



KC



KCV

### TECHNICAL DATA

**Operating range:** from 3 to 45 m<sup>3</sup>/h.  
**Maximum head:** 24 m.  
**Maximum operating pressure:** 6.5 bar.  
**Pumped liquid temperature range:** from -10 to +55 °C.  
**Maximum glycol percentage:** up to 40 %.  
**Maximum ambient temperature:** 65 °C.  
**Motor protection:** IP55.  
**Insulation class:** F (copper wire with H class insulation).  
**Standard voltage:** three-phase 230-400 V / 50 Hz.  
**Installation:** fixed or portable, horizontal position.  
**Special versions on request:**  
 other power input voltages and/or frequencies.

### APPLICATIONS

Pumping of water or other non-aggressive, non-explosive liquids, free from solid particles or fibres.  
 Particularly suited for pumping water containing glycol for air conditioning systems.

### PLUS

**Versatile:** thanks to the high quality construction materials used and the oversized motors, the KC and KCV range can be used in environments with temperatures up to 65 °C, and glycol percentages of up to 40% of the pumped liquid.

**Reliable:** all the components have been sized to guarantee a minimum life time of at least 50,000 hours of operation (with the exception of the bearings and the mechanical seals, for which the average life guaranteed is 25,000 hours in the most demanding conditions).

**Rust-proof:** all the components in contact with the liquid are made of thermoplastic material (polypropylene or noryl reinforced), and the pump shaft is made of stainless steel (AISI 304).

**Flexible:** possibility of rotating the pump body at 90 °C for better installation flexibility. Complete hydraulics (pump body, seal holder flange, impeller, diffuser) made of fibreglass reinforced technopolymer, shaft extension in contact with the liquid made of AISI 304 stainless steel.

### CONSTRUCTION FEATURES OF THE PUMP

Silicon carbide/graphite mechanical seal, EPDM O rings

### CONSTRUCTION FEATURES OF THE MOTOR

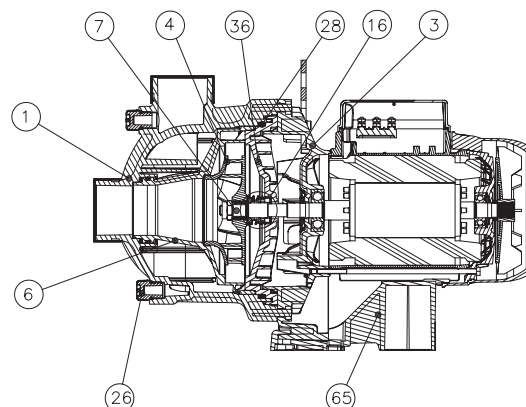
- Continuous service external ventilation asynchronous motor (S1), 2 poles
- Maximum ambient temperature: 65 °C

- Sealed ball bearings, resistant to water and humidity
- Motor construction in accordance with EN 60335-2-41.

