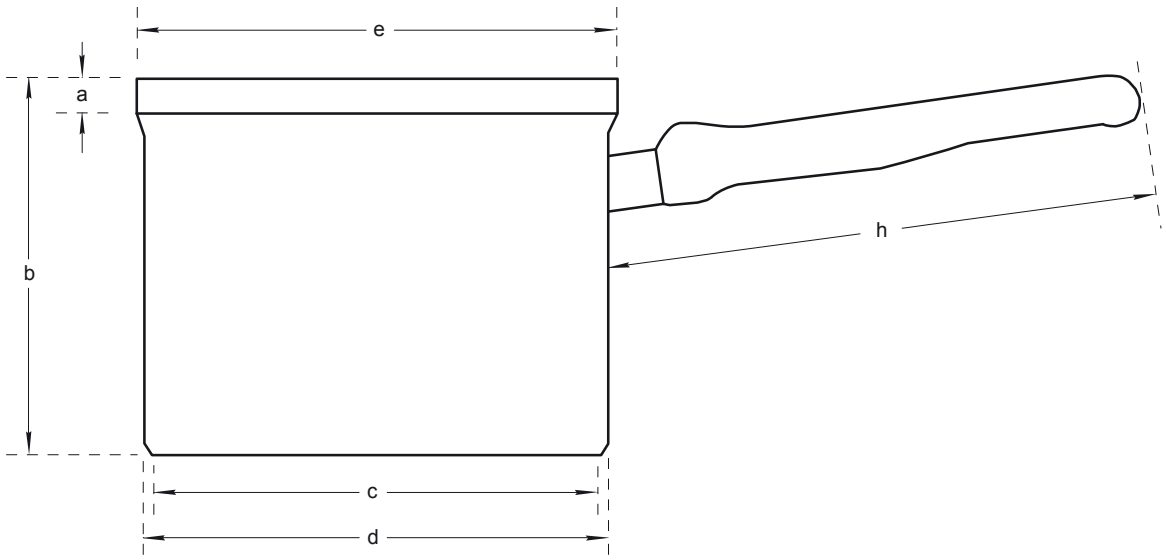
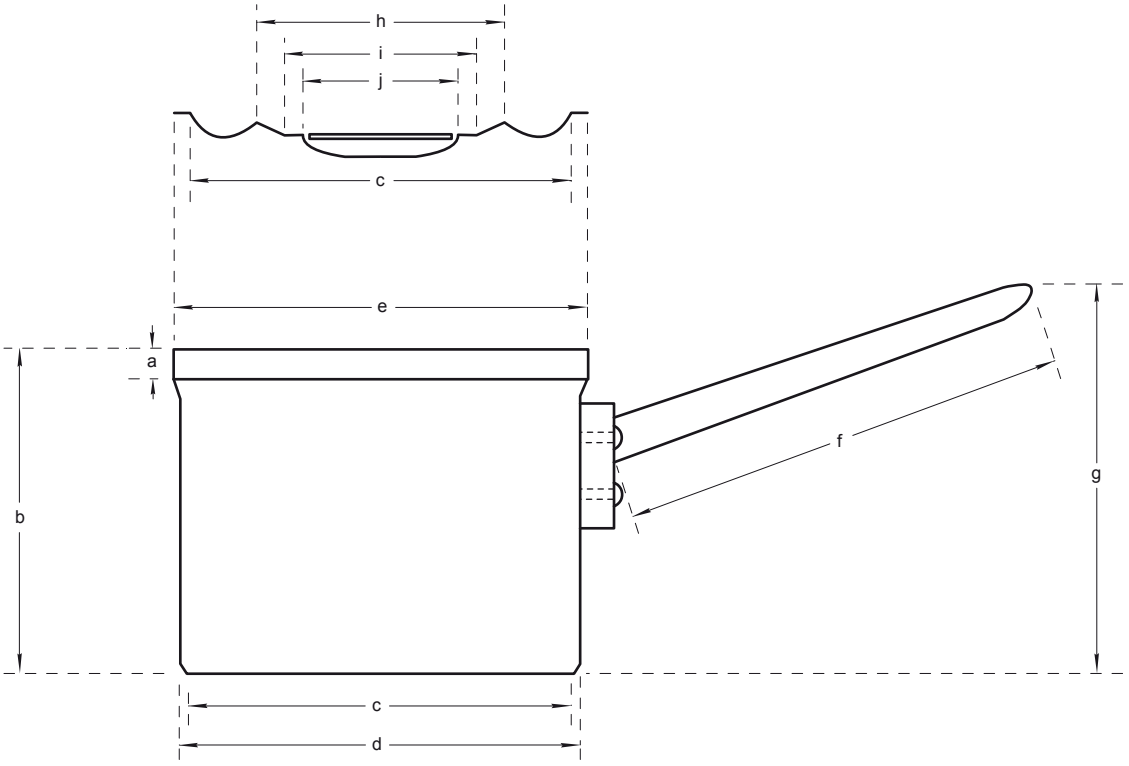


