



COMMERCIAL VEHICLE DRIVING SYSTEM CONFIGURATION SOLUTION

Shanghai OE Industrial Co.,Ltd.

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Heavy Truck Powertrain Solution

2

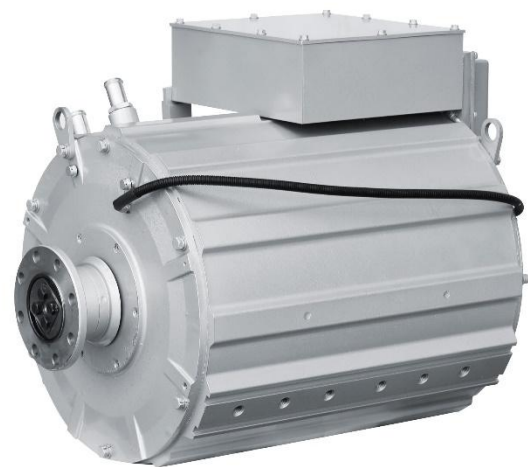
Bus Powertrain Solution



1

Heavy Truck Powertrain Solution

Solution for 12-18 Ton Truck



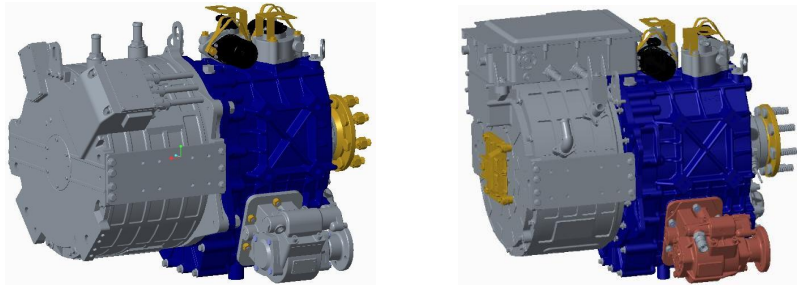
Motor + Controller 2 in 1



2SDK290XS105A

Voltage (VDC)	540
Rated/Peak Power (KW)	105/165
Rated/Peak Toruqe (Nm)	500/1000
Max Speed (RPM)	4000
Total Weight (KG)	170
Peak Current (A)	420

Solution for 12-18 Ton Truck



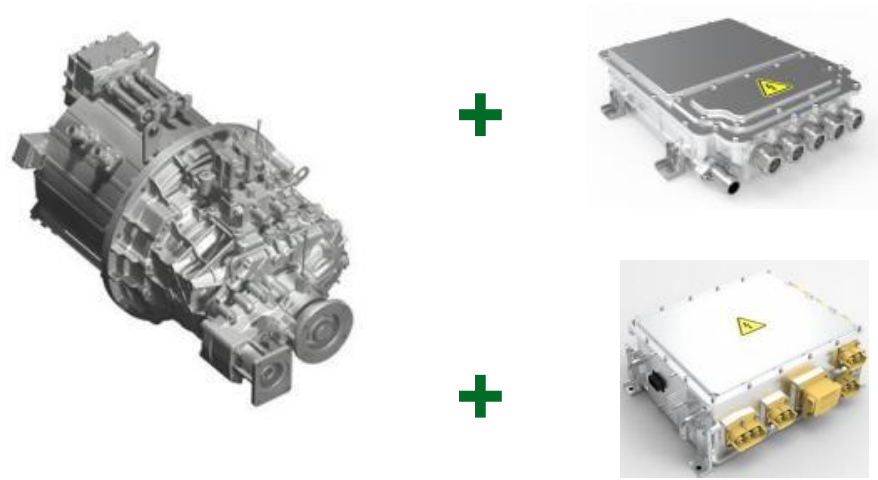
Motor + Gearbox 2 in 1
or
Motor + Controller + Gearbox 3 in 1



STED7000S

Motor	
Rated/Peak Power (kW)	100/200
Rated/Peak Torque (Nm)	500/1060
Max Speed (RPM)	3500
Gearbox	
Gear	1 2 3 4
Ratio	6.61 3.52 1.89 1
System	
Max Output Torque (Nm)	7000
Total Weight (KG)	250
Length*Width*Height (MM)	680X500X567
PTO (Optional)	
Total Ratio	1.02
Max Output Torque (Nm)	300
Max Output Power (kW)	60

Solution for 12-18 Ton Truck



Motor + Gearbox 2 in 1



CE4T670

Motor Parameter	
Model	TZ350XSK02
Rated Voltage (VDC)	560
Rated/Peak Power (KW)	120/185
Rated/Peak Torque (Nm)	600/1000
Max Speed (RPM)	3500 (adjustable)

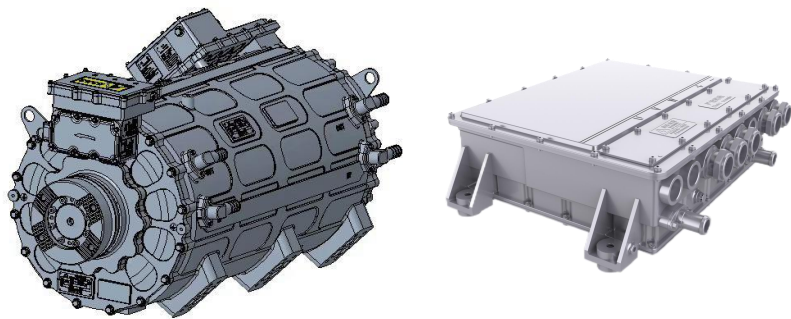
Gearbox Parameter				
Max Input Torque (Nm)	1200			
Max Input Speed (RPM)	4000			
Gear	1	2	3	4
Ratio	6.706	3.499	1.881	1.00

Powertrain Parameter	
System Output Torque (Nm)	6706

PTo (Optional)	
Max Output Torque (Nm)	500
Ratio	1.25

Controller (Single or Multiple in 1)	
Option 1	Single Controller: 600A Infineon IGBT
Option 2	Multiple in 1: DCDC, 2 DCAC, PDU

Solution for 18-25 Ton Truck

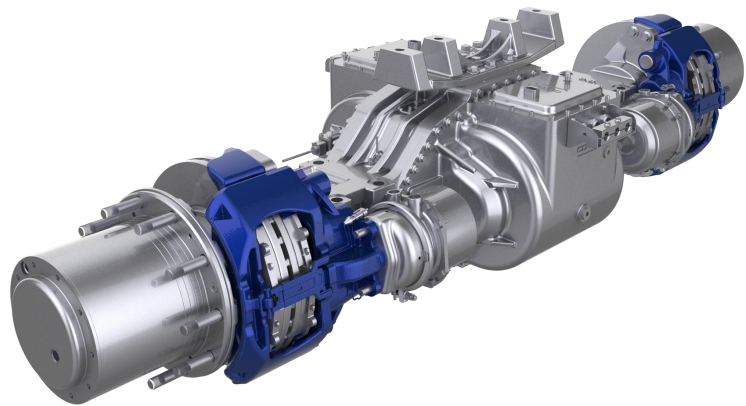


Motor + Controller



EM3803H4800	
Voltage (VDC)	520
Rated/Peak Power (KW)	250/500
Rated/Peak Toruqe (Nm)	2400/4800
Max Speed (RPM)	3000
Highest Efficiency (%)	≥97
Dimension (MM)	Φ420

Solution for 18-25 Ton Truck



E-axle Integrated with Double Motors



C5000N	
Power (KW)	2*80/2*180
Voltage (VDC)	540
System Torque (Nm)	2*25000
Peak Speed (RPM)	9500
Total Weight (KG)	1000
Rated Load (KG)	13000

Ratio 49.4/15.3

Solution for 18-25 Ton Truck



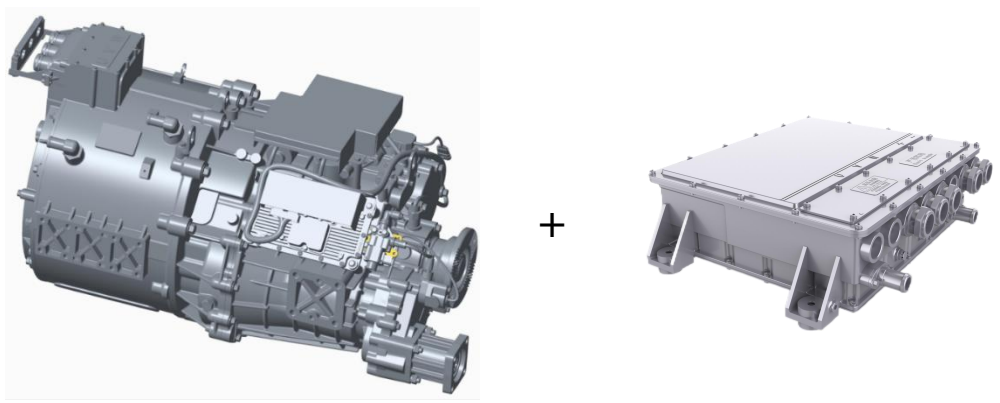
E-axle Integrated with Motor & Controller



