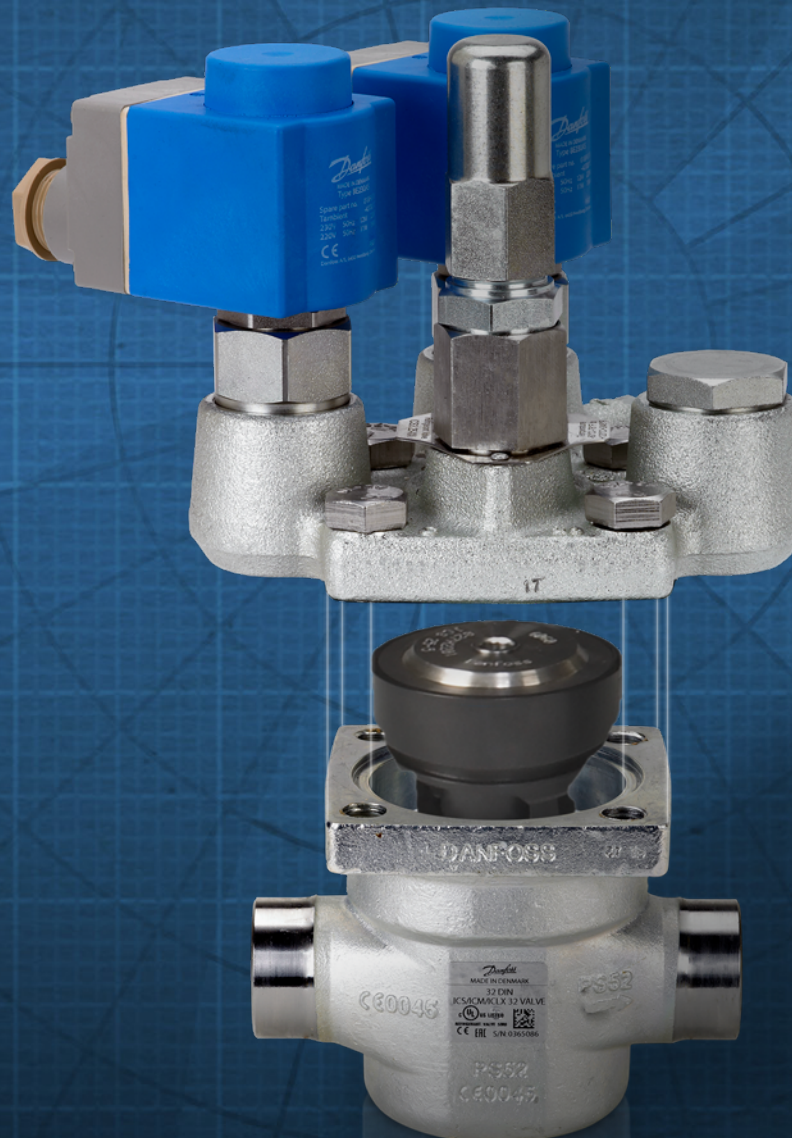


ICSH Dual Position Solenoid Valve

Improved safety for hot gas injection

The ICSH Dual Position Solenoid Valve is designed for gradual and safe opening of the hot gas flow to the evaporator, featuring an extra-safety-configuration to prevent hydraulic shocks in the system.

ICSH is fully compatible with the Danfoss ICV platform, and the top cover is compatible with both ICS and ICF Large for maximum flexibility and straight forward drop-in.



Designed to meet your system safety needs

Complying with the latest IIAR safety recommendations for soft gas applications the ICSH Dual Position Solenoid Valve provides a gradual, time controlled opening for a smooth pressure build-up in the evaporator before it opens the flow to 100% for full defrost capacity.

The 2-step approach prevents hydraulic shocks thereby improving the overall safety of the system. For additional system safety, the default ICSH configuration is in dependent mode which makes sure that the full opening in step 2 does not occur unless the soft opening in step 1 has been activated.

Product data	Metric	Imperial
Max. working pressure	52 bar g	754 psi g
Refrigerants	HCFC, HFC, R717 (Ammonia) and R744 (CO ₂)	
Media temperature	-60/+120°C	-76/+248°F
Capacity	Step 1 is 20% capacity of step 2 full capacity	
Min. opening pressure differential*	0,2 bar g	2.9 psi g
Approvals	CE (PED)	UL
Materials (valve body and top cover)	Low temperature steel	

* Higher inlet pressure than outlet pressure for fully open

Ordering made flexible

ICSH Dual Position Solenoid Valves are available as complete factory assembled units or as parts program for highest design flexibility.

Sizes and Capacity	ICSH 25-25	ICSH 32	ICSH 40	ICSH 50	ICSH 65	ICSH 80
Kv (m3/h), full capacity	11,5	17	27	44	70	85
Cv (US gal/min), full capacity	13.3	20	31	51	81	98

Manual opener available for all sizes

Superior benefits for the ICSH Dual Position Solenoid Valve



Preventing hydraulic shocks

- Controlled, 2-step hot gas injection
- Dependent configuration of step-2 opening to prevent negative pressure impact on the hot gas defrost system
- Easy to upgrade system safety from 1-step ICS solenoid to 2-step ICSH dual position solenoid valve, just by replacing the top part - no cutting or welding needed



Improved defrost performance

- The controlled and smooth hot gas injection complements overall defrost performance and operational reliability



Improved job site efficiency

- Easy installation thanks to a compact design and reduction in the number of components and welding's
- Direct weld connections; a wide range of connection types available, including flanged connections for straight forward drop in
- Common spare parts as for ICS and inspection kit as for ICV
- Fully compatible with Danfoss ICV platform for easy upgrade and retrofitting



Easy system design

- Optimal system design with the Coolselector®2 Application tool



Broad application range

- Ammonia (R717), CO₂ (R744) and fluorinated refrigerants (HCFC and HFC)
- Top cover compatible with ICS and ICF Large