Vessel	Dimensions (mm)						Capacity (L)
	a	b	c	d	e	h	
120 mm contact diameter	8	83	120	143	145	165	1.1

A1

FIGURE A4 STANDARD ALUMINIUM VESSEL FOR STABILITY TESTING



Vessel	Dimensions (mm)										Capacity (L)
	a	b	c	d	e	f	g	h	i	j	
200 mm diameter	10	141	193 ±5	199 ±5	205	193	160	150	120	95	4.0

FIGURE A5 STANDARD 200 MM ALUMINIUM VESSEL WITH LID

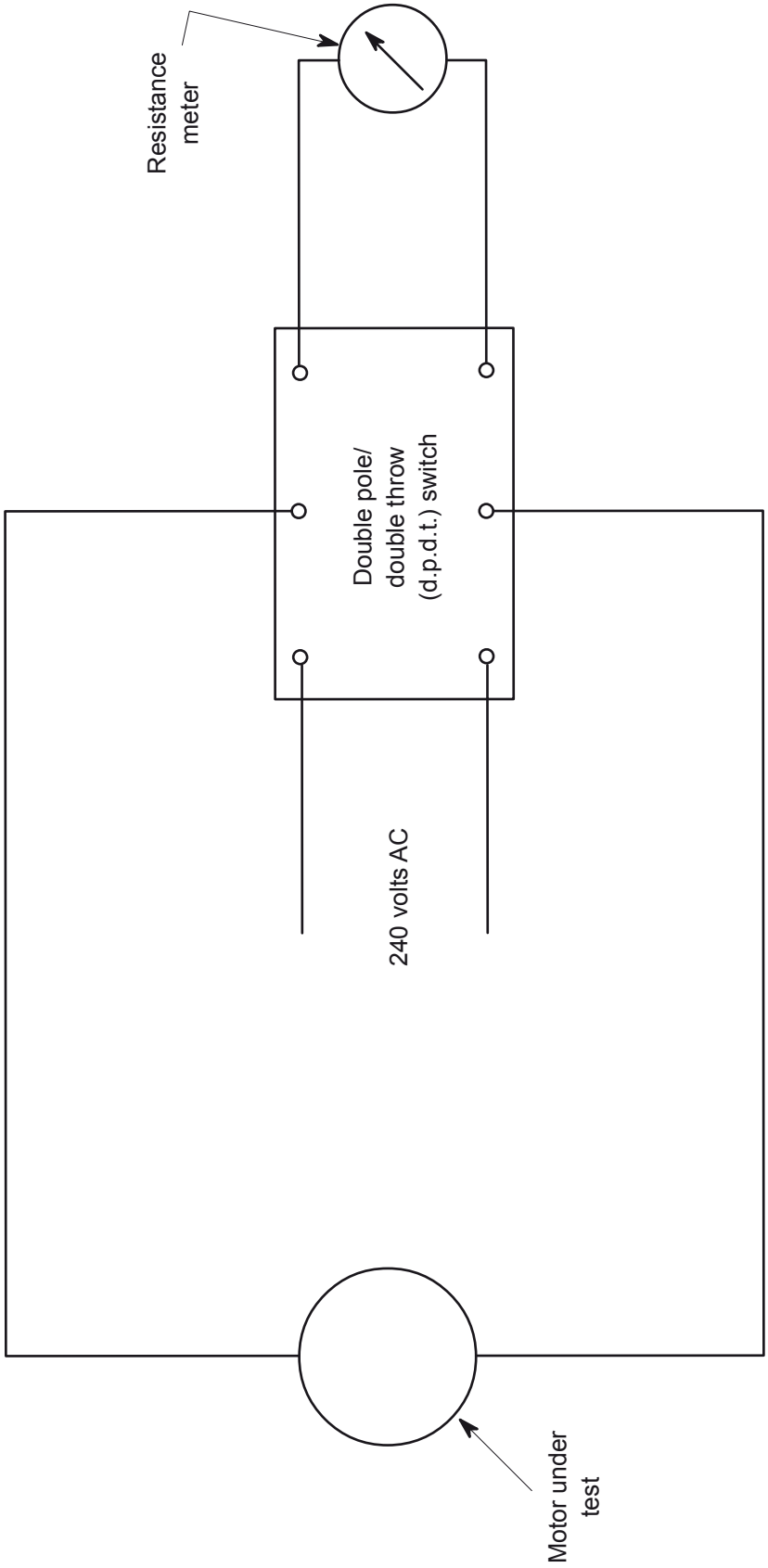


FIGURE A6 CONNECTION DIAGRAM FOR TEMPERATURES OF ELECTRIC MOTOR WINDINGS

APPENDIX B

METHODS OF TEST

(Normative)

A1

B1 'VOID'

B2 M.O.T. 2.1.23 – 2001 PAN STABILITY TEST

B2.1 SCOPE

This test applies to all side burners (except special purpose burners).

B2.2 METHOD

A 120 mm contact diameter standard aluminium vessel containing water to a depth of 40 mm is placed centrally over each hotplate burner and displaced up to 25 mm from the centre of each pan support.

B2.3 APPARATUS

120 mm contact diameter standard flat based aluminium vessel with handle (see Figure A4).

B2.4 PROCEDURE

1 Fill the vessel with water to a depth of 40 mm.

2 Place the vessel centrally on the pan support over each burner and check for stability.

3 Displace the vessel in any direction up to 25 mm from the centre of the pan support and check for stability.

B2.5 RESULT

The side burner complies with the requirement if the vessel is stable in any position.

B3 M.O.T. 2.2.4 – 98 ZINC ALLOY TEST

B3.1 SCOPE

This test applies to zinc alloys.

B3.2 METHOD

Three test samples are suspended above heated water for 10 d.