STEA40000Z

Motor Parameter		
Rated/Peak Power (KW)	125/250	
Rated/Peak Torque (Nm)	350/800	
Max Speed (RPM)	9000	
Gearbox Parameter		
Gear	1	2
Ratio	13.203	4.367
System		
Wheel Side Ratio	3.947	
Max Output Torque (Nm)	41690	
Max Output Speed (RPM)	522	
Total Weight (KG)	1020	
Rated Axle Load (KG)	13000	

Solution for 25-40 Ton Truck



Motor + Gearbox 2 in 1



HTED16000

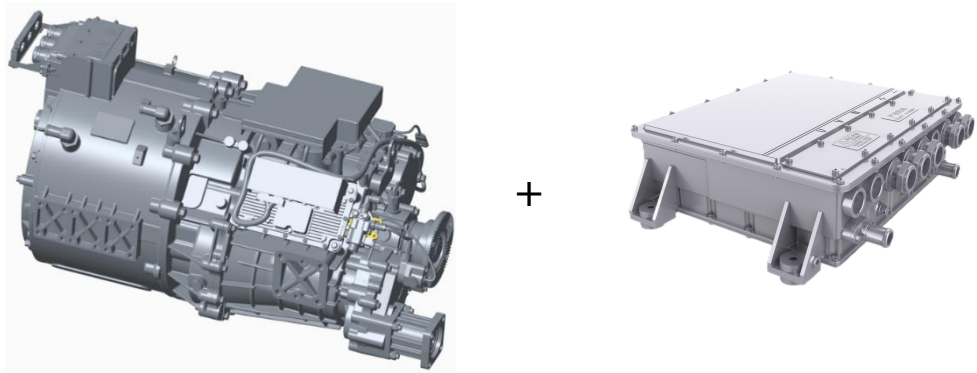
Motor	
Rated/Peak Power (KW)	180kw/300
Rated/Peak Torque (Nm)	850Nm/1950
Max Speed (RPM)	3500

Gearbox				
Gear	1	2	3	4
Ratio	8.39	3.54	1.74	1

System	
Max Output Torque (Nm)	16360
Max Output Speed (RPM)	3500
Total Weight (KG)	395

PTO (Optional)	
Ratio	1.66
Max Output Torque (Nm)	500
Max Output Power (KW)	110

Solution for 25-40 Ton Truck



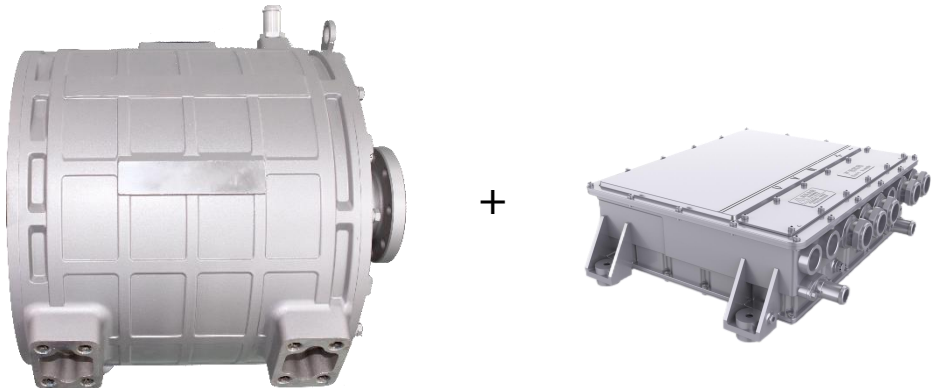
Motor + Gearbox 2 in 1



HTED20000L2

Motor				
Rated/Peak Power (KW)	250kw/380			
Rated/Peak Torque (Nm)	1200Nm/2400			
Max Speed (RPM)	3500			
Gearbox				
Gear	1	2	3	4
Ratio	8.39	3.54	1.74	1
System				
Max Output Torque (Nm)	20136			
Max Output Speed (RPM)	3500			
Total Weight (KG)	420			
PTO (Optional)				
Max Output Torque (Nm)	500/700			

Solution for 25-40 Ton Truck

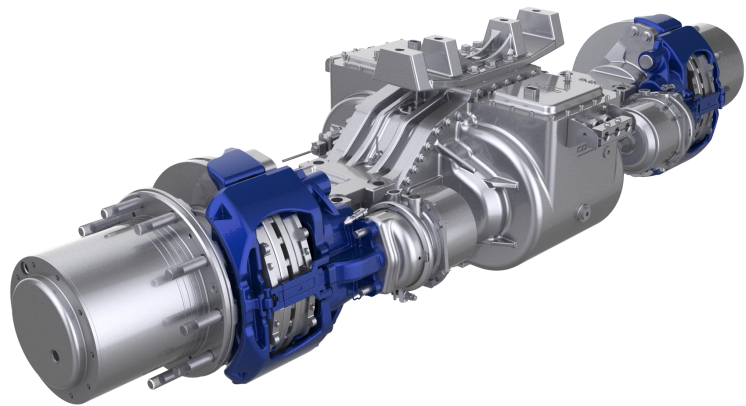


Motor + Controller



EM380 3H3100	
Voltage (VDC)	600
Rated/Peak Power (KW)	215/350
Rated/Peak Toruqe (Nm)	1260/2800(3100-20s)
Max Speed (RPM)	3500
Highest Efficiency (%)	≥97
Dimension (MM)	Φ436*540

Solution for 25-40 Ton Truck



E-axle Integrated with Double Motors



C5000N	
Power (KW)	2*80/2*180
Voltage (VDC)	540
System Torque (Nm)	2*25000
Peak Speed (RPM)	9500
Total Weight (KG)	1000
Rated Load (KG)	13000
Ratio	49.4/15.3

Solution for 40-55 Ton Truck

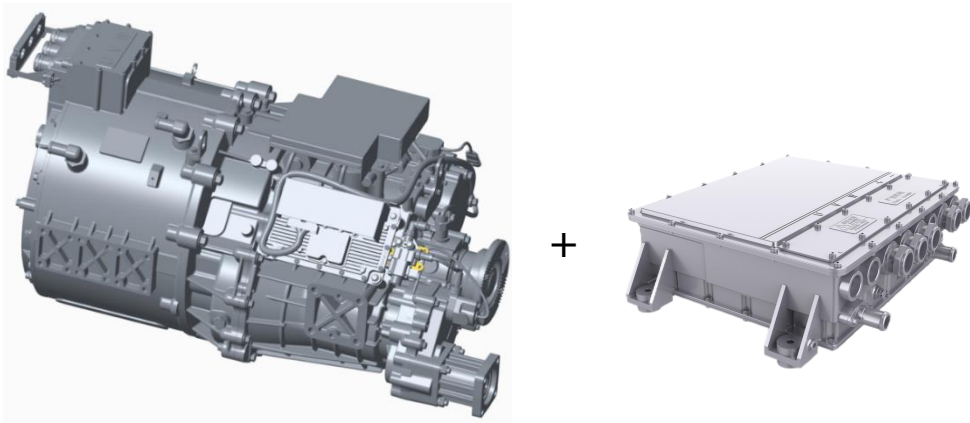


Motor + Controller



EM380 3H2800	
Voltage (VDC)	610
Rated/Peak Power (KW)	260/380
Rated/Peak Toruqe (Nm)	1 400/2800(3100-20s)
Max Speed (RPM)	3500
Highest Efficiency (%)	≥97
Dimension (MM)	Φ440*630

Solution for 40-55 Ton Truck



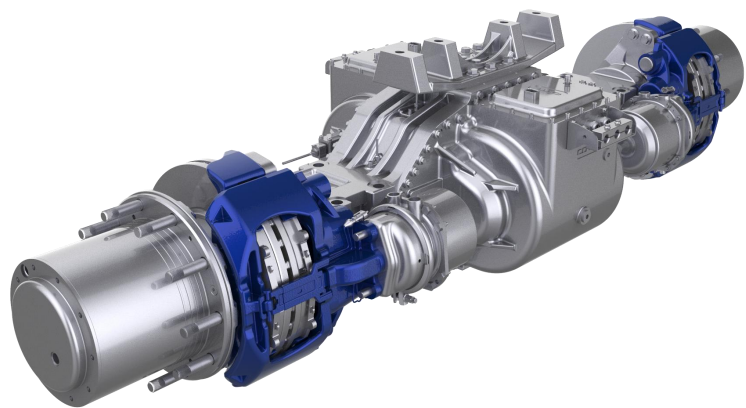
motor+gearbox 2 in 1



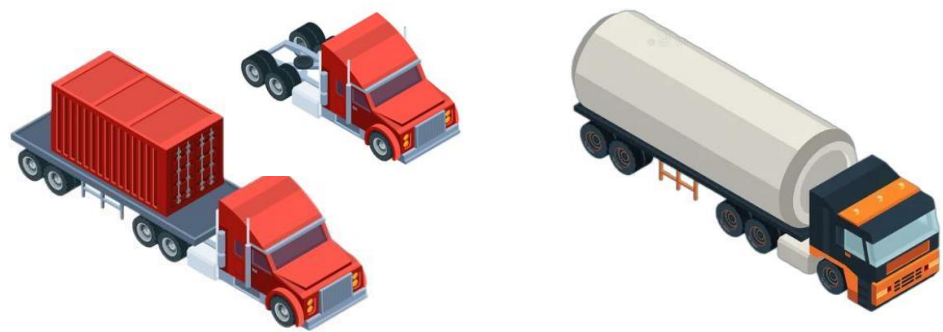
HTED20000L3

Motor				
Rated/Peak Power (KW)		270kw/405		
Rated/Peak Torque (Nm)		1500Nm/2400		
Max Speed (RPM)		3500		
Gearbox				
Gear	1	2	3	4
Ratio	8.39	3.54	1.74	1
System				
Max Output Torque (Nm)		20136		
Max Output Speed (RPM)		3500		
Total Weight (KG)		450		
PTO (Optional)				
Max Output Torque (Nm)		500/700		

