

Contents

00	Technical data	1
1	Safety precautions	1
1.1	Safety precautions when working on the high-voltage system	1
1.2	Safety precautions when working in the vicinity of high-voltage components	2
2	Repair instructions	3
2.1	Rules for cleanliness	3
2.2	Identification plates	3
2.3	Use of impact wrenches	3
2.4	Additional repair instructions for work on electric drive	4
3	Assessing high-voltage system risk level	5
93	Electric drive systems	6
1	Safety precautions	6
2	Warning labels	7
2.1	Checking warning labels	7
3	High-voltage battery unit	8
3.1	Exploded view - high-voltage battery 1 AX2	8
3.2	Determining mean cell voltage	10
3.3	Charging and discharging battery modules	11
3.4	Performing leak test for high-voltage battery 1 AX2	12
3.5	Localising leaks on high-voltage battery 1 AX2	20
3.6	Removing and installing high-voltage battery 1 AX2	20
3.7	Lifting high-voltage battery 1 AX2	28
3.8	Removing and installing underbody guard for high-voltage battery	31
3.9	Removing and installing battery regulation control unit J840	35
3.10	Removing and installing switching unit for high-voltage battery SX6	37
4	High-voltage battery components	50
4.1	Exploded view - high-voltage battery 1 AX2	50
4.2	Exploded view - switching unit for high-voltage battery SX6	54
4.3	Overview of fitting locations - battery modules	56
4.4	Overview of fitting locations - battery connectors	58
4.5	Inspecting and classifying high-voltage battery 1 AX2	60
4.6	Marking battery modules and battery connectors	61
4.7	Handling replacement bolts for cover for battery housing	61
4.8	Removing and installing cover for battery housing	62
4.9	Removing and installing battery housing (level 2)	83
4.10	Removing battery module	97
4.11	Installing battery module	106
4.12	Provisional energisation of high-voltage battery 1 AX2	110
4.13	Removing and installing communication wiring harness on high-voltage battery 1 AX2	113