



EDS-160kW Introduction For Customer

Based on Current XPT Platform Design

XPT EDS R&D Team

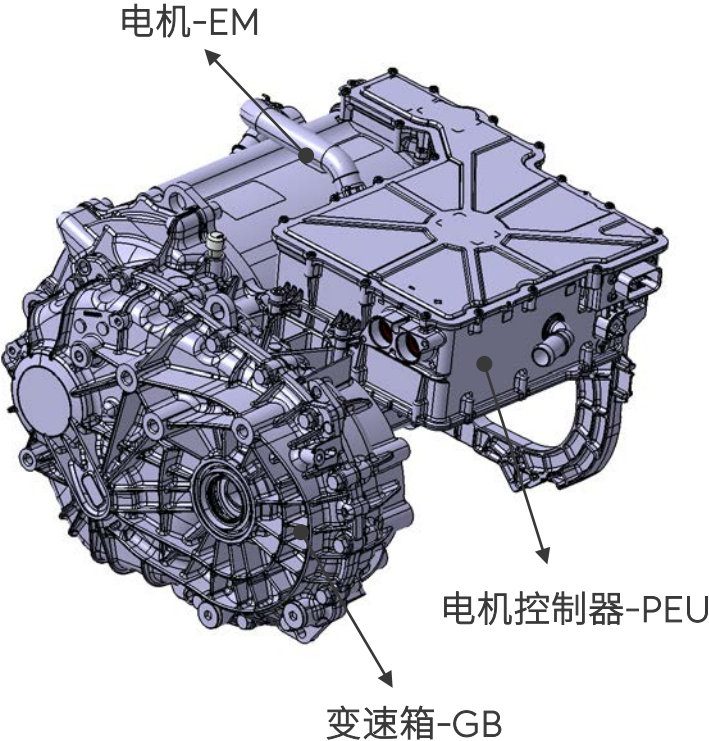
08-01-2019

Strictly Confidential

V.1.4

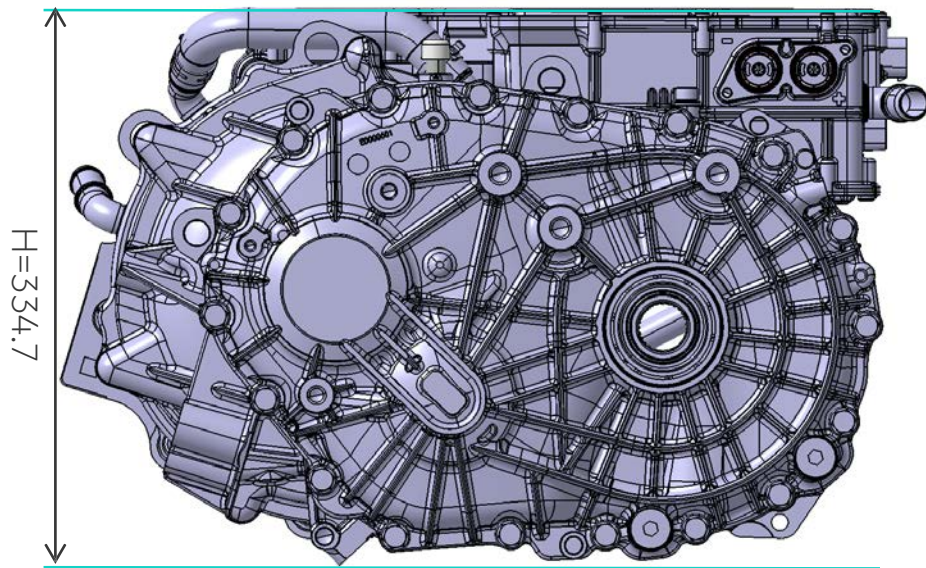
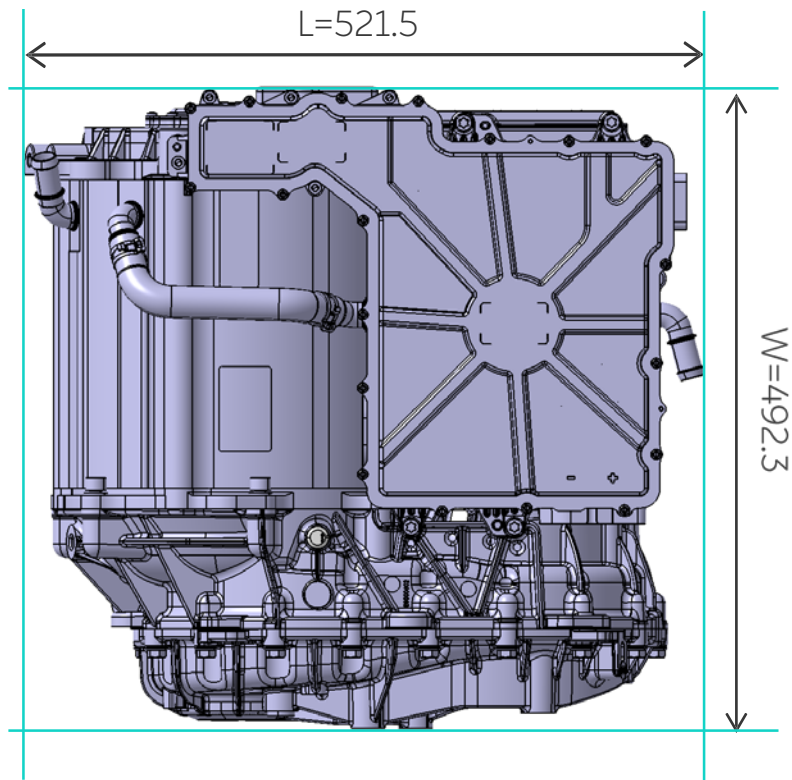


