

The ALPHA1 N pump has been designed to offer instantly hot water in single and multi-family housings in the most cost-effective way. The hot water recirculation pump with a welded stainless steel housing uses as little as down to 7 W to offer not only a price competitive but also a highly energy-efficient domestic hot water solution. As there is no waiting for the water to get warm, the ALPHA1 N efficiently eliminates the waste of water and energy — and increases comfort for the consumer.

# TECHNICAL DATA

ALPHA1 20-45 N 150

Flow  $Q_{max}$ : 2.6 m<sup>3</sup>/h Head  $H_{max}$ : 4.5 m

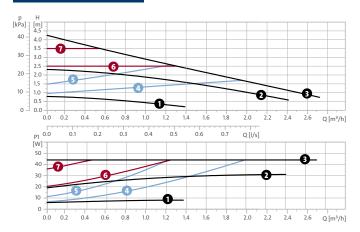
**Liquid temperature:**  $+2^{\circ}$  C to  $+110^{\circ}$  C

 Pmax:
 10 bar

 Power Range:
 7-45 W

 Motor:
 50 Hz, 230 V

## PERFORMANCE CURVES



- 1. Constant speed curve 1 2. Constant speed curve 2 3. Constant speed curve 3
- 4. Proportional pressure curve low 5. Proportional pressure curve high
- 6. Constant differential pressure curve low 7. Constant differential pressure curve high

# ALPHA1 N IN MORE DETAILS

#### **UPGRADE WITH AN ATTRACTIVE RETURN ON INVESTMENT**

Replacing an existing UP pump with the ALPHA1 N can be done with a very attractive return on investment. As the table shows very large yearly savings can be obtained by replacing any of the 3 UP pumps with the ALPHA1 N.



High efficiency - Permanent Magnet Motor Technology

Easy electrical connection due to the renowned ALPHA-plug

**Intuitive operation** 

Energy usage: 7 W-45 W

Cost-efficient hot water recirculation solution

Compact design

One pump, able to replace a range of standard pumps

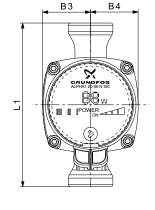
### CONVERSION TABLE

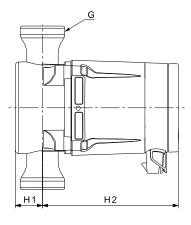
UP pump	Speed setting on ALPHA1 N 20-45 150
UP 20-07 N and UP 20-15 N	Constant speed 1
UP 20-30 N	Constant speed 2
UP 20-45 N	Constant speed 3

The ALPHA1 N pump is able to run at three different speeds, allowing it to easily replace any of the pumps in the UP range.

# TYPES AND DIMENSIONS

Pump type		I	Product number				
ALPHA120-45N	L1	В3	В4	H1	H2	G	
ALPHAI 20-45N	150	43	43	27	127	1¼	98094952





# SAVINGS

Present pump	Yearly energy consumption	Replacement ALPHA1 20-45 N 150	w	Yearly consumption
UP 20-07 N (47 W)	412 kWh	Constant speed 1	7 W	61 kWh
UP 20-30 N (70 W)	613 kWh	Constant speed 2	30 W	263 kWh
UP 20-45 N (117 W)	1.025 kWh	Constant speed 3	45 W	394 kWh

Yearly savings kWh	By 0.08€/kWh	By 0.30 €/kWh
351	28€	109€
350	28€	105€
631	51€	189€

Example 1: Bulgaria: 0.08406 €/kWh Example 2: Denmark 0.30217 €/kWh

source www.energy.eu

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