

**A6.8. Refrigerating Machines, Air Conditioners, and Articles, Pressurized Hydraulic or Pneumatic** packaged as follows:

A6.8.1. Refrigerating Machines, Air Conditioners, and Components. Factory-tested refrigerating machines, air conditioners, and components are exempted from specification

packaging, marking, and labeling except for the name of contents on the outer packaging, provided (see A3.3.2.9. for small quantities):

A6.8.1.1. Each pressure vessel is charged to not more than 2268 kg (5,000 pounds) of Group A1 refrigerant as classified in ANSI/ASHRAE Standard 15, or not more than 22.7 kg (50 pounds) of refrigerant other than Group A1.

A6.8.1.2. Machines containing two or more charged vessels may not contain more than 907 kg (2,000 pounds) of Group 1 refrigerant, or more than 45.4 kg (100 pounds) of refrigerant other than Group 1.

A6.8.1.3. Each pressure vessel is equipped with a safety relief device meeting the requirements of ANSI/ASHRAE Standard 15.

A6.8.1.4. Each pressure vessel is equipped with an individual shut-off valve at each opening except openings used for safety devices and with no other connection. Close shut-off valves during transportation.

A6.8.1.5. Pressure vessels are manufactured, inspected, and tested according to ANSI/ASHRAE Standard 15, or when over 152.4 mm (6 inches) internal diameter, according to American Society of Mechanical Engineers (ASME) Code.

A6.8.1.6. All parts subject to refrigerant pressure during shipment are tested under ANSI/ASHRAE Standard 15.

A6.8.1.7. The liquid portion of refrigerant, if any, does not completely fill any pressure vessel at 55 degrees C (130 degrees F).

A6.8.1.8. Filling densities prescribed in A3.3.2.6. are not exceeded.

A6.8.2. Articles, Pressurized Hydraulic or Pneumatic. The following apply to Articles, Pressurized, Hydraulic or Pneumatic (e.g., accumulators) containing nonliquefied, nonflammable gas, and nonflammable liquids or pneumatic accumulators containing nonliquefied, nonflammable gas, fabricated from materials that do not fragment upon rupture:

A6.8.2.1. Accumulators installed in motor vehicles, construction equipment, and assembled machinery, designed and fabricated with a burst pressure of not less than five times their charged pressure at 21 degrees C (70 degrees F) are exempt from the requirements of this manual.

A6.8.2.2. When charged to not more than 1380 kPa (200 psig) at 21 degrees C (70 degrees F), the following conditions apply:

A6.8.2.2.1. Each article must have a fluid space not exceeding 41L (2,500 cubic inches) under stored pressure. **(T-0).**

A6.8.2.2.2. Ship each article as an inside package. There are no specification requirements.

A6.8.2.2.3. Test each article, without evidence of failure or damage, to at least three times its charged pressure at 21 degrees C (70 degrees F) but not less than 120 psig (830 kPa) before initial shipment and before each refilling and reshipment.

A6.8.2.3. When charged over 1380 kPa (200 psig) at 21 degrees C (70 degrees F) the following conditions apply:

A6.8.2.3.1. Each article must have a fluid space not exceeding 41L (2,500 cubic inches) under stored pressure. **(T-0)**.

A6.8.2.3.2. Test each article, without evidence of failure or damage, to at least three times its charged pressure at 21 degrees C (70 degrees F) but not less than 120 psig (830 kPa) before initial shipment and before each refilling and reshipment.

A6.8.2.3.3. Design and fabricate each article with a burst pressure of not less than five times its charged pressure when shipped.