EDS-160kW Overview



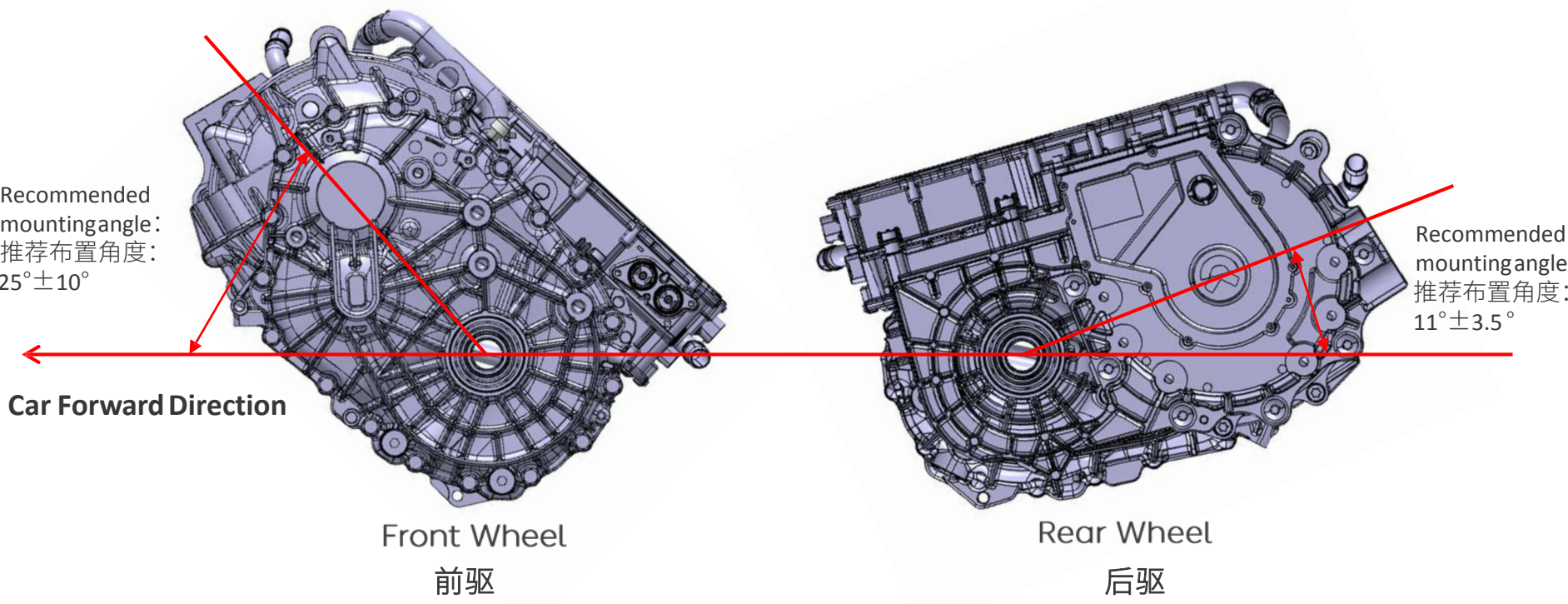
Technical Items 技术条目	Parameters 参数
EM type 电机类型	PMSM
EM peak power - 20s [kW] 电机峰值功率[kW]	160
EM continuous power[kW] 电机持续功率[kW]	60
EM peak torque - 20s [Nm] 电机峰值扭矩[Nm]	305
EM continuous torque[Nm] 电机持续扭矩[Nm]	130
EM Max. continuous speed [rpm] 电机最高转速[rpm]	15000
Rated voltage [VDC] 额定电压[VDC]	350
Operation voltage range [VDC] 工作电压范围[VDC]	250~425
Full-Performance voltage range [VDC] 全功率电压范围[VDC]	350~415
Gear ratio 齿轮箱速比	9.57
Gearbox architecture 齿轮箱结构	Parallel Axle
EDS Max efficiency EDS 最高效率	>93%
Operation temperature [degC] 运行温度[degC]	-40~85 °C
IP level 防护等级	IP6K9K,IP67