Solution for 40-55 Ton Truck



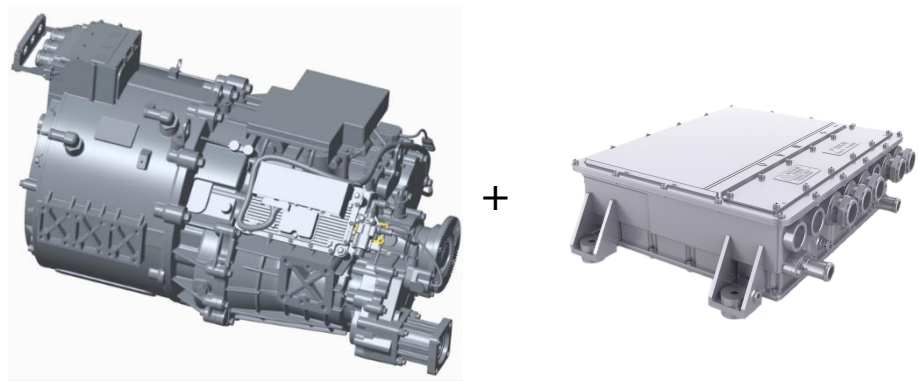
E-axle Integrated with Double Motors



C5000N	
Power (KW)	2*80/2*180
Voltage (VDC)	540
System Torque (Nm)	2*25000
Peak Speed (RPM)	9500
Total Weight (KG)	1000
Rated Load (KG)	13000

Ratio 49.4/15.3

Solution for 55-90 Ton Truck



motor+gearbox 2 in 1



HTED20000H1

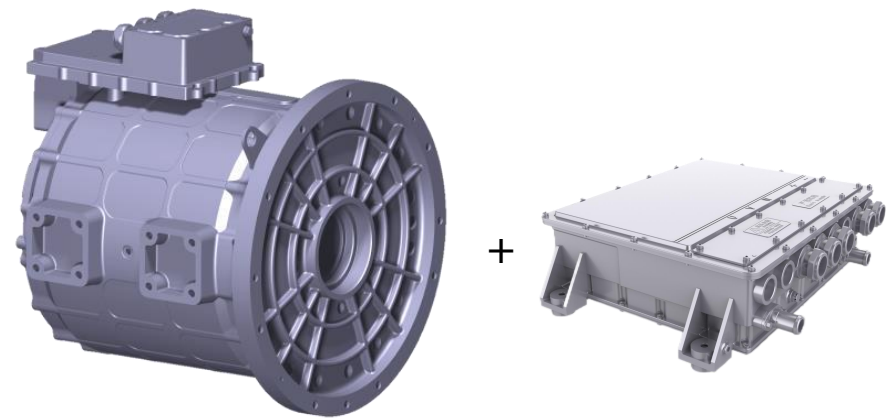
Motor	
Rated/Peak Power (KW)	315/450
Rated/Peak Torque (Nm)	1650/2400
Max Speed (RPM)	3500

Gearbox				
Gear	1	2	3	4
Ratio	8.39	4.36	2.27	1

System	
Max Output Torque (Nm)	21394
Max Output Speed (RPM)	3500
Total Weight (KG)	480

PTO (Optional)	
Max Output Torque (Nm)	500/700

Solution for 55-90 Ton Truck

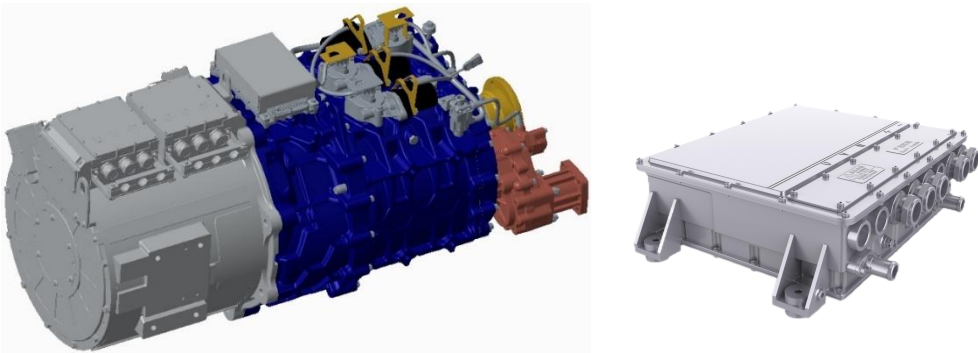


Motor + Controller



EM330-4H2800	
Voltage (VDC)	610
Rated/Peak Power (KW)	330/450
Rated/Peak Toruqe (Nm)	1500/2800
Max Speed (RPM)	3500
Highest Efficiency (%)	≥97
Dimension (MM)	Φ440*630

Solution for 55-90 Ton Truck



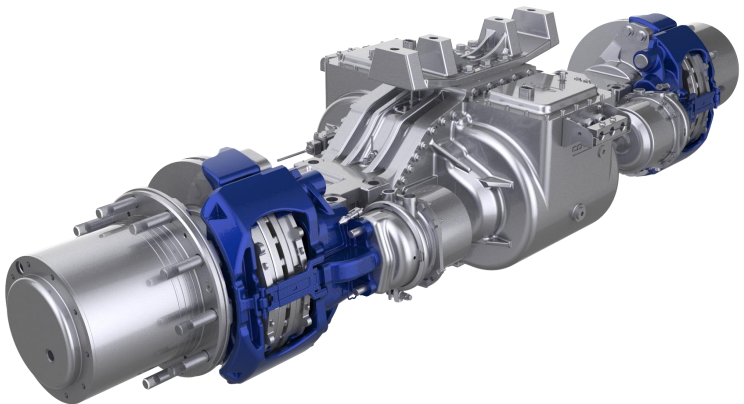
motor+gearbox 2 in 1



CED20000

Motor				
	Motor 1		Motor 2	
Rated/Peak Power (KW)	150/230		150/230	
Rated/Peak Torque (Nm)	750/1500		750/1500	
Max Speed (RPM)	3500		3500	
Gearbox				
Gear	1	2	3	4
Ratio	8.39	1.74	3.54	1
System				
Max Output Torque (Nm)	20136 (1200 of each motor when both motors working)			
Total Rated/Peak Torque (KW)	300/460			
PTO (Optional)				
Max Output Torque (Nm)	500			
Max Output Power (KW)	110			

Solution for 55-90 Ton Truck

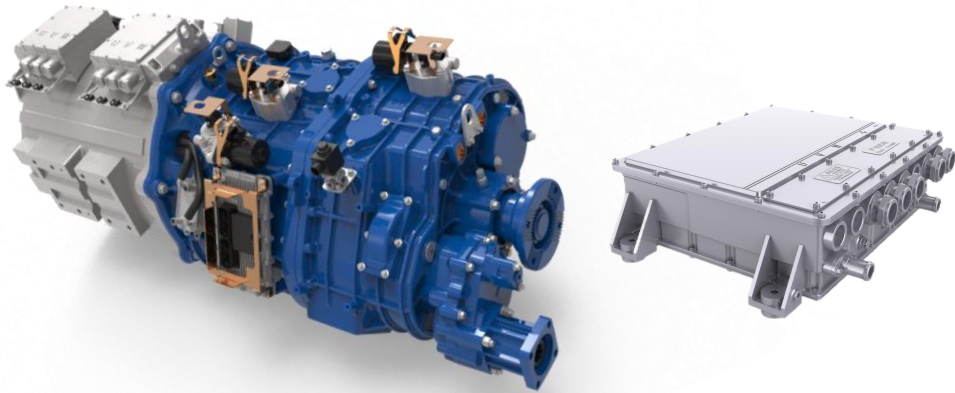


E-axis Integrated with Double Motors



C5000N	
Power (KW)	2*80/2*180
Voltage (VDC)	540
System Torque (Nm)	2*25000
Peak Speed (RPM)	9500
Total Weight (KG)	1000
Rated Load (KG)	13000
Ratio	49.4/15.3

