

DIN EN ISO 19363:2022-04 (E)

Electrically propelled road vehicles - Magnetic field wireless power transfer - Safety and interoperability requirements (ISO 19363:2020); English version EN ISO 19363:2021

Contents		Page
Foreword		v
Introduction		vi
1	Scope	1
2	Normative references	1
3	Terms and definitions	2
4	System structure	4
5	Requirements regarding environmental conditions	5
6	Classification	5
7	MF-WPT power transfer requirements	6
7.1	General	6
7.2	Frequency	6
7.3	Geometrical operating space	6
7.4	Requirements for output power	7
7.5	Requirements for power transfer efficiency	8
7.6	Requirements for output voltage	8
7.6.1	Performance requirements at different output voltage levels	8
7.6.2	Voltage ripple and voltage overshoot	8
7.7	MF-WPT power transfer test procedure	8
7.7.1	General	8
7.7.2	Test setup	8
7.7.3	Test procedure	10
8	Requirements for communication and MF-WPT activities	13
9	EMC requirements	14
10	Safety requirements	14
10.1	Protection in case of unintended power transfer	14
10.2	Protection against electric shock	14
10.2.1	General	14
10.2.2	Insulation coordination	14
10.3	Protection against thermal incidents	15
10.3.1	General	15
10.3.2	Overload protection and short-circuit protection	15
10.4	Protection of persons against electromagnetic effects	15
10.4.1	General	15
10.4.2	Protection areas	15
10.4.3	Requirements for protection of persons against exposure to hazardous electromagnetic fields	16
10.4.4	Requirements to protect the functionality of AIMDs	16
10.5	Protection against overheating	17
11	Owner's manual and marking	17
11.1	Owner's manual	17
11.2	Marking	17
Annex A (normative)	Reference supply power circuit for EVPCs with a rated output power $\leq 3,7$ kW	18

Annex B (normative) Reference supply power circuit for EVPCs with a rated output power $\leq 11,1$ kW23

Annex C (informative) Example for a different implementation of a supply power circuit.....27

Annex D (informative) Conformance demonstration for protection of persons against electromagnetic effects.....31

Bibliography39