## MATERIALS

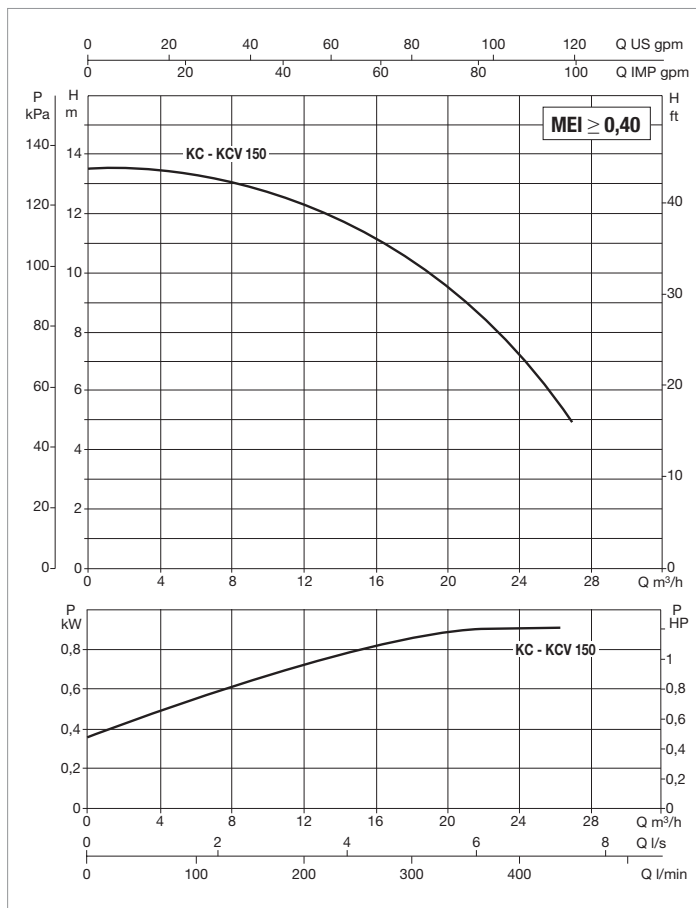
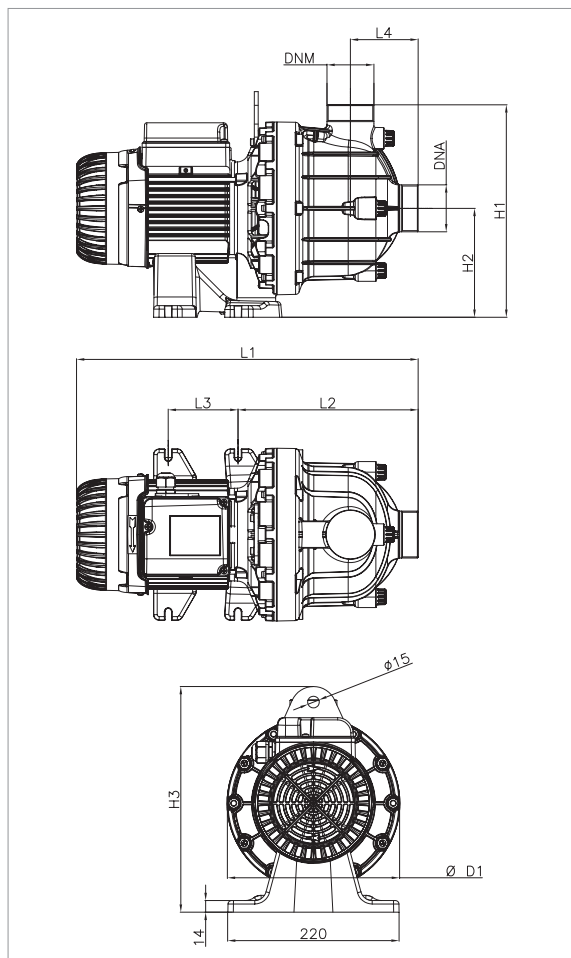
| N. | PARTS*            | MATERIALS                                           |
|----|-------------------|-----------------------------------------------------|
| 1  | PUMP BODY         | FIBREGLASS REINFORCED TECHNOPLYMER                  |
| 3  | SUPPORT           | DIE-CAST ALUMINIUM ALLOY                            |
| 4  | IMPELLER          | FIBREGLASS REINFORCED TECHNOPLYMER                  |
| 6  | DIFFUSER          | FIBREGLASS REINFORCED TECHNOPLYMER                  |
| 7  | SHAFT             | AISI 304 STAINLESS STEEL IN CONTACT WITH THE LIQUID |
| 16 | MECHANICAL SEAL   | SILICON CARBIDE/GRAPHITE                            |
| 26 | CAP               | FIBREGLASS REINFORCED TECHNOPLYMER                  |
| 28 | O-RING            | EPDM                                                |
| 36 | SEAL HOLDING DISC | FIBREGLASS REINFORCED TECHNOPLYMER                  |
| 65 | BASE              | FIBREGLASS REINFORCED TECHNOPLYMER                  |

