



KM200e Mine Utility Vehicle



GENERAL SPECIFICATIONS

Height *	8 ft. 6 in. (2.6m)
Width *	7 ft. 6.5 in. (2.3m)
Length *	20 ft. 8 in (6.3m)
Inner Turning Radius *	10 ft. 9 in. (3.3m)
Outer Turning Radius *	21 ft. (6.4m)
Gross Vehicle Mass (GVM) *	23375 lbs (10603 kg)
Carrying Capacity *	5500 lbs (2500 kg)
Ground Clearance*	10.2 in. (260mm)
Wheel Base*	7 ft. 10.5 in. (2.4m)
Maximum Recommended Operating Grade*	20%
Noise Level (@ Operator's Seat)*	70 dBa
Equipped with Operator Seat *	2 Passenger Seats
Maximum Ambient Operating Temperature	122 deg. F (50 deg. C)

* Based on machine configuration

DRIVETRAIN

Front Axles	Carraro 26.19 M
Rear Axles	Carraro 28.43 M
Front Axle rating	6414.70KG
Rear Axle rating	7647.56KG
Front Differential Type	Open
Rear Differential Type	Open
Gear Box (If Equipped)	None - has through shaft motor to axles

BRAKES

Service Brakes	Full enclosed (Wet Disc) / Piston actuated
Secondary (Emergency) Brake	Fully enclosed, spring applied / hydraulic release (SAHR) wet
Park Brake (D/Line or inter, wet or dry)	Fully enclosed, spring applied / hydraulic release (SAHR) wet
CAN/CSA-M424.3-90 Certified	Yes

TIRES

Tire Manufacture	Camso Front / Galaxy Rear
Tire Size	Front: 14x17.5, rear:19.5x24
Radial or Bias Ply	Bias
Tire Rating (Number of Ply/ Star Rating)	12 ply

AUTOMATION AND TECHNOLOGY

Wireless telemetry capability to transfer carrier and BEV Data	Yes
Collision Avoidance Compatible	Yes
Camera System	Yes, rear camera, display on main GUI

TRACTION MOTOR(S) & POWER CONVERSION SYSTEM

Motor Make and Model	Dana MD HV2200-6P
Motor Type (induction, brushless DC, etc...)	Brushless permanent magnet
Number of Motors, arrangement	single motor, direct drive to axles
Motor Rated Voltage	750V
Motor Rated Amps	350A max
Motor Rated Power (Continuous /Peak)	190kW / 255 kW
Motor Cooling method	liquid
Power Conversion System Make and Model	Dana CO200
Power Conversion System Type	3 phase HV inverter / IGBT
Power Conversion System Input Voltage Range	750VDC
Power Conversion System Output Voltage Range	750V
Power Conversion System Maximum Current	425
Braking Resistor (Make/Model/Size)	60kW
Power Conversion System Cooling method	Liquid

SPEEDS

0% Grade (flat)	18 km/h (electronically limited)
5% Grade	18 km/h (electronically limited)
10% Grade	18 km/h (electronically limited)
15% Grade	18 km/h (electronically limited)
20% Grade	18 km/h (electronically limited)

RANGE

On +20% Grade	13 km
On +15% Grade	21.4 km
On +10% Grade	28.7 km
On +5% Grade	39.8 km
On 0% Grade (flat)	60 km
Guaranteed range on one new fully charged battery up a +15% grade	20 km



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BATTERY

Cells Chemistry	Lithium Nickel Manganese Cobalt oxide
Cells Rating	126Ah (Energy cells) to 108Ah (Power cells) optional
Cell Monitoring	Voltage, Temperature (Cell Pair), Amperage
Pack voltage	650V nominal
Pack energy capacity - total	77kWh (Energy) to 67kWh (Power) optional
Pack energy capacity - useable	61.6 kWh to 53.8 kWh
Pack safety systems	Over/undervoltage, over/under temperature, overcurrent, welded contactor check, over-discharge
Cell cooling method (liquid or air)	Liquid
Operating temperature limits (ambient)	-20C to 50C
Battery Pack Weight	650kg
Battery Pack Dimensions	780mm x 760mm x 1905mm

EXPECTED LIFE	DEPTH OF DISCHARGE (%) / CYCLE LIFE (no.)
	100% DOD: 3000 (Energy) – 4000 (Power)
	80% DOD: 4000(Energy) -10000 (Power)

Charging Current (A), Voltage (V)	140A / 700V (energy) to 420A / 700V (power)
Maximum Charging Rate (kW)	100kW (energy) to 275kW (power)
Charge Rate (i.e. C2)	1C (energy) to 2C (power)
Charge time (0-100%) (min)	84 min standard pack, onboard 50kW charger
Expected Run Time on 1 Full Charge	4 hrs

CHARGER

Equipped with Onboard Charger	Yes
Onboard Charger: Rating	50 kW standard (optional 75kW onboard)
Onboard Charger: Input Voltage/ Phases	400-600-1000 VAC, 3ph, 50-60Hz
Onboard Charger: Connector Type	Meltric, optional SMS 8340 Series Uni-Lock Lever-Action, other options available, J1772 level 2
Equipped with Offboard Charging Capability	Optional, CCS Type 1 / Type 2

HYDRAULICS

Specify Application	Hydraulic pump
Rated Power	32, 23 Kw
Rated Torque	85, 37 N-m
Efficiency	92%
Cooling method	Liquid