B3.3 APPARATUS

A chamber of suitable size to enclose the test samples suspended above a quantity of water heated to a temperature of 97 ±2°C. The water level shall be maintained automatically.

B3.4 PROCEDURE

1 The pressure in the chamber shall be maintained at atmospheric pressure via a water filled S trap.

2 Suspend the three samples above the water for 10 d.

B3.5 RESULT

The casings are deemed to have failed if they develop cracks, swell significantly or, in extreme cases, crumble. The presence of white rust on the surface of castings is not regarded as a failure.

B4 M.O.T. 2.4.1.2 – 2003 DEVICE TO SHUT OFF OR REDUCE GAS FLOW—OPERATION TEST - PART 1

B4.1 SCOPE

This test applies to all devices/regulator assemblies.

B4.2 METHOD

Three samples of the device and regulator assembly are subjected to this test. The flow test piping system shall incorporate a source of air of adequate capacity and pressure, flow control valve(s) and a properly designed and calibrated flowmeter. Each sample device and regulator assembly shall be connected together as in normal service and be connected to the flow test piping system in the normal flow direction. A calibrated pressure gauge to indicate the closing pressure is installed on the upstream side of the device/regulator assembly. Tests are conducted with air and shall be made without restrictions connected to the downstream side of the sample with the exception of the flowmeter.

