

# Vorgabedaten

PROJEKT:	UNIT TAG:	MENGE:
ANSPRECHPARTNER: _____	SERVICELEISTUNG:	DATUM: _____
INGENIEUR/TECHNIKER:	VORGEGEBEN VON:	DATUM:
AUFTRAGNEHMER:	BESTELLNUMMER:	DATUM:

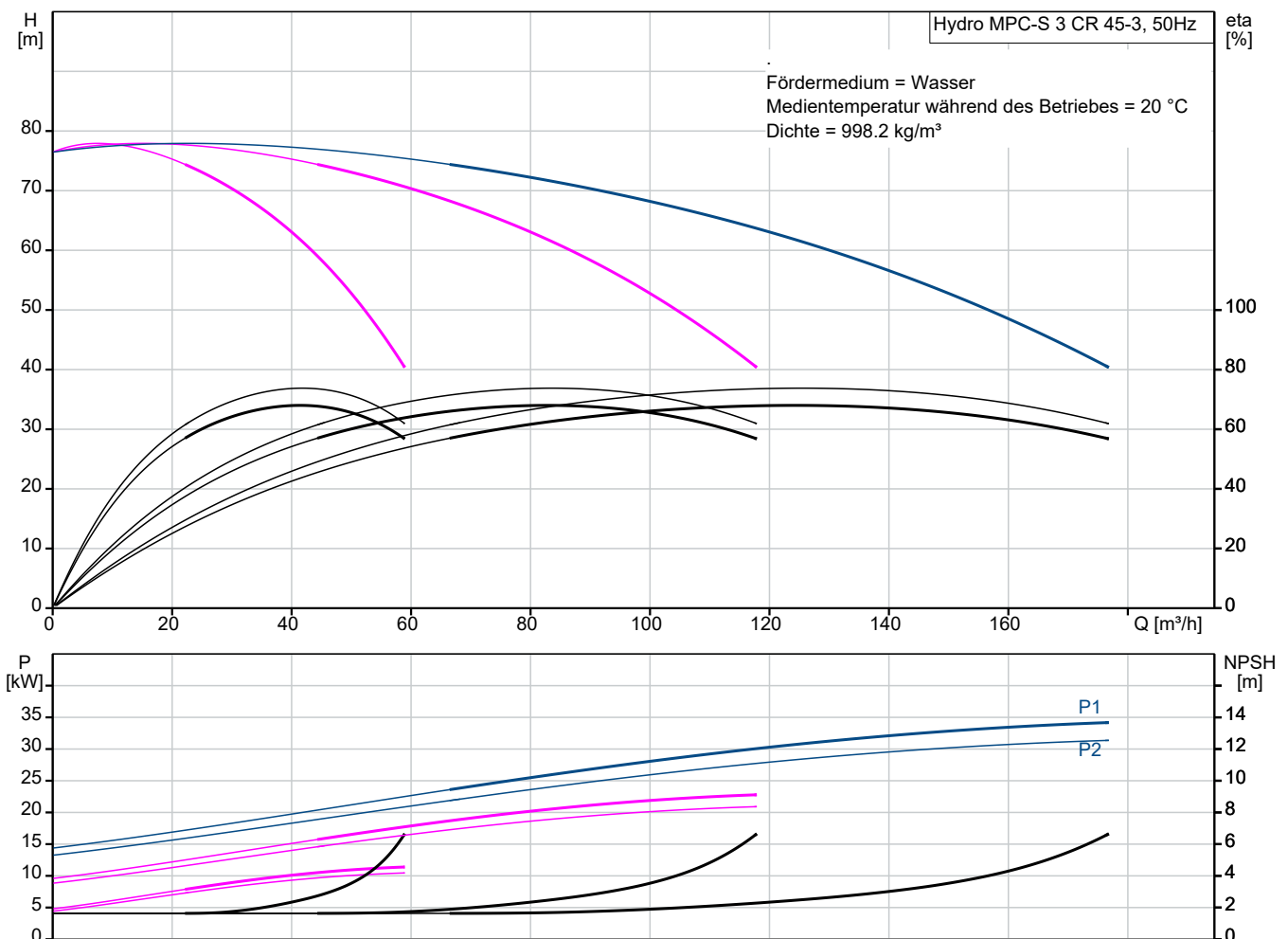
## Hydro MPC-S 3 CR 45-3

Druckerhöhungsanlagen mit EIN/AUS-Steuerung

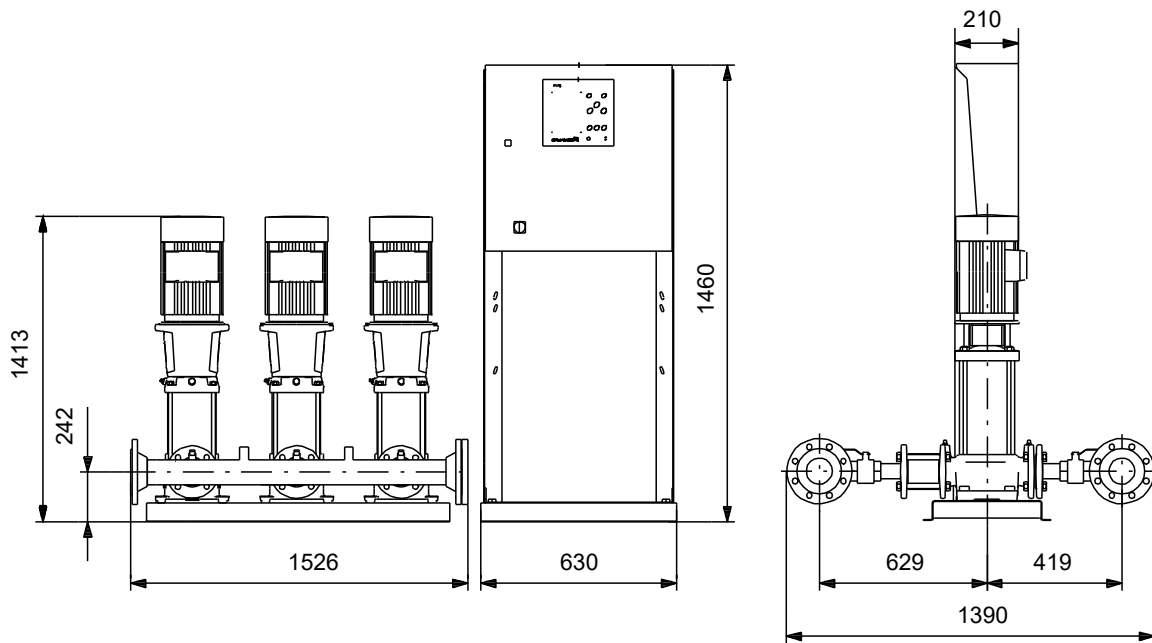


Hinweis! Abbildung kann vom Produkt abweichen.

Servicebedingungen		Pumpendaten		Motordaten	
Fördermedium:	Wasser	Max. Betriebsdruck:	16 bar	Netzfrequenz:	50 Hz
Temperatur:	20 °C	Medientemperaturbereich:	5 .. 60 °C	Schutzart:	IP54
Relative Dichte:	1.000	Maximale Umgebungstemperatur:	40 °C		
		Produktnummer:	auf Anfr.		



# Vorgabedaten



**Werkstoffe:**

Verrohrung: Edelstahl 1.4571 (AISI 316 Ti)

**Anz. Beschreibung**1 **Hydro MPC-S 3 CR 45-3**

Hinweis! Abbildung kann vom Produkt abweichen.

Produktnr.: auf Anfr.

Pressure booster system supplied as compact assembly according to DIN standard 1988/T5.

The pumps are all mains-operated CR(I) pumps.

- \* Hydro MPC-S maintains the pressure through cutting in/out the CR(I) pumps.
- \* The system performance is adapted to the demand through cutting in/out the required number of CR(I) pumps and through parallel control of the pumps in operation.
- \* Pump changeover is automatic and depends on load, time and fault.

