

# Vorgabedaten

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

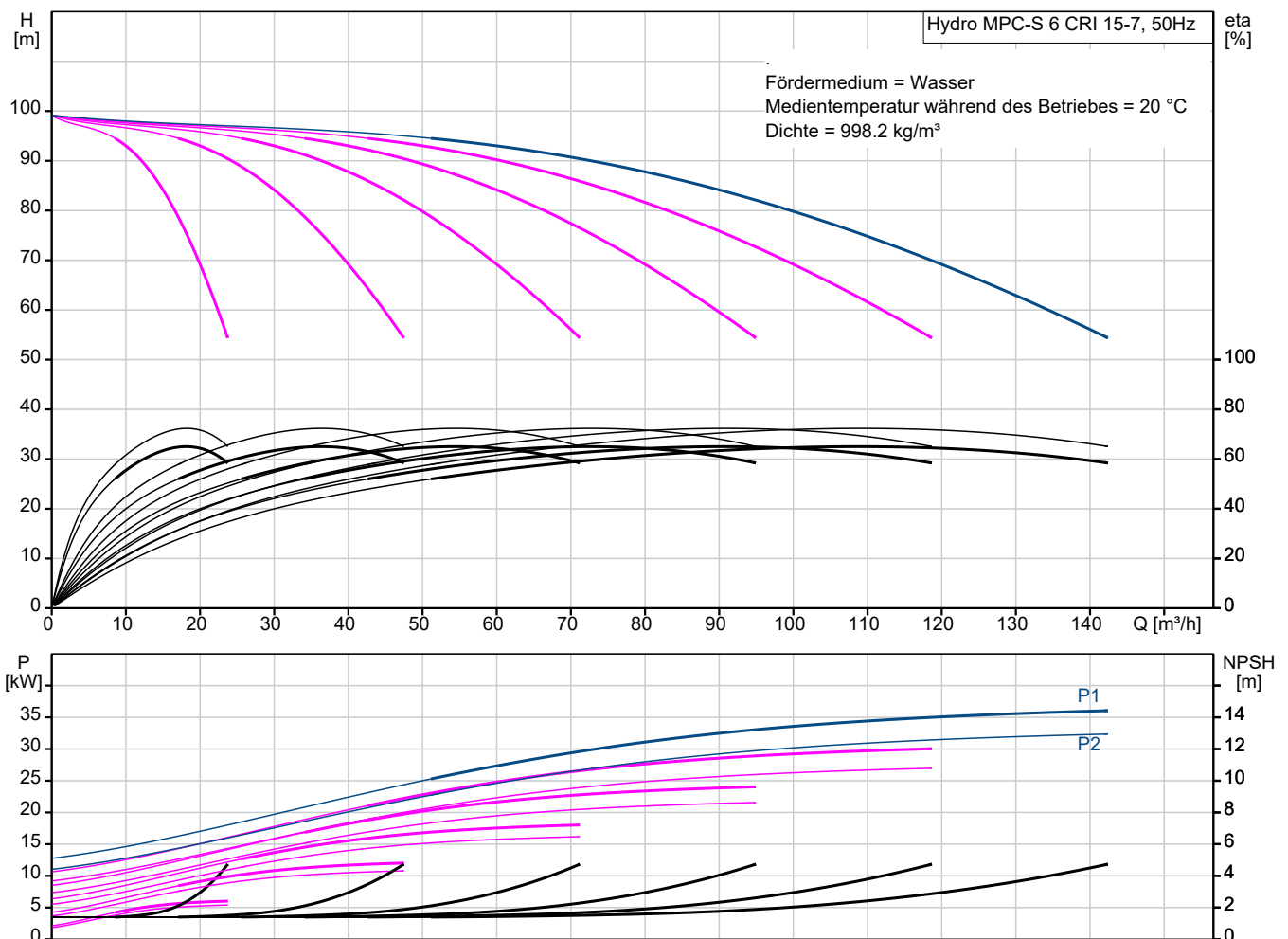
## Hydro MPC-S 6 CRI 15-7

Druckerhöhungsanlagen mit EIN/AUS-Steuerung

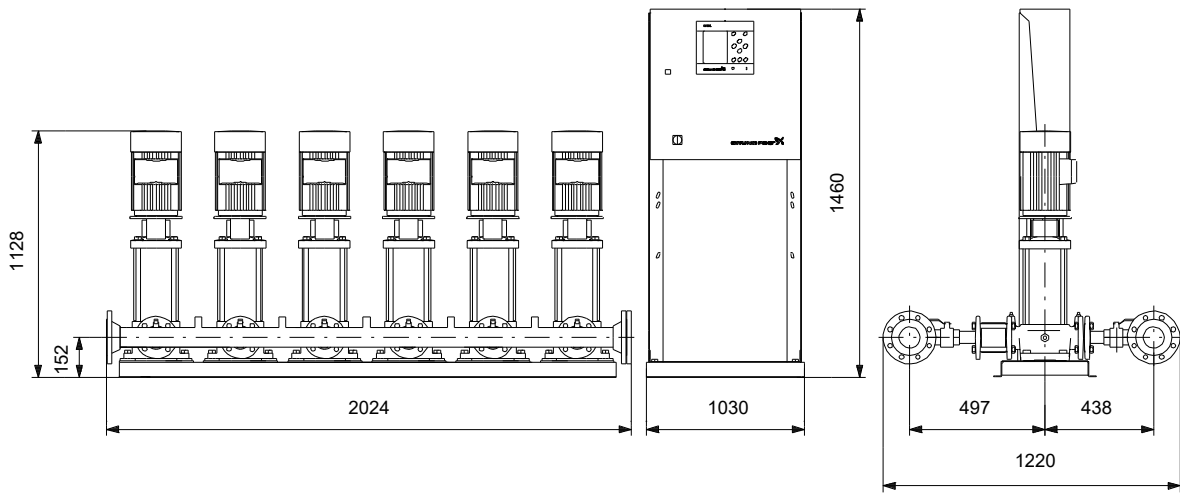


Hinweis! Abbildung kann vom Produkt abweichen.

| 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 6 CRI 15-7