Solution for > 90 Ton Truck



motor+gearbox 2 in 1



CED21000

Motor						
	Motor 1			Motor 2		
Rated/Peak Power (KW)	210/350			210/350		
Rated/Peak Torque (Nm)	1100/1800			1100/1800		
Max Speed (RPM)	3500			3500		
Gearbox						
	Gearbox1			Gearbox2		
Gear	1	2	3	1	2	3
Ratio	7.233	3.048	1.415	4.667	2.064	1
System						
Max Output Torque (Nm)				21420		
Total Rated/Peak Torque (KW)				420/700		
PTO (Optional)						
Max Output Torque (Nm)				500Nm		
Max Output Power (KW)				110kW		

Solution for > 90 Ton Truck



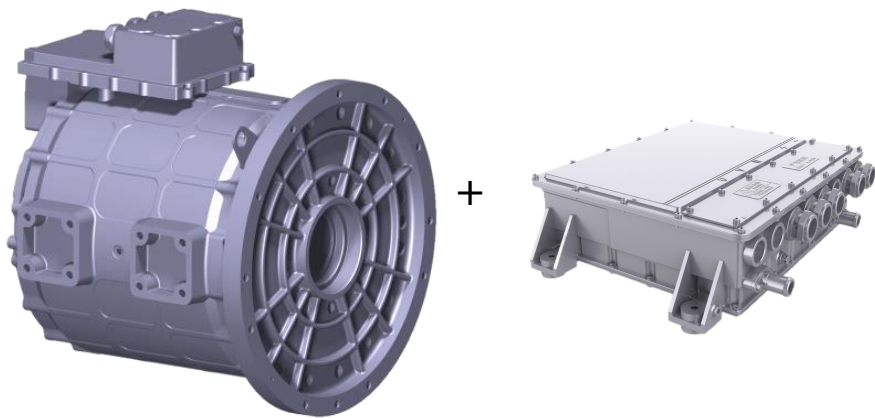
motor+gearbox 2 in 1



CED34000H

Motor						
	Motor 1			Motor 2		
Rated/Peak Power (KW)	270/400			270/400		
Rated/Peak Torque (Nm)	1200/2400			1200/2400		
Max Speed (RPM)	3500			3500		
Gearbox						
	Gearbox1			Gearbox2		
Gear	1	2	3	1	2	3
Ratio	9.16	3.02	1.22	5.27	2.17	1
System						
Max Output Torque (Nm)				34632		
Total Rated/Peak Torque (KW)				540/800		

Solution for > 90 Ton Truck



motor+controller

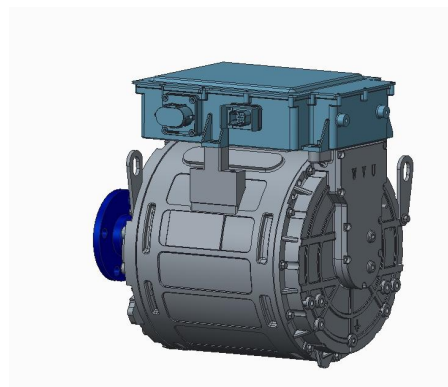
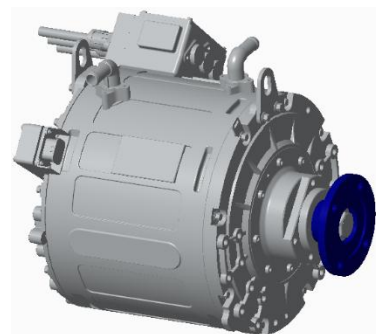


EM380 3H4800	
Voltage (VDC)	600
Rated/Peak Power (KW)	430/700
Rated/Peak Toruqe (Nm)	2720/4800
Max Speed (RPM)	3500
Highest Efficiency (%)	≥97
Dimension (MM)	Φ440*780

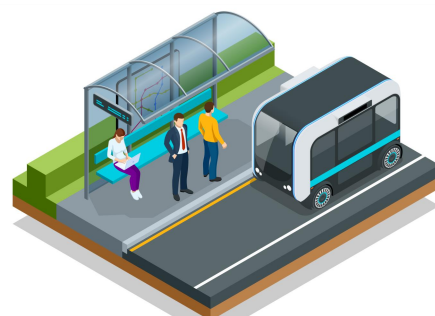
2

Bus powertrain solution

Solution for 6-7M Bus



**motor+controller 2 in 1
(Optional)**



DM1000

Rated/Peak Power (KW) 70/130

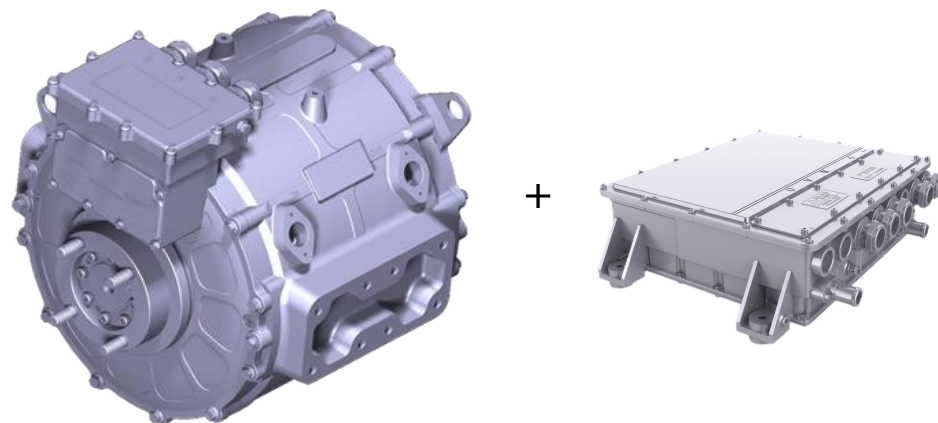
Rated/Peak Torque
(Nm) 400/1000

Max Speed (RPM) 4500

Weight (KG) 120

Overall Dimensions (MM) $\Phi 356 \times 446$

Solution for 6-7M Bus



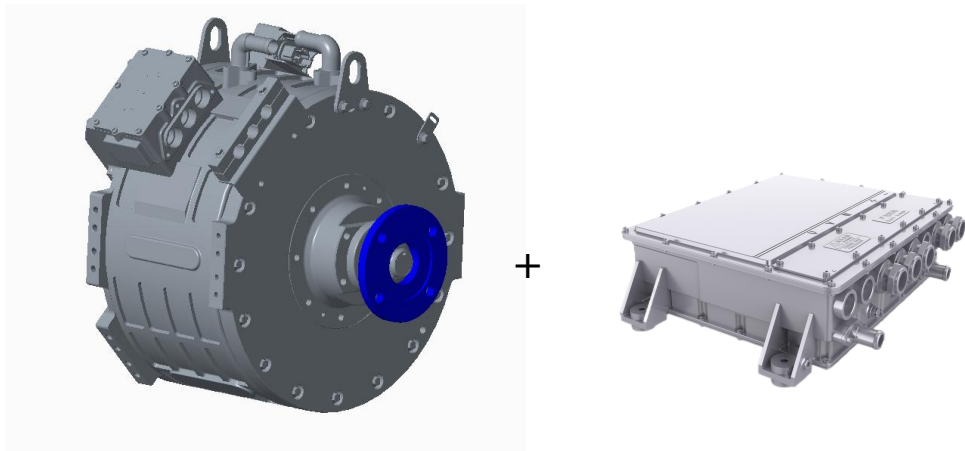
motor+controller



EM330 4H1600

Voltage (VDC)	520
Rated/Peak Power (KW)	80/160
Rated/Peak Torque (Nm)	800/1600
Max Speed (RPM)	3000
Maximum Motor Efficiency (%)	≥97
Overall Dimensions (MM)	Φ372*330

Solution for 6-7M Bus



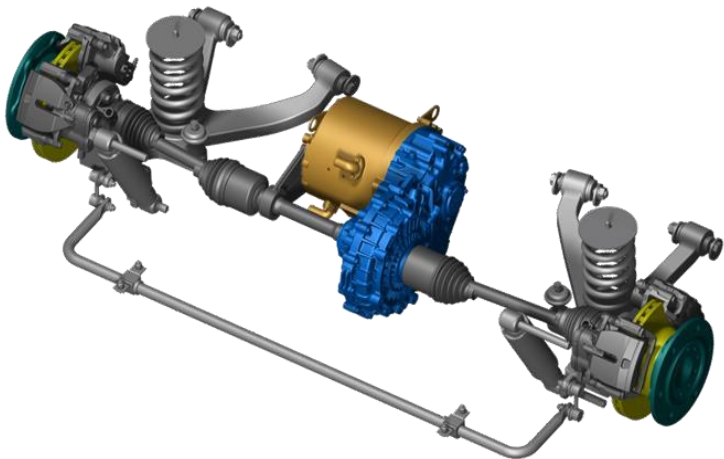
motor+controller



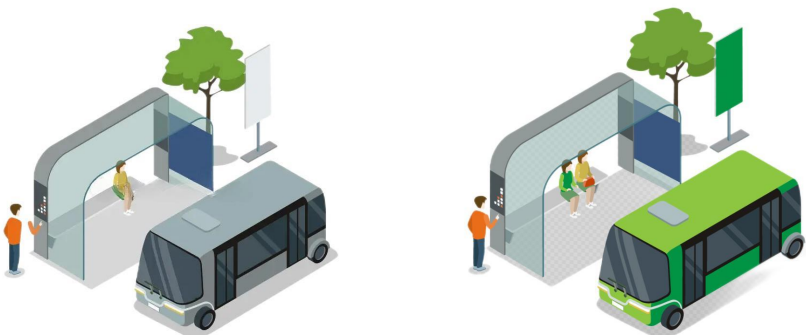
DM1100

Model	PMSM Motor
Rated/Peak Power (KW)	80/160
Rated/Peak Toruqe (Nm)	500/1100
Max Speed (RPM)	4500
Weight (KG)	125
Overall Dimensions (MM)	Φ415X 370

