

**DTSO1-096-  
HSM1-6.17.12**  
Offset  
Traction Drive



**Optimal performance  
from zero speed**

**Safety first**

Including mechanical  
parking lock

Low short circuit torque

Integrated overload  
protection against  
overheating

**Cutting-Edge Technology**

High power density

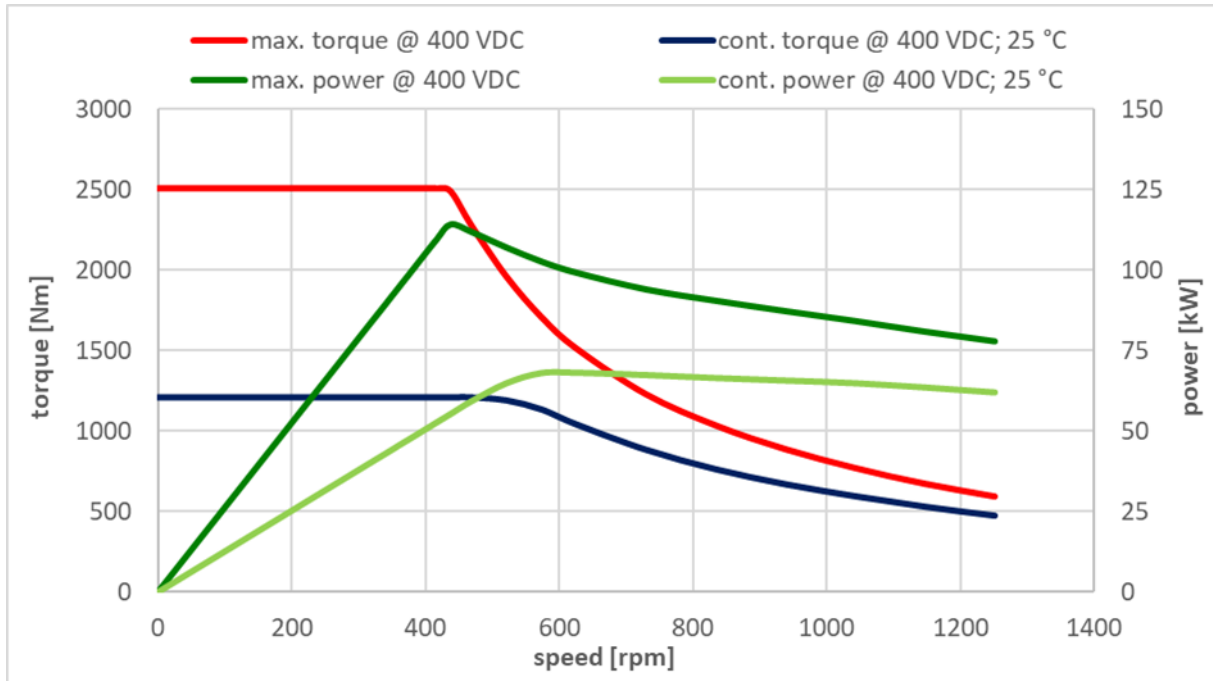
Minimal drag losses

Constant power over a very  
wide speed range

High efficiency over a wide  
speed and torque range

Performance data at 400V <sub>DC</sub>		DTSO1
Nominal speed	440	rpm
Continuous torque	1'210	Nm
Maximum torque (at max. inverter current)	2'500	Nm
Continuous power (acc. S1) at 25°C	68	kW
Continuous power (acc. ECE R85) at 25°C	72	kW
Maximum power	116	kW
Maximum speed	1'250	rpm
Basic electrical data		
Compatible inverter	DMC544-C02	
Recommended input voltage	300 - 450	V
Maximum inverter current	450	A <sub>RMS</sub>
Insulation class	H	
Mechanical data / Cooling system / Environment		
Transmission ratio	1:9.59	
Diameter (cooling jacket)	270	mm
Length	501	mm
Width	456	mm
Height	325	mm
Weight (dry)	76.8	kg
Oil volume (+/-50ml)	0.75	L
Oil type	Castrol BOT 553	
Ingress protection	IP67	
Ambient temperature range (operation)	-40 to +85	°C
Ambient temperature range (storage)	-40 to +85	°C
Amount of coolant in motor	0.5	L
Coolant water mixture water/glycol	50/50	%
Coolant input temperature range	-20 to +65	°C
Coolant flow rate	6 to 10	L/min
Max. pressure drop motor (8 L/min, T <sub>coolant</sub> = 25°C)	225	mbar
Maximum coolant pressure	1.5	bar
Maximum altitude	4000	m
Connections		
Phases U, V, W: M6 cable lugs, recommended cross section (Cu)	50	mm <sup>2</sup>
Ground GND: M8 cable lug, recommended cross section (Cu)	50	mm <sup>2</sup>
Key reference standards*		
Environmental	ISO 16750 ISO 20653 EN 60034-5 LV124	
Electrical Safety	IEC 60664-1 LV123	
Additional relevant standards	EN 60034-1	

**Performance DTSO1-096-HSM1-6.17.12**



**Dimensions [mm]**

