

STANDARDS AUSTRALIA

Amendment No. 1

to

AS 1731.12—2003

Refrigerated display cabinets

Part 12: Measurement of the heat extraction rate of the cabinets when the condensing unit is remote from the cabinet

REVISED TEXT

The 2003 edition of AS 1731.12 is amended as follows; the amendments should be inserted in the appropriate places.

SUMMARY: This Amendment applies to Clauses 1.1, 6.1(a), 6.1(b), 6.3(b), 6.6 and 6.7.

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AMDT
No. 1
DEC
2005

Page 4 Clause 1.1

Delete the text of Clause 1.1 and *replace* with the following:

‘This Standard specifies terminology, general mechanical and physical requirements, test conditions as well as installation and maintenance, for commercial refrigerators and freezers used for the sale or display of food products including beverages.

This Standard does not cover refrigerated vending machines, ice-makers, cabinets intended for use in catering and similar non-retail applications.’

AMDT
No. 1
DEC
2005

Page 11 Clause 6.1(a)

Delete text ‘(see Figures 4 to 6)’ and *replace* with text ‘(see Figures 5 to 7)’.

Insert the following text after Equation 6.1:

‘For indirect system replace subscript ‘ Φ_n ’ with ‘ Φ_0 ’ to calculate Q_{tot} . Calculate Φ_0 using Equation 5.1.’

AMDT
No. 1
DEC
2005

Page 11 Clause 6.1(b)

Delete text ‘(see Figure 4)’ and *replace* with text ‘(see Figure 5)’.

Delete Equation 6.2 and *replace* with:

$$Q_{75} = \sum_{i=1}^{i=d} \sum_{n=1}^{n=N_{75}} \Phi_n \cdot \Delta t$$

Insert the following text after Equation 6.2:

‘For indirect system replace subscript ‘ Φ_n ’ with ‘ Φ_0 ’ to calculate Q_{75} . Calculate Φ_0 using Equation 5.1.’

Page 12 Clause 6.3(b)

Delete Equation 6.8 and *replace* with:

$$T_{\text{mrun}} = \theta_i - 3\text{K} + 376.15$$

Delete Equation 6.9 and *replace* with:

$$PEC = v \tau \frac{2.5 q_{\text{mrun}} (p_{\text{irun}} - p_{\text{orun}})}{0.5 \times 1000}$$

Page 13 Clause 6.6

Delete the following line:

θ_7 refrigerant mean temperature at evaporator outlet

and *replace* with the following:

θ_7 refrigerant mean temperature at evaporator outlet (°C)

Page 13 Clause 6.7

1 *Delete* ‘(see Figures 5, 6 and 7)’ in the title and *replace* with ‘(see Figure 7)’.

2 *Delete* line:

θ_{mrun} arithmetic average of the secondary refrigerant median temperature (θ) during all running periods (°C)

and *replace* with:

θ_{mrun} arithmetic average of the secondary refrigerant mean temperature (θ) during all running periods (°C)

3 *Delete* line:

θ_{min} arithmetic average of the secondary refrigerant median temperature (θ) during the last 10% of all running periods (°C)

and *replace* with:

θ_{min} arithmetic average of the secondary refrigerant mean temperature (θ) during the last 10% of all running periods (°C)

4 *Delete* line:

PEC pumping electrical energy consumption

and *replace* with:

PEC pumping electrical energy consumption (kWh/24h)
