

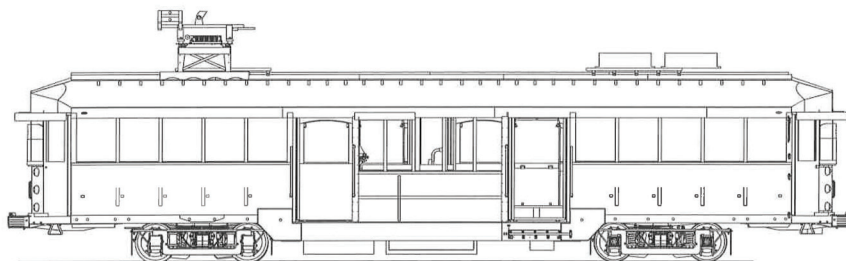
Streetcar DC Traction System

ATS Part # A520012

This ATS system for passenger streetcars uses a dual motor controller for up to two 45HP DC motors running on one truck. Power is supplied by overhead voltage of 450V - 950V DC.

Features

- Complete, compact system
- Microprocessor controlled solid state propulsion system provides vehicle acceleration and electrical braking.
- Dynamic brake controller with dynamic braking down to 5 mph.
- Regenerative braking capabilities
- Step-less acceleration and braking
- Forced air cooling
- Modular design
- Common and differential mode EMI filter
- High efficiency power conversion
- Separate field control with field weakening algorithm
- Voltage pre-charge control
- CAN-bus diagnostics
- Discrete input control signals (digital input 24V, analog reference 0-10V / -10...+10V)
- Safety circuits for maximum protection of personnel and components
- Wheel slip and slide detection
- Overspeed protection

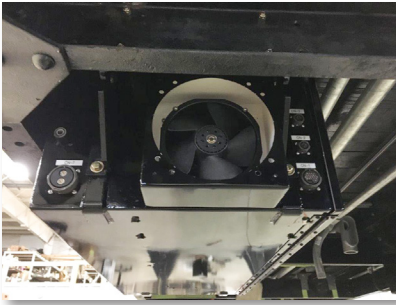


Electrical Specifications**

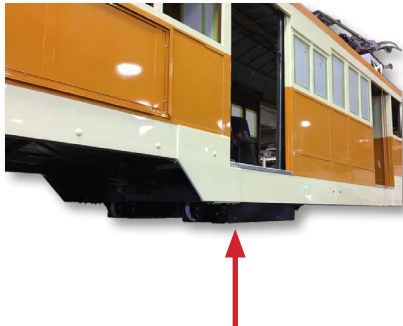
	Input	Output
Rated Power @ Rated Volts	85kW @ 600V DC	2 x 42kW @ 600V DC
Frequency Range	DC	DC
Voltage Range	0 - 950V DC	0 - Input
Amps @ Rated Power	142A	2 x 70A
Continuous Current Rating	70A per motor	
Current Overload Capability	150% for 1 minute, 200% for 3 seconds	
Control Supply Voltage	22V - 26V DC	
Control Supply Current	2A (10A with cooling fan running)	
Ingress Protection Level	NEMA 3R	
Ambient Operating Temperature Range	-20°C to +50°C	
Cooling Method	Forced air cooled	
Minimum Air Flow	200 ft ³ / min	
HP Range	recommended 20HP to 45HP (dual motor)	

** Specifications are subject to change. Please contact sales representative for additional information.

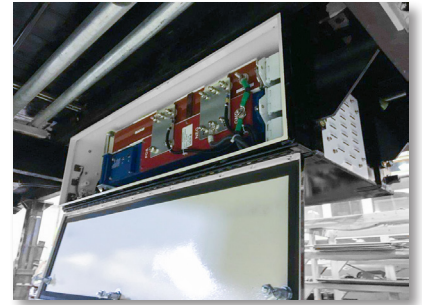
Streetcar - Typical Application



Undercarriage view of fan side.



Car under renovation with enclosure mounting.



Complete system enclosed in under-mounted enclosure with easy access pull out tray.

DC Propulsion System Block Diagram

