

Nicab DUE®

Secondary refrigerant valve 2 or 3 way
intended for regulation of the temperature
in display cabins, cold rooms, etc.

- Internal relay
- 2 potentialfree contacts
- 2 LED's (indicates cooling/defrosting)
- 3 O-rings in EPDM rubber
- Internal condense protection
- Compatible with earlier versions
- DN15 - DN40



Nicab DUE® - Motorised ballvalve for secondary refrigerants HT -15 °C / LT -35 °C

The Nicab Due ballvalve for secondary refrigerant systems is a development from the Nicab STANDARD, specially designed to handle low temperatures and different types of secondary refrigerants like Glycol, Freezium, Hy-Cool, Temper and Tyfoxit.

The valve is ON/OFF type, the ball in the 3-way valve has a special drilling which gives a secure and stable flow through the valve even when the valve is shifting port, for example in defrosting. The valves are manufactured as both 2 and 3 way depending on system design.

The same type of actuator is used for all valves regardless if it's 2 or 3 way. On the top of the actuator there are two LEDs that indicates cooling and defrosting.

To control the valve you can use a thermostatic control with an open/close contact.

The voltage is 230 V or 24 V depending on design. There is also two potential free contacts on plint to receive a signal back from the micro switch.



| Art. No | Description | DN | Kvs m3/h | Voltage | Weight (kg) | Max. differential pressure |
|----------|---------------------------|----|----------|------------|-------------|----------------------------|
| 422HT015 | 2-way motorised ballvalve | 15 | 16 | 230V (24V) | 1 | 3,5 bar |
| 422HT020 | 2-way motorised ballvalve | 20 | 27 | 230V (24V) | 1,2 | 3,5 bar |
| 422HT025 | 2-way motorised ballvalve | 25 | 47 | 230V (24V) | 1,4 | 3,0 bar |
| 422HT032 | 2-way motorised ballvalve | 32 | 70 | 230V (24V) | 1,9 | 3,0 bar |
| 422HT040 | 2-way motorised ballvalve | 40 | 145 | 230V (24V) | 2,2 | 2,4 bar |
| 423HT015 | 3-way motorised ballvalve | 15 | 12 | 230V (24V) | 1,1 | 3,5 bar |
| 423HT020 | 3-way motorised ballvalve | 20 | 17 | 230V (24V) | 1,2 | 3,5 bar |
| 423HT025 | 3-way motorised ballvalve | 25 | 23 | 230V (24V) | 1,6 | 3,0 bar |
| 423HT032 | 3-way motorised ballvalve | 32 | 34 | 230V (24V) | 2,4 | 3,0 bar |
| 423HT040 | 3-way motorised ballvalve | 40 | 51 | 230V (24V) | 2,6 | 2,4 bar |

Technical information, actuator

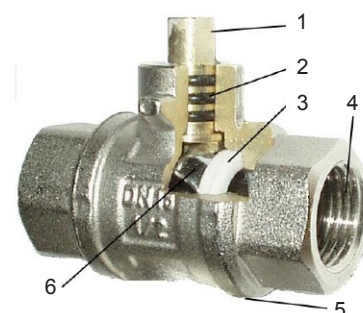
| | | | |
|--------------------------------|------------------------------|------------------------------|-------------------------------|
| Power supply | 230V~, 50...60 Hz (standard) | Permissible ambient temp. | -25...70 °C |
| | 24V~, 50...60 Hz (option) | Permissible ambient humidity | < 95 %rh without condensation |
| Power consumption | Running | Torque | 11 Nm |
| | Idle | Turning angle | 90° clockwise |
| Condense protection (internal) | 230V~, ca 5,8 VA | Running time | ca 90 sec |
| | 24V~, ca 5,1 VA | Protection | IP 65 acc. to EN 60529 |
| | 230V~, ca 4,2 VA | Noise while running | < 30 dB(A) |
| | 24V~, ca 4,1 VA | | |