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 CRI 15-7.
- \* 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> |
|---|---|

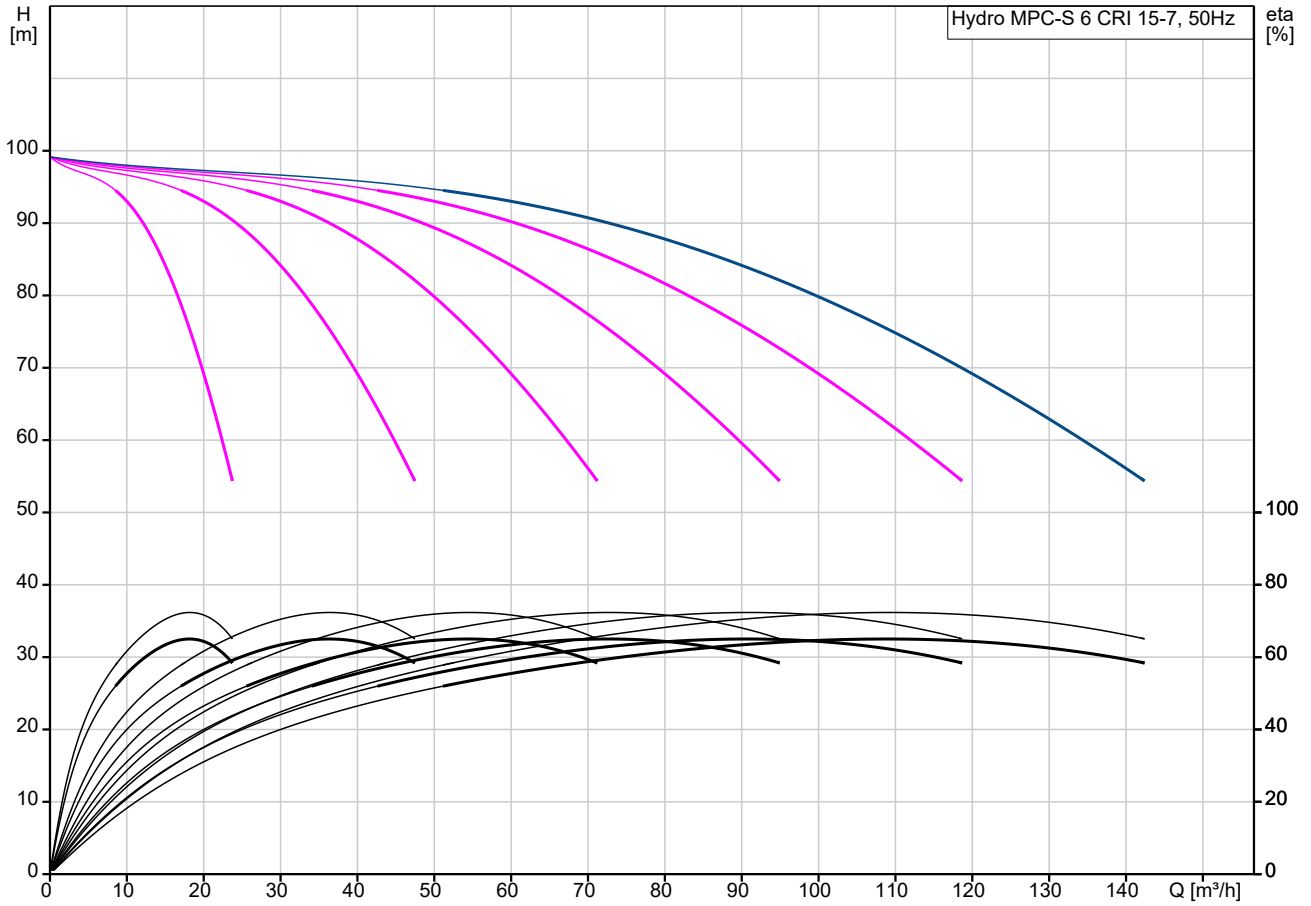
Pumps, piping, cabling complete as well as Control MPC are mounted on the base frame.  
The booster system has been preset and tested.

