CFA

High Energy-efficient Circulator Pumps



Circulator pumps:

CFA pump is a complete range of circulator pump feature:

- Pump parameters adjust to the actual system environments
- Automatic night-time duty
- The frequency converter
- Display the actual power consumption in watt
- Motor based on permanent-magnet / compact-rotor technology
- The Energy Efficiency Index (EEI) requirement will be EEI ≤ 0.27 from 2013, EEI ≤ 0.23 from 2015. Cacheng's CFA series can meet the requirement on 2017.

CFA pump is energy-optimised and A-labelled.

- The energy label A indicates the energy-saving level of the pump. The energy classification system has seven levels, i.e. from A to G. Level A is the best.
- The installation of a CFA pump will reduce the power consumption considerably, reduce noise from thermostatic valves and similar fittings, and improve the control of the system.

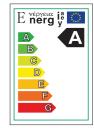
CFA pump offers a host of advantages:

- Energy savings automatic control of the differential pressure.
- Low-noise operation.
- Safety built-in electrical and thermal protection of the pump.
- Top quality materials used.



CFA25-40-180 EEI<0.17





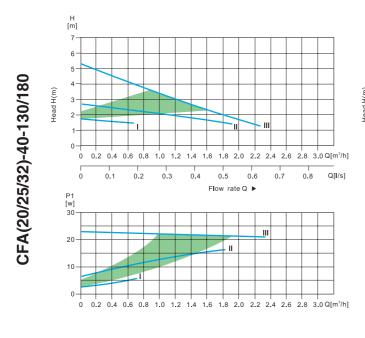
Application and Use:

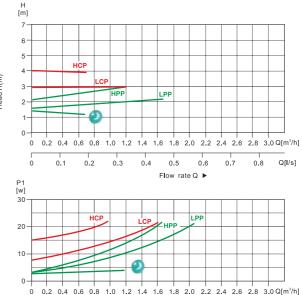
CFA pump is designed for circulating liquids in heating systems.

- Automatic operation proportional or constant presssure control.
- Automatic night-time duty
- Optional communication (Digital inputs / outputs, analog input, ethernet connection.)

CFA pump is especially suitable for

- Installation in existing systems where the differential pressure of the pump is too high during periods of reduced flow demand.
- Installation in new systems for fully automatic adjustment of the performance to flow demands without the use of by pass valves or similar expensive components.
- Clean, thin, non-aggressive and non-explosive liquid, not containing solid particles, fibres or mineral oil.
- The pump must not be used for the transfer of flammable liquids such as diesel, petrol and similar liquid.



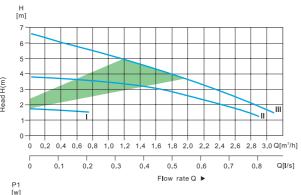


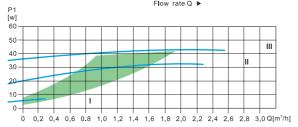
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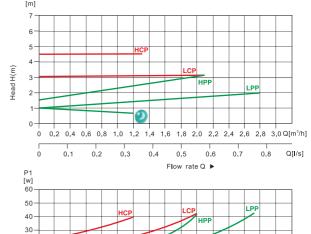
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CFA(20/25/32)-60-130/180







0 0.2 0.4 0.6 0.8 1.0 1.2 1.4 1.6 1.8 2.0 2.2 2.4 2.6 2.8 3.0 Q[m³/h]

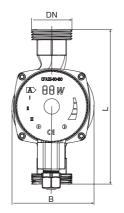
Exhaust vent

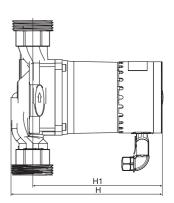
(If shaft block in pump, open exhause vent, use screwdriver to insert shaft of pump and turn around in upper space.)

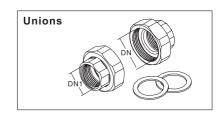


(ensure easier and quicker installation)









MODEL	HEAD (m)	SIZE(mm)				G.W	FITTINGS		QTY/20' GP
		Н	H1	L	В	(KG)	DN	DN1	(UNIT)
CFA20-40-130N	4	180	150	130	90	3.1	G1"	G¾"	5120
CFA25-40-180N	4	180	150	180	90	3.5	G1½"	G1"	5120
CFA32-40-180N	4	180	150	180	90	3.8	G2"	G1¼"	4800
CFA25-50-180N	5	180	150	180	90	3.5	G1½"	G1"	5120
CFA20-60-130N	6	180	150	130	90	3.1	G1"	G¾"	5120
CFA25-60-180N	6	180	150	180	90	3.5	G1½"	G1"	5120
CFA32-60-180N	6	180	150	180	90	3.8	G2"	G1¼"	4800

CFA

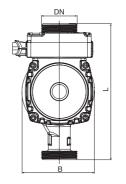
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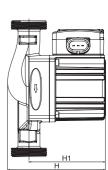
Setting	Pump Curve	Function					
AUTO (factory setting)	Proportional pressure curve from highest to lowest	Auto function will automatically control the pump within stipulated range referring to above table -To adjust pump performance according to size of system -To adjust pump performance according to load change within a period The pump sets to proportional control mode under "Auto" mode					
LPP	Lowest proportional pressure curve	The working point on the lowest pressure proportional system of the pump will go up or down following the flow demand of system refer to above table. The pressure is declined when flow demand falls and increased when flow demand go up.					
HPP	Highest proportional pressure curve	The working point on the highest pressure proportional system of the pump will go up or down following the flow demand of system referring to above table. The pressure is declined when flow demand falls and increased when flow demand go up.					
LCP	Lowest constant pressure curve	The working point on the lowest constant pressure curve of the pump will back and forth following the flow demand of system referring to above table. The pressure is constant regardless flow demand.					
НСР	Highest constant pressure curve	The working point on the highest constant pressure curve of the pump will back and forth following the flow demand of system referring to above table. The pressure is constant regardless flow demand.					
Ш	Speed III	On speed III mode, the pump sets to operate on the max curve under all conditions. Referring to table above. The air can be discharged quickly for pumps if the pump is setted under speed III speed at a short time.					
II	Speed II	On speed II mode, the pump sets to operate on the middle curve under all conditions. Refer to table above.					
1	Speed I	On speed I mode, the pump sets to operate on the min curve under all conditions. Refer to table above.					
Night Mode	Night Mode	Once a certain conditon is met, the pump will change to the night mode by lowest performace and power consumption referring to above table.					

Electrical Specification:

Supply voltage 1 x 230 V-10 %/+ 6 %, 50 Hz, PE Motor protection The pump requires no external motor protection. Enclosure class IP 44 Insulation class Relative air humidity Maximum 95 % Ambient temperature 0°C to + 40°C Temperature class TF110 to CEN 335-2-51 EMC (electromagnetic EC641/2009 compatibility) CFA2-40-180 EEI<0.17 Sound pressure level \leq 43 dB(A)

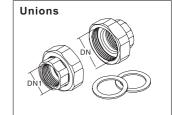


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- Cast-iron pumps: +2°C to + 110°C
- In domestic hot-water systems, it is recommended to keep the liquid temperature below 65°C to eliminate the risk of lime precipitation.



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