EDS-160kW Outline

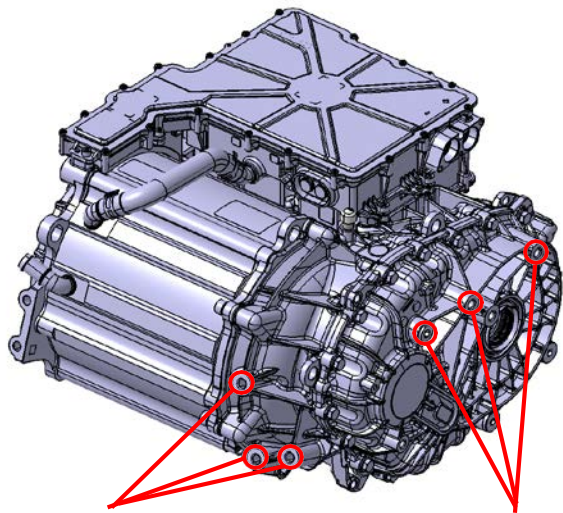


EDS-160kW: L (长) *W (宽) *H (高) =521.5*492.3*334.7mm

EDS-160kW Interface - Installation Concept

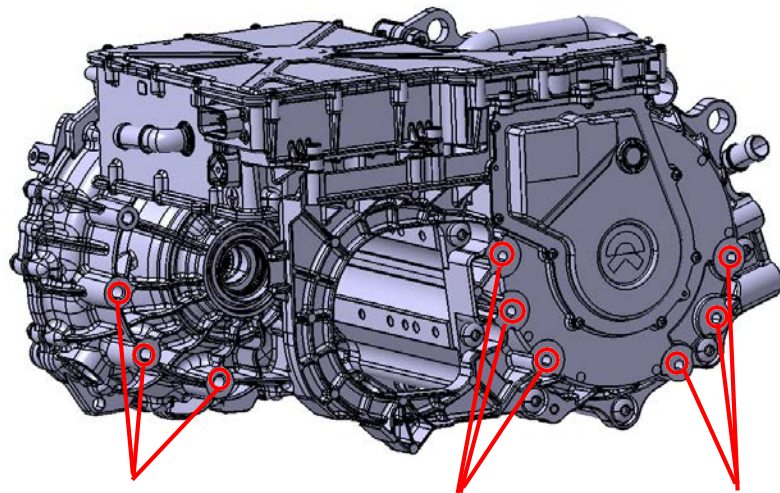


EDS-160kW Interface - Mounting Interface on Suspension



悬置组1: 3xM12

悬置组2: 3xM12



悬置组3: 3xM12

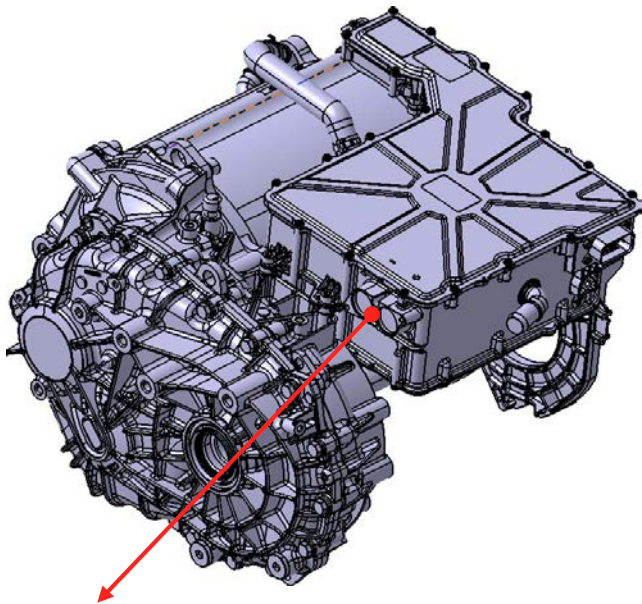
悬置组4: 3xM10

悬置组5: 3xM10

Notes: EDS installation mounts need to be confirmed with XPT.

注：EDS安装悬置固定需要与XPT进行确认。

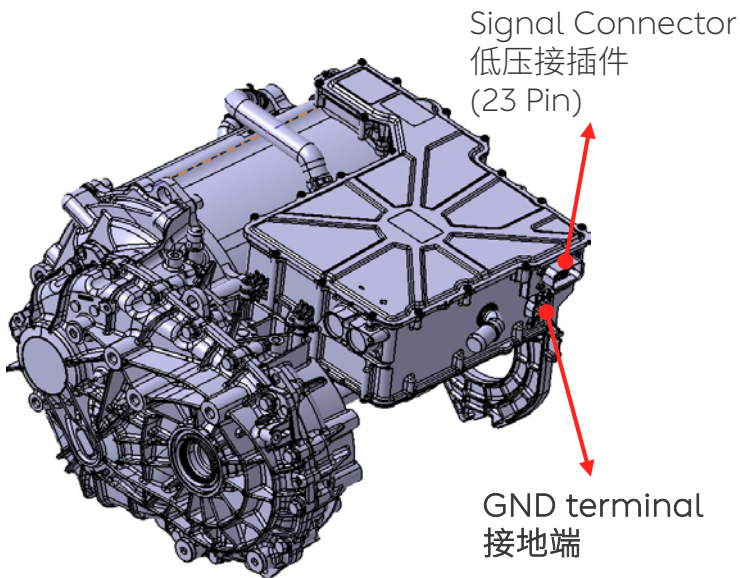
EDS-160kW Interface - HV Connector



HV Connector
高压接插件

- HV Connector(Harness Side, female)
高压接插件（线束侧，母端）：
 - Rosenberger H4K136 (Recommended)
罗森伯格 H4K136(推荐)
- Recommend cable :
 - Cable dia. 推荐线束直径：50mm²

