

-  Clean water
-  Domestic use
-  Civil use



PERFORMANCE RANGE

- Flow rate up to **160 l/min** (9.6 m³/h)
- Head up to **57 m**

APPLICATION LIMITS

- Manometric suction lift up to **7 m**
- Liquid temperature between **-10 °C** and **+90 °C**
- Ambient temperature up to **+40 °C**
- Max. working pressure:
 - **6 bar** for CP 600-610-620
 - **10 bar** for CP 650-660-670
- Continuous service **S1**

CONSTRUCTION AND SAFETY STANDARDS

EN 60335-1
IEC 60335-1
CEI 61-150

EN 60034-1
IEC 60034-1
CEI 2-3



CERTIFICATIONS

Company with management system certified DNV
ISO 9001: QUALITY
ISO 14001: ENVIRONMENT

INSTALLATION AND USE

Suitable for use with clean water and with liquids that are not chemically aggressive towards the materials from which the pump is made. Because they are reliable and easy to use these pumps are widely used in domestic and civil applications such as the distribution of water in combination with small and medium sized pressure tanks, for transferring liquids and for the irrigation of gardens and orchards. The pump should be installed in an enclosed environment or sheltered from inclement weather.

PATENTS - TRADE MARKS - MODELS

- Registered EU Design n. 002098434

OPTIONS AVAILABLE ON REQUEST

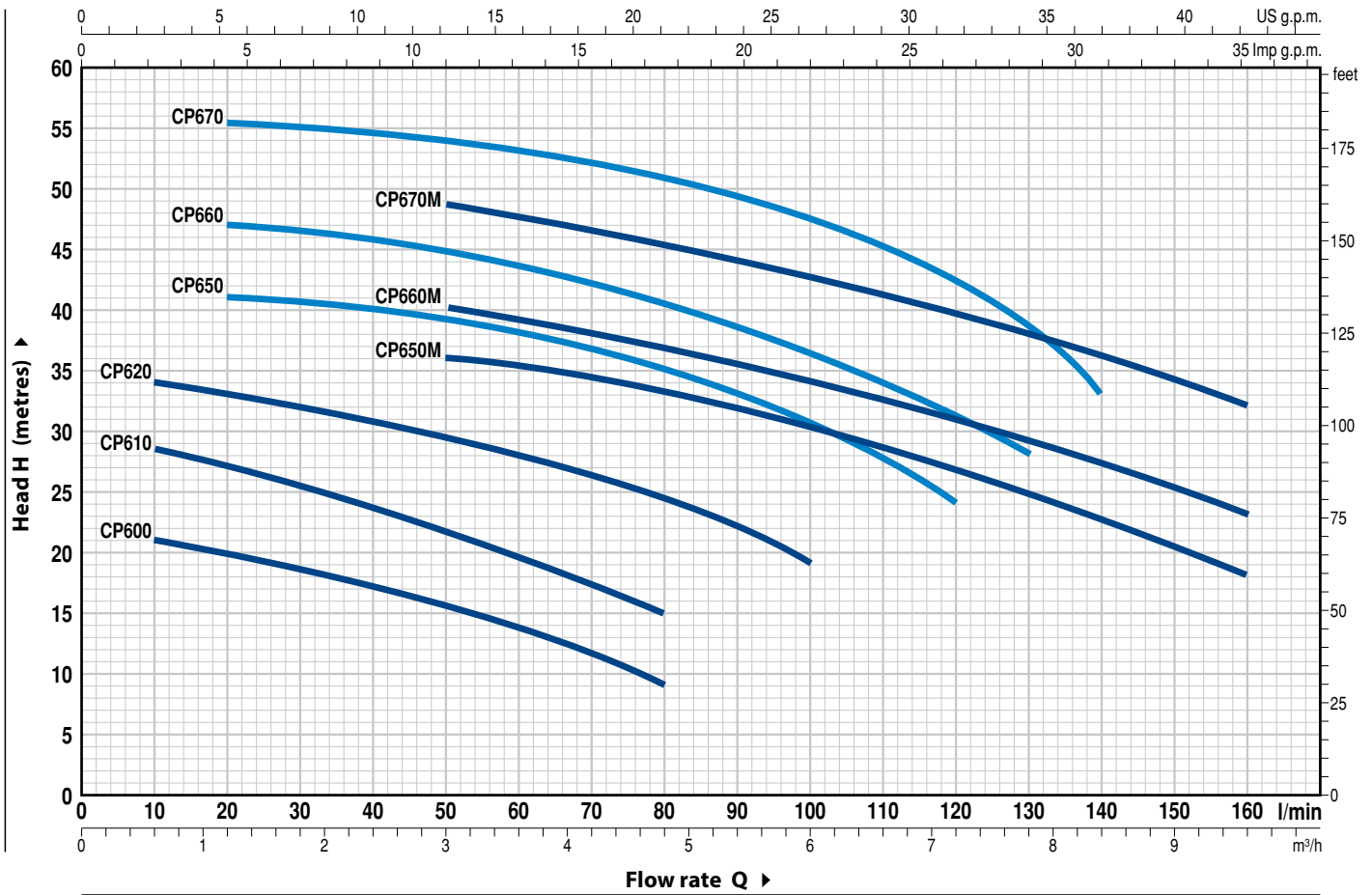
- Pump with technopolymer impeller (CP600X, CP610X, CP620X)
- Special mechanical seal
- Other voltages
- IP X5 class protection for CP 650-660-670

