

Počet | Popis

1 | HYDRO MPC-E 2 CRIE5-9



Pozn.: obr. výrobku se může lišit od skuteč. výrobku

Výrobní číslo: [98389631](#)

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

All pumps are speed-controlled.

From 0.37 to 11 kW, the booster system is equipped with CR, CRE, CRI, CRIE pumps with electronically commutated permanent-magnet motors with extremely high efficiency. The total efficiency of the motor including the frequency converter applies to IE5 level in IEC60034-31.

From 15 to 22 kW, the booster system is equipped with CR, CRE, CRI, CRIE pumps with motors with integrated frequency control. The total efficiency of the motor including the frequency converter is better than the IE3 level in IEC60034-31, even though this standard only applies to the motor.

- * Hydro MPC-E maintains a constant pressure through continuous adjustment of the speed of the pumps.
- * The system performance is adapted to the demand through cutting in/out the required number of 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:

- * 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 a service-friendly cartridge shaft seal, HQQE (SiC/SiC/EPDM)
- * Two stainless steel manifolds to EN DIN 1.4571
- * Stainless steel base frame to 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, IP54, 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:

- * Intelligent multipump controller, CU 352.
- Constant-pressure control through continuously variable adjustment of the speed of each individual pump.

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PID controller with adjustable PI parameters ($K_p + T_i$).
 Constant pressure at setpoint, independent of inlet pressure.
 Soft pressure build-up (To prevent water hammer during startup).
 On/off operation at low flow.
 Automatic cascade control of pumps for optimum efficiency.
 Selection of min. time between start/stop, automatic pump changeover and pump priority.
 Automatic pump test function to prevent idle pumps from seizing up.
 Possibility of standby pump allocation.
 Possibility of backup sensor (redundant primary sensor).
 Secondary sensor (Possible to switch to another sensor/setpoint).
 Multi-sensor (up to 6 sensors to influence the setpoint).
 Manual operation.
 Possibility of external setpoint influence.
 Log function.
 Setpoint ramp.
 Possibility of digital remote-control functions:
 System on/off.
 Max., min. or user-defined duty.
 Up to 6 alternative setpoints.
 Digital inputs and outputs can be configured individually.
 Pump and system monitoring functions:
 Minimum and maximum limits of current value.
 Inlet pressure.
 Non-return valve monitoring.
 Motor protection.
 Sensors and cables monitored for malfunction.
 Alarm log with the previous 24 warnings/alarms.
 Display and indication functions:
 Colour screen display.
 Green indicator light for operating indications and red indicator light for fault indications.
 Potential-free changeover contacts for operation and fault.
 Grundfos bus communication.

It is possible to add CIM communication modules for communicating with Scada/BMS.

Pumps, piping, cabling complete as well as Control MPC are mounted on the base frame.