Technical information, valvebody

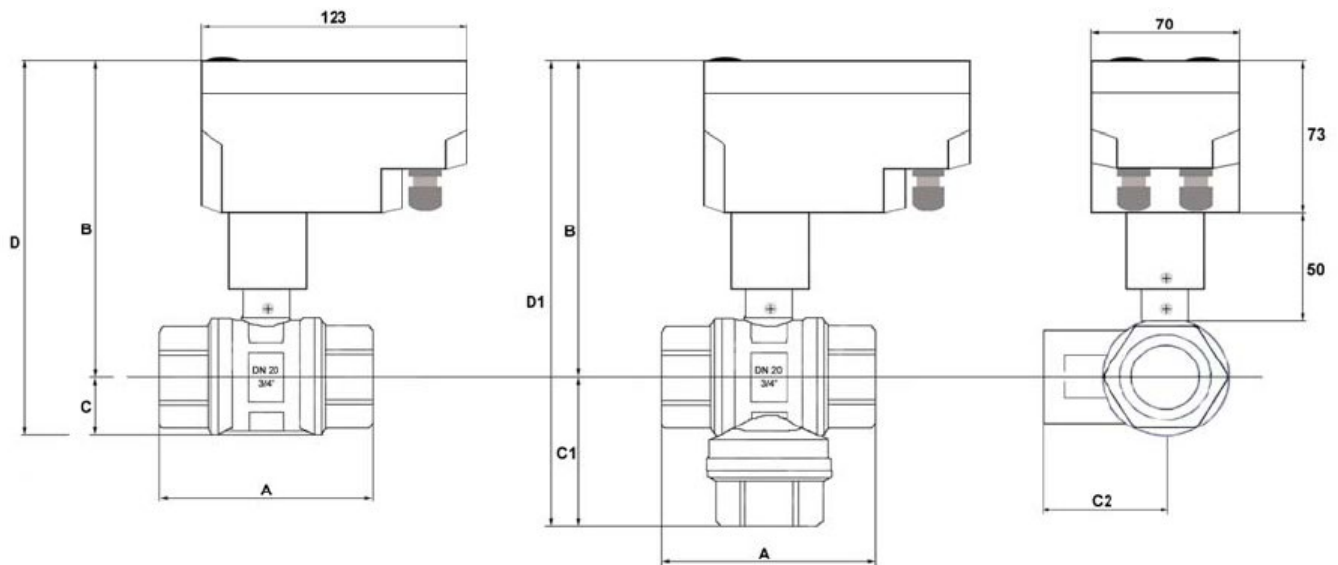
| | |
|---------------------------|-------------|
| Nominal pressure | PN16 |
| Max operating pressure | 10 bar |
| Max differential pressure | 2,4-3,5 bar |
| Sec. Ref. temp HT | -15...95 °C |
| Sec. Ref. temp LT | -35...95 °C |
| Turning angle | 90° |

Konstruktion:

1. Axle in chrome plated brass
2. 3 O-rings in EPDM rubber
3. Disk PTFE
4. Female thread BSP, standard (Male optional)
5. Body in low zinc plated brass
6. Ball in chrome plated brass



Drawing



Measures 2-way valve

| DN | A | B | C | D | KG | Kv | Art. Nr | Rsk. Nr. |
|----|-----|-----|------|-----|-----|-----|----------|----------|
| 15 | 73 | 140 | 17 | 157 | 1,0 | 16 | 422HT015 | 5363189 |
| 20 | 84 | 145 | 21,5 | 166 | 1,2 | 27 | 422HT020 | 5363190 |
| 25 | 95 | 150 | 26 | 175 | 1,4 | 47 | 422HT025 | 5363191 |
| 32 | 107 | 155 | 32,5 | 188 | 1,9 | 70 | 422HT032 | 5363192 |
| 40 | 120 | 172 | 39,5 | 205 | 2,2 | 145 | 422HT040 | 5363193 |

Measures 3-way valve

| DN | A | B | C1 | C2 | D1 | KG | Kv | Art. Nr | Rsk. Nr. |
|----|-----|-----|----|----|-----|-----|----|----------|----------|
| 15 | 73 | 140 | 45 | | 187 | 1,1 | 12 | 423HT015 | 5363194 |
| 20 | 84 | 145 | 55 | | 200 | 1,2 | 17 | 423HT020 | 5363195 |
| 25 | 95 | 150 | 67 | | 217 | 1,6 | 23 | 423HT025 | 5363196 |
| 32 | 107 | 155 | 85 | | 240 | 2,4 | 34 | 423HT032 | 5363197 |
| 40 | 120 | 172 | 39 | 60 | 205 | 2,6 | 51 | 423HT040 | 5363198 |

Electrical Wiring

- 1 = Neutral
- 2 = Phase / L1
- 3 = Thermostat
- 4 = Ground

Neutral and phase should always be connected (red light is lit). When the thermostat is connected the valve opens (blue light is lit).

The connection is the same for 24V actuators.

Återföringssignaler

CC is used to receive a signal back in close pos.
OO is used to receive a signal back in open pos.