|                             |               |
|-----------------------------|---------------|
| Fördermedium:               | Wasser        |
| zul. Mediumtemp.:           | 5 °C .. 60 °C |
| Max. Betriebsdruck:         | 16 bar        |
| Max. Förderstrom d. Anlage: | 141 m³/h      |
| Nennstrom der Anlage:       | 66.2 A        |
| Motorbemessungsleistung:    | 5.5 kW        |

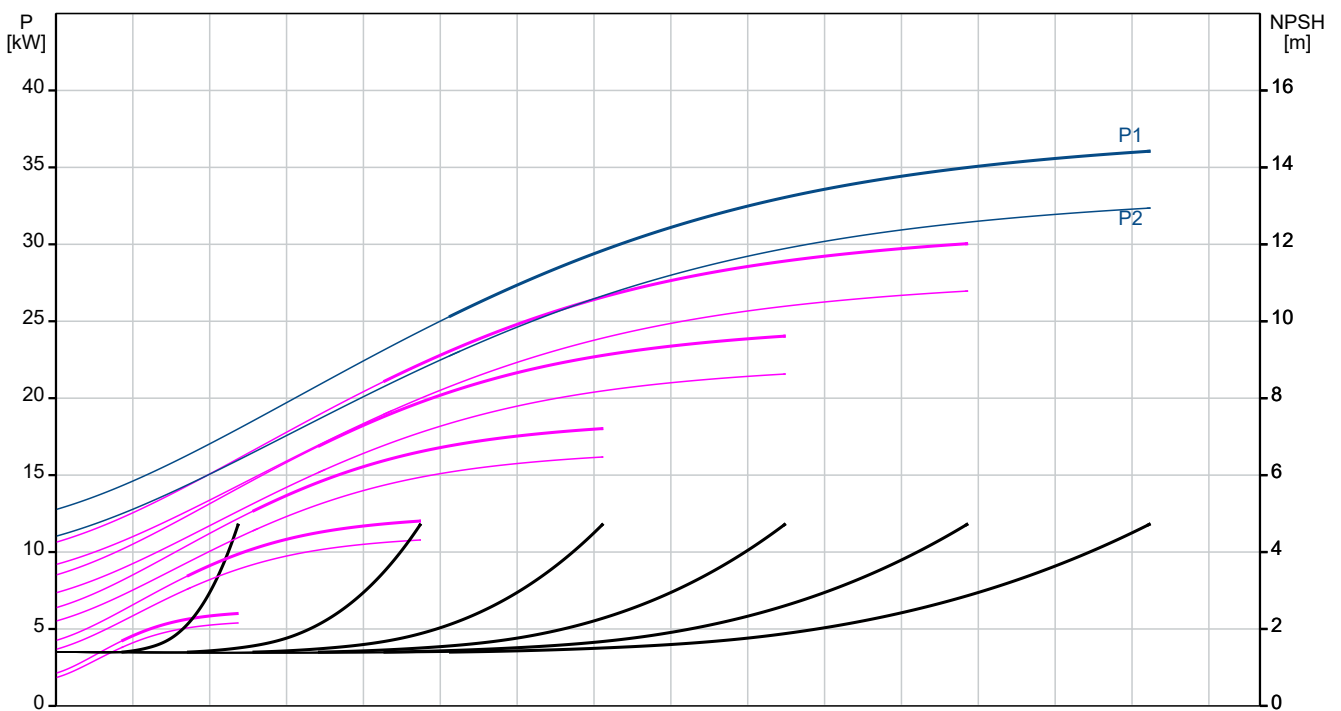
Membranbehälter, Komponenten zur Wassermangelüberwachung und alternative Bedieneinheiten können aus der Zubehörliste ausgewählt werden.

