

**Mine Duty VFD**  
 (Variable Frequency Drive)  
**VF1-75**  
 75KW 480VAC

**SAMINCO**  
 ELECTRIC TRACTION DRIVES



- Compact, 75KW AC/AC or DC/AC traction drive for continuous miners, shuttle cars and locomotives
- Wide range input voltages available: 480VAC, 600VAC or 550VDC (nominal)
- PWM Flux Vector inverter using the latest NPT (non-punch through) IGBT technology
- Flux Vector torque control mode provides differential traction control for superb cornering for dual motor shuttle car systems
- Rugged, short circuit proof power circuit provides excellent long term reliability
- Comprehensive display housed in XP headlight enclosure
- Multiple control options: standard analog foot switch, Radio Remote Control, Operator Station, PLC, CAN-Bus (SAE J1939) or serial port (mod-bus protocol)
- User-friendly parameter set up and diagnostics—same interface as A400, Q750 and Q800 drives

**Specifications:**

<b>Input Voltage:</b>	480VAC - 3 Phase 50/60Hz (with Saminco VFD Rectifier Unit) 600VAC - 3 Phase 50/60Hz (with Saminco VFD Rectifier Unit) 550VDC (520VDC—700VDC)
<b>Input Current at Full Load:</b>	150A (460V)
<b>Rated Output Current:</b>	135A AC continuous, 200A for 60 seconds
<b>Nominal Motor Rating:</b>	75kW continuous ; Base Speed – 1500RPM to 3000RPM for 4 pole motor
<b>Output Frequency:</b>	0.1 to 200Hz
<b>Control Modes:</b>	Open loop V/Hz, closed loop V/Hz, closed loop Flux Vector
<b>Starting Torque:</b>	150% of Motor nominal rating below 1Hz, (with encoder)
<b>Input Control:</b>	0 to 5V analog; Digital operator; RS232 or RS485 Serial Link (Modbus Protocol) CAN-Bus (SAE J1939)
<b>Diagnostics:</b>	-Alpha-numeric readout of main functions, operating parameters, and faults in plain English, on hand-held operator
<b>Options:</b>	- Resistive Braking Module for 4 quadrant control - Input AC/DC rectifier for multiple drives - Remote Control via wireless link

**WWW.SAMINCOINC.COM**

Fort Myers Florida  
 Phone: (239) 561-1561 Fax: (239) 561-1502

Lavalette West Virginia  
 Phone: (304) 523-4700 Fax: (304) 523-4039

Norris City Illinois  
 Phone: (618) 599-2567 Fax: (618) 378-2402