

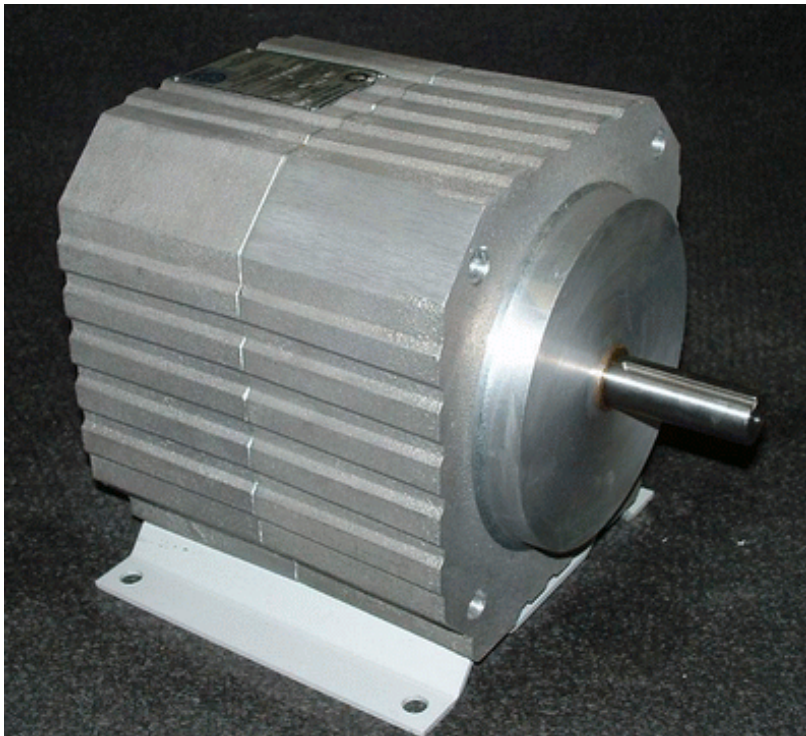
CERAMAG™
C3 750 Explosion Proof Generator



HAZARDOUS LOCATION DC POWER GENERATOR
C1D2 GP C,D

Index

1. Introduction and specifications
2. Installation
3. Wiring
4. Operation



Ceramag Generator
Series C3-750
Owners manual

rev 1.1 11/05

Features:

- Class 1 Division 2 (division 1 pending)
- Sealed maintenance free design
- Easy installation or field retrofit
- All weather operation
- Voltage regulation does not change with speed
- 2 year warranty on generator, 1 year controller
- Adjustable regulated voltage and current set points
- Operates over wide and changing speed ranges
- Corrosion resistant housing and winding
- Scalable with multiple units

Applications:

Electrical power for:

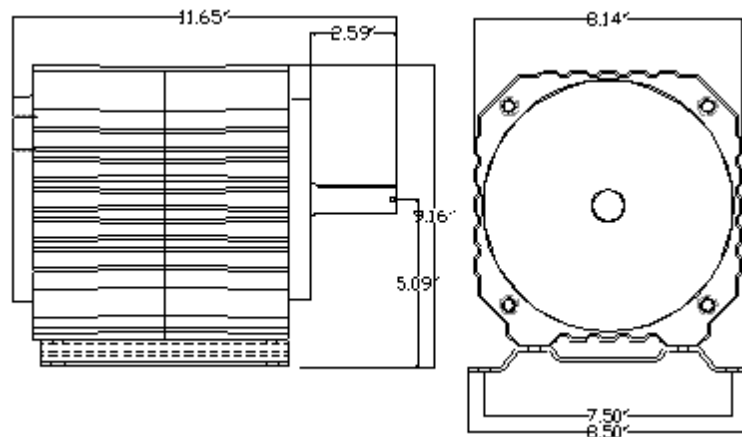
- Ignition
- Instrumentation
- Safety systems
- Communications
- SCADA
- Battery back up

Installations:

