

# NCED G.F Energy saving twin circulating pumps with flanges



## Construction

Energy saving variable speed circulating pump driven by a permanent magnet synchronous motor (pm) controlled by on board inverter.

## Applications

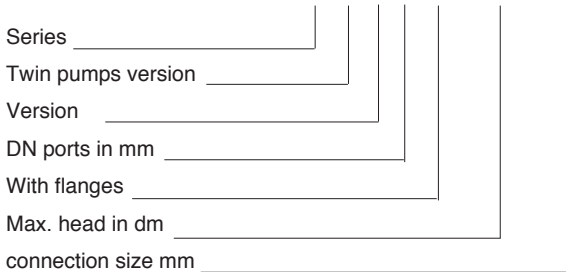
Heating, conditioning, circulating systems.  
For civil and industrial applications.

## Operating conditions

- Liquid temperature from -10 °C to +110 °C
- Ambient temperature from 0 °C to +40 °C
- Maximum permissible working pressure: 6/10 bar
- Storage: -20°C/+70°C max. relative humidity 95% at 40 °C
- Certifications: in conformity with CE requirements
- Sound pressure ≤ 54 dB (A).
- Minimum suction pressure:
  - 0,5 bar at 50 °C.
  - 0,8 bar at 80 °C.
  - 1,4 bar at 110 °C.
- Maximum glycol quantity: 20%.
- EMC according to: EN 55014-1, EN 55014-2  
EN 61000-3-2, EN 61000-3-2.
- Connections: Flanges according to PN 6/10, EN 1092-2, DN 40, 50, 65, 80, 100.
- The benchmark for most efficient circulators is EEI ≤ 0,20.

## Designation

NCE D G 40 F - 120 / 250



## Motor

Synchronous motor with permanent magnet.

- Motor: variable speed
- Standard voltage: single-phase 230 V (-10%;+6%)
- Frequency: 50 Hz
- Protection: IP 44
- Insulation class: H
- Overload protection (integrated).
- Cable: phases and neutral.
- Constructed in accordance with: EN 60335-1, EN 60335-2-51.

## Features

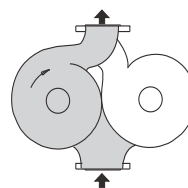
### Smart pump

NCED G.F adapt its functions to the system: the circulator measures the pressure and the flow and adjusts the speed to the selected pressure.

### Easy use

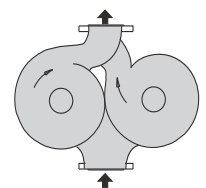
There are different operating modes selectable from the control panel.

## Operation



### Single operation

Operation of a single pump chosen by the customer, with the second pump on stand-by



### Double operation

Operation in parallel of the two pumps

## Operating modes



### Automatic mode

(factory setting):

In this mode the pump automatically sets the operating pressure, depending on the hydraulic system. This mode is recommended in most systems.



### Proportional pressure mode:

The circulator changes the pressure proportionally to the current flow. The pressure value can be adjusted with the + and - buttons.



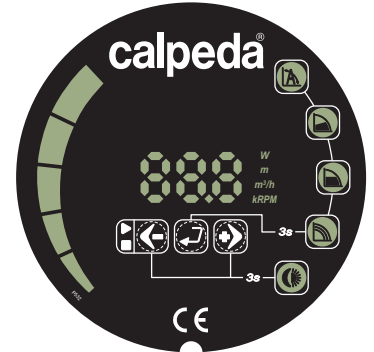
### Constant pressure mode:

The circulator maintains the pressure constant when the reference flow changes. The pressure value can be adjusted with the + and - buttons.



### Fixed speed mode:

The circulator works with constant curve and the curve could be changed using + e - buttons.



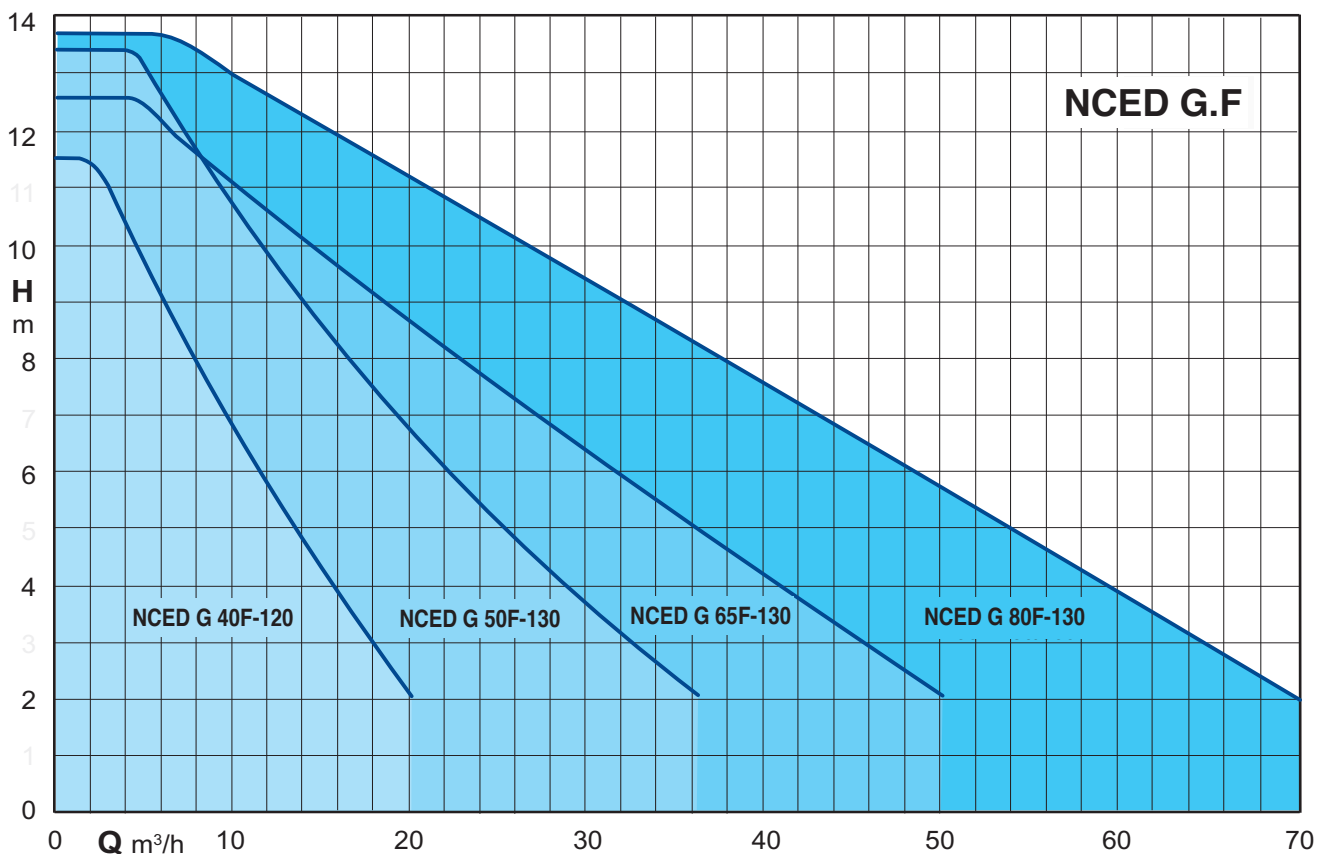
Operating mode-control panel

NCED G.F could works in:

- automatic mode
- proportional pressure mode
- constant pressure mode
- fixed speed mode
- night mode

The night mode could be selected with any operating mode.

## Coverage chart



## Characteristic curves

