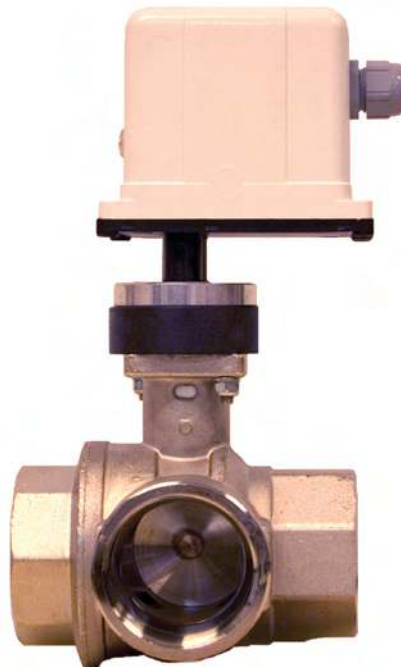


## Nicab Maxi®

Secondary refrigerant valve 2 or 3 way  
with 3 O-rings in EPDM rubber to  
minimize the risk of leakage.  
DN50-DN65.



Properties	Benefits	User Advantages
Position indicator	2 Leds shows if the valve is in cooling or defrost mode.	Easy to see if the vavle i setup properly.
3 O-rings in EPDM rubber	Can handle low temperatures. Can handle different types of media. Stable vavlestem.	Minimizes the risk of leakage. Suitable for most applications.
90 degrees 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 DN50 - DN65

Nicab Maxi is a motorised ballvalve for control of secondary refrigerant systems. The valve function is ON/OFF and is compatible with most secondary refrigerants including Glycol, Freezium, Hy-Cool, Temper and Tyfoxit.

Type	Dimensionon DN	kvs value m3/h 2-way / 3-way	Weight (kg) 2-way / 3-way
Maxi DN50	50	191 64,5	4 5
Maxi DN65	65	340 105	5 6

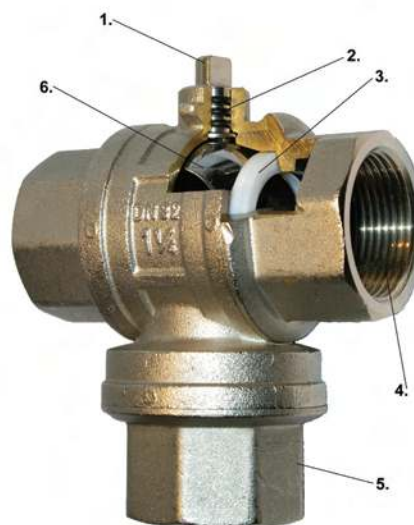


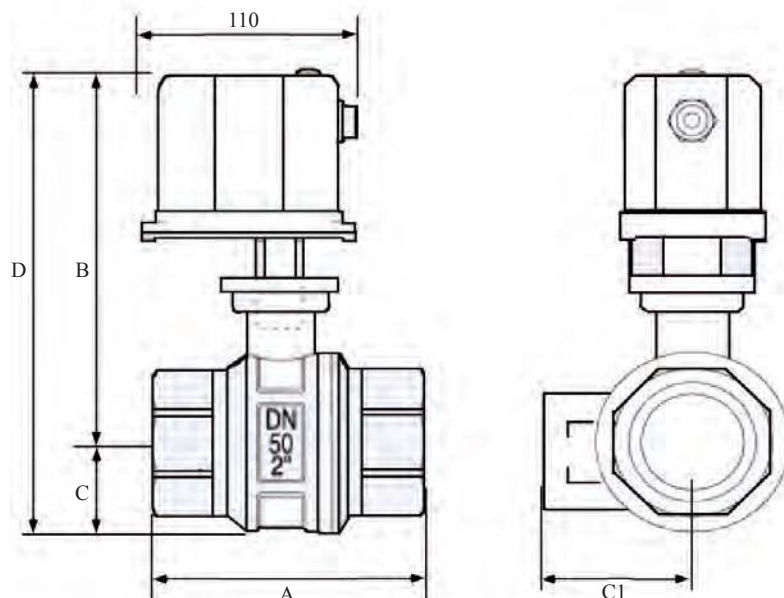
### Technical Data

Dimension:	DN50 - DN65
Voltage:	230V (24V)
Torque:	18 Nm
Room temp.:	-15 °C -- +55 °C
Room humidity:	< 95% rh
Valvebody:	Low zinc plated brass
Power:	5,5 VA
Frequenzy:	50/60 Hz
Running time:	110 sec
Protection:	IP 65
Sec. Refrigerant temp.:	HT -15 °C / +95 °C
Operational pressure:	10 bar
Differential pressure:	4 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





## Measures 2-way valve

DN	A	B	C	D	Kg	Kv	Art. Nr.	Rsk Nr.
50	138	187	47,5	234	4	191	422HT050	5363165
65	164	202	60	230	5	340	422HT065	5363166