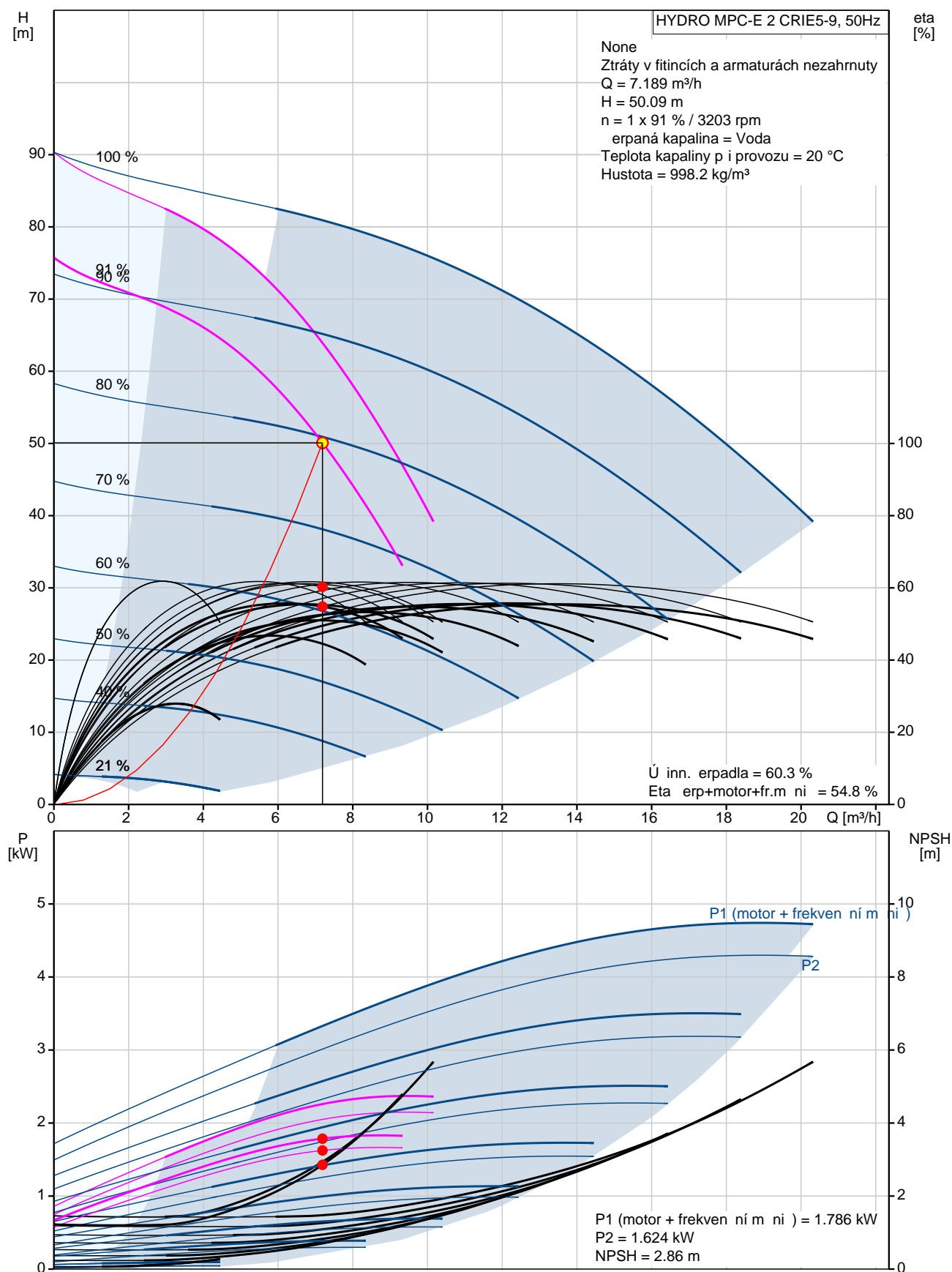
The booster system has been preset and tested.

Kapalina:	Voda
Dovol. teplota kapaliny:	5 °C .. 60 °C
Max. systémový tlak:	16 bar
Pr tok (za ízení):	20 m³/h
Pr tok (erpadlo):	7.189 m³/h
Doprav. výška:	50.09 m
Napájecí nap tí:	380-415 V
Jmen. proud za ízení:	8,2A-400V
Jmen. p íkon:	2.2 kW
istá hmotnost:	121 kg