|               |        |
|---------------|--------|
| Nettogewicht: | 790 kg |
|---------------|--------|

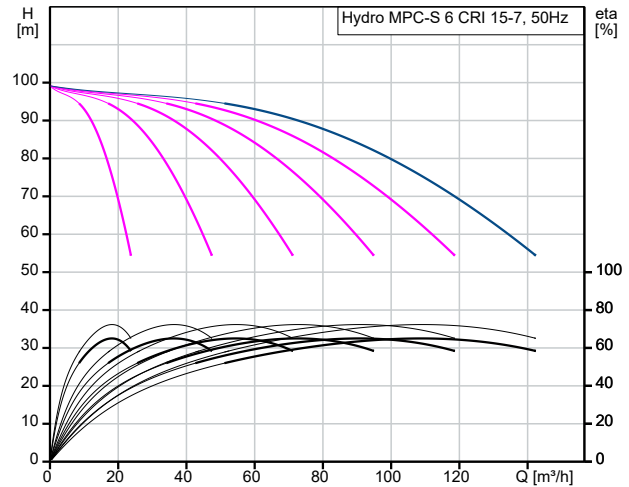
## auf Anfr. Hydro MPC-S 6 CRI 15-7 50 Hz



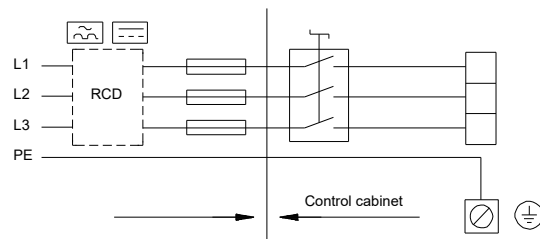
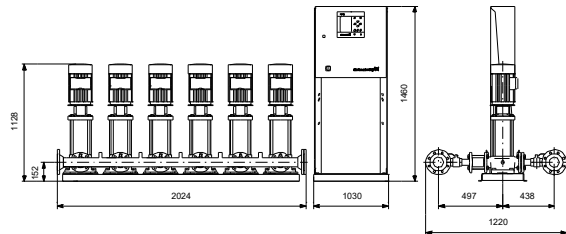
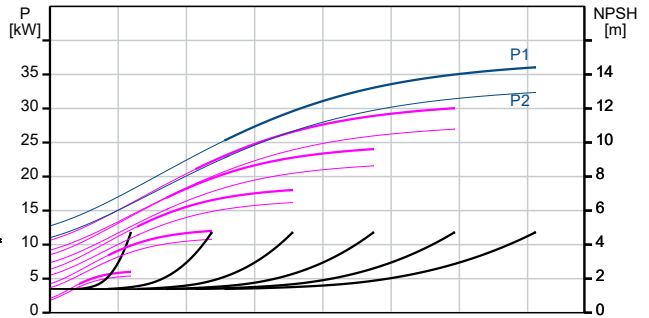
Fördermedium = Wasser  
 Medientemperatur während des Betriebes = 20 °C  
 Dichte = 998.2 kg/m³