- Natural gas compressors
- Oil pump jacks
- Any rotating shaft

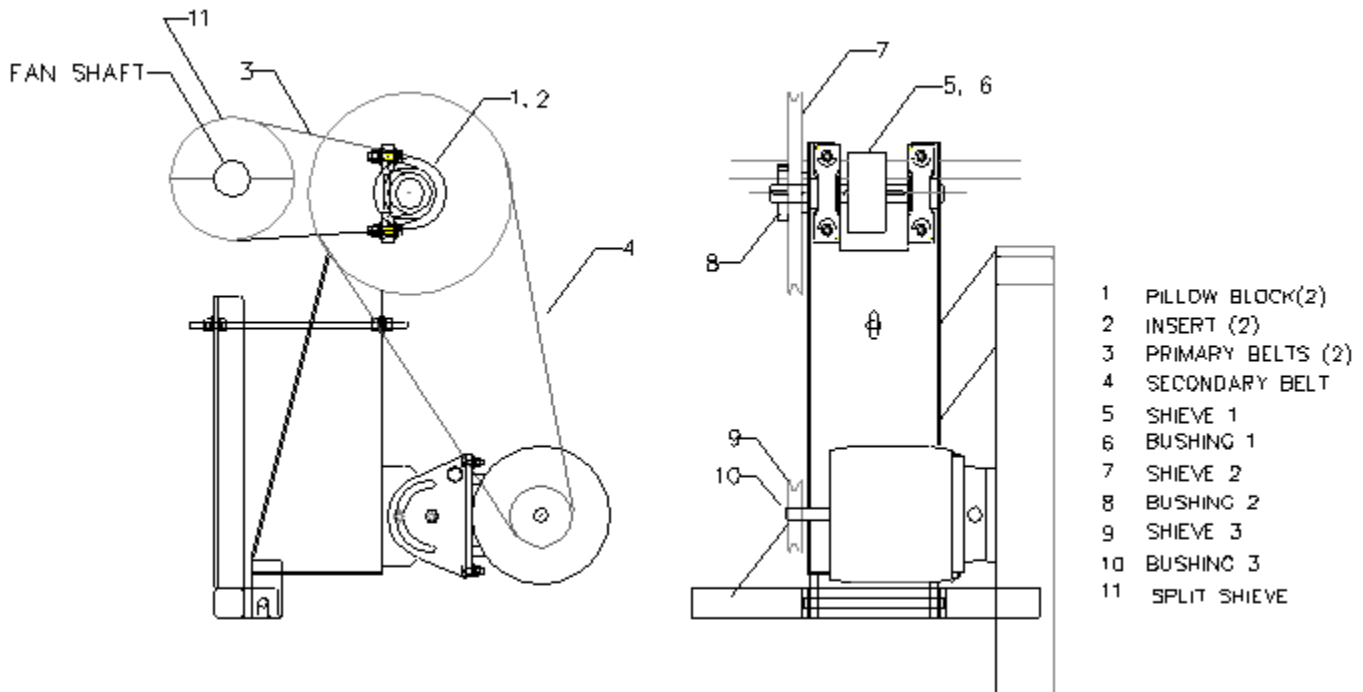
CERAMAG C3-750 Specifications

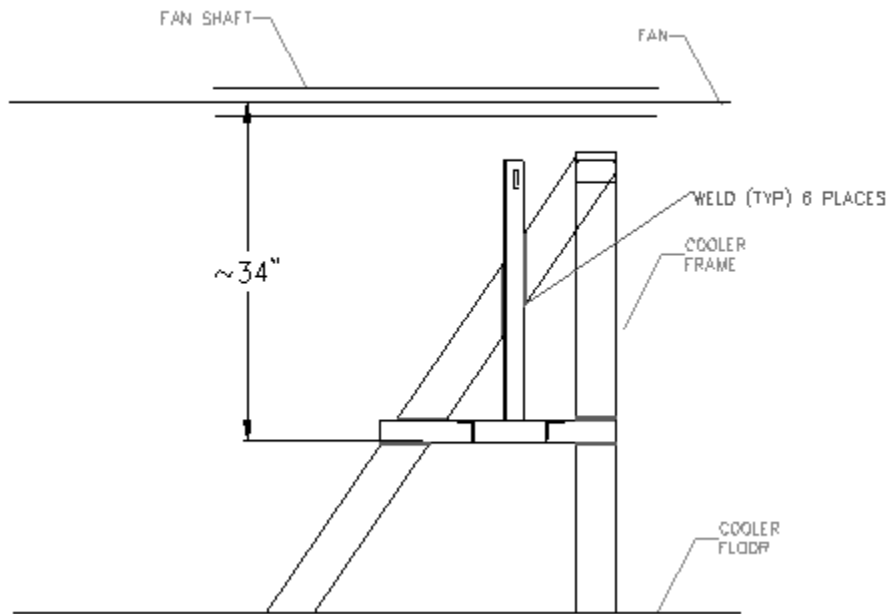
Generator	C3 750
AC Volts	30-65 Vac 3 Phase
AC Current	20
Phase	3
Frequency (Hz)	175-260
Drive Speed (rpm)	1500-2000
Classification	Class 1 Division 2 gp C ,D (div 1 pending)
Certification	CSA
Controller	
Output Volts DC	12 - 30 (user setable via front panel control)
Output current	25A max
Maximum controller power	750W