The system consists of these parts:

- \* vertical multistage centrifugal pumps, type CR 45-3.
- \* The pumps are mains-operated (start/stop).
- \* Pump parts in contact with the pumped liquid are made of stainless steel EN DIN 1.4301.
- \* Pump bases and heads are of either cast iron/stainless steel (CRI) or cast iron EN-GJS-500-7 (CR), depending on pump type; other vital parts are made of stainless steel EN DIN 1.4301.
- \* The pumps are equipped with the service-friendly cartridge shaft seal HQQE (SiC/SiC/EPDM).
- \* Two manifolds of stainless steel EN DIN 1.4571.
- \* Base frame of stainless steel EN DIN 1.4301 up to CR 64. Above CR 64 the pumps are placed on a galvanized C-profile frame.
- \* One non-return valve (POM) and two isolating valves for each pump.
- \* Non-return valves are certified according to DVGW, isolating valves according to DIN and DVGW.
- \* Adapter with isolating valve for connection of diaphragm tank.
- \* Pressure gauge and pressure transmitter (analog output 4-20 mA).
- \* Control MPC in a steel cabinet, IP 54, including main switch, all required fuses, motor protection, switching equipment and microprocessor-controlled CU 352.

Dry-running protection and diaphragm tank are available according to the list of accessories.

