



mx30

ZERO EMISSION
ELECTRIC TRUCKS AND TRACTORS



PIONEERING CLEAN TECHNOLOGIES THAT COMBINES ZERO POLLUTION, POWER AND ENERGY EFFICIENCY IN PERFECT HARMONY

Electric motor coupled with six speed automatic transmission, you get the startup power when it matters the most. Quick-Shift technology, that learns as you drive giving you smooth and comfortable driving pleasure behind the wheel during daily driving in stop and go inner city applications. Equipped standard with Regenerative braking promotes energy efficiency and safety during downhill driving. Zero emission driving machine that makes a statement of respecting the environment and economic efficiency that lowers your cost per mile by 74% when compared to diesel trucks. At Balqon, we are committed to pioneering zero emission technologies from controllers, chargers and battery systems for heavy duty truck markets, which has resulted in innovative fast charging and idle-off technologies that increase vehicle daily range and efficiency. Over 10,000 hrs of stop and go field testing of drive train makes MX30 drive system most reliable and maintenance free with positive impact to your company's bottom line.

POWERTRAIN

MAX SPEED: 70 mph (110 Km/hr); unloaded grade 10%, loaded 5%.

RANGE: Unloaded 150 miles (240 Km.) fully loaded 90 miles (150 Km.)

BATTERY: Lithium Iron Phosphate, pack voltage 540 vdc nominal voltage, 700 Ahr capacity batteries; total pack energy 380 kwhr.

BATTERY MANAGEMENT SYSTEM (BMS): Proprietary BMS for large format batteries, monitor voltage, cell balancing, SOC and temperature monitoring at cell level. J1939 Can Bus communication.

CHARGER: 40 kw 300-700 vdc, off-board charger standard, 8-10 hour charge time; 100 kW off-board charger optional, 3-4 hour charge time. J1939 Can Bus communication.

TRACTION CONTROL: Proprietary 240 kW liquid cooled flux vector motor controller; 500-700 VDC input, 460 VAC 3 phase output; overload protection; 12 VDC controls; remote diagnostic and calibration keypad for motor tuning; adjustable regenerative braking.

TRACTION MOTOR: 325 hp. peak rated 460 volt AC vector duty electric motor connected to flux vector variable frequency controller; full continuous torque at zero speeds; laminated square frame design, high power to weight ratio; 1000:1 constant torque in vector mode; built in thermostats on each phase; connected directly to automatic transmission; low rotor inertia for faster acceleration; fully enclosed zero maintenance.

ACCESSORY CONTROLLER: Proprietary 40 kW liquid cooled accessory drive; 500-700 VDC, 460 VAC 3 phase output to power steering, air conditioning and air compressor motors; 12 VDC input.

CABIN CHASSIS

CABIN: Day cab lightweight aluminum construction; rear air spring and shock absorber; tinted door glass and windows; electric windows; mirror mounted AM/FM antenna; tilt and telescopic steering column; air conditioning and heating.

INSTRUMENTATION: Low air pressure warning and Buzzer; temperature gauge; 12 volt meter; speedometer, odometer; dual vehicle control system displays with SOC gauge and vehicle diagnostics.

12 VOLT BATTERY: 200 A alternator coupled to electric motor

BRAKES: Dual circuit air brake system with auto slack adjuster and spring park brake; Wabco ABS anti-lock brake with traction control; heated air dryer with pressure control valve; trailer brake control with air and electrical lines with two valve park brake plus indicator and lock; Air compressor 20 CFM coupled to independent accessory electric motor; Meritor front and rear brake drums; tandem axle, inter axle differential lock.

