



responsibility for errors and omissions. Danfoss Industrial Refrigeration reserves the right to make changes to products and specifications without prior notice.

### Refrigerants

Applicable to all common non-flammable refrigerants, including R717 and non-corrosive gases/liquids dependent on sealing material compatibility. Flammable hydrocarbons are not recommended. The valve is only recommended for use in closed circuits. For further information please contact Danfoss.

### Temperature range

SFV 15 - 25:  $-30/+100^{\circ}\text{C}$  ( $-22/+212^{\circ}\text{F}$ ).

### Pressure range

The valve is designed for a max. working pressure of 25 bar g (362 psi g). Danfoss Industrial Refrigeration A/S is supplying safety valves adjusted for a certain pressure (indicated on the ID-plate) and sealed. Danfoss Industrial Refrigeration guarantees correct pressure as long as the seal remains unbroken.

### Installation

The valve should be installed with the spring housing upwards (fig. 1). By mounting of the safety valve it is important to avoid the influence of thermic and dynamic stress (vibrations) (fig. 2). The outlet pipe of the valve must be designed as to prevent dirt from penetrating into the valve (fig. 3).

For valves with outlet in the open air, an oil filled U-pipe is an efficient protection against the entrance of water and dirt (fig. 4).

The valve is designed to withstand a high internal pressure. However, the piping system should be designed to avoid liquid traps and reduce the risk of hydraulic pressure caused by thermal expansion. It must be ensured that the valve is protected from pressure transients like "liquid hammer" in the system.

### Welding

If welding fittings are applied, these should be dismantled during the welding process (fig. 5). Only materials and welding methods, compatible with the flange material, must be welded to the flange.

Avoid welding debris and dirt in the threads of the housing and pipes.

### Assembly

Remove welding slag and dirt from tubes and housing before the valve is mounted. Mount the valve as shown in fig. 6.

### Colours and identification

The valves are Zinc-Chromated in the factory. If further corrosion protection is required, it can be painted. Precise identification of the valve is made via the ID-plate on the valve housing. In cases of doubt, please contact Danfoss. Danfoss accepts no

**DECLARATION OF CONFORMITY**  
The Pressure Equipment Directive 97/23/EC



**Name and Address of Manufacturer within the European Community**

Danfoss Industrial Refrigeration A/S  
Stormosevej 10  
PO Box 60  
DK-8361 Hasselager  
Denmark

**Description of Pressure Equipment**

Refrigerant safety valve  
**Type SFV 15, 20 and 25**

Nominal bore	<b>13 mm</b> (0,512 in.) for SFV 15 <b>18 mm</b> (0,709 in.) for SFV 20 <b>23 mm</b> (0,906 in.) for SFV 25	
Classified for	<b>Fluid Group I</b> (all refrigerants (toxic, nontoxic, flammable and nonflammable)). For further details / restrictions - see Installation Instruction.	
Temperature range	SFV 15 - 25	-30°C/+100°C (-22°F/+212°F)
Maximum allowable working pressure	SFV 15 - 25	<b>10 - 25 bar</b> (143 - 362 psi g) -30°C/+100°C (-22°F/+212°F)

**Conformity and Assessment Procedure Followed**

Category	<b>IV</b>	
Module	<b>B + D</b>	
Certificate ID	B: 07 202 0511 Z 0078/1/H-0001 D: 07 202 0511 Z 0009/1/H-0001	
Nominal bore	Standard application	<b>13 mm</b> (0,512 in.) for SFV 15 <b>18 mm</b> (0,709 in.) for SFV 20 <b>23 mm</b> (0,906 in.) for SFV 25

**Name and Address of the Notified Body which carried out the Inspection**

TÜV-Nord e.V.  
Grosse Bahnstrasse 31  
22525 Hamburg, Germany



**Name and Address of the Notified Body monitoring the Manufacturer's Quality Assurance System**

TÜV-Nord e.V.  
Grosse Bahnstrasse 31  
22525 Hamburg, Germany

**References of Harmonised Standards used**

EN 10222-4

**References of other Technical Standards and Specifications used**

prEN 12284                              prEN 13136  
  
AD-Merkblätter                      DIN 3158

**Authorised Person for the Manufacturer within the European Community**

**Name:** Morten Steen Hansen                              **Title:** Production Manager

**Signature:** Morten Steen Hansen                              **Date:** 29/11/2001

