### Nicab Maxi®

Secondary refrigerant valve 2 or 3 way with 3 O-rings in EPDM rubber to minimize the risk of leakage, with the ability to hand manouver in case of power loss. DN 50 – DN 65.



Properties	Benefits	User Advantages		
Position indicator	Easy to see if the valve is in cooling or defrost mode	Easy to see if the valve is setup properly		
Internal heating	Prevents condensation	Minimizes the risk of short circuit		
3 O-rings in EPDM rubber	Can handle low temperatures. Can handle different types of media. More stable valvestem.	Minimizes the risk of leakage. Suitable for most applications.		
90° turning angle	Same actuator for both 2 and 3-way valves.	Only one sparepart		

NICAB Maxi: Motorised ballvalve for secondary refrigerants

HT -15 °C

Dimensions DN 50 - DN 65

The MAXI range of 2 and 3 port motorised ball valves are designed for use in secondary refrigerant systems. The valve function is ON/OFF or for continuous output (0...10 V, 4...20 mA). Gearbox can be de-coupled in order to make manual adjustments.

The valve is compatible with most secondary refrigerants including Glycol, Freezium, Hy-Cool, Temper and Tyfoxit.

Туре	Dimension DN	kVS value m <sup>3</sup> /h 2-way / 3-way	Weight in kg 2-way / 3-way		
Maxi DN 50	50	191 64,5	4 kg 5 kg		
Maxi DN 65	65	340 105	5 kg 6 kg		



#### **Technical Data**

Dimension: DN 50 – DN 65 Voltage: 230V (24V)

Torque: 15 Nm DN 50 – 30 Nm DN 65

Room temp:  $-10 \,^{\circ}\text{C} - +55 \,^{\circ}\text{C}$ Room humidity: < 95% rh

Valvebody: Low zinc plated brass

Frequency: 50/60 Hz

Running time: 60 / 120 Sec (240).

Protection: IP 54

Sec. refrigerant temp: HT -15°C / +95 °C

Operational pressure: 10 bar Differential pressure: 6 bar

#### Construction

1. Axel in chrome plated brass

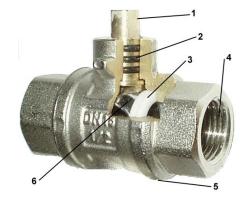
2. 3 O-rings in EPDM rubber

3. Disc PTFE

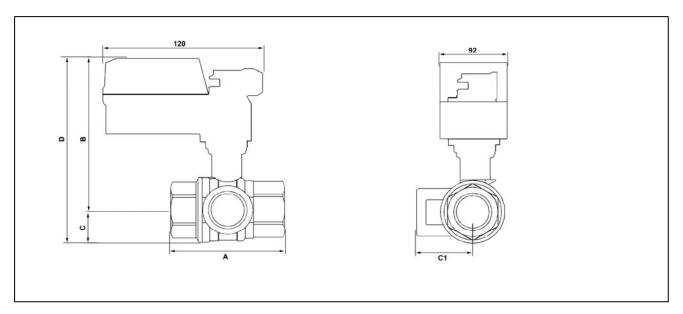
4. Female thread BSP, standard

5. Body in low zinc brass

6. Ball in chrome plated brass



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#### Measures 2-way valve

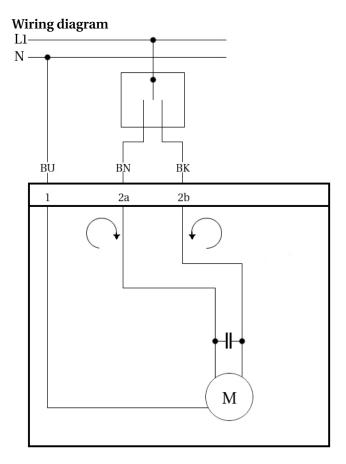
Dn	Α	В	С	D	Kg	Kv	Art. No.	Rsk No.
50	138	187	47,5	234	4	191	422HT050	5363165
65	164	202	60	230	5	340	422HT065	5363166

#### Measures 3-way valve

Dn	Α	В	С	C1	D	Kg	Kv	Art. No.	Rsk No.
50	138	187	47,5	71,5	234	5	64,5	423HT050	5363167
65	164	190	60	89	230	6	105	423HT065	5363168

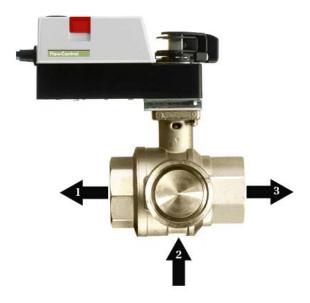
#### **Pressure Loss**

For calculating pressure loss over the valve use the formula  $Kv = Q/\ddot{O}Dp$  normally the flow and Kv-value are known. Kv = amount of flow in m3/h create a pressure drop of 1,0 bar when passing the valve. Q = flow in m3/h Dp = Pressure drop in bar. Example: 3-way DN 20 (423HT020) Kv = 7,9 - Q = 2,0 m3/h P Dp = (2,0/7,9)2 = 0,0064 bar = 6,4 Kpa. To calculate the valve size (Kv) for a given max pressure drop e.g. max Dp 10 Kpa. Ex. Kv = ? Q = 4,0 m3/h - Dp = 0,1 bar = 10 Kpa P Kv = 4,0/P00,1 P00,1 P00 Kv = 12,6 find a valve with a Kv-value close to 12,6, take a 3-way P10 S (423HT025) with P13. This example above is for water +20°C for secondary refrigerant and low temperature calculate with a pressure loss 40% - 70% higher, depending on type of secondary refrigerants and temperature. For more detail figure contact Nicab or use the computer program on our home page.



BN = brown = clockwise BK = black = counter clockwise BU = blue = neutral

#### Flow direction 3-way DN 50 - 65



Port 1 is closed at delivery.

#### Accessories

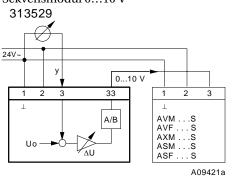
Single Double Potentiometer auxilliary change auxilliary change contacts







Sekvensmodul 0...10 V



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