:** 120VAC, single phase (supplied separately)

\* Other voltages available.  
Please contact factory for details.

Visit our website at [www.samincoinc.com](http://www.samincoinc.com) or email us at [sales@samincoinc.com](mailto:sales@samincoinc.com)



**FLORIDA**

*Headquarters*

10030 Amberwood Rd. Fort Myers, FL 33913  
 PH: 239-561-1561  
 FAX: 239-561-1502

**WEST VIRGINIA**

*Service Branch*

517 Virginia Ave. Huntington, WV 25701  
 PH: 304-523-4700  
 FAX: 304-523-4039

**COLORADO**

*Service Branch*

Cedaredge, CO  
 PH: 940-623-0000

**SOUTH CAROLINA**

*Service Branch*

Anderson, SC  
 PH: 304-654-9054

**INTERNATIONAL LOCATIONS:**

**Boksburg, South Africa** PH: +27 11 397 6026  
**Australia** PH: +61 2 9899 6857  
**China** PH: +86 15140090694  
**Poland**