Pump operation is controlled by Control MPC with the following functions:

- \* Mains-operated pumps(start/stop).
- \* Constant Pressure – the system is able to maintain an almost constant pressure through cutting in/out the required number of pumps.
- \* System overview – Nice system overview via pump animation and icons on color screen.
- \* Dry-running protection – increase your system reliability and decrease maintenance costs.
- \* Alarm & Warnings – real time alarms and warnings on the color display reduces downtime.
- \* Alarm & Warnings logger – storage of up to 24 alarms and warnings makes fault analyzing easier.
- \* Monitoring – the CU 352 holds several monitoring possibilities such as pressure level, pump outside duty range, this gives you great system insights.
- \* Logged data – valuable insights available on the big color screen or exported to a PC for further analysis.
- \* Protective functions – Several functions ensure reliable and safe operation and the result is longer lifetime.
- \* Clock program – setpoint automatically reduced to the required value at any given time which means money saved on energy.
- \* Redundancy – it is possible to assign one or more standby pumps, these will take over in case of failure.
- \*

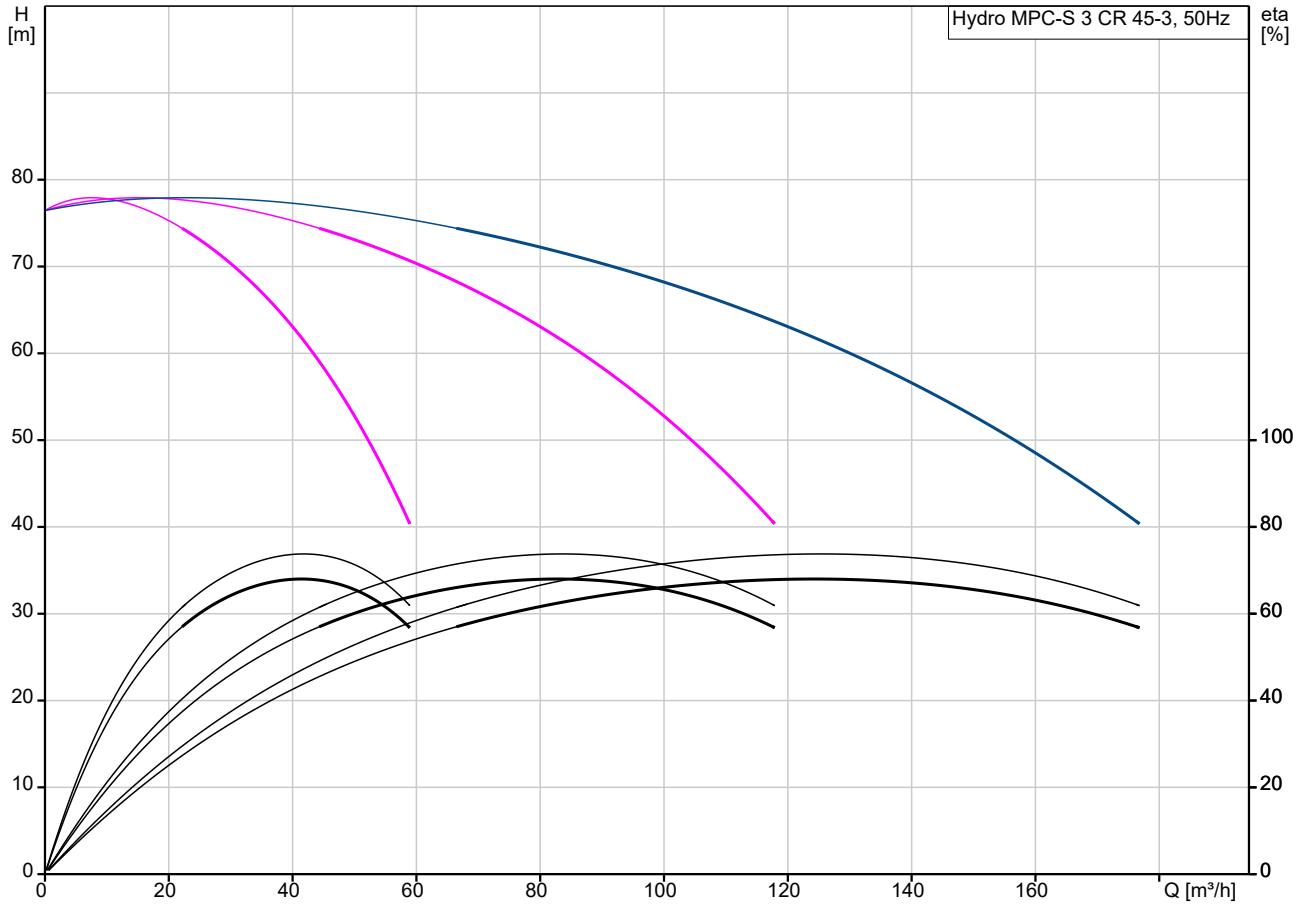
**Anz. Beschreibung**

- |   |   |
|---|---|
