



## **DOMESTIC PRESSURISATION**



Inverter controlled units with two horizontal multi-stage pumps.

### TYPICAL APPLICATIONS

GPE pressurisation units have the following applications:

- Water supply to building service distribution systems
- Generic industrial water supply
- Irrigation for gardens, parks and sports facilities

### **UNIT EQUIPMENT**

- Two COMPACT series pumps with 2-pole self-ventilating asynchronous motor, efficiency class IE2 for three-phase motors starting from 0.6 kW with E-power series INVERTER
- Control unit: pumps equipped with inverters for modulating control
- Automatic INVERTER control of each pump with frequency variation at constant pressure, electronic controller display
- Corrosion resistant materials for all components in contact with fluids
- Galvanised steel base
- Galvanised steel manifolds (AISI 304, AISI 316 available on request).
  The manifolds are dimensioned in relation to the total hydraulic output of the pressurisation system
- Intake/delivery shut-off valves on each pump
- Intake side check valve
- Delivery side pressure gauge
- Protection against water supply failure
- Equipped for connection to delivery side accumulation tank
- Circuit breaker panel with two thermal cutouts

#### **INVERTER CONTROL UNIT**

- Installation on line
- Mounting position: any
- Fittings: 1"1/4 male

- Power voltage: Single-phase 230V
- Output voltage (pump): three-phase 230V
- Phase current: max 10 A
- Maximum pump power: 2.2 kW
- Output frequency: 5 60 Hz
- Display: 2 digit alphanumeric
- Protection rating: IP 65
- Operating temperature: 5 40 °C
- Pressure setpoint: 0.3 8 bar
- Max overpressure: 12 bar
- Electrical safety: EN60730
- Electromagnetic compatibility: EN61000 (specific standards declared in CE certificate)
- Protections:
  - Dry run
  - Over/under voltage
  - Short circuit
  - Over current
- Over temperature
- Insufficient pressure
- Sensor failure





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#### **TECHNICAL FEATURES**

#### **APPLICATION RANGE**

- Maximum operating pressure: 10 bar
- Max fluid temperature: 40°C

#### **PUMP MATERIALS**

- Cast iron pump body and support
- AISI 304 external jacket
- Impeller and diffuser in PPE + glass fibre reinforced PS
- Stages in PPE + glass fibre reinforced PS/PTFE
- AISI 416 shaft
- Ceramic/carbon fibre/NBR mechanical seal

#### **MOTOR SPECIFICATIONS**

- Motors IE2 from 0.75kW
- Self-ventilated asynchronous 2-pole motor
- Insulation Class F
- Protection rating IP44
- Three-phase voltage 230/400V ± 10%
- Permanently inserted capacitor and incorporated thermoamperometric protection device with automatic rearm for singlephase motor

#### **ADVANTAGES**

- Energy saving: the controller modulates the pump rate in relation to system demand, better than direct in-line connection to the mains supply
- Better, faster response regulation
- Reduced hammering due to gradual startup and shutdown
- Improved heating, A/C and pressurisation system comfort
- Reduced startup current
- Pumps switched at each startup
- Speed modulation of both pumps for optimal regulation

#### **ACCESSORIES**

• Membrane accumulation tank: depending on installation conditions.

#### **CONSIGNMENT**

- Pressurisation system ready for hookup, factory assembled and tested for operation and hermetic seal
- Packaging
- Installation, user and maintenance instructions

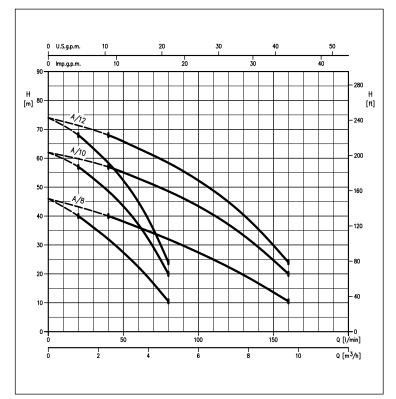




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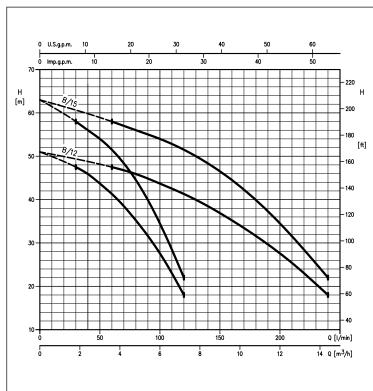
#### **PERFORMANCE CURVES for 2GPE COMPACT A series**