\* In contact with the liquid



– Denomination index:  
(example)

KC V 300 T  
 KC = 2" M-GAS threaded ports  
 KCV = 2" Victaulic threaded ports  
 Nominal power in hp x 100  
 Three-phase motor

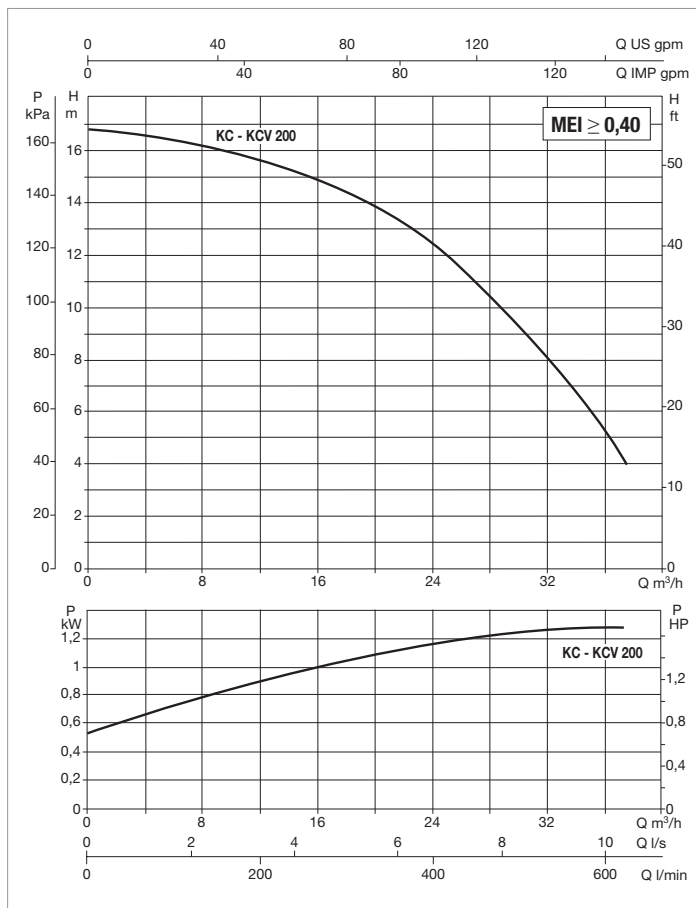
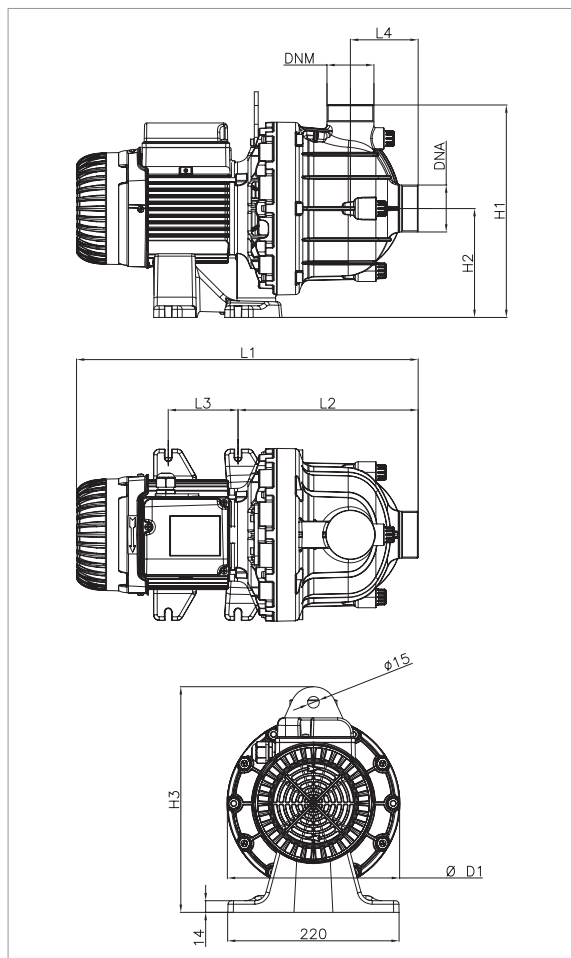


