# **Horizontal end-suction pumps**

# CR(E)H, CRI(E)H, CRN(E)H 50/60 Hz

CRH, CRIH, CRNH pumps are horizontal end-suction pumps, typically mounted on base plates. The pumps are available in a complete 50 and 60 Hz range with IEC or NEMA motors.



Fig. 1 Horizontal end-suction pumps

#### Interchangeable ANSI solution

The patented loose-flange concept provides easy installation in ANSI, DIN or JIS standard pipework.

CRH pumps can be selected with suction and discharge ports that meet ANSI/ASME B73.1 standard dimensions for suction and discharge piping. This makes the CRH a high-efficiency solution designed for ANSI-specified applications. The back pull-out design enables service of most versions without removing the base from the pipework. CRH pumps do not fully comply with the ASME B73.1 specification.

CRH, CRIH, CRNH pumps are suitable for a variety of applications from pumping of potable water to pumping of chemicals. The pumps are therefore used in a wide variety of pumping systems where the performance and material of the pump meet specific demands.

## **Energy efficiency**

To reduce loss and thus increase the pump efficiency, CRH, CRIH, CRNH pumps are available in an energy-optimised version with suction and discharge ports with a larger diameter than ANSI specifications.

#### **Variants**

The same variants and accessories are available for the CRH, CRIH, CRNH pump range as for the standard CR pump range, such as air-cooled top, MAGdrive, and tandem seals.

### **Operating conditions**

Max. pressure: 30 bar.

Max. liquid temperature: 120 °C (air-cooled top 180 °C

(oil 240 °C)).

#### **IEC** motor

Max. motor size: 45 kW.

Pump type	1	1s	3	5	10	15	20	32	45	64	90	120	150
CRH	•	•	•	•	•	•	•	•	•	•	•		
CRIH	•	•	•	•	•	•	•						
CRNH	•	•	•	•	•	•	•	•	•	•	•		

#### **NEMA** motor

FM05 1717 3511

Pump type	1	1s	3	5	10	15	20	32	45	64	90	120	150
CRH	•	•	•	•	•	•	•	•	•	•	•		
CRNH	•	•	•	•	•	•	•	•	•	•	•		

### **Terminal box positions**

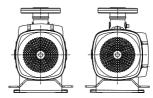


Fig. 2 Terminal box positions of CRH pumps

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## Construction

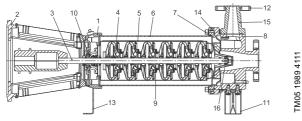
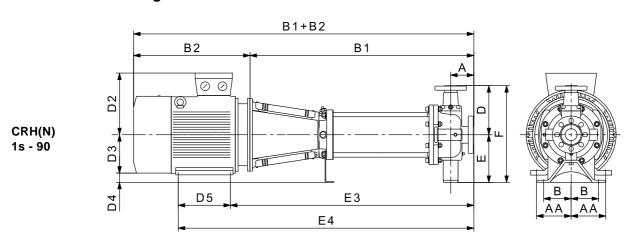


Fig. 3 Sectional drawing

Pos.	Designation	Pos.	Designation				
1	Pump head	9	Neck ring				
2	Motor stool	10	Shaft seal				
3	Shaft	11	Foot				
4	Impeller	12	Flange ring				
5	Chamber	13	Support bracket				
6	Sleeve	14	Sleeve flange				
7	O-ring for sleeve	15	Discharge port				
8	Base	16	Bottom bearing ring				

# **Dimensional drawing**



CRH(N) 1-5 CRH(N) 10-20 CRH(N) 32 CRH(N) 45 CRH(N) 64-90 Inlet [mm] 40 50 50 80 100 25 Outlet [mm] 50 50 80 100 Ref. Dimensions [mm] АВ 102 102 102 102 102 76 124 124 124 124 D 165 191 191 229 280 Ε 134 210 210 210 210 F 299 401 401 439 490

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