GUARANTEE

2 years subject to terms and conditions

CHARACTERISTIC CURVES AND PERFORMANCE DATA

60 Hz n= 3450 rpm HS= 0 m



| MODEL | | POWER (P ₂) | | ▲ | Q | H metres | | | | | | | | | | | | | | | | | | |
|--------------|-------------|-------------------------|------|-----|----------|-------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|--|
| Single-phase | Three-phase | kW | HP | | | m ³ /h | 0 | 0.6 | 1.2 | 1.8 | 2.4 | 3.0 | 3.6 | 4.2 | 4.8 | 5.4 | 6.0 | 6.6 | 7.2 | 7.8 | 8.4 | 9.0 | 9.6 | |
| | | | | | l/min | 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | | |
| CPm 600 | CP 600 | 0.37 | 0.50 | IE2 | H metres | 22 | 21 | 20 | 18.5 | 17 | 15.5 | 14 | 12 | 9 | | | | | | | | | | |
| CPm 610 | CP 610 | 0.60 | 0.85 | | | 30 | 28.5 | 27 | 25.5 | 23.5 | 21.5 | 19.5 | 17.5 | 15 | | | | | | | | | | |
| CPm 620 | CP 620 | 0.75 | 1 | | | 35 | 34 | 33 | 31.5 | 30.5 | 29.5 | 28 | 26.5 | 24.5 | 22 | 19 | | | | | | | | |
| CPm 650 | CP 650 | 1.1 | 1.5 | IE3 | | 42 | 41.5 | 41 | 40.5 | 39.5 | 39 | 38 | 36.5 | 35 | 33 | 30 | 27 | 24 | | | | | | |
| CPm 660 | CP 660 | 1.5 | 2 | | | 48 | 47.5 | 47 | 46.5 | 46 | 45 | 43.5 | 42 | 40.5 | 38.5 | 36 | 33.5 | 31 | 28 | | | | | |
| CPm 670 | CP 670 | 2.2 | 3 | | | 57 | 56.5 | 55.5 | 55 | 54 | 53.5 | 53 | 52 | 50.5 | 49.5 | 47 | 45 | 42.5 | 38 | 33 | | | | |
| CPm 650M | CP 650M | 1.1 | 1.5 | IE2 | | 39 | 38.5 | 38 | 37 | 36.5 | 36 | 35 | 34 | 33 | 32 | 30 | 28.5 | 26.5 | 24.5 | 22.5 | 20 | 18 | | |
| CPm 660M | CP 660M | 1.5 | 2 | IE3 | | 43 | 42.5 | 42 | 41 | 40.5 | 40 | 39 | 37.5 | 36.5 | 35 | 34 | 32.5 | 31 | 29 | 27 | 25 | 23 | | |
| CPm 670M | CP 670M | 2.2 | 3 | | | 51 | 50.5 | 50.5 | 50 | 49.5 | 48.5 | 47.5 | 46.5 | 45 | 44 | 42.5 | 41 | 39.5 | 37.5 | 36 | 34 | 32 | | |

Q = Flow rate H = Total manometric head HS = Suction height

Tolerance of characteristic curves in compliance with EN ISO 9906 Grade 3B.

▲ Performance class of the three-phase motor (IEC-60034-30)