The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL          | Q=m³/h  | 0    | 10   | 15   | 20  | 25  |
|----------------|---------|------|------|------|-----|-----|
|                | Q=l/min | 0    | 167  | 250  | 333 | 417 |
| KC / KCV 150 T | H (m)   | 13,6 | 12,8 | 11,5 | 9,5 | 6,5 |

| MODEL     | ELECTRICAL DATA      |             |                  |         |                                   |
|-----------|----------------------|-------------|------------------|---------|-----------------------------------|
|           | POWER INPUT<br>50 Hz | P1 MAX<br>W | P2 NOMINAL<br>kW | In<br>A | MOTOR STARTER<br>RESISTANCE (Ohm) |
| KC 150 T  | 3 x 230 - 400 V ~    | 1,2         | 870              | 2,3     | 6,28                              |
| KCV 150 T | 3 x 230 - 400 V ~    | 1,2         | 870              | 2,3     | 6,28                              |

| MODEL     | L1  | L2  | L3 | L4 | H1  | H2  | H3  | D1  | DNA          | DNM          | PACKING DIMENSIONS |     |     | VOLUME<br>(m³) | WEIGHT<br>kg |
|-----------|-----|-----|----|----|-----|-----|-----|-----|--------------|--------------|--------------------|-----|-----|----------------|--------------|
|           |     |     |    |    |     |     |     |     |              |              | L/A                | L/B | H   |                |              |
| KC 150 T  | 439 | 231 | 90 | 87 | 273 | 140 | 290 | 222 | 2" M-GAS     | 2" M-GAS     | 510                | 300 | 320 | 0,013          | 14           |
| KCV 150 T | 439 | 231 | 90 | 87 | 273 | 140 | 290 | 222 | 2" Victaulic | 2" Victaulic | 510                | 300 | 320 | 0,013          | 14           |