B4.3 APPARATUS

1 A properly designed and calibrated flowmeter.

2 An appropriate pressure gauge to measure up to at least 1.7 MPa reading in increments no more than 1.5 kPa. A pressure gauge complying with the requirements of AS 1349 for industrial gauges and capable of indicating the required test pressure to within ±2% of the true value is appropriate for this purpose.

Digital or analogue pressure gauges with equivalent or better accuracies may be used.

3 An appropriate pressure gauge to measure up to 5.0 kPa.

B4.4 MATERIALS

An adequate supply of air at a pressure of at least 1.7 MPa.

B4.5 PREPARATION OF APPARATUS

1 Connect the pressure gauge flowmeter, in that order, to the outlet of the test sample in the horizontal position.

2 Connect the pressure gauge upstream of the test sample.

B4.6 PROCEDURE

1 Connect the air supply to the inlet of the test sample.

2 Set the inlet pressure to 700 kPa.

3 Slowly increase the air flow through the sample from a no flow condition, until the device closes. Ensure the inlet pressure remains at 700 kPa.

4 Record the flow rate at the outlet and pressure at the inlet at the instant of closing.

5 With the device still in the closed position, adjust the pressure to 170 kPa.

6 Measure and record the flow rate.

7 With the device still in the closed position, adjust the pressure to 1.7 MPa.

8 Measure and record the flow rate and pressure at the outlet.

9 Shut off the inlet air supply

10 If necessary, reset the device.

B4 M.O.T. 2.4.1.2 – 2003 DEVICE TO SHUT OFF OR REDUCE GAS FLOW DEVICE—OPERATION TEST - PART 1 (Cont'd)

11 Repeat Steps 2 and 10 three times.

B4.7 RESULT

The device and regulator assembly comply with the requirement if, at the conclusion of each test:

(a) The flow rate when the device closes does not exceed 3.0 m^3/h (corrected to standard conditions, see Clause 1.2.66).

(b) The flow rate when the device is closed does not exceed 0.3 m^3/h (corrected to standard conditions, see Clause 1.2.66) with inlet pressures between 700 and 170 kPa, and does not exceed 0.45 m^3/h with an inlet pressure of 1.7 MPa.

(c) The device does not open automatically when the pressure is varied from 700 kPa to 170 kPa to 1.7 MPa.

(d) The device does not remain in the open position or otherwise become inoperative.

B5 M.O.T. 2.4.1.2 – 2003 DEVICE TO SHUT OFF OR REDUCE GAS FLOW—OPERATION TEST – PART 2

B5.1 SCOPE

This test applies to all devices/regulator assemblies.

B5.2 METHOD

Three samples of the device and regulator assembly are subjected to this test. The flow test piping system shall incorporate a source of air of adequate capacity and pressure, flow control valve(s) and a properly designed and calibrated flowmeter. Each sample device shall be connected together as in normal service and be connected to the flow test piping system in the normal flow direction. A regulator and a calibrated pressure gauge to indicate the closing pressure is installed on the upstream side of the sample. A control valve is connected to the outlet of the device.

B5.3 APPARATUS

1 A properly designed and calibrated flowmeter.

2 An appropriate pressure gauge to measure up to at least 1.7 MPa reading in increments no more than 1.5 kPa. A pressure gauge complying with the requirements of AS 1349 for industrial gauges and capable of indicating the required test pressure to within ±2% of the true value is appropriate for this purpose.

3 An appropriate pressure gauge to measure up to 5.0 kPa.

4 A control valve, fitted to the outlet of the hose supplied with the device and regulator assembly with a fully open flow capacity exceeding that of the hose, and requiring a minimum of 5 turns from fully closed to fully open.

NOTE: The requirement for a valve with a minimum of 5 turns from fully closed to fully open is to ensure that the flow rate is increased gradually to avoid the device reacting to sudden increases in flow.

