

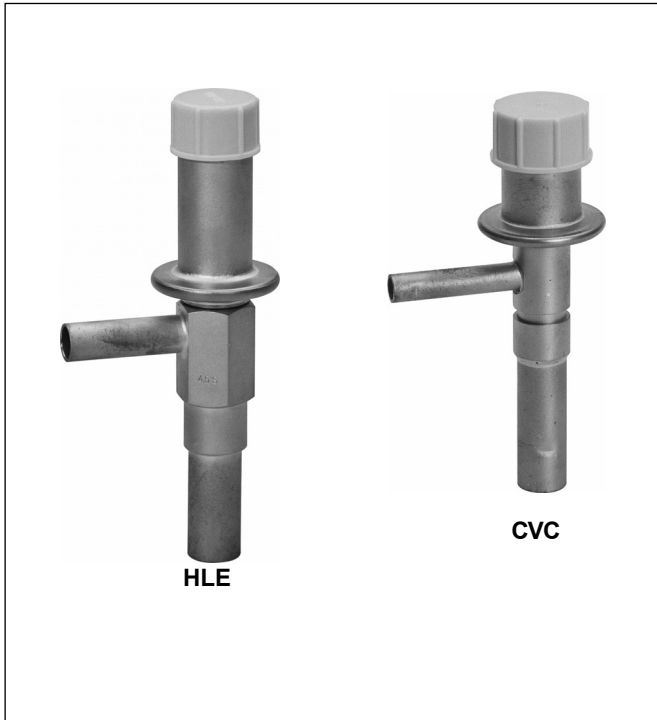


Series CVC and HLE

HOT GAS BYPASS VALVES

FIXED ORIFICE, ADJUSTABLE SUCTION PRESSURE LIMITATION

PRODUCT DATA



Features

- **CVC:** Orifice size 4.0, equivalent to 1 kW bypass capacity R134a
- **HLE:** Orifice size 4.5S, equivalent to 1.5 kW bypass capacity R134a
- Smallest dimensions
- High performance
- Hermetic construction
- Adjustable suction pressure limitation
- Solder connections
- Internal pressure equalisation
- Extreme durable due to stainless steel head and stainless steel diaphragm welded using protective gas
- Fixed orifice
- Refrigerants: all CFC, HCFC, HFC, not for ammonia

Specification

Nominal capacity	see table on page 2
Adjusting range for suction pressure limitation	1 - 6 bar(a) (CVC) 1 - 9 bar(a) (HLE)
Factory setting	3.2 bar(a) (CVC) 3.5 bar(a) (HLE)
Maximum pressure PS	25.5 bar(a)
Maximum test pressure PF	28 bar(a)
Max. ambient temperature	100 °C

Application

Hot gas bypass valves series CVC and HLE are used to adjust the compressor capacity to the actual evaporator capacity in a refrigerating plant.

The hot gas bypass valve can be installed in a bypass tube between the hot gas line and suction line. The suction pressure is downward limited by flowing hot gas from the high pressure to the low pressure side.

For plants in general refrigeration and for original equipment such as dehumidifiers, air driers, water coolers or ice-making machines.

Materials

Body	brass
Head	stainless steel, brass
Connection tubes	copper

Installation

- The valves may be installed in any position.
- When soldering the valve, the valve body must not get warmer than 100 °C.
- Remove plastic cap during soldering
- Constructive modifications at the valve are not allowed.

Adjustment

One complete revolution of the adjusting screw effects an alternation of the suction pressure limitation by approx. 0.5 bar (CVC) resp. 0.4 bar (HLE).