Solution for 6-7M Bus



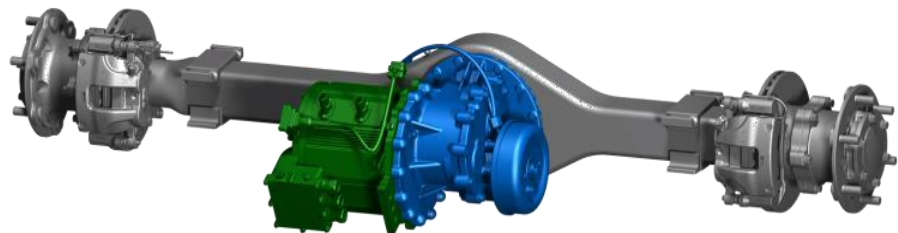
Suspension Electric Drive Axle



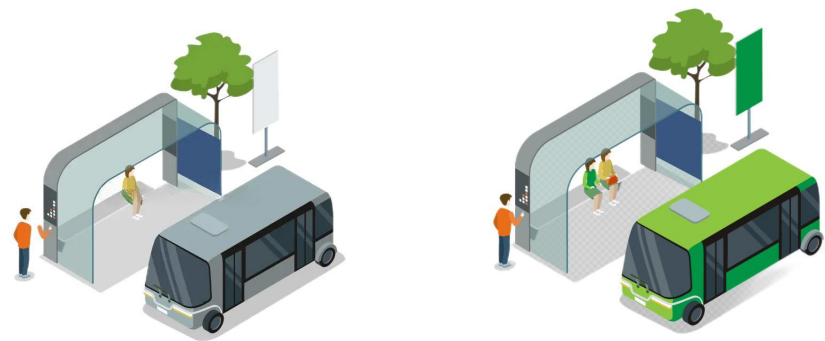
EA23 (Rear Drive)

Motor	Voltage (VDC)	405
	Rated/Peak Power (KW)	47/120
	Rated/Peak Toruqe (Nm)	130/270
System	Maximum Output Torque (Nm)	4323
	Rated Load (KG)	2300
	Weight (KG)	289 (Including suspension)

Solution for 6-7M Bus



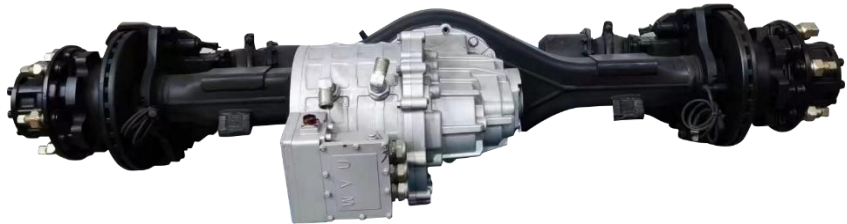
Parallel Axis Electric Drive Axle



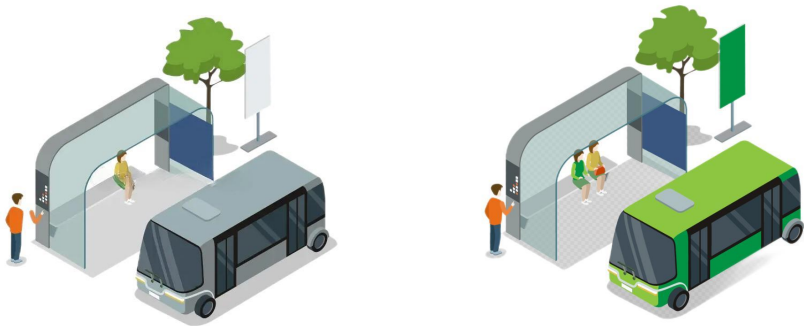
EA30

Motor	Voltage (VDC)	540
	Rated/Peak Power (KW)	65/120
	Rated/Peak Torque (Nm)	170/355
System	4870	
	Maximum Output Torque (Nm)	(Max Input Torque of Gearbox: 320Nm)
	Rated Load (KG)	3000
	Weight (KG)	270

Solution for 6-7M Bus



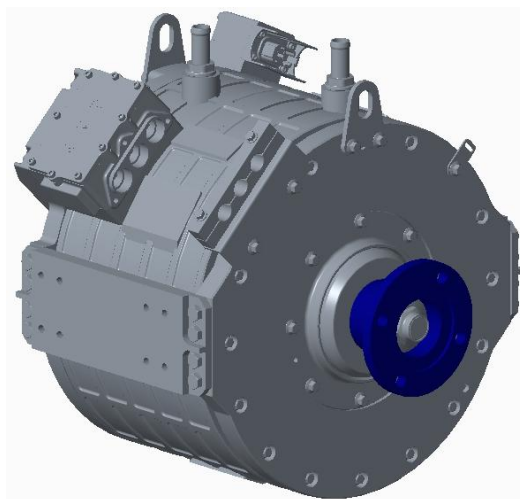
Parallel Axis Electric Drive Axle



EA60

Motor	Voltage (VDC)	540
	Rated/Peak Power (KW)	65/120
	Rated/Peak Torque (Nm)	170/355
	Maximum Output Torque (Nm)	5780
System	Rated Load (KG)	6000
	Weight (KG)	329

Solution for 8-9M Bus



DM2100

Rated/Peak Power (KW)	85/160
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Rated/Peak Torque (Nm)	900/2100
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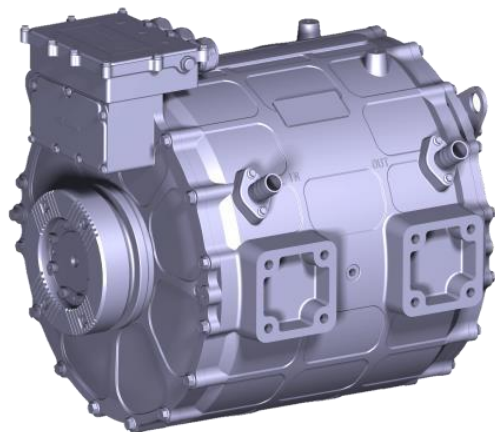
Max Speed (RPM)	2800
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Weight (KG)	195kg
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Overall Dimensions (MM)	Φ415X433
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Solution for 8-9M Bus



EM380-3H2000

Voltage (VDC)	520
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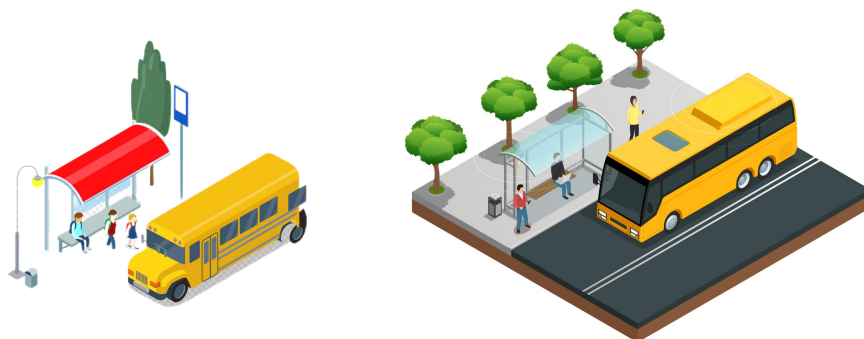
Rated/Peak Power (KW)	100/200
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Rated/Peak Torque (Nm)	1000/2000
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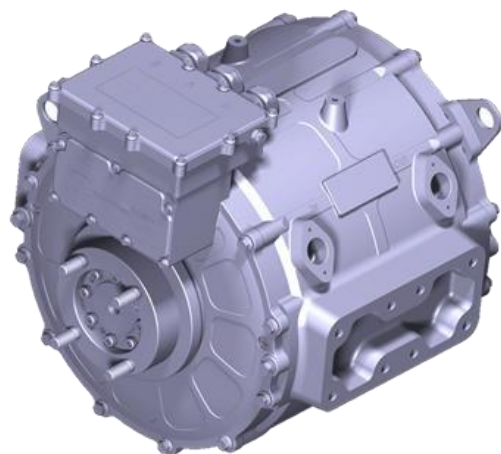
Max Speed (RPM)	3500
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Maximum Motor Efficiency	≥97%
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Overall Dimensions (MM)	Φ436*405
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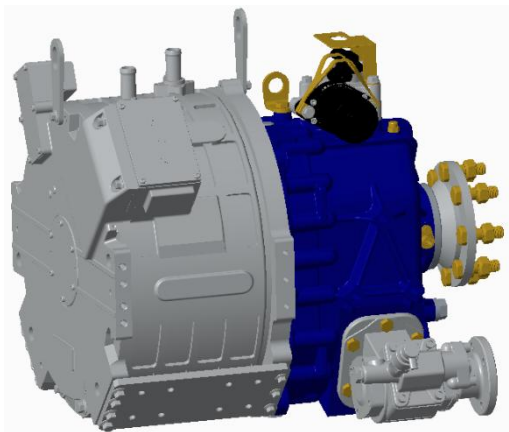
Solution for 8-9M Bus



