

COMPASS | DESIGN ENVELOPE VARIABLE SPEED WET ROTOR CIRCULATORS | SUBMITTAL

File No: 10.65UK
Date: APRIL 21, 2016
Supersedes: 10.65UK
Date: MARCH 28, 2014

Job: _____ Representative: _____
 _____ Ordered by: _____ Date: _____
 Engineer: _____ Submitted by: _____ Date: _____
 Contractor: _____ Approved by: _____ Date: _____

TECHNICAL DATA

Supply voltage: 1 x 230 v 50 Hz

| | MINIMUM | MAXIMUM |
|------|---------|---------|
| Amp | 0.05 | 0.38 |
| Watt | 5 | 45 |

Motor protection: The pump requires no external motor protection.

Maximum working temperature: TF 110

Maximum working pressure: 10 bar (150 psi).

Maximum relative air humidity (rh): 95%.

Flow range: 0 to 4.5 m³/h (0 - 20 USgpm)

Head range: 0 to 6.09 m (0 - 20 ft)

Enclosure class: IP 42

Insulation class: 180 (H)

Certification: EC declaration of conformity:

- Low voltage directive (2006/95/EC)
Standard used:
EN 60335-2-51: 2003+A1:08+A12:12,
EN 60335-1: 2012, EN62233: 2008
- EMC directive (2004/108/EC)
Standard used:
EN 55014-1: 2006/+A1:2009/+A2:2011,
EN 55014-2: 1997/+A1:2001/+A2:2008,
EN 61000-3-2: 2006/+A1:2009/+A2:2009,
EN 61000-3-3: 2008
- Ecodesign directive (2009/125/EC),
Regulation No 641/2009
Standard used: EN 16297-1:2012



| MODEL | MAX HEAD (m) | EEI** |
|----------------------|--------------|------------|
| Compass 25-60-130 CI | 6 | EEI ≤ 0.22 |
| Compass 25-60-180 CI | 6 | EEI ≤ 0.22 |
| Compass 25-60-180 SS | 6 | EEI ≤ 0.22 |

**The benchmark for the most efficient circulators is EEI ≤ 0.20.

INLET PRESSURE

Minimum inlet pressure in relation to liquid temperature:

| LIQUID TEMPERATURE | MINIMUM INLET PRESSURE |
|--------------------|------------------------|
| 65°C (150°F) | 0.91 m (3.0 ft) |
| 75°C (167°F) | 1.34 m (4.4 ft) |
| 90°C (194°F) | 2.8 m (9.2 ft) |
| 110°C (230°F) | 11.0 m (36.1 ft) |

Sound pressure level: The sound pressure level of the pump is lower than 43 dB(A).

Ambient temperature: 0°C (32°F) - 40°C (104°F)

Pumped liquids: Water or water Glycol mix.

Liquid temperature: 2°C (36°F) - 110°C (230°F)*

To avoid condensation in the control box and stator, the liquid temperature must always be higher than the ambient temperature.

| AMBIENT TEMPERATURE | LIQUID TEMPERATURE | |
|---------------------|--------------------|---------------|
| | MIN. | MAX. |
| 0°C (32°F) | 2°C (35.6°F) | 110°C (230°F) |
| 10°C (50°F) | 10°C (50°F) | 110°C (230°F) |
| 20°C (68°F) | 20°C (68°F) | 110°C (230°F) |
| 30°C (86°F) | 30°C (86°F) | 100°C (212°F) |
| 35°C (95°F) | 35°C (95°F) | 90°C (194°F) |
| 40°C (104°F) | 40°C (104°F) | 80°C (176°F) |

* For open systems, it is recommended that the liquid temperature be less than 65°C (150°F) to avoid precipitation of calcium.

MATERIALS OF CONSTRUCTION

Pump body: Cast iron (closed systems)
 Stainless steel (open systems)

Impeller: Noryl

Shaft: Ceramic

Bearings: Ceramic

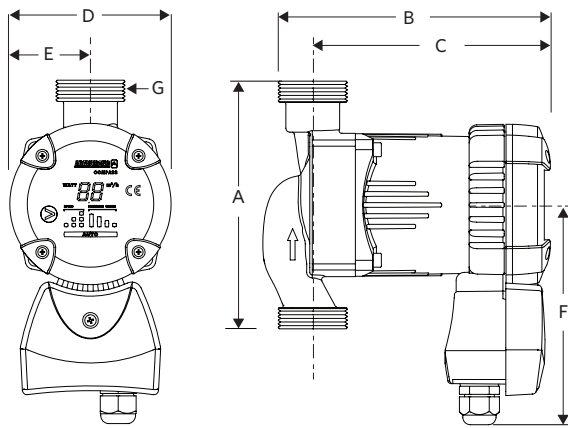
Gasket material: EPDM

DIMENSIONS AND WEIGHTS

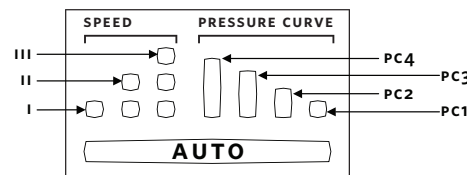
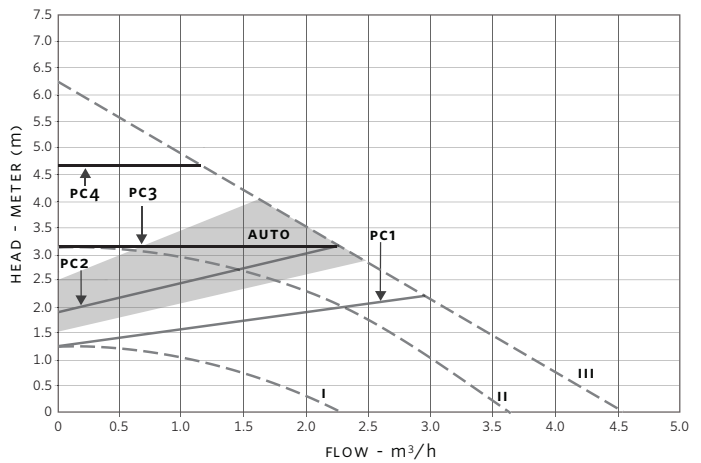
| STAINLESS STEEL | A | B | C | D | E | F | CONNECTION TYPE & SIZE (G) | WEIGHT |
|-------------------------|------------|------------|------------|------------|-----------|------------|----------------------------|-----------|
| Compass 25-60-180 SS | 180 (7.00) | 180 (7.08) | 146 (5.75) | 102 (4.00) | 50 (2.00) | 135 (5.31) | Union 1 1/2" BSPP | 3.0 (6.5) |
| CAST IRON | A | B | C | D | E | F | CONNECTION TYPE & SIZE (G) | WEIGHT |
| Compass 25-60-130 CI | 130 (5.12) | 180 (7.08) | 146 (5.75) | 102 (4.00) | 50 (2.00) | 135 (5.31) | Union 1 1/2" BSPP | 3.0 (6.5) |
| Compass 25-60-180 CI | 180 (7.00) | 180 (7.08) | 146 (5.75) | 102 (4.00) | 50 (2.00) | 135 (5.31) | Union 1 1/2" BSPP | 3.0 (6.5) |

NOTE:
All dimensions are in mm (inches) and weights in kg (lbs).

COMPASS



COMPASS PERFORMANCE CURVES



Lights on the display indicate the Control mode selected.

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