Cooler installation

1. Locate "T" bracket against forward pillow block support, flush with the forward edge of the support and parallel with the fan shaft. Clamp in place.
2. Weld bracket in 6 places as indicated in FIG 1.
3. Mount pre-assembled generator stand to "T" bracket by sliding tabs over mounting bar. Hold upright and install the 3/4" threaded rod provided into the generator stand and "t" bar tensioning holes.
- 4 Mount the split shieve on the fan shaft in line with the center shieve on the generator stand.
5. Shorten the 3/4" tensioning rod to its shortest position and install the link belt around the split shieve and the generator stand center shieve.
6. Tension the link belt with the threaded rod (remove links if you can't place enough tension on the belt)
7. Adjust the pivot frame to its most upright position and tighten in place.
8. Mount the CERAMAG generator and tighten the nuts and washers provided down on the prepared studs.
9. Install the 3VX belt between the jog shaft secondary shieve and the CERAMAG shieve, loosen the pivot frame bolts and tension the generator belt with the pivot frame, tighten the pivot frame bolts





NOTE:

1. Link belts stretch. After the first few hours of operation the unit should be shut down and the belts re-tensioned. Especially if you are noticing a drop-off in produced generator voltage.
2. DO NOT OVER TENSION GENERATOR DRIVE BELTS. The only wear items in a CERAMAG generator are the bearings, if they are overloaded they may prematurely wear. "B" size belts are the largest recommended belt to use for a CERAMAG generator installation

Engine bay installation

1. Weld the pivot frame mount parallel to the shaft that is to drive the generator.
2. Adjust the pivot frame to its most upright position and tighten in place.
3. Mount the CERAMAG generator and tighten the nuts and washers provided down on the prepared studs.
4. Install the belt between the drive shaft shieve and the CERAMAG shieve, loosen the pivot frame bolts and tension the generator belt with the pivot frame, tighten the pivot frame bolts

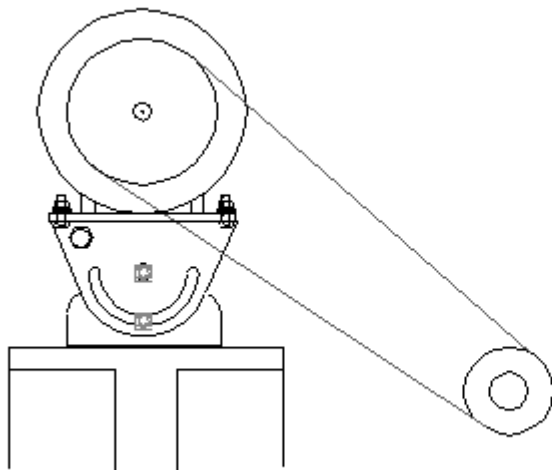


FIG 3.