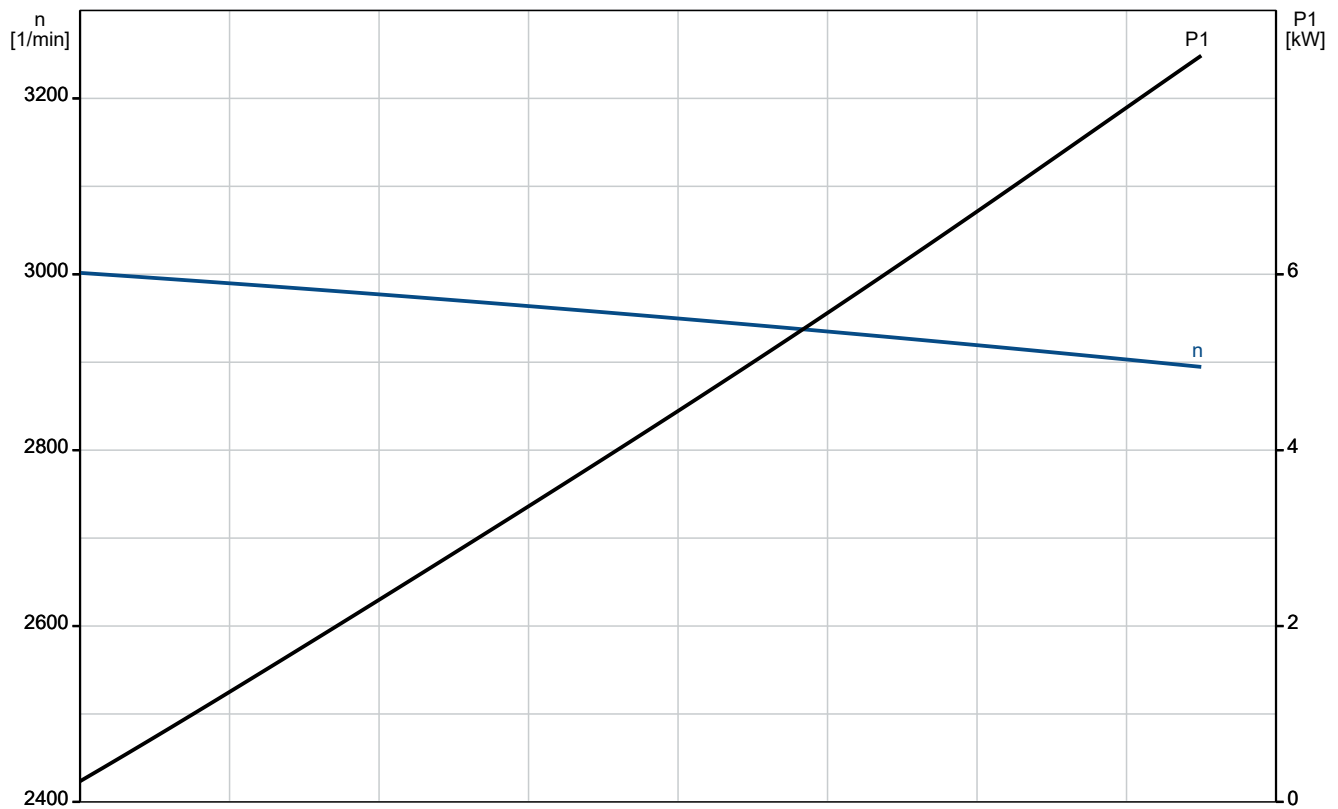
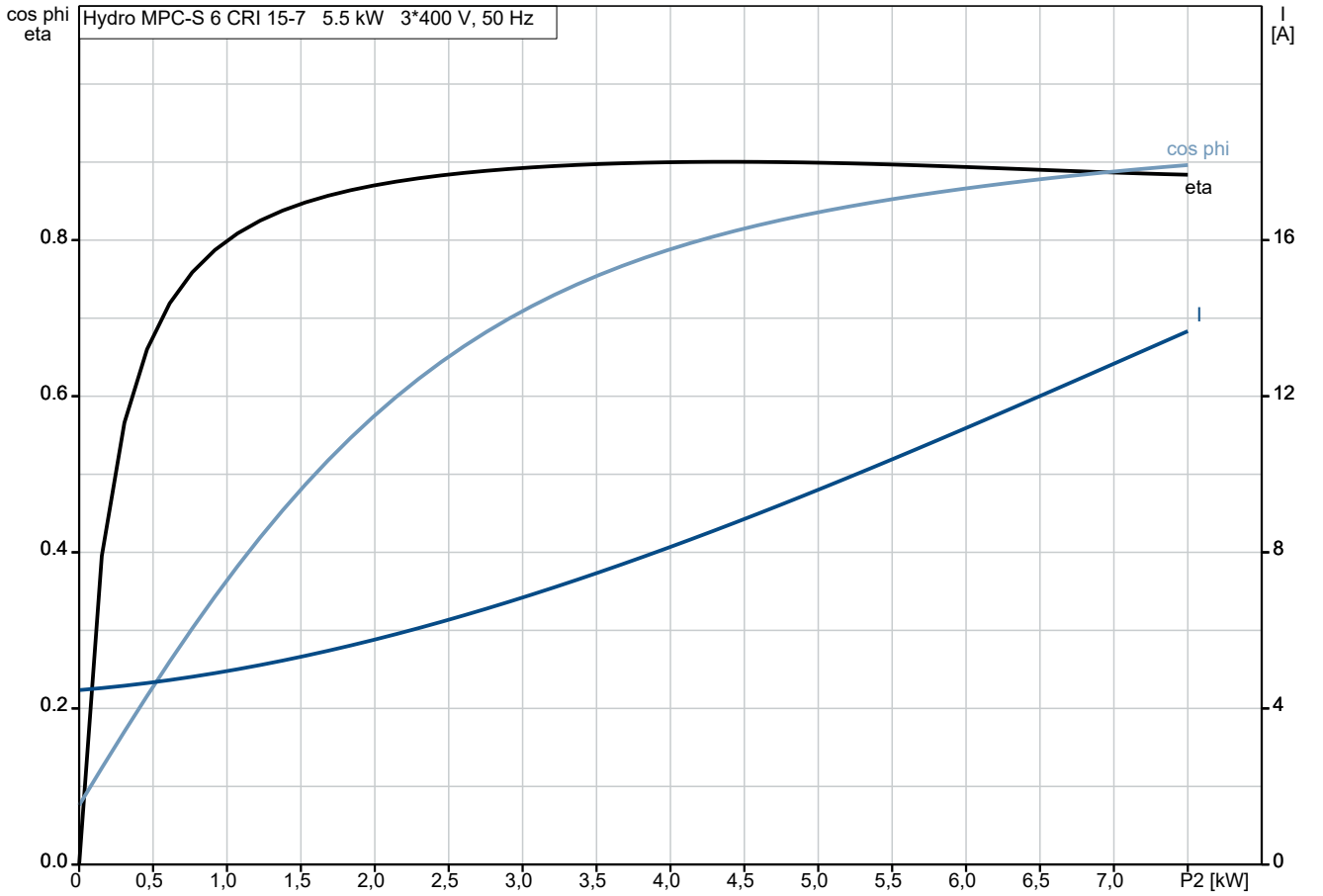
| Beschreibung                           | Daten                          |
|--|--------------------------------|
| <b>Allgemeine Informationen:</b>       |                                |
| Produktbezeichnung:                    | Hydro MPC-S 6 CRI 15-7         |
| Produktnummer:                         | auf Anfr.                      |
| EAN-Nummer:                            | auf Anfr.                      |
| <b>Technische Daten:</b>               |                                |
| Nennförderstrom:                       | 102 m³/h                       |
| Maximaler Förderstrom:                 | 141 m³/h                       |
| Nennförderhöhe:                        | 77.9 m                         |
| Maximale Förderhöhe:                   | 98.5 m                         |
| Bezeichnung der Hauptpumpe:            | CRI 15-7                       |
| Produktnummer Hauptpumpe:              | 96501916                       |
| Anzahl der Pumpen:                     | 6                              |
| Rückflußverhinderer:                   | Y                              |
| <b>Werkstoffe:</b>                     |                                |
| Verrohrung:                            | Edelstahl 1.4571 (AISI 316 Ti) |
| <b>Installation:</b>                   |                                |
| Umgebungstemperatur:                   | 5 .. 40 °C                     |
| Max. Betriebsdruck:                    | 16 bar                         |
| Maximal zulässiger Zulaufdruck:        | 6.2 bar                        |
| Anschluss Saugseite:                   | DN150                          |
| Anschluss Druckseite:                  | DN150                          |
| Nennndruck:                            | PN 16                          |
| Masseanschluss:                        | PE                             |
