

Features

SINGLE IMPELLER

The compact design of the Single Impeller allows for easy installation, even in confined or restricted spaces.

The mechanical structure of the hydraulic parts that come into contact with pumped liquids are dimensioned to guarantee maximum resistance to mechanical stress.



The lantern bracket design prevents contact with the pumps rotating parts, providing protection to the end-user while allowing for the inspection of the mechanical seal.

The bearing and shaft are designed to reduce stress and provide high reliability under all operating conditions.

TWO BACK-TO-BACK IMPELLER

The option to choose between cast iron or bronze materials for the hydraulic parts that come into contact with pumped liquids allows the Two Back-to-Back Impeller series pumps to be used with different types of liquids.



The mechanical structure of the hydraulic parts that make contact with pumped liquids are dimensioned to guarantee the maximum resistance to mechanical stress.

The bearing and shaft are designed to provide stress reduction and high reliability under all operating conditions.

Applications

- For clean liquids without abrasives, which are non-aggressive for the pump materials (solids content up to 0.2%).
- For water supply.
- For heating, air-conditioning, cooling and circulation plants.
- For civil and industrial applications.
- For irrigation.

Operating Conditions

- Liquid temperature from 14 °F to 194 °F.
- Ambient temperature up to 104 °F.
- Total suction lift up to 23 ft.
- Maximum permissible working pressure up to 145 psi (232 psi for pumps NMD 25/190).
- Continuous duty.



Construction

- Close-coupled, centrifugal pumps; electric motor with extended shaft directly connected to the pump.
 Single-impeller
- Two back-to-back impellers (with axial thrust balancing).
- Connections: threaded ports NPT.

Motor

- 2-pole induction motor, 60 Hz (n ≈ 3450 rpm).
- Three-phase 230/460 V.
- Single-phase 115/230 V, 115 V, 230 V.
- Insulation class F.
- Protection IP 44.

Special Features Available Upon Request

- Other voltages.
- Special mechanical seal.
- Higher or lower liquid or ambient temperatures.

Materials

| COMPONENT | MATERIAL | | | | | | | |
|-----------------|--|--|--|--|--|--|--|--|
| Pump Casing | Cast iron | | | | | | | |
| Lantern Bracket | GJL 200 EN 1561 | | | | | | | |
| Impeller | Brass CW510L (lead free public LAW 111-380) | | | | | | | |
| | Cr steel AISI 430 | | | | | | | |
| Shaft | Cr Ni steel AISI 303 1 - 1.5 - 2.5 - 3 HP | | | | | | | |
| Mechanical Seal | Carbon - Ceramic - NBR | | | | | | | |

End Suction Centrifugal Pumps with Threaded Ports

Performance Curves | n= 3450 rpm



Nominal Currents

| MODEL | P2 | 3 | | 1~ | | | | | | | |
|--------|-----|-----------------|---------|-----------|-----------|-----------------|---------|--|--|--|--|
| | HP | 230 / 460V IN A | la / In | 115V IN A | 230V IN A | 115 / 230V IN A | la / In | | | | |
| CEC 10 | 1 | 5.5/3.2 | 5.5 | | 8.5 | | 2.8 | | | | |
| CEC 15 | 1.5 | 8.3/4.8 | 5.4 | | 10.6 | | 3.8 | | | | |
| CEC 20 | 2 | 9.9/5.7 | 7.3 | | 13.5 | | 4.5 | | | | |
| | | | | | | | | | | | |
| NMD 30 | 3 | 9.9/5.7 | 7.3 | | | | | | | | |

P2 Rated motor power output. | IA / IN D.O.L. starting current / Rated current.

Weights and Dimensions



| MODEL | DN1 | DN2 | DIMENSIONS INCHES | | | | | | | | | | | | NET WEIGHT LBS | | | | | |
|-----------------|-----|-----|-------------------|-------|------|------|-------|------|------|------|------|------|------|------|----------------|------|-------|-------|-------------|-------------|
| | NPT | | а | fM | h1 | h2 | Н | m1 | m2 | n1 | n2 | n3 | b | s | 1 | 12 | w | g1 | 3 ~ | 1~ |
| CEC 10 / CEC 15 | 1 | 1 | 1.97 | 14.76 | 4.41 | 7.09 | 9.45 | 2.17 | 1.69 | 9.65 | 8.07 | 1.46 | 1.77 | 0.45 | 4.33 | 4.45 | 9.61 | 9.61 | 50.4 / 55.2 | 52.8 / 57.2 |
| CEC 20 | 1 | 1 | 1.97 | 16.34 | 4.41 | 7.09 | 9.45 | 2.17 | 1.69 | 9.65 | 8.07 | 1.46 | 1.77 | 0.45 | 4.33 | 4.45 | 11.18 | 11.18 | | 63.1 |
| | | | | | | | | | | | - | | | | | | | | | |
| NMD 30 | 1.5 | 1 | 3.82 | 19.17 | 5.51 | 7.09 | 10.55 | - | - | 9.45 | 7.48 | 1.27 | 1.97 | 0.55 | 5.24 | 5.24 | 12.36 | 0.51 | 92.4 | |