EM330-4H1600

Voltage (VDC)	520
Rated/Peak Power (KW)	80/160
Rated/Peak Torque (Nm)	800/1600
Max Speed (RPM)	3000
Maximum Motor Efficiency	≥97%
Overall Dimensions (MM)	Φ372*330

Solution for 8-9M Bus



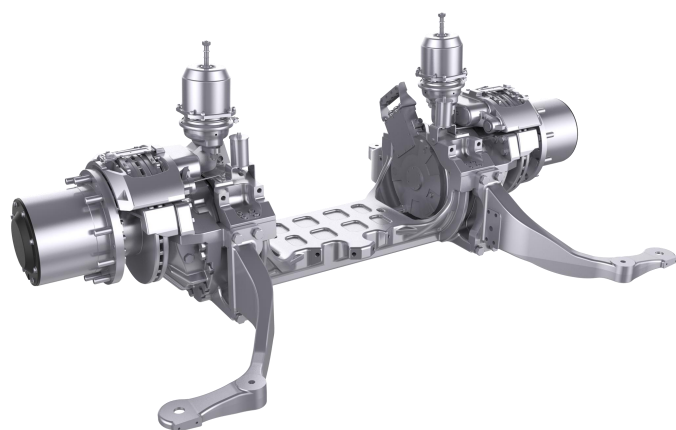
Motor + Gearbox 2 in 1



TED3010S

Motor		
Rated/Peak Power (KW)	110/210	
Rated/Peak Torque (Nm)	500/1100	
Max Speed (RPM)	4500	
Gearbox		
Gear	—	—
Ratio	2.741	1
System		
Maximum Output Torque (Nm)	3015	
Weight (KG)	174	
Length * width * height (MM)	595*516*549	
PTO (Optional)		
Total Gear ratio	1.148	
Rated/Peak Torque (Nm)	120/200	
Rated/Peak Power (KW)	20/40	

Solution for 8-9M Bus



Distributed e-axle



CTDL09T

Rated/Peak Power (KW)	2 * 60/2 * 120
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Voltage (VDC)	540
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Rated/Peak Torque(Nm)	2 * 145/2 * 400
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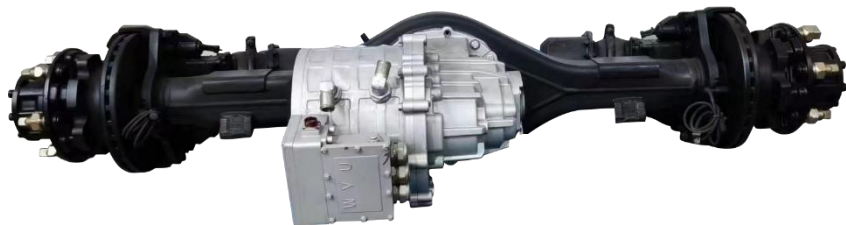
Motor Max Speed (RPM)	9500
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Bridge Axle (KG)	850
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Rated Load (KG)	9000
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Gear Ratio	17.55
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Solution for 8-9M Bus



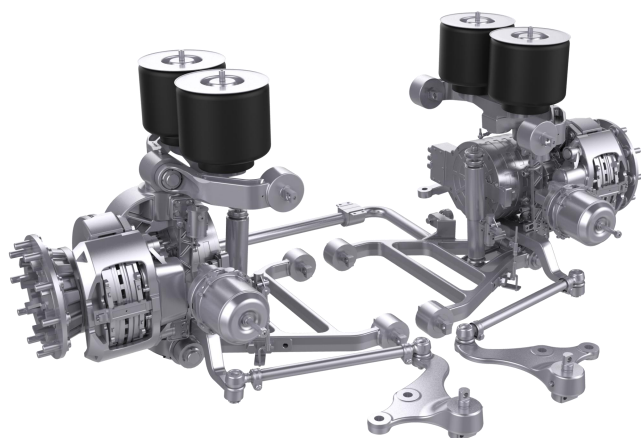
Parallel Axis Electric Drive Axle



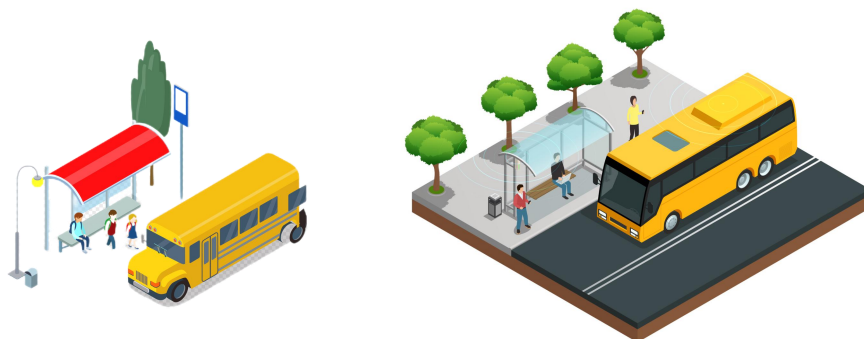
EA85

Motor	Voltage (VDC)	540
	Rated/Peak Power (KW)	80/160
	Rated/Peak Torque (Nm)	200/450
System	Maximum Output Torque (Nm)	9213
	Rated Load (KG)	6000
	Weight (KG)	415

Solution for 8-9M Bus



Steering Portal Axle



EA1100K

Rated/Peak Power (KW)	2 * 55/2 * 90
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Voltage (VDC)	600
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Rated/Peak Torque (Nm)	2 * 140/2 * 350
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Max Speed (RPM)	9500
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Bridge Axle (KG)	950
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Rated Load (KG)	9000
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Gear Ratio	17.55
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Solution for 8-9M Bus



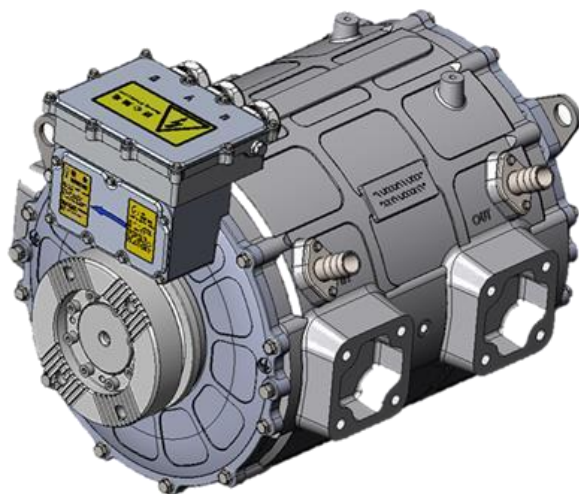
Independent Suspension Distributed Electric Drive System



EW70

Motor	Voltage (VDC)	540
	Rated/Peak Power (KW)	2*60/105
	Rated/Peak Torque (Nm)	2*170/300
System		8860
	Maximum Output Torque (Nm)	(Max Input Torque of Gearbox: 320Nm)
	Rated Load (KG)	7000
	Weight (KG)	745

Solution for 10-13M Bus



EM330-4H2400

Voltage (VDC)	520
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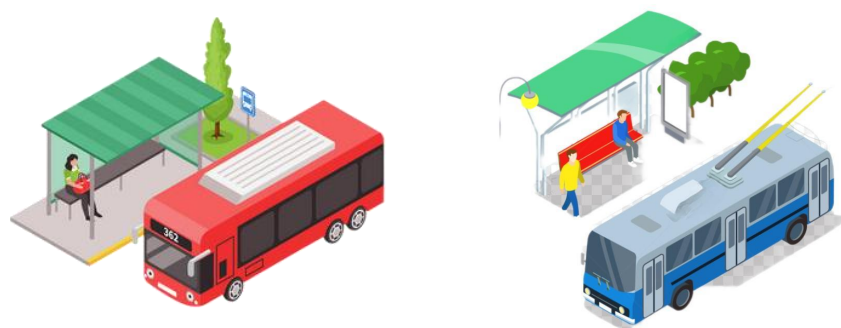
Rated/Peak Power (KW)	120/240
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Rated/Peak Toruqe (Nm)	1200/2400
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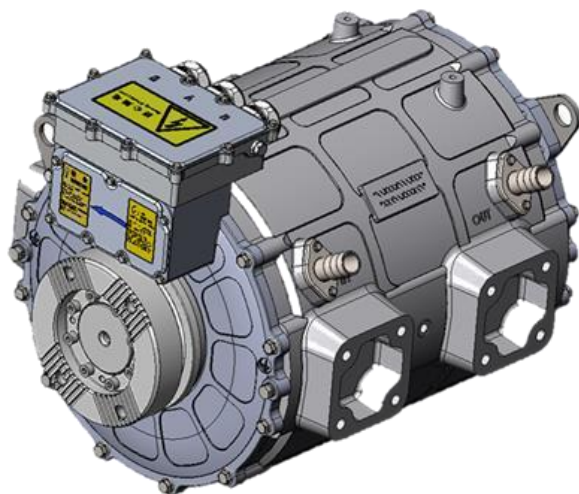
Max Speed (RPM)	3000
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Maximum Motor Efficiency (%)	≥97
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Overall Dimensions (MM)	Φ372*430
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Solution for 10-13M Bus