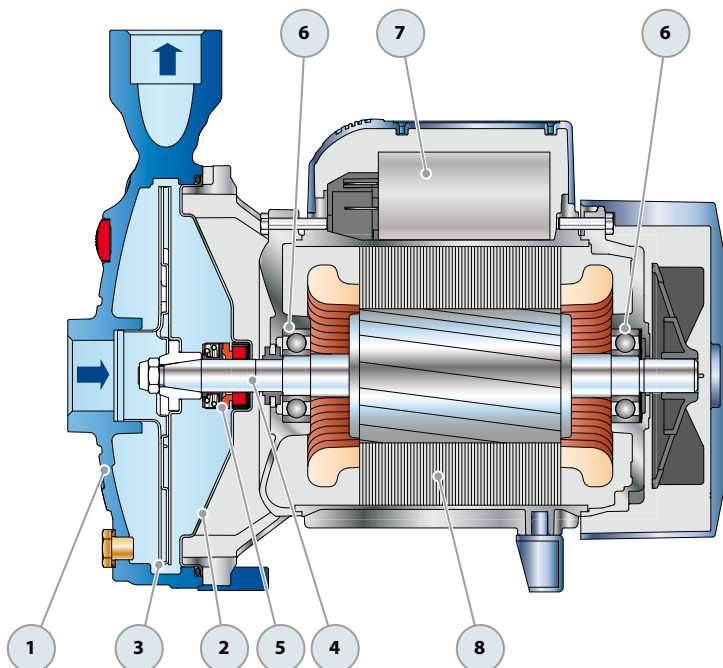
POS. COMPONENT CONSTRUCTION CHARACTERISTICS

| | | | | | | |
|--------------------------|---|--------------------------|-------------------------|------------------------|------------------------|------------------|
| 1 PUMP BODY | Cast iron with an Epoxy Electro Coating treatment, with threaded ports in compliance with ISO 228/1 | | | | | |
| 2 BODY BACKPLATE | Stainless steel AISI 304 (cast iron for CP 650-660-670) | | | | | |
| 3 IMPELLER | Stainless steel AISI 304 | | | | | |
| 4 MOTOR SHAFT | Stainless steel EN 10088-3 - 1.4104 | | | | | |
| 5 MECHANICAL SEAL | Pump | Seal | Shaft | Materials | | |
| | <i>Model</i> | <i>Model</i> | <i>Diameter</i> | <i>Stationary ring</i> | <i>Rotational ring</i> | <i>Elastomer</i> |
| | CP 600-610 | AR-12 | Ø 12 mm | Ceramic | Graphite | NBR |
| | CP 620 | AR-14 | Ø 14 mm | Ceramic | Graphite | NBR |
| | CP 650-660-670 CP 650M-660M-670M | FN-18 | Ø 18 mm | Graphite | Ceramic | NBR |
| 6 BEARINGS | Pump | Model | | | | |
| | CP 600-610 | 6201 ZZ / 6201 ZZ | | | | |
| | CP 620 | 6203 ZZ / 6203 ZZ | | | | |
| | CP 650-660-670 | 6204 ZZ / 6204 ZZ | | | | |
| | CP 650M-660M-670M | 6204 ZZ / 6204 ZZ | | | | |
| 7 CAPACITOR | Pump | Capacitance | | | | |
| | <i>Single-phase</i> | <i>(220 V)</i> | <i>(110 V or 127 V)</i> | | | |
| | CPm 600 | 10 µF - 450 VL | 25 µF - 250 VL | | | |
| | CPm 610 | 14 µF - 450 VL | 25 µF - 250 VL | | | |
| | CPm 620 | 20 µF - 450 VL | 60 µF - 300 VL | | | |
| | CPm 650-650M | 25 µF - 450 VL | 60 µF - 250 VL | | | |
| | CPm 660-660M | 31.5 µF - 450 VL | 60 µF - 250 VL | | | |
| | CPm 670-670M | 50 µF - 450 VL | 80 µF - 250 VL | | | |

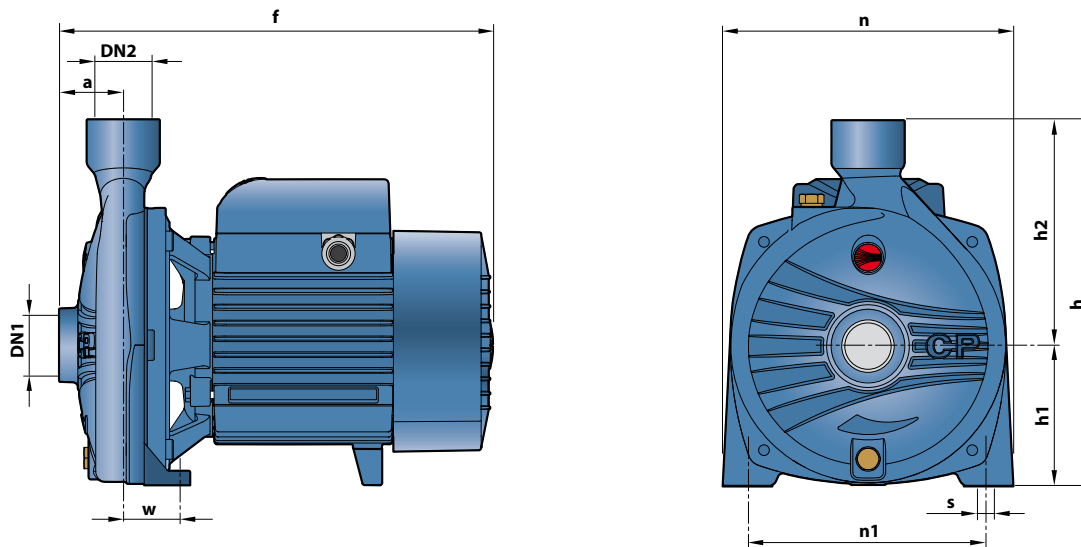
8 ELECTRIC MOTOR CPm: single-phase 220 V - 60 Hz with thermal overload protector incorporated into the winding.
 CP: three-phase 220/380 V - 60 Hz or 220/440 V - 60 Hz.