EDS-160kW Interface - LV Connector & GND Terminal

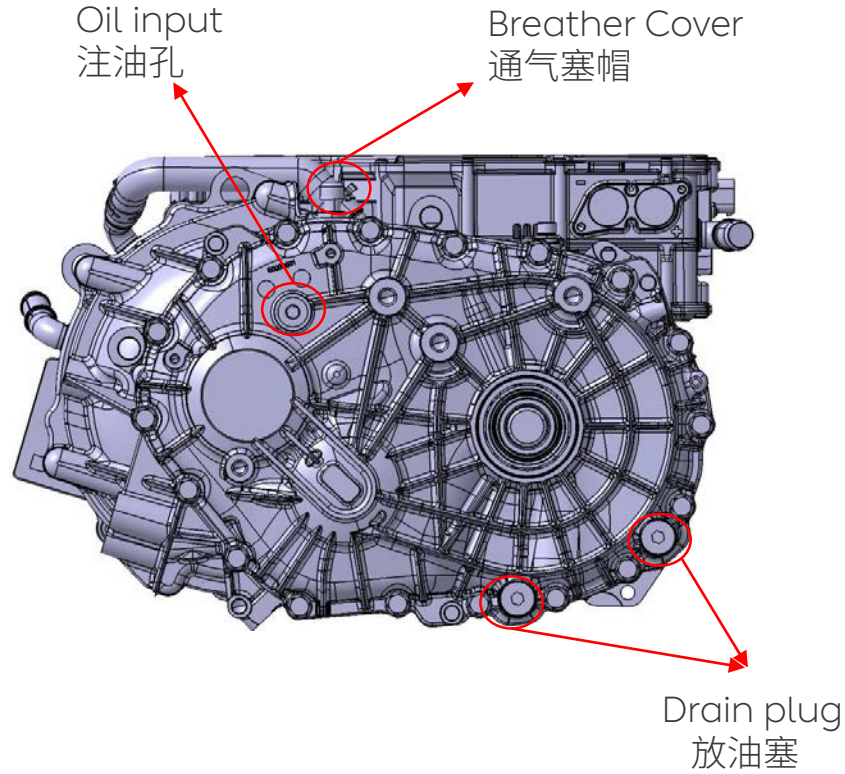


- Signal Connector(Harness Side, female)
低压接插件（线束侧，母端）推荐型号: TE 1-770680-5