EM330-4H2800

Voltage (VDC)	520/869
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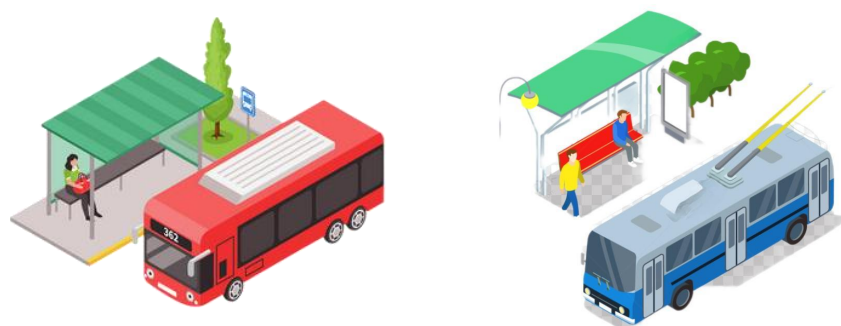
Rated/Peak Power (KW)	120/240
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Rated/Peak Torque (Nm)	1200-1400/2800
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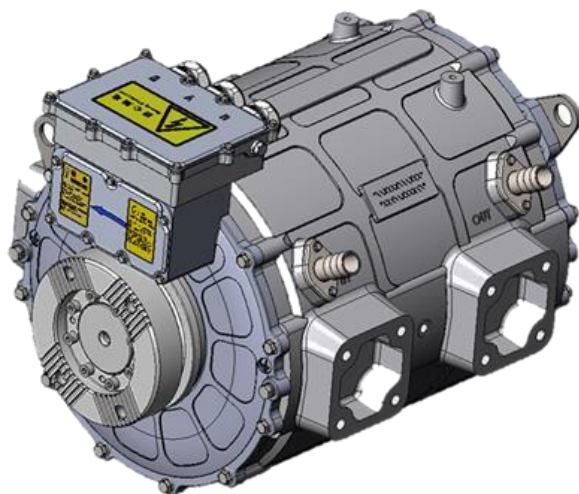
Max Speed (RPM)	2500
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Maximum Motor Efficiency (%)	≥97
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Overall Dimensions (MM)	Φ372*430
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Solution for 10-13M Bus



EM380-3H3100

Voltage (VDC)	600
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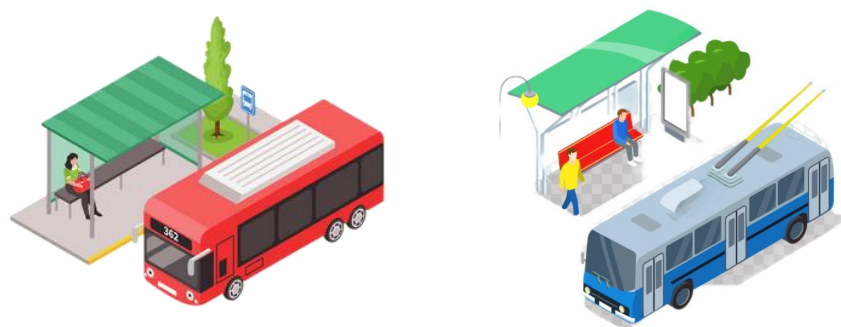
Rated/Peak Power (KW)	215/350
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Rated/Peak Torque (Nm)	1260/2800(3100-20s)
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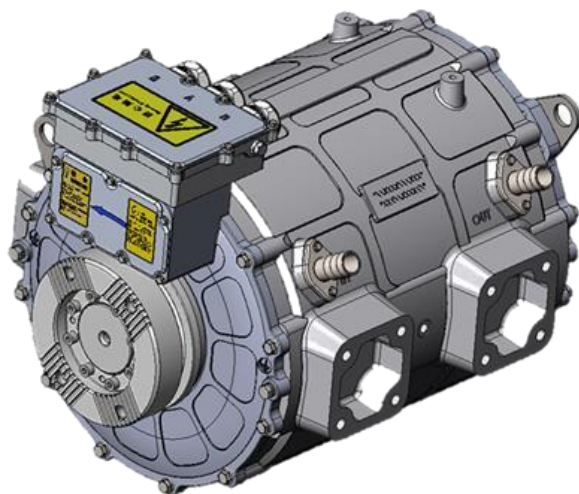
Max Speed (RPM)	3500
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Maximum Motor Efficiency (%)	≥97
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Overall Dimensions (MM)	Φ436*405
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Solution for 10-13M Bus



EM330-3H3200

Voltage (VDC)	600
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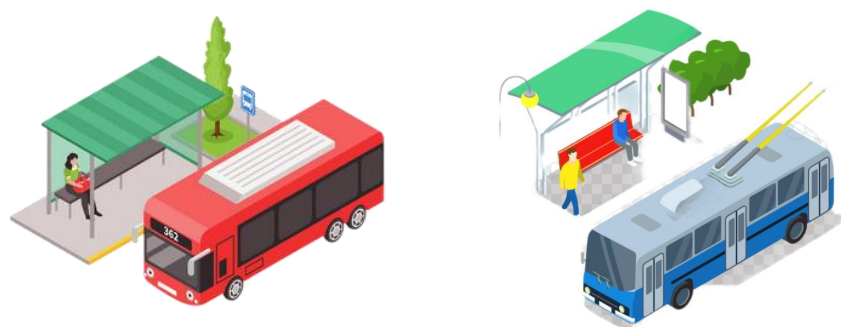
Rated/Peak Power (KW)	150/260
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Rated/Peak Torque (Nm)	1450/2800(3200-20s)
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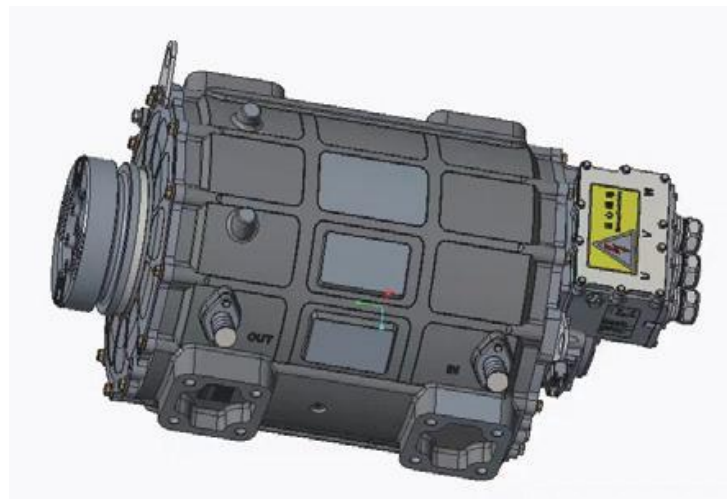
Max Speed (RPM)	3000
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Maximum Motor Efficiency (%)	≥97
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Overall Dimensions (MM)	Φ378*487
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Solution for 10-13M Bus



EM330-3H3200

Voltage (VDC)	600
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Rated/Peak Power (KW)	220/350
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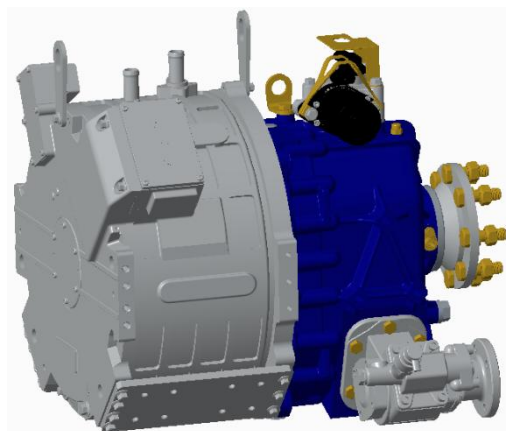
Rated/Peak Torque (Nm)	1200/2800(3200-20s)
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Max Speed (RPM)	3500
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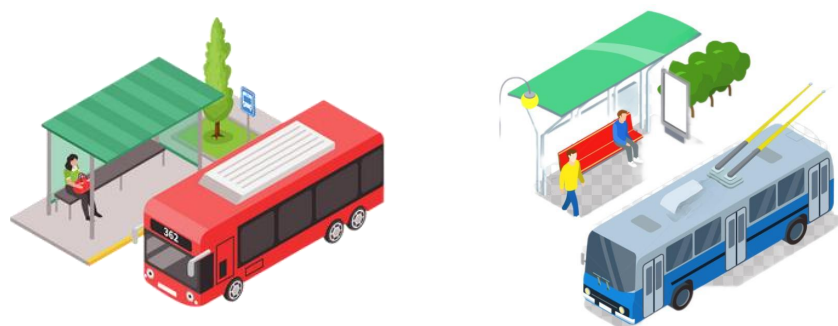
Maximum Motor Efficiency (%)	≥97
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Overall Dimensions (MM)	Φ378*487
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Solution for 10-13M Bus



