## Reliable **EVR and NRV Solutions** for Enhanced **Safety** in **HVAC** and **Refrigeration** Applications



Get ahead of upcoming regulations with Danfoss' innovative safety valves that separate flammable refrigerant (A2L, A2 or A3) charge in case of leaks, which can reduce the total releasable charge in higher-capacity systems and set a new standard for industry compliance.

Our new EVR Safety shut-off valves and NRV Check shut-off valves ensure UL 60335-2-40 and UL 60335-2-89 compliance, effective January 2024.

ENGINEERING TOMORROW





The **Danfoss Solenoid Shut-Off Valve (SSOV)** is utilized in refrigeration systems to provide a secure separation of flammable refrigerant in response to a leak detection.

The **Danfoss Check Shut-Off Valve (CSOV)** is tailored for preventing refrigerant backflow, crucial to effectively isolate the charge when combined with an SSOV.

Together, **these unidirectional and easy-to-install valves** meet UL 60335-2-40 and 60335-2-40-89 requirements and **offer comprehensive shut-off solutions** that enhance safety in air conditioning, heat pump and refrigeration applications, including fail-safe closing. The normally-closed (NC) solenoid valve will close in the event of an electrical power failure, and it is approved to meet the required leak rates in a closed condition.

## Safety Shut-Off Valve Principles







**Direct-acting valves** 

Servo-operated diaphragm valves

Servo-operated piston valves

	<b>Cv value</b> (USgal/min)	Connection size (in)							
		1/4"	3/8"	1/2"	5/8"	7/8"	1 1/8"	1 3/8"	
EVR 2 NC	0.17	•							
EVR 3 NC	0.3	•	•						
EVR 4 NC	0.8		•						
EVR 6 NC	1.16		•	•					
EVR 8 NC	1.33			•	•				
EVR 10 NC	1.7 / 2.5		•	•	•				
EVR 15 NC	3.8				•	•			
EVR 18 NC	4.5					•			
EVR 20 NC	6.9					•	•		
EVR 22 NC	6.9						•	•	
EVR 25 NC	11.3						•	•	

	Cv value	Connection size (in)							
	(USgal/min)	1/4"	3/8"	1/2"	5/8"	7/8"	1 1/8"	1 3/8"	
NRV/NRVH 6s	0.77	•	•						
NRV/NRVH 10s	1.9		•	•					
NRV/NRVH 12s	2.9			•	•				
NRV/NRVH 16s	4.6				•				
NRV/NRVH 19s	7.5					•			
NRV/NRVH 22s	9.8					•	•		
NRV/NRVH 28s	19.1						•	•	
NRV/NRVH 35s	33.5							•	



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