

Traction Duty: DC to AC Motor/Alternator Set Power System

“Stand-by” Auxiliary Power System

DC hot rail power conversion to stabilized AC voltages for emergency station power.

Kinetics Industries has designed, manufactured, and time tested, in transit/traction applications, a highly reliable, “stand-by” emergency power, traction duty DC to AC motor alternator set system. The Kinetics auxiliary power system provides stabilized AC output power, independent of DC voltage variations caused by transit car motors accelerating and decelerating (regenerating) on to a common DC transit bus. The system has been designed within a spaced efficient, heavy-duty enclosure with vibration isolation, for installation within the space restrictive confines and harsh operating environments of subway utility power rooms. All components are selected, electrically and mechanically, for long term service in the extremely harsh application environments of sub-street level transit installations. Systems can be used in conjunction with a utility AC “street” power service, to provide a dual power system redundancy within a subway station for critical loads such as emergency lighting and ventilation systems.



Manufactured by:

Kinetics Industries Inc.

140 Stokes Avenue Phone: 609-883-9700 Sale Ext. 122
Trenton, NJ 08638 Email: info@kinetics-industries.com



System features to include:

- Traction duty DC motor manufactured to Kinetics' specification for a wide range of DC input voltages from the traction DC bus.
- Kinetics' solid state SCR field excitation regulation system for DC motor speed control.
- Heavy industrial duty AC alternator with Kinetics' solid state regulator circuitry.
- Solid state, micro-processor controlled automatic transfer switch system.
- Unit and power system protective interfacing relays for application interface.
- Annunciation and metering packing for continuous input and output system monitoring and operational status.
- DC bus regenerative power, from transit car deceleration, over-speed protection.
- System isolation devices for removing the unit from the DC input bus and connection to the AC station load.
- Space efficient enclosure design with vibration isolation system.

Fax: 609-883-0025

Web: <http://www.kinetics-industries.com>

Traction Duty: DC to AC Motor/Alternator Set Power System

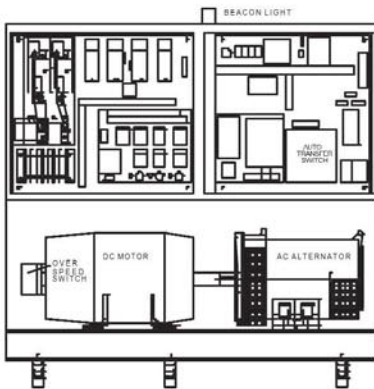
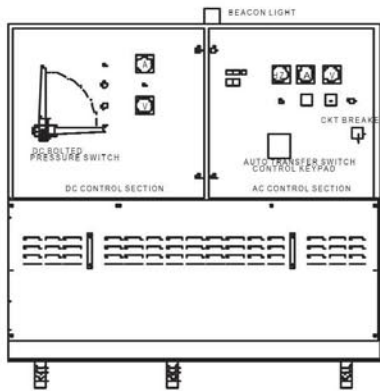
“Stand-by” Auxiliary Power System

DC hot rail power conversion to stabilized AC voltages for emergency station power.

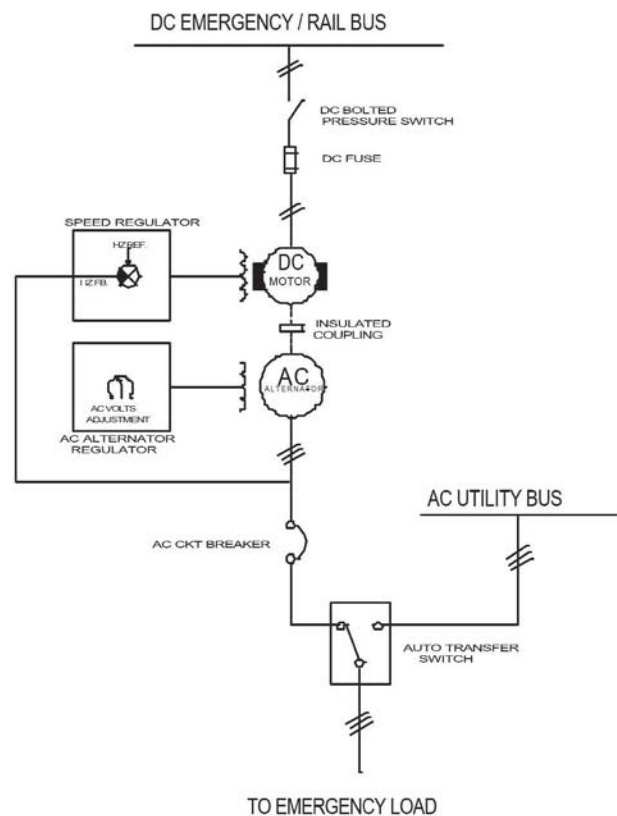
KW Ratings	KVA Ratings	P.F.	Model Number	DC Motor HP	DC Volts	DC Amps	*AC Volts	AC Amps
20	25.0	0.8	MGDC6/AC4/3A3020	30.0	500-1000	39.0	480/3/60	30.0
30	37.5	0.8	MGDC6/AC4/3A4530	45.0	500-1000	58.0	480/3/60	45.0
40	50.0	0.8	MGDC6/AC4/3A6040	60.0	500-1000	75.0	480/3/60	60.0
50	62.5	0.8	MGDC6/AC4/3-7550	75.0	500-1000	96.0	480/3/60	75.0
60	75.0	0.8	MGDC6/AC4/3-9060	90.0	500-1000	116.0	480/3/60	90.0
75	93.75	0.8	MGDC6/AC4/3-1175	112.5	500-1000	146.0	480/3/60	113.0
100	125.0	0.8	MGDC6/AC4/3-1510	150.0	500-1000	194.0	480/3/60	150.0

*Other AC voltages and frequency available per application

Mechanical Profiles



Electrical Single Line Diagram-Representative



INDUSTRIES, INC.

140 Stokes Avenue

Trenton, N.J. 08638

Phone: 609-883-9700 Sales: 122

Fax: 609-883-0025

Also available from Kinetics

- Mill duty, AC to DC rectifiers & power supplies 1 to 2000 Kw.
- Synchronous motor field excitation systems.
- KinetSync-SR & KinetSync-NB synchronous motor field application digital logic & control modules.
- Generator excitation systems.
- Magnet rectifiers: fuseless, flux forcing and select-a-peak.
- Crane and DC substation rectifiers to 2000 Kw
- Dry type transformers 500 VA to 2000 KVA
- Enclosures for NEMA1, 3R, 4, 4X & 12 applications

Email: info@kinetics-industries.com

Web: <http://www.kinetics-industries.com>