| Anlagengestaltung:                     | D                              |
| <b>Fördermedium:</b>                   |                                |
| Fördermedium:                          | Wasser                         |
| Medientemperaturbereich:               | 5 .. 60 °C                     |
| Medientemperatur während des Betriebs: | 20 °C                          |
| Dichte:                                | 998.2 kg/m³                    |
| <b>Elektrische Daten:</b>              |                                |
| Leistung (P2) je Pumpe:                | 5.5 kW                         |
| Netzfrequenz:                          | 50 Hz                          |
| Bemessungsspannung:                    | 3 x 380-415 V                  |
| Nennstrom der Anlage:                  | 66.2 A                         |
| Einschaltart:                          | DOL                            |
| Schutzart (gemäß IEC 34-5):            | IP54                           |
| Funkentstörung:                        | EMC<br>DIRECTIVE(2014/30/EU)   |
| Anzahl der Phasen der Hauptpumpe:      | 3                              |
| <b>Art der Steuerung:</b>              |                                |
| Steuerungsart:                         | S                              |
| <b>Behälter:</b>                       |                                |
| Membrandruckbehälter:                  | N                              |
| <b>Sonstiges:</b>                      |                                |
| Basisprodukt:                          | Y                              |
| Nettogewicht:                          | 790 kg                         |
| Bruttogewicht:                         | 852 kg                         |
| Softwareversion:                       | 98272227                       |
| Konfigurationsdatei Control MPC:       | 98272011                       |
| Konfigurationsdatei Hydro MPC:         | 98272018                       |