Motor + Gearbox 2 in 1



TED3010S

Motor

Rated/Peak Power (KW)	110/210kw
Rated/Peak Torque (Nm)	500/1100Nm
Max Speed (RPM)	4500rpm

Gearbox

Gear	—	—
Ratio	2.741	1

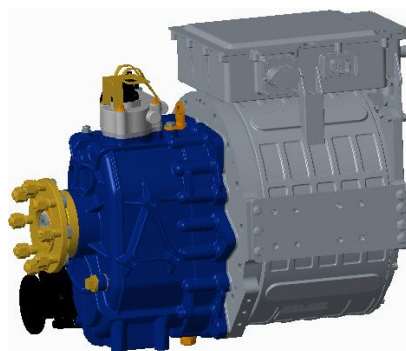
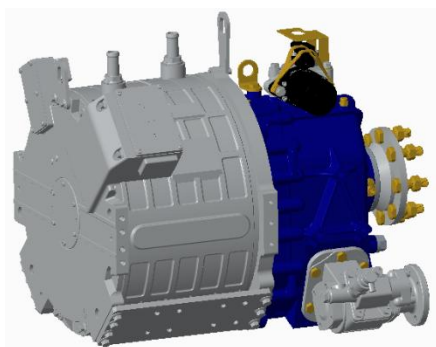
System

Maximum Output Torque (Nm)	3015Nm
Weight (KG)	174kg
Length * width * height (MM)	595X 516X 549

PTO (Optional)

Total Gear ratio	1.148
Rated/Peak Torque (Nm)	120/200Nm
Rated/Peak Power (KW)	20/40kW

Solution for 10-13M Bus



Motor + Gearbox 2 in 1 or 3 in 1



TED3380S

Motor

Rated/Peak Power (KW)	120/185kW
Rated/Peak Torque (Nm)	500/1300Nm (Motor Limits Torque to 1233Nm)
Max Speed (RPM)	3500rpm

Gearbox

Gear	—	—
Ratio	2.741	1

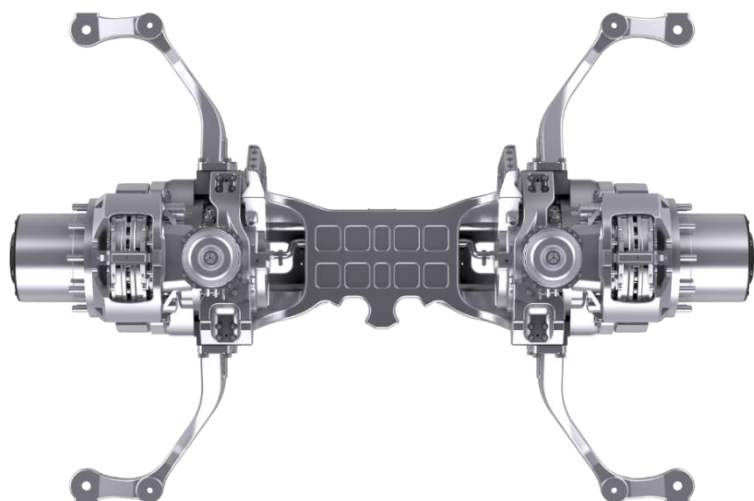
System

Maximum Output Torque (Nm)	3380Nm
Weight (KG)	210kg
Length * width * height (MM)	636X516X549

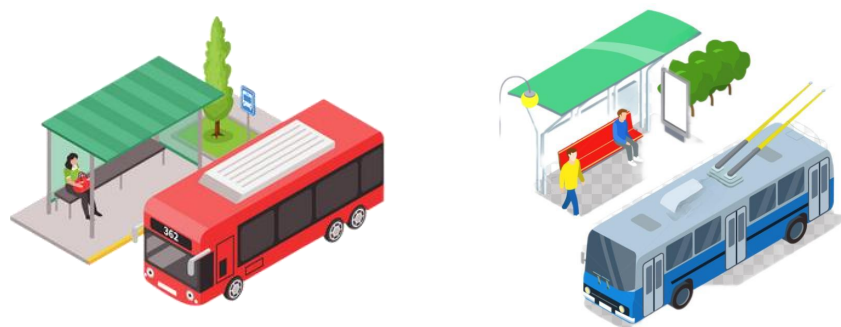
PTO (Optional)

Total Gear ratio	1.148
Rated/Peak Torque (Nm)	120/200Nm
Rated/Peak Power (KW)	20/40kW

Solution for 10-13M Bus



Distributed e-axle



C2100P

Rated/Peak Power (KW)	2 * 80/2 * 160
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Voltage (VDC)	540
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Rated/Peak Torque (Nm)	2 * 220/2 * 580
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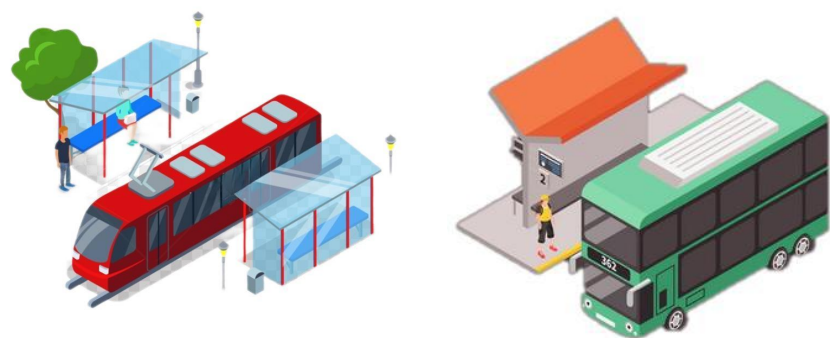
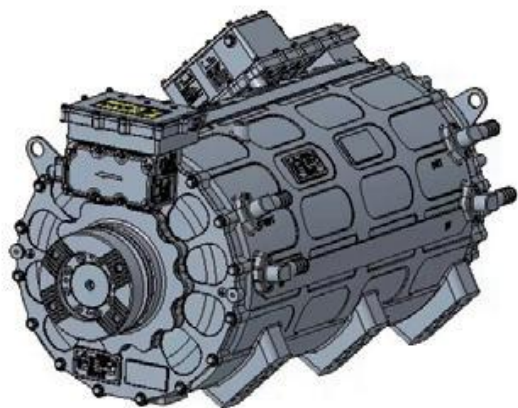
Motor Max Speed (RPM)	8000
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Bridge Axle (KG)	1080
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Rated Load (KG)	13000
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Gear Ratio	18.58
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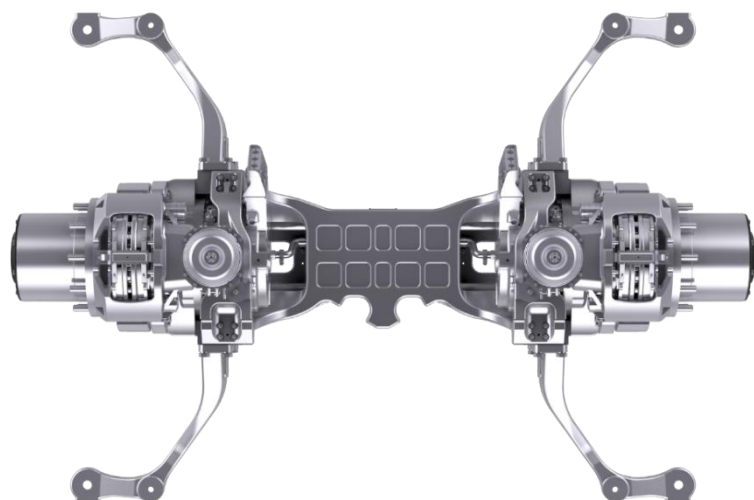
Solution for 14-18M Bus



EM380-3H4800

Voltage (VDC)	520
Rated/Peak Power (KW)	250/500
Rated/Peak Torque (Nm)	2400/4800
Max Speed (RPM)	3000
Maximum Motor Efficiency (%)	≥97%
Overall Dimensions (MM)	Φ440*780

Solution for 14-18M Bus



Distributed e-axle



C2100P

Rated/Peak Power (KW)	2 * 80/2 * 160
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Voltage (VDC)	540
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Rated/Peak Torque (Nm)	2 * 220/2 * 580
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Motor Max Speed (RPM)	8000
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Bridge Axle (KG)	1127
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Rated Load (KG)	14000
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Gear Ratio	18.58
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THANK YOU