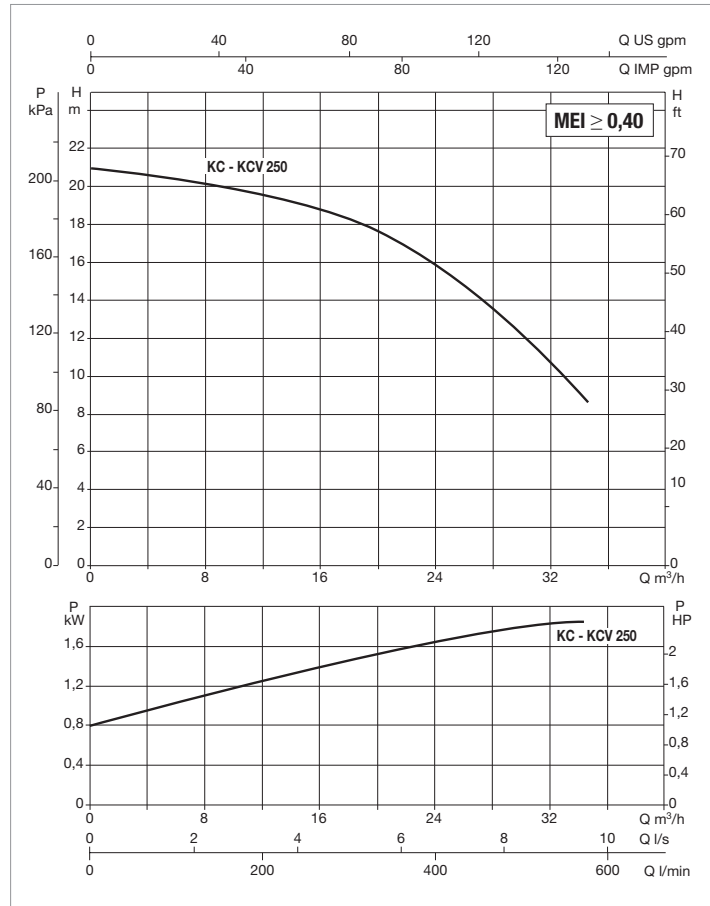
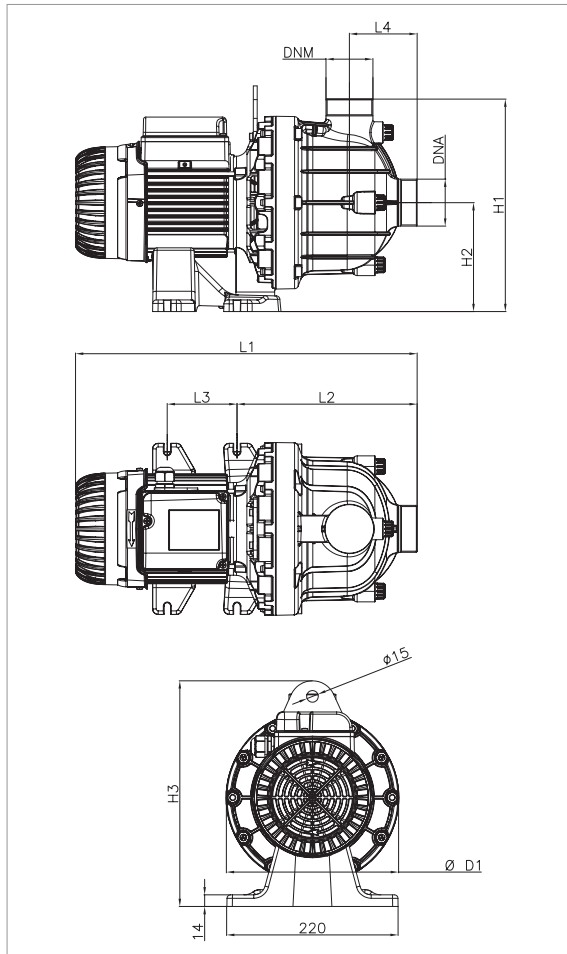


The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL          | Q=m³/h  | 0    | 10   | 15  | 20  | 25   | 30  |
|----------------|---------|------|------|-----|-----|------|-----|
|                | Q=l/min | 0    | 167  | 250 | 333 | 417  | 500 |
| KC / KCV 200 T | H (m)   | 16,8 | 15,7 | 15  | 14  | 11,8 | 9   |

| MODEL     | ELECTRICAL DATA      |             |                 |         |                                   |
|-----------|----------------------|-------------|-----------------|---------|-----------------------------------|
|           | POWER INPUT<br>50 Hz | P1 MAX<br>W | P2 NOMINAL<br>W | In<br>A | MOTOR STARTER<br>RESISTANCE (Ohm) |
| KC 200 T  | 3 x 230 - 400 V ~    | 1,5         | 1260            | 3,1     | 3,51                              |
| KCV 200 T | 3 x 230 - 400 V ~    | 1,5         | 1260            | 3,1     | 3,51                              |

| MODEL     | L1  | L2  | L3 | L4 | H1  | H2  | H3  | D1  | DNA          | DNM          | PACKING DIMENSIONS |     |     | VOLUME<br>(m³) | WEIGHT<br>kg |
|-----------|-----|-----|----|----|-----|-----|-----|-----|--------------|--------------|--------------------|-----|-----|----------------|--------------|
|           |     |     |    |    |     |     |     |     |              |              | L/A                | L/B | H   |                |              |
| KC 200 T  | 439 | 231 | 74 | 87 | 273 | 140 | 290 | 222 | 2" M-GAS     | 2" M-GAS     | 510                | 300 | 320 | 0.013          | 16           |
| KCV 200 T | 439 | 231 | 74 | 87 | 273 | 140 | 290 | 222 | 2" Victaulic | 2" Victaulic | 510                | 300 | 320 | 0.013          | 16           |