- GND Terminal
接地端

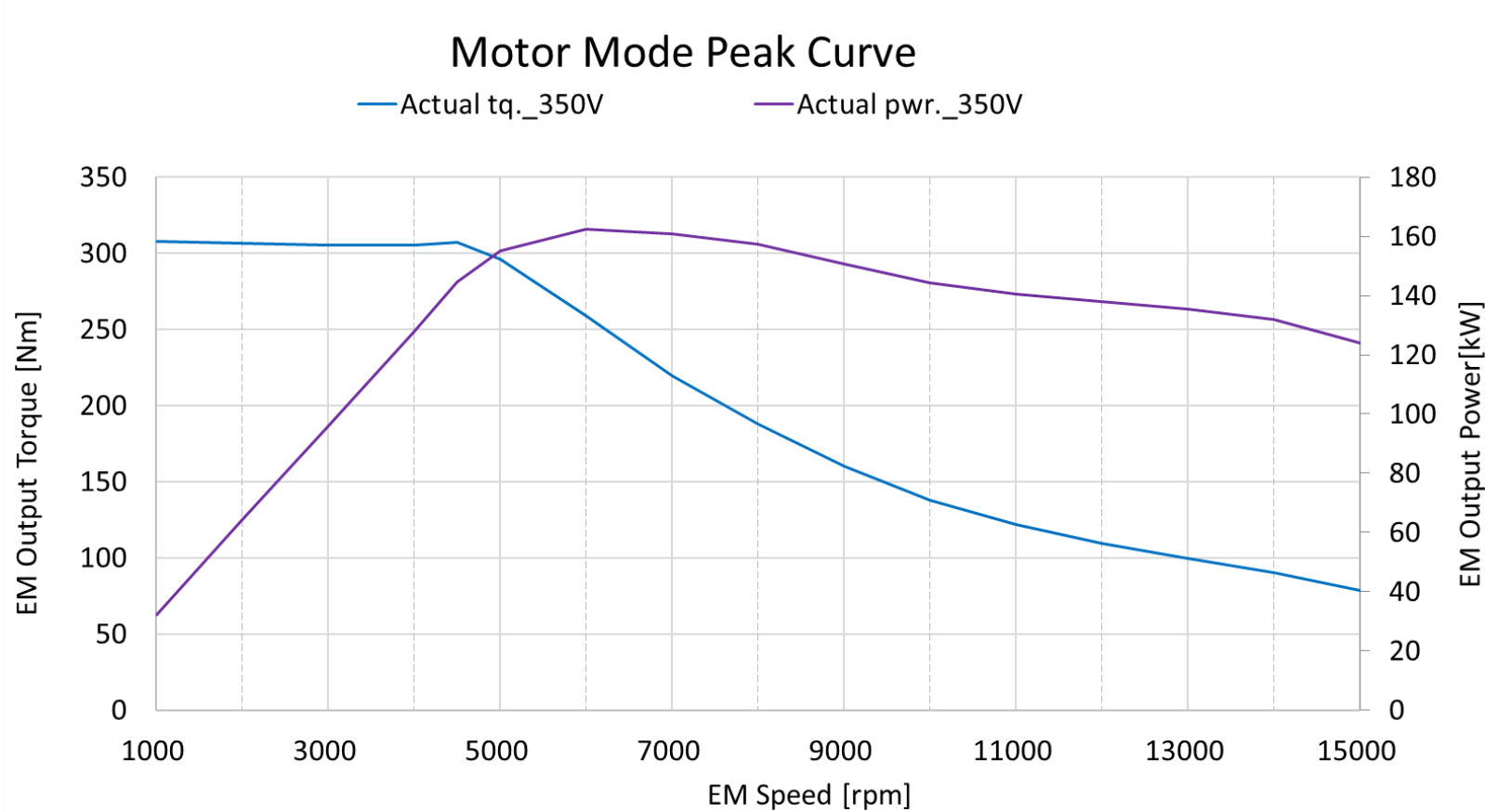
➤ Signal Connector PIN Assignment
(as the table shows)
低压接插件Pin脚定义（参见下表）：