SUSPENSION: Taper-leaf 7,258 kg front suspension with dual acting shock absorbers; Freightliner Airliner 46K rear suspension with air bags, dual instant response height control valves

TRACTION CONTROL: Rugged duty seamless full power shift, 6 speed fully automatic Allison 3000 RDS transmissions coupled directly to electric motor; heavy duty torque converter reduces shock and strain on drive line components and electric motor; electronic CAN Bus shifting controlled by proprietary variable frequency control system

POWER STEERING: Hydraulic pump coupled to electric motor; THP-60 with RCH45 auxiliary gear 7,350 kg

BENEFITS FEATURES

IDLE-OFF: MX30 reduces fuel consumption by shutting off the drive system when vehicle idles for more than 180 seconds. During idle-off accessory control systems, such as power steering and air compressor remain operational ensuring safety is never compromised. Energy consumed during idling can reduce fuel consumption by over 85% during daily stop and go inner city applications. Less idling means less maintenance of vehicle drive train, resulting in 55% reduction in average maintenance costs of MX30 when compared to a diesel vehicle.

FUEL ECONOMY: MX30 electric drive system reduces fuel consumption by 74% in daily inner city applications. Idle-off, on-demand operation of accessories such as air compressor, and air conditioner, combined with over 90% efficiency of electric motor provides three times more fuel to wheel efficiency than a diesel truck.

REGENERATIVE BRAKING: Regenerative braking transfers energy back to the batteries during braking and also provides speed control when vehicle is travelling downgrade. This feature also reduces brake maintenance during inner city stop and go applications.

LOW NOISE: Noise pollution of over 75 db generated by diesel tractors is a significant contributor to health risks of drivers and local communities with large population of Class 8 tractors. MX30 with no noise during idling and maximum noise of less than 70 db during operation is a significant benefit for the driver and local communities.

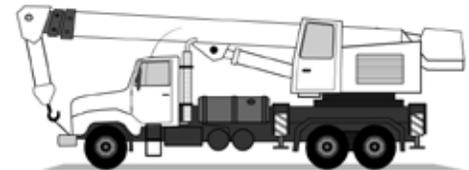
ZERO EMISSION: The benefit of Zero Emission extends beyond reducing health risks of pollution and its impact to local communities. Zero Emission technology of MX30 allows longer life cycle for the vehicle due to zero impact of local emission restrictions or regulations on heavy duty trucks. Compliance to future emission regulations also increases vehicle resale value and doubling life cycle of the vehicle.

WELCOME TO A NEW WAY TO WORK

ERGONOMICS, RIDE
COMFORT AND LOW NOISE ADDS TO TRUE PRODUCTIVITY

Comfortable, ergonomic layout of the cab with a wrap around dash with automatic transmission allows driver to navigate daily workloads with ultimate control and safety. In daily stop and go inner city workday, MX30 delivers comfort during idling and waiting to pickup a load. Powerful electric motor with no noise, vibration or heat provides a serene environment for the driver, away from air and noise pollution providing ultimate in comfort during long wait periods. Low maintenance technology with no engine fluids to check or filters to change, reduces maintenance and vehicle down time making MX30 ideal for short-haul applications. Charging vehicle is as simple as charging cell phone, plug the charging cord push GO and automatic charger performs a complete diagnostic of the vehicle and completes charging in less than four hours. MX30 can also be opportunity charged during the day increases daily range without impacting battery life. Proprietary Battery Management system monitors each battery cell and provides accurate feedback on vehicle State of Charge (SOC) allowing driver to schedule daily work load. Driver cabin includes dual diagnostic panels that monitor and provide real time feedback on vehicle and battery system status reducing unscheduled downtime.





About Balqon Corporation

Headquartered in Harbor City, California, Balqon Corporation is a leading developer of zero-emissions electric drive systems, lithium battery systems and medium to heavy-duty electric vehicles. Balqon's proprietary electric drive system encompasses complete power management, propulsion, flux vector motor controllers and energy systems. Balqon electric vehicles and drive systems are marketed globally to companies, governments and municipalities looking for viable and effective ways to reduce their vehicle maintenance and operating costs and lower carbon emissions. Balqon is recognized as a pioneer in commercial electric vehicle technology and development of energy efficient transportation solutions. For more information, please visit www.balqon.com. Balqon Corporation's common stock trades on the OTC Bulletin Board under the symbol "BLQN". Follow us on Twitter @balqon or <http://twitter.com/#!/balqon> or visit our Facebook page here: <http://www.facebook.com/balqoncorporation>



Yard Tractor XRE20



Shuttle Bus EQO 14



Delivery Truck M100



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