

ISO 23551-9:2015-08 (E)

Safety and control devices for gas burners and gas-burning appliances - Particular requirements - Part 9: Mechanical gas thermostats

Contents		Page
Foreword		v
Introduction		vi
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Classification	3
4.1	Classes of controls	3
4.2	Groups of controls	3
5	Test conditions	3
6	Construction	4
6.1	General	4
6.2	Construction requirements	4
6.2.1	Appearance	4
6.2.2	Holes	4
6.2.3	Breather holes	4
6.2.4	Screwed fastenings	4
6.2.5	Jointing	4
6.2.6	Moving parts	4
6.2.7	Sealing caps	4
6.2.8	Dismantling and reassembling for servicing and/or adjustment	4
6.2.9	Auxiliary channels	4
6.3	Materials	5
6.3.1	General material requirements	5
6.3.2	Housing	5
6.3.3	Springs	5
6.3.4	Resistance to corrosion and surface protection	5
6.3.5	Impregnation	5
6.3.6	Seals for glands for moving parts	5
6.4	Gas connections	5
6.4.1	Making connections	5
6.4.2	Connection sizes	5
6.4.3	Threads	6
6.4.4	Union joints	6
6.4.5	Flanges	6
6.4.6	Compression fittings	6
6.4.7	Nipples for pressure tests	6
6.4.8	Strainers	6
7	Performance	7
7.1	General	7
7.2	Leak-tightness	7
7.2.1	Criteria	7
7.2.2	Test for leak-tightness	7
7.3	Torsion and bending	7

7.4	Rated flow rate	7
7.4.1	Criterion	7
7.4.2	Test for rated flow rate	8
7.5	Durability	8
7.6	Functional requirements	8
7.7	Endurance	14
7.7.1	Mechanical cycling	14
7.7.2	Thermal cycling	15
8	EMC/electrical requirements	16
9	Marking, installation, and operating instructions	16
9.1	Marking	16
9.2	Installation and operating instructions	17
9.3	Warning notice	17
Annex A (informative)	Leak-tightness test -- Volumetric method	18
Annex B (informative)	Leak-tightness test -- Pressure-loss method	19
Annex C (normative)	Conversion of pressure loss into leakage rate	20
Annex D (normative)	Test for immunity to power-frequency magnetic fields	21
Annex E (normative)	Specific regional requirements in European countries	22
Annex F (normative)	Specific regional requirements in Canada and USA	23
Annex G (normative)	Specific regional requirements in Japan	25
Bibliography	26