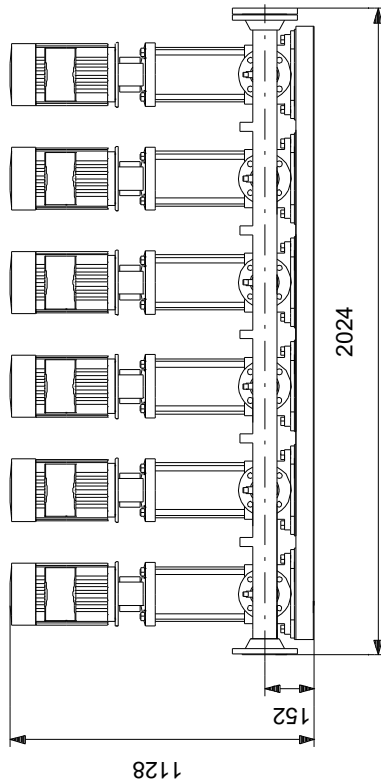
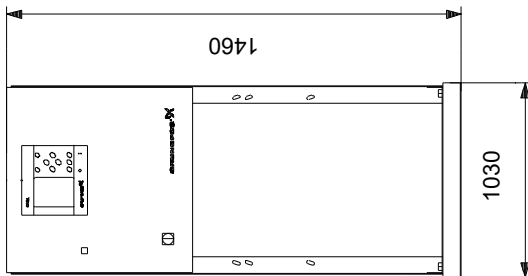
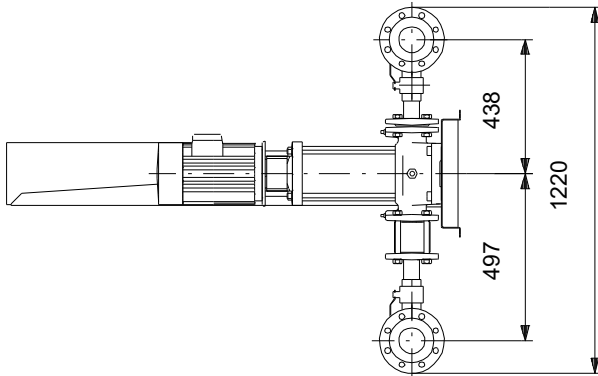
Fördermedium = Wasser  
 Medientemperatur während des Betriebes = 20 °C  
 Dichte = 998.2 kg/m³



## auf Anfr. Hydro MPC-S 6 CRI 15-7 50 Hz



## auf Anfr. Hydro MPC-S 6 CRI 15-7 50 Hz



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

## auf Anfr. Hydro MPC-S 6 CRI 15-7 50 Hz



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