| 1 | <p>Pump test run – prevents pumps from seizing up and liquid from decaying in the pumps and removes trapped air.</p> <ul style="list-style-type: none"><li>* Emergency run – pumps keep running regardless of warnings and alarms.</li><li>* Forced pump changeover – setting of pump changeover so the pumps run for the same number of operation hours.</li><li>* Fall back sensor - If the Primary sensor fails, the system will automatically be regulating on the fallback sensor at a predefined setpoint, thereby you avoiding downtime in case of primary sensor fault.</li><li>* Communication – Ethernet, PLC via IO 351, Modbus-Profibus-LON-GSM-GPRS via CIU modules.</li><li>* Multi language - wide range of operating languages.</li></ul> |
|---|---|

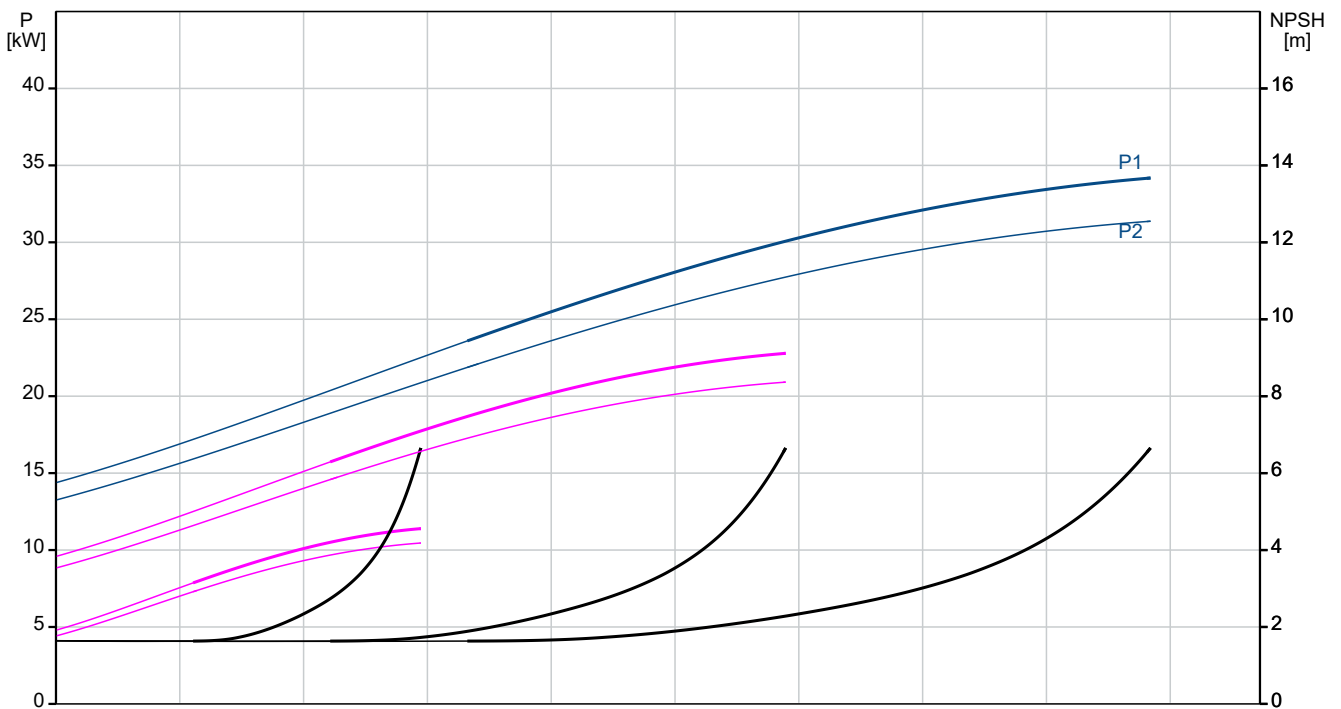
Pumps, piping, cabling complete as well as Control MPC are mounted on the base frame.  
The booster system has been preset and tested.

Fördermedium: Wasser  
zul. Mediumtemp.: 5 °C .. 60 °C  
Max. Betriebsdruck: 16 bar  
Max. Förderstrom d. Anlage: 174 m³/h  
Nennstrom der Anlage: 61.1 A  
Motorbemessungsleistung: 11 kW  
Membranbehälter, Komponenten zur Wassermangelüberwachung und alternative Bedieneinheiten können aus der Zubehörliste ausgewählt werden.  
Nettogewicht: 729 kg

## auf Anfr. Hydro MPC-S 3 CR 45-3 50 Hz



Fördermedium = Wasser  
 Medientemperatur während des Betriebes = 20 °C  
 Dichte = 998.2 kg/m³



Beschreibung	Daten
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**Allgemeine Informationen:**

Produktbezeichnung: Hydro MPC-S 3 CR 45-3  
 Produktnummer: auf Anfr.  
 EAN-Nummer: auf Anfr.