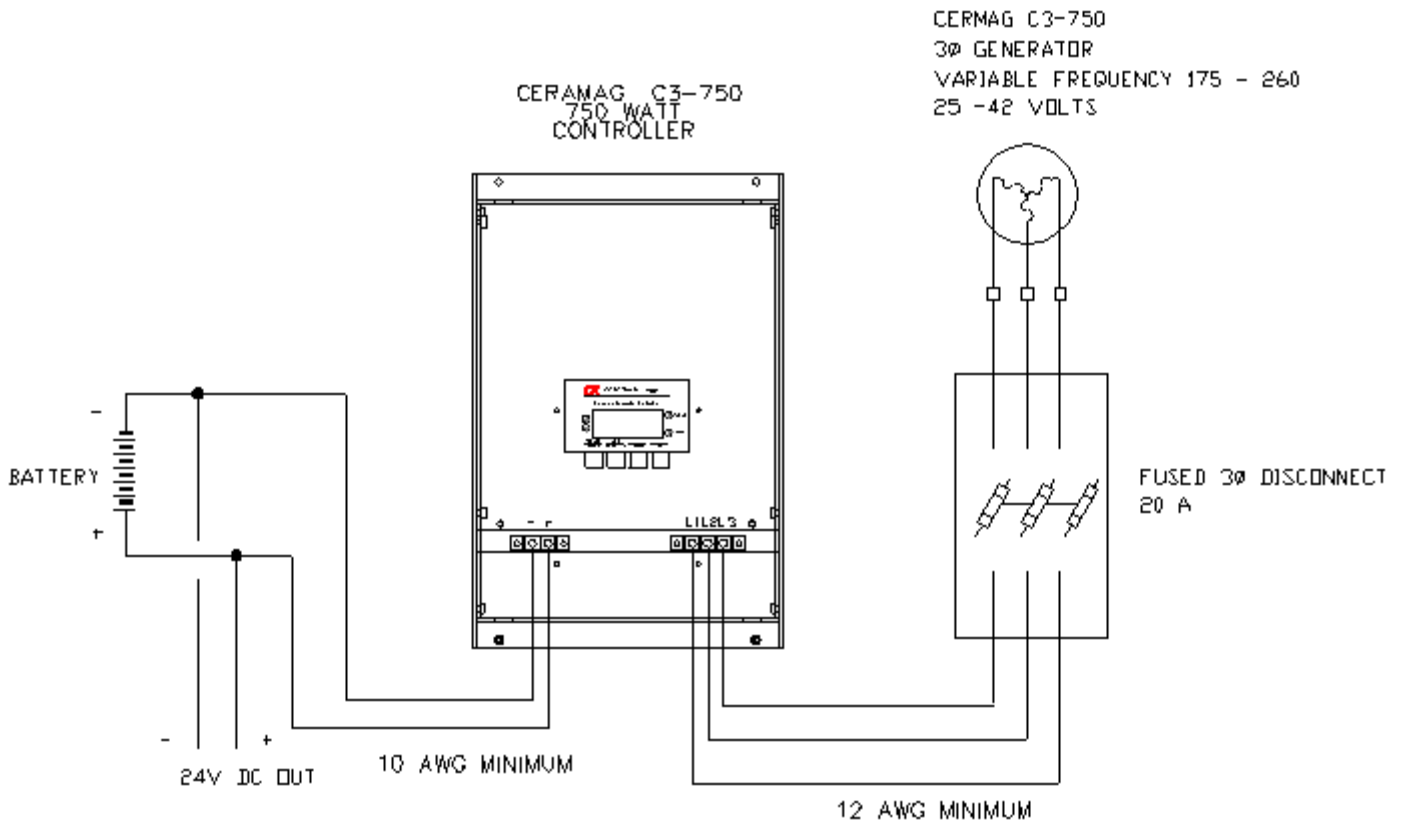
Electrical Installation

1. Installation must be carried out by qualified personnel.
2. The CERAMAG generator and controller along with any optional equipment must be located, installed and wired according to all local codes and area classifications.

Wiring

1. A main disconnect is required between the CERAMAG generator and the controller. Use 250 volt, 30A, 3 pole fused disconnect with three (3) 20A slow blow fuses.
2. Use minimum #12 AWG when connecting the CERAMAG generator.
3. DC output conductors to the batteries or load distribution should be a minimum of #10 AWG. All loads powered by the controller or the batteries require their own fusing.

Wiring Diagram-



Operation

Start up

1. Double check battery polarity before connecting to controller. Reverse polarity at controller will damage the unit and void warranty.
2. Before connecting DC loads energize controller with the CERAMAG generator and check controller output setting.
3. De-energize the controller and disconnect batteries before making final DC load connections.

Front Panel operation

1. The front panel interface (SAM) acts as operational display and user interface

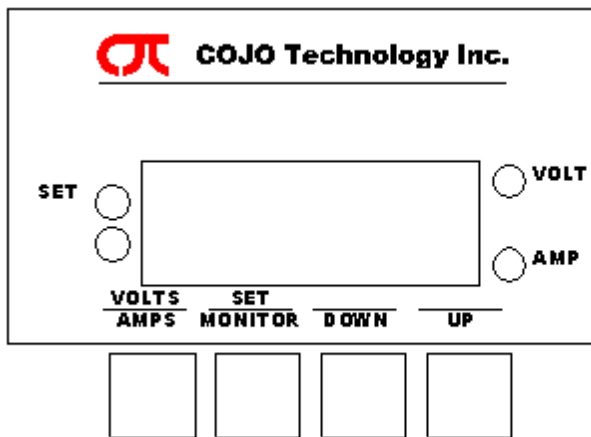


FIG 6

2. SET / MONITOR button will toggle the display between the actual output (monitor) and the set points (SET).
3. VOLTS / AMPS button toggles between displaying the output voltage or current in both SET and MONITOR modes.
4. In set mode The UP and DOWN buttons are used to adjust the upper limits of both the voltage and the current set points.
5. The display is normally turned off. To turn on press any button four (4) times rapidly. After use the display times out and shuts off again.

Contacts

COJO Technology Inc.
1003-P 55th Ave. NE
Calgary, AB
T2E 6W1

Tel (403) 275-6047
Fax (403) 275-6175