

ISO 817:2014-05 (E)

Refrigerants - Designation and safety classification

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Normative references	1
3	Terms, definitions, abbreviated terms and symbols	1
3.1	Terms and definitions	1
3.2	Abbreviated terms	6
3.3	Symbols	7
4	Numbering of refrigerants	7
5	Designation prefixes	11
5.1	General prefixes	11
5.2	Composition-designating prefixes	11
6	Safety classifications	12
6.1	General	12
6.2	Matrix diagram of safety group classification system	14
7	Refrigerant classifications	14
8	Refrigerant concentration limit (RCL)	14
8.1	General	14
8.2	Data for calculations	17
8.3	Contaminants and impurities	18
8.4	Conversion of units -- Volumic mass and altitude adjustment	18
Annex A (informative) Examples of isomer designation		25
Annex B (normative) Details of testing for flammability and fractionation analysis		27
Annex C (informative) Method of test for burning velocity measurement of flammable gases		31
Annex D (normative) Calculation of RCL and ATEL for blends		54
Annex E (informative) Data used to determine safety classification and RCL values and data for unclassified refrigerants		57
Annex F (normative) Application instructions		65
Bibliography		72