➔ **The three-phase pumps are fitted with high performance motors up to P2=1.1kW in class IE2 and from P2=1.5kW in class IE3 (IEC 60034-30)**

- Insulation: class F
- Protection: IP X4



DIMENSIONS AND WEIGHT



| MODEL | | PORTS | | DIMENSIONS mm | | | | | | | | | kg | |
|----------------|---------------|-------|-----|---------------|-----|-----|-----|-----|-----|-----|------|----|------|------|
| Single-phase | Three-phase | DN1 | DN2 | a | f | h | h1 | h2 | n | n1 | w | s | 1~ | 3~ |
| CPm 600 | CP 600 | 1" | 1" | 42 | 253 | 205 | 82 | 123 | 165 | 135 | 41 | 10 | 7.1 | 7.1 |
| CPm 610 | CP 610 | | | | | 240 | 92 | 148 | 190 | 160 | 38 | | 8.7 | 8.2 |
| CPm 620 | CP 620 | | | | | 285 | 240 | 92 | 148 | 190 | 160 | | 38 | 11.5 |
| CPm 650 - 650M | CP 650 - 650M | 1¼" | 1" | 51 | 367 | 260 | 110 | 150 | 206 | 165 | 44.5 | 11 | 17.8 | 17.2 |
| CPm 660 - 660M | CP 660 - 660M | | | | | 260 | 110 | 150 | 206 | 165 | 44.5 | | 18.9 | 17.9 |
| CPm 670 - 670M | CP 670 - 670M | | | | | 260 | 110 | 150 | 206 | 165 | 44.5 | | 20.7 | 20.1 |

ABSORPTION

| MODEL | VOLTAGE | | |
|---------------------|---------|--------|--------|
| | 220 V | 110 V | 127 V |
| Single-phase | 220 V | 110 V | 127 V |
| CPm 600 | 2.7 A | 5.5 A | 5.2 A |
| CPm 610 | 4.0 A | 8.0 A | 7.6 A |
| CPm 620 | 6.0 A | 12.0 A | 10.0 A |
| CPm 650 | 8.8 A | 17.6 A | 16.0 A |
| CPm 650M | 8.8 A | 17.6 A | 16.7 A |
| CPm 660 | 9.7 A | 20.0 A | 18.4 A |
| CPm 660M | 9.7 A | 19.0 A | 18.4 A |
| CPm 670 | 13.2 A | 25.0 A | 19.0 A |
| CPm 670M | 12.0 A | 25.0 A | 19.0 A |

| MODEL | VOLTAGE | | | |
|--------------------|---------|-------|-------|-------|
| | 220 V | 380 V | 220 V | 440 V |
| Three-phase | 220 V | 380 V | 220 V | 440 V |
| CP 600 | 1.8 A | 1.0 A | 2.0 A | 1.2 A |
| CP 610 | 2.8 A | 1.6 A | 2.6 A | 1.5 A |
| CP 620 | 4.2 A | 2.4 A | 4.2 A | 2.4 A |
| CP 650 | 5.5 A | 3.2 A | 5.5 A | 3.2 A |
| CP 650M | 5.3 A | 3.1 A | 5.6 A | 3.1 A |
| CP 660 | 6.7 A | 3.9 A | 6.4 A | 4.1 A |
| CP 660M | 6.7 A | 3.9 A | 6.4 A | 4.1 A |
| CP 670 | 10.4 A | 6.0 A | 8.8 A | 5.0 A |
| CP 670M | 9.0 A | 5.2 A | 9.7 A | 5.2 A |

PALLETIZATION

| MODEL | | GROUPAGE | CONTAINER |
|-----------------|----------------|----------|-----------|
| Single-phase | Three-phase | n. pumps | n. pumps |
| CPm 600 | CP 600 | 90 | 162 |
| CPm 610 | CP 610 | 90 | 162 |
| CPm 620 | CP 620 | 70 | 112 |
| CPm 650 - 650M | CP 650 - 650M | 50 | 70 |
| CPm 660 - 660M | CP 660 - 660M | 50 | 70 |
| CPm 670 - 670 M | CP 670 - 670 M | 50 | 70 |