**Technische Daten:**

Nennförderstrom: 135 m³/h  
 Maximaler Förderstrom: 174 m³/h  
 Nennförderhöhe: 59.4 m  
 Maximale Förderhöhe: 77.1 m  
 Bezeichnung der Hauptpumpe: CR 45-3  
 Produktnummer Hauptpumpe: 96122801  
 Anzahl der Pumpen: 3  
 Rückflußverhinderer: Y

**Werkstoffe:**

Verrohrung: Edelstahl 1.4571 (AISI 316 Ti)

**Installation:**

Umgebungstemperatur: 5 .. 40 °C  
 Max. Betriebsdruck: 16 bar  
 Maximal zulässiger Zulaufdruck: 8.3 bar  
 Anschluss Saugseite: DN200  
 Anschluss Druckseite: DN200  
 Nenndruck: PN 16  
 Masseanschluss: PE  
 Anlagengestaltung: D

**Fördermedium:**

Fördermedium: Wasser  
 Medientemperaturbereich: 5 .. 60 °C  
 Medientemperatur während des Betriebs: 20 °C  
 Dichte: 998.2 kg/m³

**Elektrische Daten:**

Leistung (P2) je Pumpe: 11 kW  
 Netzfrequenz: 50 Hz  
 Bemessungsspannung: 3 x 380-415 V  
 Nennstrom der Anlage: 61.1 A  
 Einschaltart: S/D  
 Schutzart (gemäß IEC 34-5): IP54  
 Funkentstörung: EMC DIRECTIVE(2014/30/EU)

Anzahl der Phasen der Hauptpumpe: 3

**Art der Steuerung:**

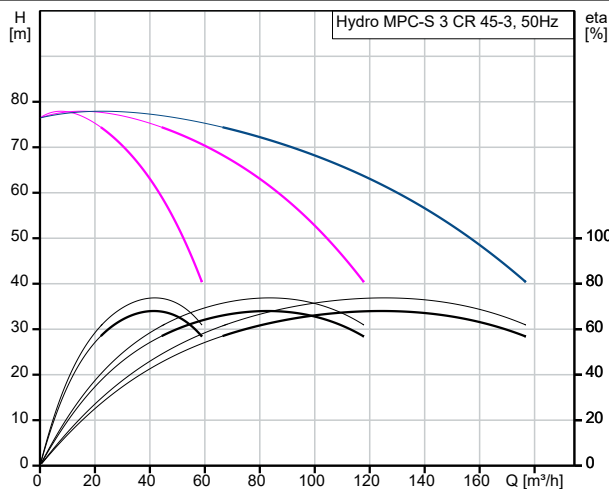
Steuerungsart: S

**Behälter:**

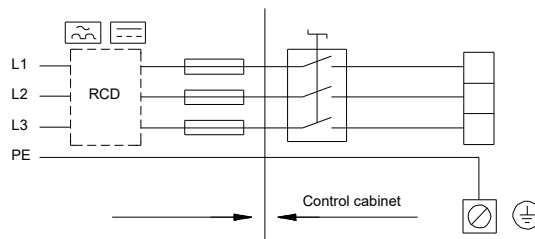
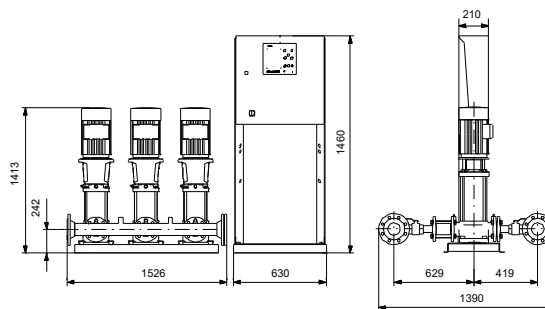
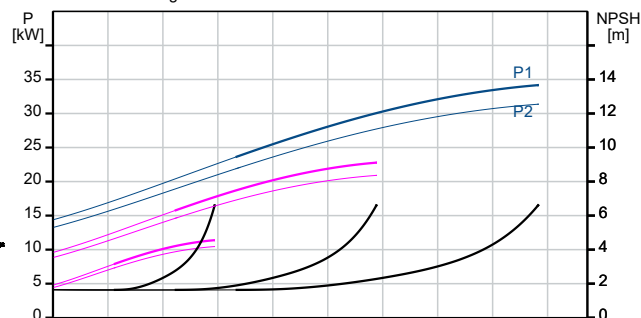
Membrandruckbehälter: N