PIN Number Pin脚	Circuit Description 描述	Comment & Clarification 定义
2	KL30	12V power input - UNSWITCHED
3	KL30	12V power input - UNSWITCHED
5	KL15	Wakeup
6	CRASHIN	OD/OC input PWM signal with special duty
12	CAN_2_H	Just for Calibration
13	CAN_1_H	PDCAN
14	CAN_3_H	PTCAN
15	HVIL_Out	HV interlock loop output
20	CAN_2_L	Just for Calibration
21	CAN_1_L	PDCAN
22	CAN_3_L	PTCAN
23	HVIL_In	HV interlock loop input

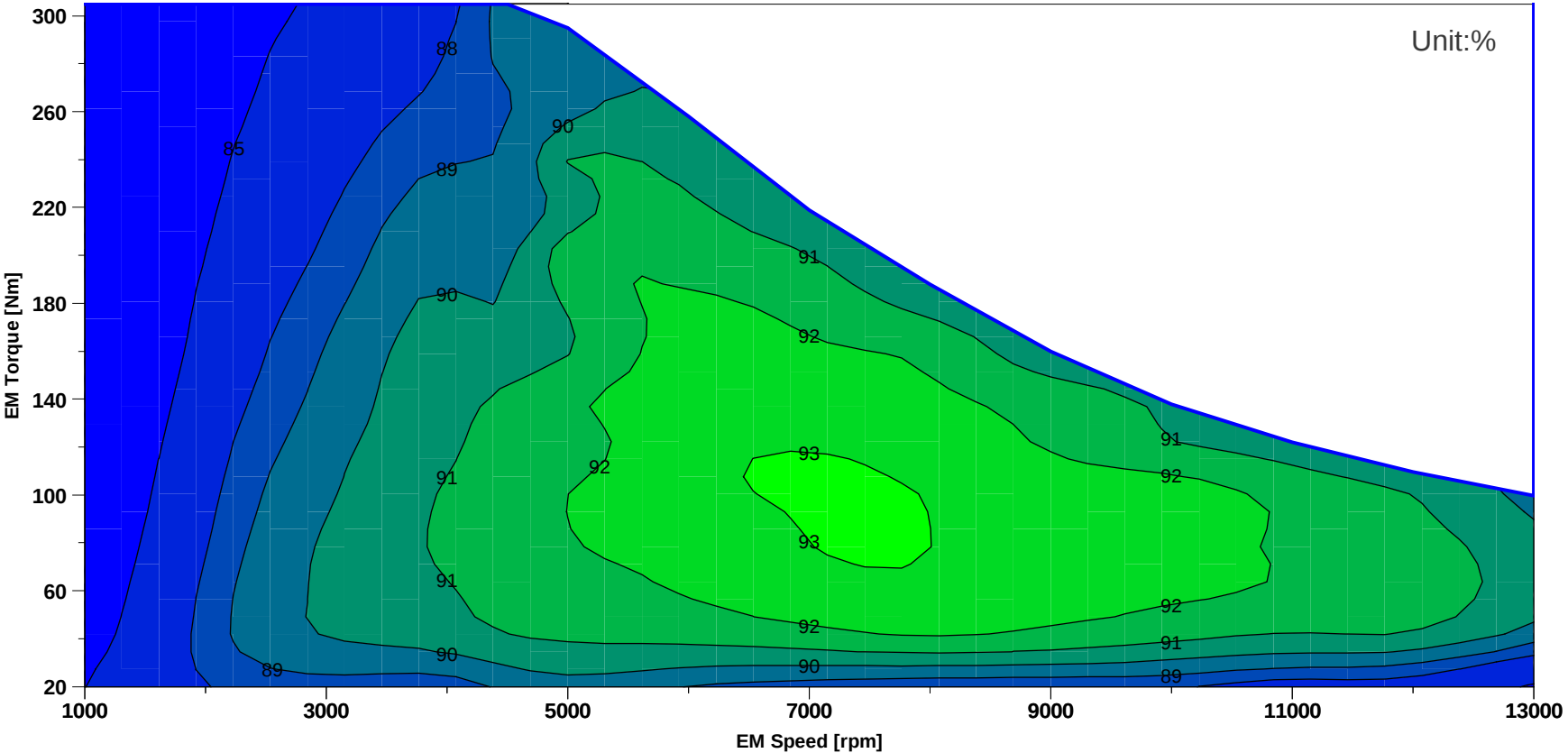
EDS-160kW Interface - Breath vent plug/ Oil input/ Output plug