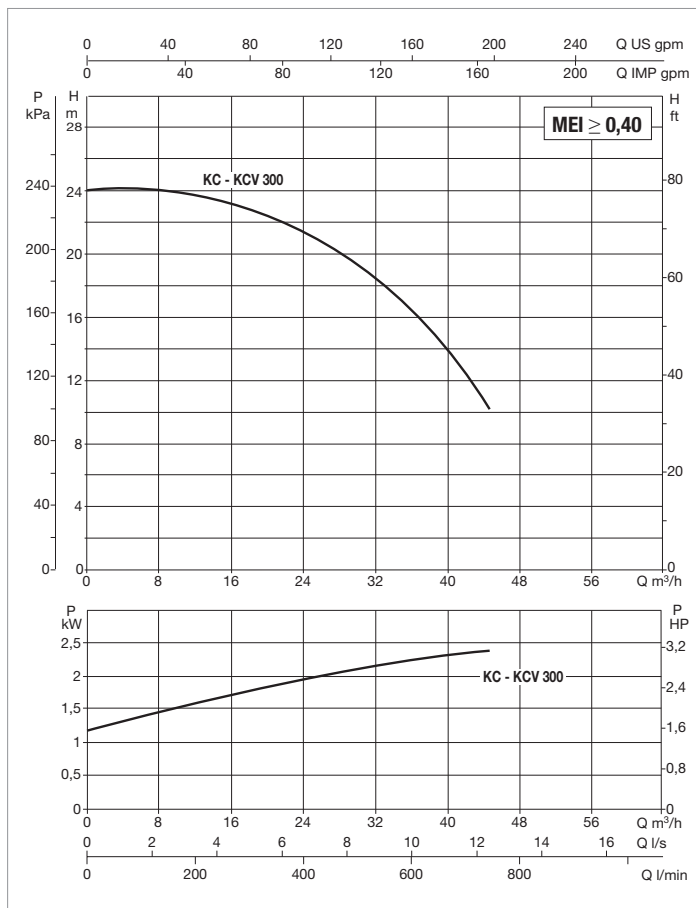
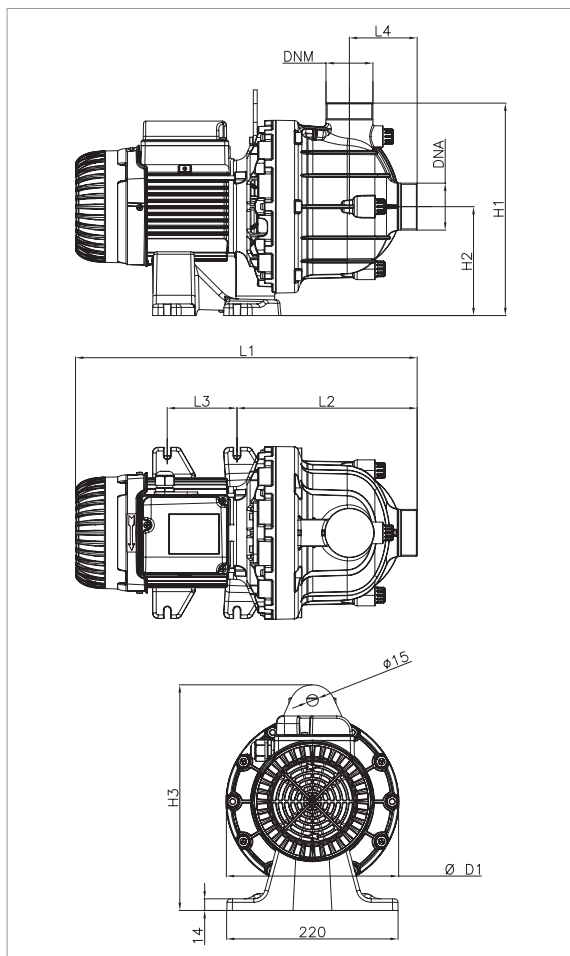