**Sonstiges:**

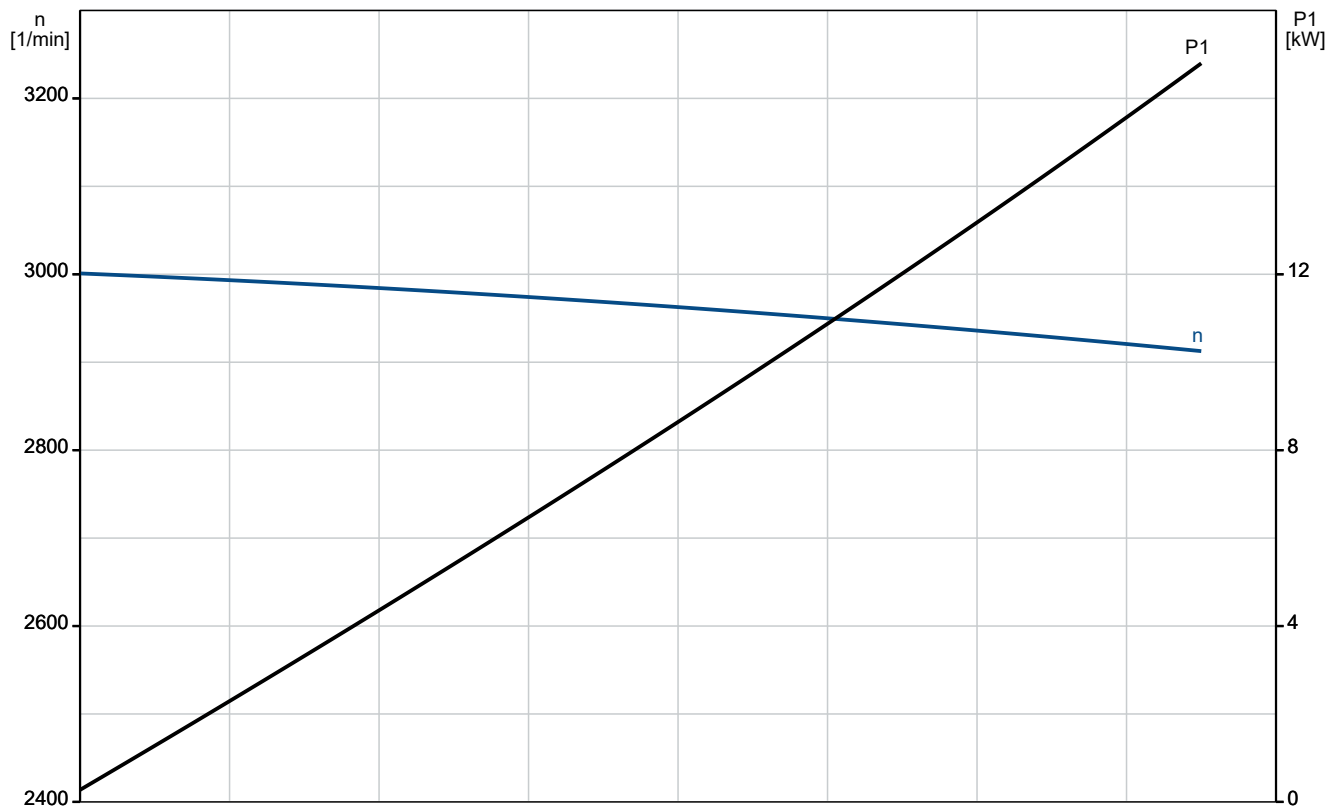
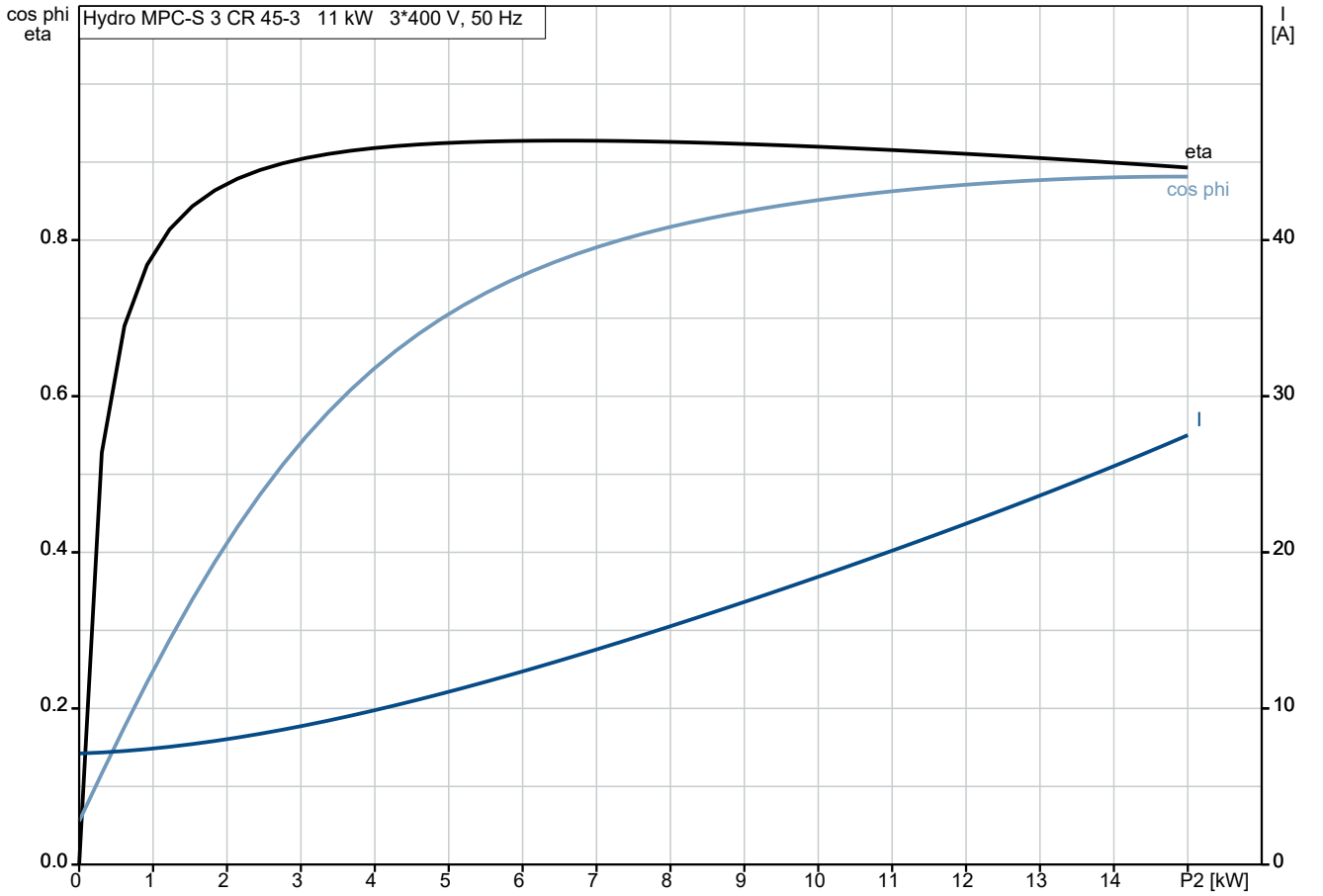
Basisprodukt: Y  
 Nettogewicht: 729 kg  
 Bruttogewicht: 789 kg  
 Softwareversion: 98272164  
 Konfigurationsdatei Control MPC: 98272008  
 Konfigurationsdatei Hydro MPC: 98272018