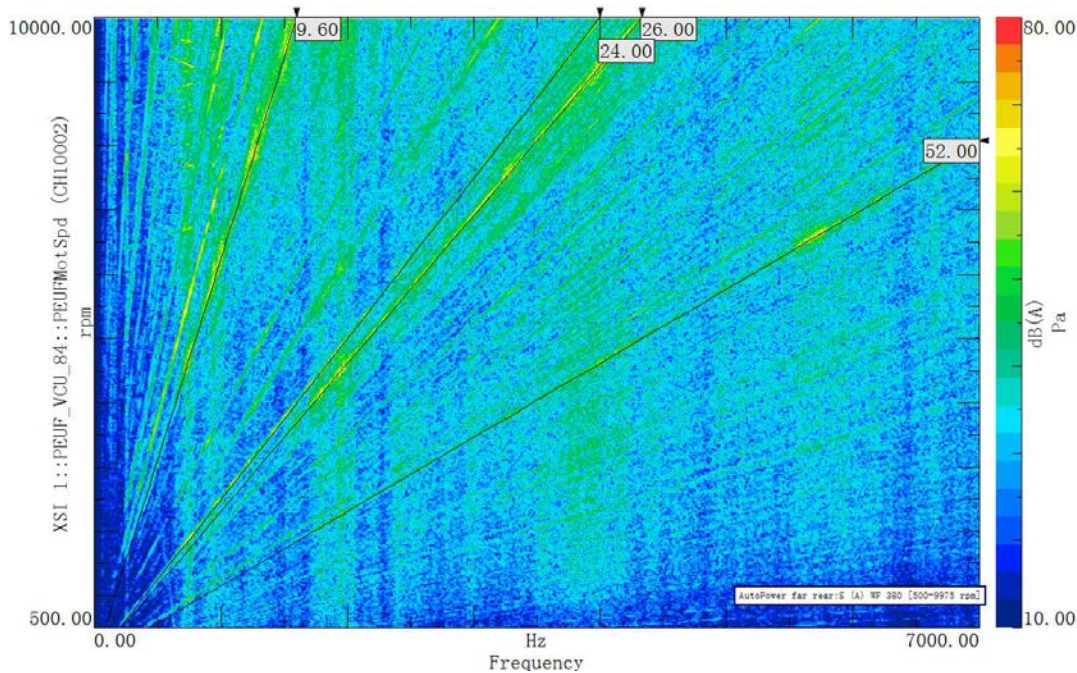
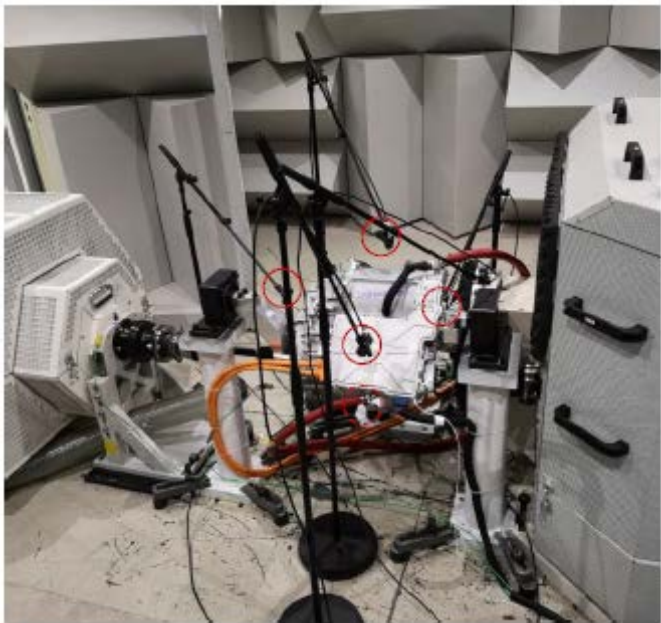
EDS-160kW EM+PEU System Peak Curve



EDS-160kW Efficiency



EDS-160kW NVH Performance



Notes: Based on a certain project tested, and the result is only for information.

注：基于特定项目测试，结果仅供参考。

EDS-160kW EMC Performance

Test Item	Test Description	Functional Class & Functional Status	Reference to requirement or feature
Radiated Emissions	Radiated Emissions, ALSE	Class 5 in FM band Class 3 in other bands	CISPR25 CDV - 2015
Conducted Emission	Conducted Emission on LV power lines – Voltage method	Class 5 in FM band Class 3 in other bands	CISPR25 CDV – 2015
	Conducted Emission on HV power lines – Voltage method	Class 5 in FM band Class 3 in other bands	CISPR25 CDV – 2015
	Conducted Emission on LV lines – current probe method	Class 5 in FM band Class 3 in other bands	CISPR25 CDV – 2015
	Conducted Emission on HV lines – current probe method	Class 5 in FM band Class 3 in other bands	CISPR25 CDV 2015
ESD	Handling(ESD Unpowered – Handling of Devices)	Class A	ISO 10605 – 2008
	Power-On Mode	Class A	ISO 10605 – 2008
	Remote Inputs and Outputs harness	Class A	NA
Radiated Immunity	Bulk Current Injection (Radiated Immunity – BCI)	Class A	ISO 11452-4
	Radiated Immunity, ALSE	Class A	ISO 11452-1 ISO 11452-2
	Immunity to Magnetic Fields	Class A	ISO 11452-1 ISO 11452-8
Conducted Immunity	Power lines only	Class A & C	ISO 7637-1 ISO 7637-2 ISO 16750-2
	CCC method	Class A	ISO 7637-1
	ICC method	Class A	ISO 7637-3

Remarks:

All information is based on current product design, here is possibility of design change.

Official contract and customer SOR shall be prevailed.

备注：

以上内容仅基于当前产品设计数据，后期可能设计变更。

请以最终商务合同和技术要求为准。



Thank You

