



THERMAL SYSTEM

OEM & RETROFIT TRANSIT BUS/MOTOR COACH APPLICATIONS



MINI-HYBRID GEN IV (4 FAN)



MINI-HYBRID GEN IV



MINI-HYBRID GEN III



MINI-HYBRID® BENEFITS:

- Curbside Quiet
- Less Maintenance
- Qualifies for FTA Funding
- Delivers More Power to the Wheels
- Diesel, CNG, LNG, & Hybrid Applications
- Improved Fuel Economy & Reduced Emissions
- Increased Safety Through Hydraulic Fluid Elimination

BRUSHLESS ALTERNATORS

- Air Cooled
- Power 450, 290 Amps @ Engine Low Idle / 450 Amps Max
- Power 535, 325 Amps @ Engine Low Idle / 535 Amps Max



EMP
POWERING THE FUTURE™

(906) 789-7497
emp-corp.com

2701 N. 30th Street - Escanaba, MI 49829



MINI-HYBRID[®]

COOLING SYSTEM FEATURES

Thermal Management Controller
EMP Fil-15 28 Volt Pusher Fans with Integrated Controllers
Radiator
Charge Air Cooler
Powdercoated Steel Frame & Fan Shroud
Hybrid Cooler
Wiring Harness
Adjustable Door Seals

INSTALLATION KITS

Power Cables, Can Interface Cable, Ignition Signal Wire
Power Distribution Center with Main Fuse & Cable Tie-downs
Power Steering Reservoir, Fittings & Brackets
Kit Mounting Brackets & Isolation Grommets
Fan Reversal & Diagnostics LED Panel

CHARGING SYSTEM KITS

Brushless Alternator - 535 Amps 28 VDC/450 Amp 28 VDC
Cooling Air Duct & Mounting Bracket
Voltage Regulator
Voltage Regulator Harness
Oil Port Block-off Kit

AVAILABLE MINI-HYBRID THERMAL SYSTEM KITS

Engines: Cummins, DDC, John Deere, Doosan, Caterpillar
Fuels: Diesel, CNG, LNG, Hybrids
OEM & Aftermarket Applications:
New Flyer
Gillig
NABI
NOVA
ORION
MCI
Neoplan
El Dorado

WEIGHT OF BASE KIT

330 lbs. as shown

PRODUCT SPECIFICATIONS



MINI-HYBRID[®] GEN IV (4 FAN)

COOLING SYSTEM ADVANTAGES

Electronic Control of Engine and CAC Temperatures
Electronic Control of Transmission and Hybrid System Temperatures
Patented Baffle Design
J1939 CAN Capable
Onboard Diagnostics
Long Life, 28V, Brushless, Sensorless 11" and 15" Fans
Reversible Fans Clean Debris from the Heat Exchangers and Screens
Reduced Power Consumption
Increase Power to the Wheels
Custom Hardware and Software Configurations Available
OEM and Aftermarket Packages Available

CURRENT DRAW

Draws 40 Amps OR LESS 90% of the Time

SERVICE / SUPPORT

FREE Service Tool Available with the Products
Factory Sales and Service
Global Service & Field Support Including Onsite Training

MINI-HYBRID[®] COMPONENTS*

MEETS SAE J1308 STANDARDS
SCREEN GUARD INSTALLED ON ALL EMP ELECTRIC FANS

*Please Email productinfo@emp-corp.com for specific component specifications



FIL-15 Electric Fan



Optimized Radiator, CAC & Oil Coolers



Brushless Alternator



Thermal Mgt. Control

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