

**DTSO1-097-  
HSM1-12.18.13**  
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

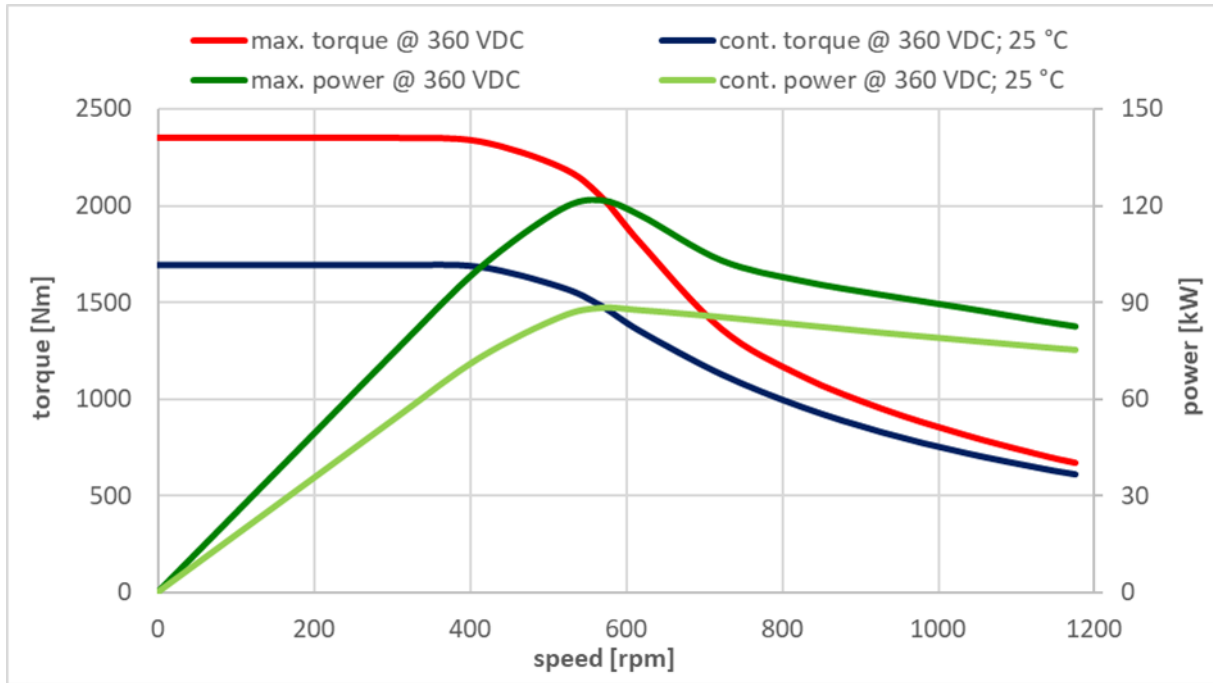
Minimal drag losses

Constant power over a very  
wide speed range

High efficiency over a wide  
speed and torque range

Performance data at 360 V <sub>DC</sub>	DTSO1	
Nominal speed	505	rpm
Continuous torque	1'690	Nm
Maximum torque (at max. inverter current)	2'350	Nm
Continuous power (acc. S1) at 25°C	84	kW
Continuous power (acc. ECE R85) at 25°C	87	kW
Maximum power	121	kW
Maximum speed	1'175	rpm
Basic electrical data		
Compatible inverter	DMC544-C02	
Recommended input voltage	300 - 450	V
Maximum inverter current	400	A <sub>RMS</sub>
Insulation class	H	
Mechanical data / Cooling system / Environment		
Transmission ratio	1:9.7	
Length	513	mm
Width	428	mm
Height	383	mm
Weight (dry)	73.4	kg
Oil volume	0.5	L
Oil type	Castrol BOT 448	
Ingress protection	IP67	
Ambient temperature range (operation)	-40 to +85	°C
Ambient temperature range (storage)	-40 to +85	°C
Coolant water mixture water/glycol	50/50	%
Coolant input temperature range	-20 to +65	°C
Coolant flow rate	2 to 6	L/min
Max. pressure drop motor (6 L/min, T <sub>coolant</sub> = 25°C)	<100	mbar
Maximum coolant pressure	2	bar
Maximum altitude	4000	m
Connections		
Phases U, V, W: M6 cable lugs, 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 DTSO1-097-HSM1-12.18.13**



**Dimensions [mm]**