ISO 9906 Annex A)



### PERFORMANCE CURVES for 2GPE COMPACT B series

(ISO 9906 Annex A)



#### TABLE OF PERFORMANCE AND ELECTRICAL DATA FOR TWO PUMPS RUNNING SIMULTANEOUSLY

| Model                  |           | Max absorption   | Q = Flow rate |      |      |      |      |      |      |      |  |
|------------------------|-----------|------------------|---------------|------|------|------|------|------|------|------|--|
|                        |           | [A] <sup>'</sup> | I/min 40      | 60   | 80   | 100  | 120  | 160  | 200  | 240  |  |
|                        | [kW]      | Three-phase      | m³/h 2.4      | 3.6  | 4.8  | 6    | 7.2  | 9.6  | 12   | 14.4 |  |
|                        |           | 23ÓV             |               |      |      |      |      |      |      |      |  |
| 2GPE COMPACT A 8 E-PW  | 0.6+0.6   | 5.2              | 39.7          | 36.1 | 32.0 | 27.4 | 22.4 | 10.5 | -    | -    |  |
| 2GPE COMPACT A 10 E-PW | 0.75+0.75 | 6.6              | 56.5          | 53.0 | 48.5 | 43.5 | 37.1 | 20.0 | -    | -    |  |
| 2GPE COMPACT A 12 E-PW | 0.9+0.9   | 8.6              | 67.5          | 63.5 | 58.5 | 52.5 | 45.0 | 24.0 | -    | -    |  |
| 2GPE COMPACT B 12 E-PW | 0.9+0.9   | 8.6              | -             | 47.5 | 46.0 | 43.5 | 41.5 | 35.2 | 27.6 | 18.0 |  |
| 2GPE COMPACT B 15 E-PW | 1.1+1.1   | 9.0              | -             | 58.0 | 56.0 | 54.0 | 51.5 | 44.5 | 34.5 | 22.0 |  |

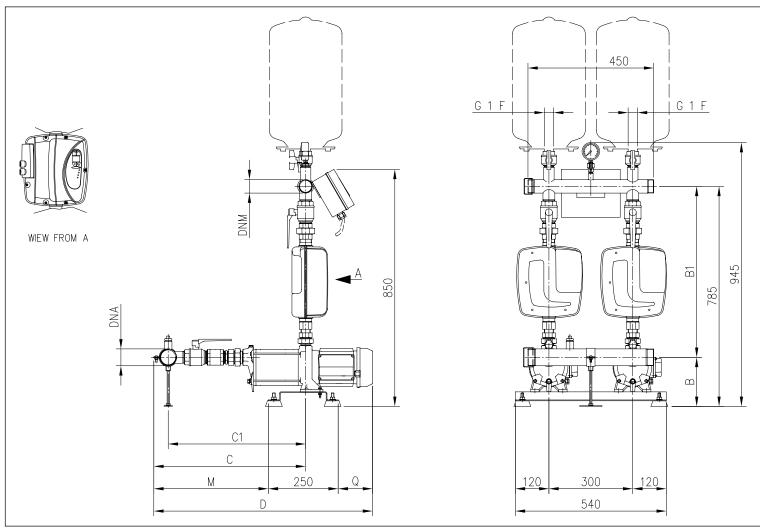
serves the right to effect any modification it deems necessary, without prior notoe.





## **DOMESTIC PRESSURISATION**

#### **DIMENSIONS**



### **DIMENSION CHART**

| Model                  | Dimensions [mm] |     |     |           |      |      |     |     |     | Weight |
|------------------------|-----------------|-----|-----|-----------|------|------|-----|-----|-----|--------|
|                        | В               | B1  | C   | <b>C1</b> | DNA  | DNM  | D   | M   | Q   | [kg]   |
| 2GPE COMPACT A/8 E-PW  | 180             | 620 | 430 | 380       | G 2" | G1"½ | 615 | 295 | 70  | 39     |
| 2GPE COMPACT A/10 E-PW | 175             | 625 | 455 | 405       | G 2" | G1"½ | 680 | 320 | 110 | 48     |
| 2GPE COMPACT A/12 E-PW | 175             | 625 | 485 | 430       | G 2" | G1"½ | 725 | 350 | 125 | 51     |
| 2GPE COMPACT B/12 E-PW | 175             | 625 | 385 | 335       | G 2" | G1"½ | 625 | 255 | 125 | 50     |
| 2GPE COMPACT B15 E-PW  | 175             | 625 | 410 | 360       | G 2" | G1"½ | 650 | 275 | 125 | 50     |