The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL          | Q=m³/h  | 0  | 10  | 15   | 20   | 25   | 30  |
|----------------|---------|----|-----|------|------|------|-----|
|                | Q=l/min | 0  | 167 | 250  | 333  | 417  | 500 |
| KC / KCV 250 T | H (m)   | 21 | 20  | 19,1 | 17,7 | 15,5 | 12  |

| MODEL     | ELECTRICAL DATA      |             |                 |         |                                   |
|-----------|----------------------|-------------|-----------------|---------|-----------------------------------|
|           | POWER INPUT<br>50 Hz | P1 MAX<br>W | P2 NOMINAL<br>W | In<br>A | MOTOR STARTER<br>RESISTANCE (Ohm) |
| KC 250 T  | 3 x 230 - 400 V ~    | 2,3         | 1900            | 4,3     | 2,55                              |
| KCV 250 T | 3 x 230 - 400 V ~    | 2,3         | 1900            | 4,3     | 2,55                              |

| MODEL     | L1  | L2  | L3 | L4 | H1  | H2  | H3  | D1  | DNA          | DNM          | PACKING DIMENSIONS |     |     | VOLUME<br>(m³) | WEIGHT<br>kg |
|-----------|-----|-----|----|----|-----|-----|-----|-----|--------------|--------------|--------------------|-----|-----|----------------|--------------|
|           |     |     |    |    |     |     |     |     |              |              | L/A                | L/B | H   |                |              |
| KC 250 T  | 513 | 231 | 74 | 87 | 273 | 140 | 290 | 222 | 2" M-GAS     | 2" M-GAS     | 600                | 300 | 450 | 0,08           | 18           |
| KCV 250 T | 513 | 231 | 74 | 87 | 273 | 140 | 290 | 222 | 2" Victaulic | 2" Victaulic | 600                | 300 | 450 | 0,08           | 18           |



The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL          | Q=m³/h  | 0    | 15   | 20   | 25   | 30   | 40   |
|----------------|---------|------|------|------|------|------|------|
|                | Q=l/min | 0    | 250  | 333  | 417  | 500  | 667  |
| KC / KCV 300 T | H (m)   | 24,3 | 23,4 | 22,5 | 21,3 | 19,5 | 13,9 |

| MODEL     | ELECTRICAL DATA      |             |                 |         |                                   |
|-----------|----------------------|-------------|-----------------|---------|-----------------------------------|
|           | POWER INPUT<br>50 Hz | P1 MAX<br>W | P2 NOMINAL<br>W | In<br>A | MOTOR STARTER<br>RESISTANCE (Ohm) |
| KC 300 T  | 3 x 230 - 400 V ~    | 3           | 2560            | 5,8     | 1,72                              |
| KCV 300 T | 3 x 230 - 400 V ~    | 3           | 2560            | 5,8     | 1,72                              |

| MODEL     | L1  | L2  | L3  | L4  | H1  | H2  | H3  | D1  | DNA          | DNM          | PACKING DIMENSIONS |     |     | VOLUME<br>(m³) | WEIGHT<br>kg |
|-----------|-----|-----|-----|-----|-----|-----|-----|-----|--------------|--------------|--------------------|-----|-----|----------------|--------------|
|           |     |     |     |     |     |     |     |     |              |              | L/A                | L/B | H   |                |              |
| KC 300 T  | 563 | 282 | 177 | 114 | 355 | 170 | 320 | 300 | 2" M-GAS     | 2" M-GAS     | 700                | 400 | 520 | 0,15           | 23           |
| KCV 300 T | 563 | 282 | 177 | 114 | 355 | 170 | 320 | 300 | 2" Victaulic | 2" Victaulic | 700                | 400 | 520 | 0,15           | 23           |