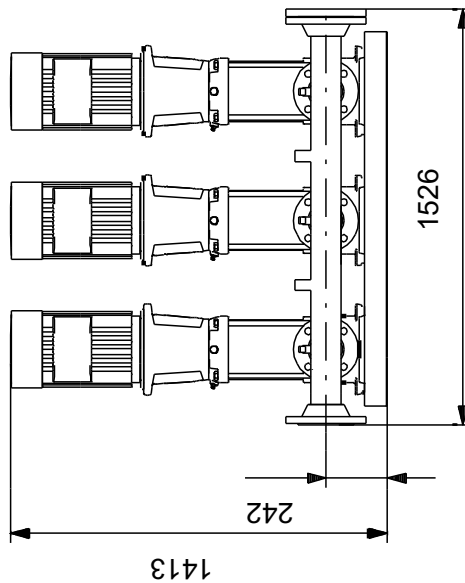
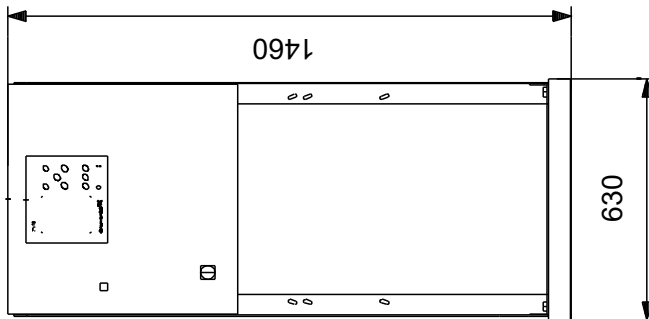
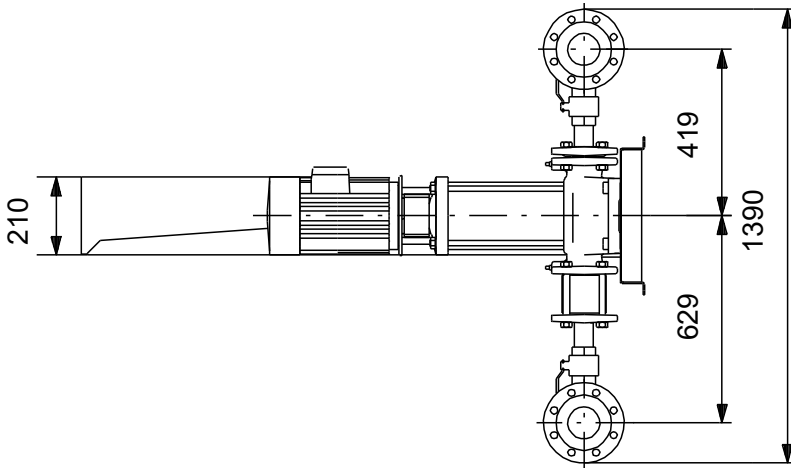
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## auf Anfr. Hydro MPC-S 3 CR 45-3 50 Hz