## Measures 3-way valve

DN	A	B	C	C1	D	Kg	Kv	Art. Nr.	Rsk Nr.
50	138	187	47,5	71,5	234	5	64,5	423HT050	5363167
65	164	190	60	89	230	6	105	423HT065	5363168

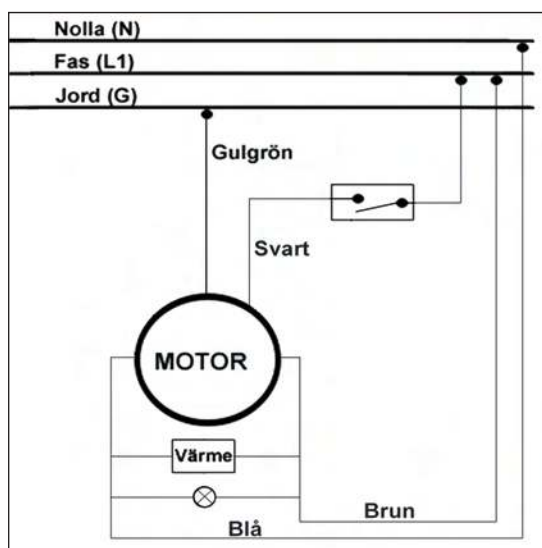
## Pressure loss

For calculating pressure loss over the valve use the formula  $K_v = Q/\sqrt{\Delta p}$  normally the flow and Kv-value are known. Kv = amount of flow in m<sup>3</sup>/h create a pressure drop of 1,0 bar when passing the valve. Q = flow in m<sup>3</sup>/h  $\Delta p$  = Pressure drop in bar. Example: 3-way DN 20 (423HT020) Kv = 7,9 - Q=2,0 m<sup>3</sup>/h  $\Delta p = (2,0/7,9)^2 = 0,0064$  bar = 6,4 Kpa. To calculate the valve size (Kv) for a given max pressure drop e.g. max  $\Delta p$  10 Kpa.

Ex. Kv = ? Q = 4,0 m<sup>3</sup>/h -  $\Delta p = 0,1$  bar = 10 Kpa ->  $K_v = 4,0/\sqrt{0,1}$  -> Kv = 12,6 find a valve with a Kv-value close to 12,6, take a 3-way DN 25 (423HT025) with Kv = 13. 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.

# FlowControl

## Nicab Maxi

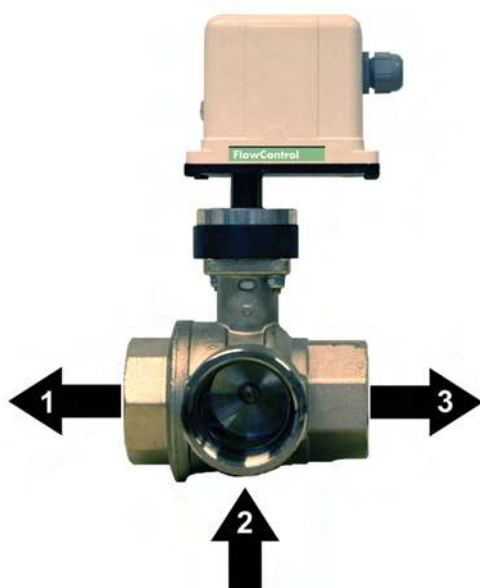
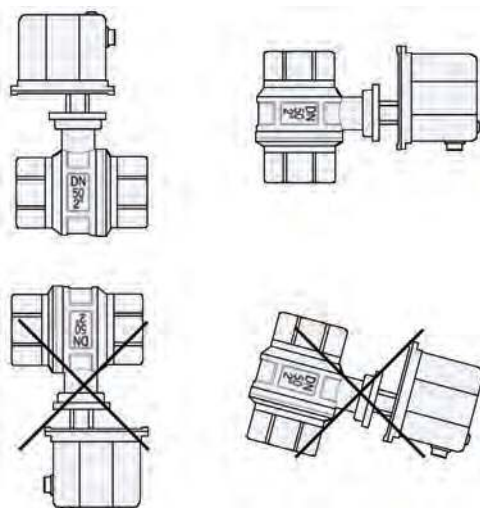


Brown = Phase  
 Blue = Neutral  
 Black = Thermostat  
 Yellow/green = Ground

### Installation & wiring instructions

The brown and the blue cable shall always be connected, when you put power on the black cable port 1 will close and port 3 will open. Port 2 is always open (i.e inlet). When the red LED is lit port 3 is closed. When the blue LED is lit port 1 is closed. Port 3 is closed on delivery.

The valve must be installed with the actuator in an upright position as shown in the figure next to here. The valve can NEVER be installed with the actuator facing down. The valve can not be used in environments with a humidity above 95% rh.



### Installing in distributing pipe