Turning clockwise	=	Higher suction pressure
Turning counterclockwise	=	Lower suction pressure

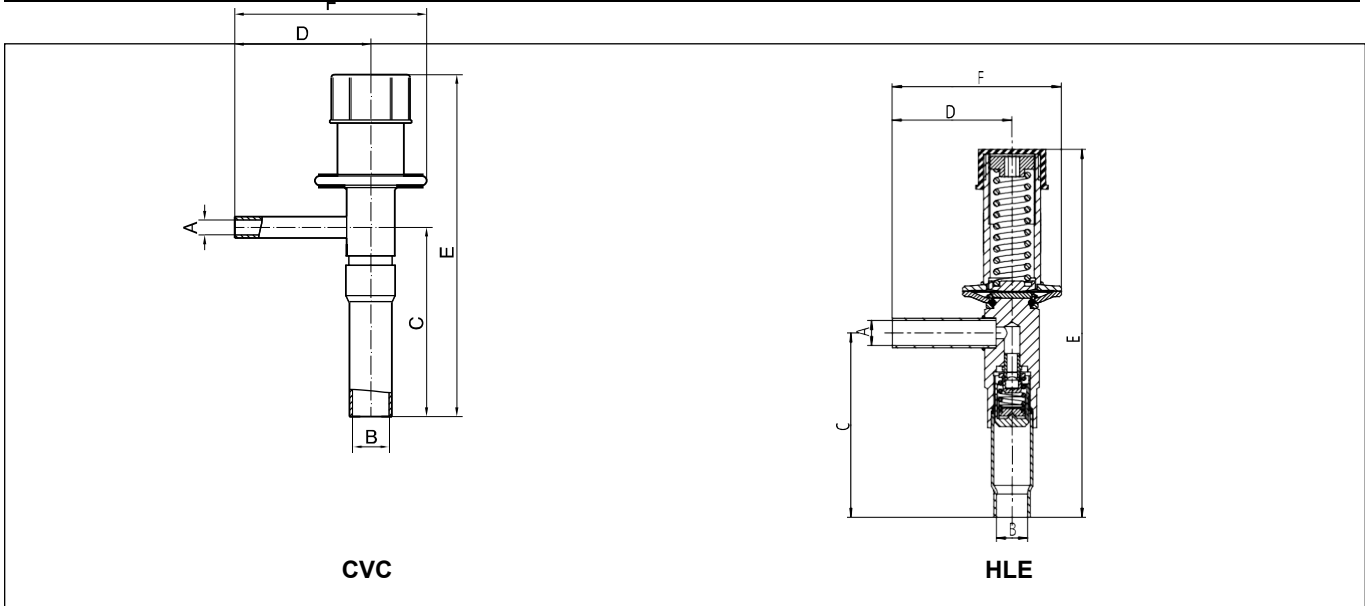
Capacities

Type	Valve size	Condensing temperature t _c (°C)	⊗p _{offset} (bar)	Bypass-capacity Q _N (kW)		
				R134a	R407C	R404A
CVC	4.0	35	0.5	0.62	1.05	0.88
			0.7	0.85	1.45	1.20
		50	0.5	0.71	1.16	0.88
			0.7	1.00	1.60	1.20
HLE	4.5S	35	0.5	0.98	1.67	1.40
			0.7	1.37	2.33	1.95
		50	0.5	1.13	1.86	1.41
			0.7	1.57	2.60	1.97

Evaporating temperature t₀: 0 °C; Hot gas superheat ⊗t_{v2oh}: 25 K

Dimensions and Weights

Type	Valve size	Connections		Dimensions (mm)				Weight (kg)
		Inlet (A)	Outlet (B)	C	D	E	F	
CVC	4.0	6 mm ODF	12 mm ODF	64	43	113	61	approx. 0.16
		1/4" ODF	1/2" ODF					
HLE	4.5S	10 mm ODF	12 mm ODF	71	46	142	65	approx. 0.3
		3/8" ODF	1/2" ODF					



KAT-CVC-002



Ademco 1 GmbH
Hardhofweg 40
74821 Mosbach
Phone: +49 1801 466 388
info.de@resideo.com
homecomfort.resideo

©2020 Resideo Technologies, Inc. All rights reserved. The Honeywell Home trademark is used under license from Honeywell International Inc. This product is manufactured by Resideo Technologies, Inc and its affiliates.

