

DIN EN 1648-2:2012-10 (E)

Leisure accommodation vehicles - 12 V direct current extra low voltage electrical installations - Part 2: Motor caravans

Contents		Page
Foreword		4
Introduction		5
1	Scope	6
2	Normative references	6
3	Terms and definitions	6
4	Power supply	6
4.1	General	6
4.2	Auxiliary batteries	7
4.2.1	General	7
4.2.2	Type of battery	7
4.2.3	Capacity	7
4.2.4	Terminals	7
4.2.5	Location	7
4.2.6	Auxiliary battery compartment	7
4.2.7	Warning notice	8
4.3	Other sources of supply	8
4.3.1	Generators and transformer/rectifiers unit	8
4.3.2	Regenerative sources	8
4.4	Protective measures	9
5	Wiring	9
5.1	Cable and fixed wiring cross-sectional areas	9
5.2	Fixed wiring	9
5.2.1	Cables	9
5.2.2	Type of cable	9
5.2.3	Cable installation	9
5.2.4	Supporting of cables	9
5.2.5	Connections	9
5.2.6	Auxiliary battery cables	9
5.2.7	Prohibited cable runs and LPG installations	9
6	Overcurrent protection	10
6.1	Protection of positive conductors	10
6.2	Types of device	10
6.3	Installation of fuses	10
6.4	Prohibited locations	10
7	Installation of appliances	10
7.1	General	10
7.2	Selection and connection of appliances	11
7.3	Socket outlets	11
7.4	Battery charger	11
7.5	External luminaires	11
7.6	Voltage drop	11
8	User's Handbook	11

Annex A (informative) Relation of cable cross-sectional area, current flow and cable length for fixed wiring installations	13
A.1 General	13
A.2 Graphs for obtaining minimum cross-sectional areas	13
A.3 Calculation of the minimum cross-sectional areas	14
Bibliography	15
Figures Figure 1 -- Overview of relevant European Standards applying to leisure accommodation vehicles	5
Figure A.1 -- Graph for obtaining minimum cross-sectional area for conductors for fixed wiring installations with a voltage drop of 0,8 V	13
Figure A.2 -- Graph for obtaining minimum cross-sectional area for conductors for battery cable installations with a voltage drop of 0,3 V	14