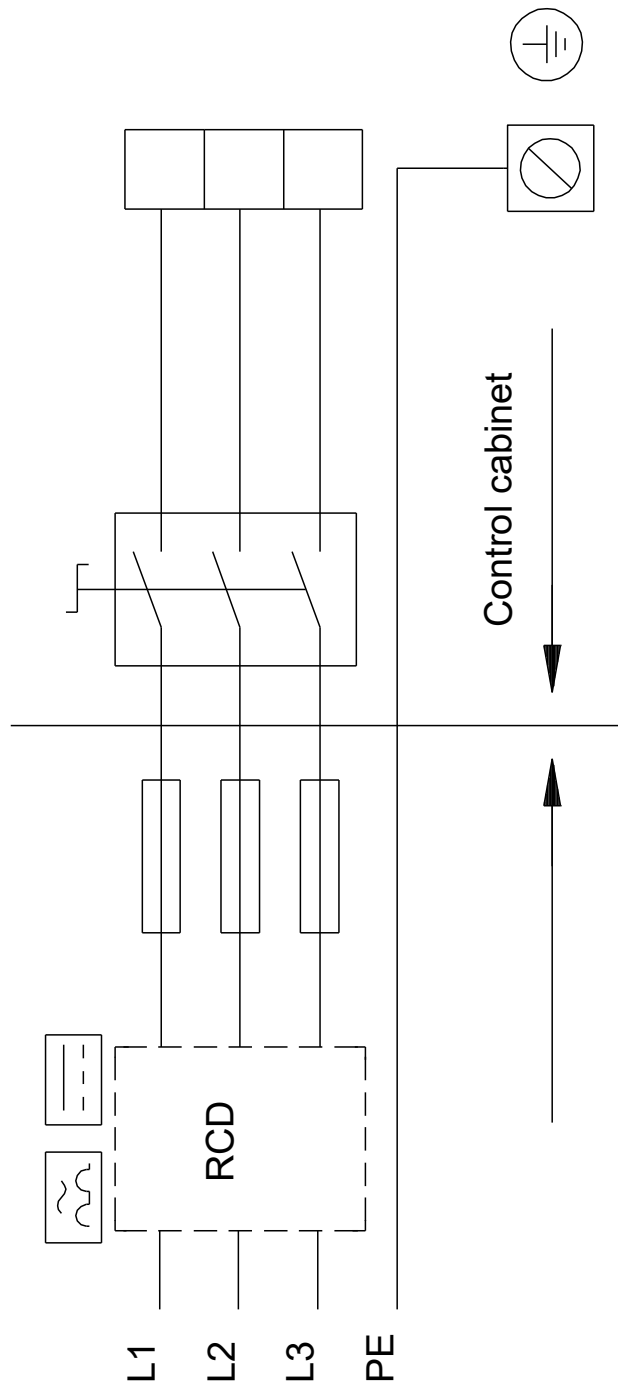


## auf Anfr. Hydro MPC-S 3 CR 45-3 50 Hz



Achtung! Soweit nicht anders angegeben, handelt es sich um Millimeterangaben (mm). Die vereinfachte Maßzeichnung zeigt nicht alle

## auf Anfr. Hydro MPC-S 3 CR 45-3 50 Hz



Hinweis: Alle Einheiten in [mm] soweit nicht anders bezeichnet.

