

ISO 13043:2011-04 (E)

Road vehicles - Refrigerant systems used in mobile air conditioning systems (MAC) - Safety requirements

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Normative references	1
3	Terms and definitions	2
4	Safety targets	7
4.1	General	7
4.2	Risk assessment	8
4.3	Relevant inputs and scenarios for the risk assessment	9
5	System level requirements	11
5.1	Refrigerant system	11
5.2	Pressure and temperature ranges	12
5.3	System layout	12
5.4	Pressure and temperature limitation strategies	12
6	Component level requirements	12
6.1	General requirements	12
6.2	Piping and connecting technology	13
6.3	Compressor	14
6.4	Evaporator	15
6.5	Condenser/gas cooler	15
6.6	Receiver and accumulator	15
6.7	Service ports	15
6.8	Control devices	15
7	Design requirements for service and manufacturing	15
Annex A (normative)	Relevant input values for the risk assessment of refrigerants R134a, R1234yf and R744	16
Annex B (normative)	Pressure and temperature reference data	19
Bibliography		21