B5.4 MATERIALS

An adequate supply of air at a pressure of at least 1.7 MPa.

B5.5 PREPARATION OF APPARATUS

1 Connect the pressure gauge flowmeter, hose and control valve, in that order, to the outlet of the hose supplies with the test sample in the horizontal position.

2 Connect the pressure gauge upstream of the test sample.

B5.6 PROCEDURE

1 Connect the air supply to the inlet of the test sample.

2 Close the control valve.

3 Pressurize the test sample to 700 kPa, and maintain throughout the test.

4 Open the control valve slowly until it is in the fully open position.

5 At the instant of closing, measure and record the flow rate and inlet pressure.

6 Record the inlet pressure and flow rate after the device closes.

7 Repeat steps 3 to 7 with an inlet pressure of 170 kPa.

8 Repeat steps 3 to 7 at an inlet pressure of 1.7 MPa.

9 Repeat steps 3 to 9 three times.

B5 M.O.T. 2.4.1.2 – 2003 DEVICE TO SHUT OFF OR REDUCE GAS FLOW—OPERATION TEST - PART 2 (Cont'd)

B5.7 RESULT

The device and regulator assembly comply with the requirement if, at the conclusion of each test:

(a) The flow rate when the device closes does not exceed 3.0 m^3/h (corrected to standard conditions, see Clause 1.2.66).

(b) The flow rate when the device is closed does not exceed 0.3 m^3/h (corrected to standard conditions, see Clause 1.2.66) with inlet pressures between 700 and 170 kPa, and does not exceed 0.45 m^3/h with an inlet pressure of 1.7 MPa.

(c) The device does not remain in the open position or otherwise become inoperative.

B6 M.O.T. 2.4.1.2 – 2003 DEVICE TO SHUT OFF OR REDUCE GAS FLOW—OPERATION TEST – PART 3

B6.1 SCOPE

This test applies to all devices/regulator assemblies.

B6.2 METHOD

One sample of the device and regulator assembly is subjected to this test. The flow test piping system shall incorporate a source of air of adequate capacity and pressure. Each sample device shall be connected together as in normal service and be connected to the flow test piping system in the normal flow direction. A regulator and a calibrated pressure gauge is installed on the upstream side of the sample. A control valve is connected to the outlet of the hose supplied with the device and regulator assembly.

B6.3 APPARATUS

1 An appropriate pressure gauge to measure up to at least 700 kPa reading in increments no more than 1.5 kPa. A pressure gauge complying with the requirements of AS 1349 for industrial gauges and capable of indicating the required test pressure to within ±2% of the true value is appropriate for this purpose.

2 An appropriate regulator to maintain the inlet pressure to 700 kPa.

3 A control valve.

B6.4 MATERIALS

An adequate supply of air at a pressure of at least 700 kPa.

B6.5 PREPARATION OF APPARATUS

1 The test sample is connected to the outlet of the regulator in the horizontal position and the control valve closed.

2 The pressure gauge is connected upstream of the test sample.

B6.6 PROCEDURE

1 Connect the air supply to the inlet of the device and regulator assembly.

2 Pressurize the device and regulator assembly to 700 kPa, and maintain throughout the test.

3 Open the control valve until the device operates.

4 Close the control valve until the device resets or, in the case of a manual reset device, reset the device.

5 Repeat steps 3 and 4, 10 000 times at a rate not exceeding 10 cycles per min.

6 At the conclusion of the 10 000 cycles, determine the flow rate with an inlet pressure of 700 kPa and device closed as described in MOT 2.4.1.2, Part 1.

B6.7 RESULT

The device and regulator assembly comply with the requirement if, at the conclusion of 10 000 cycles:

(a) The device shuts off the flow of air.

(b) The flow rate with the device closed does not exceed 0.3 m^3/h (corrected to standard conditions, see Clause 1.2.66).

(c) The device does not remain in the open position or otherwise become inoperative.