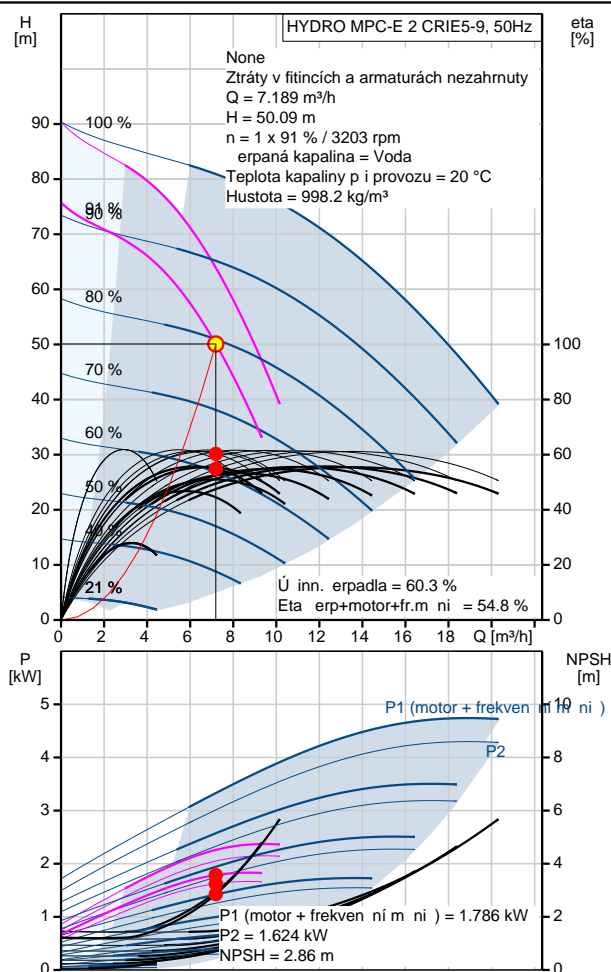
Maximum head: 93 m

Maximum flow: 20 m³/h

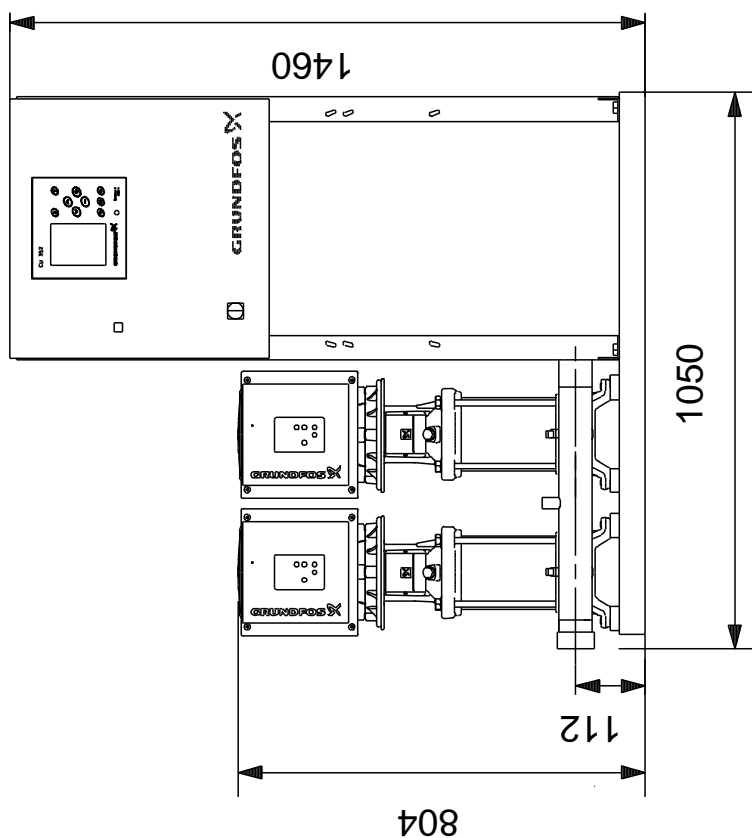
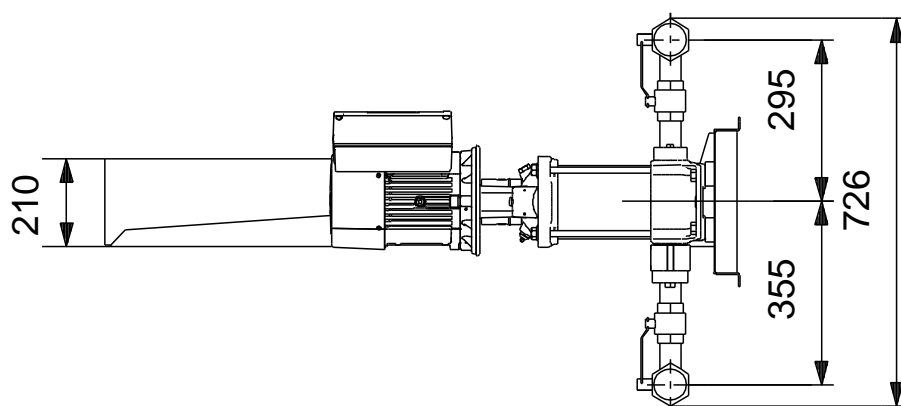
98389631 HYDRO MPC-E 2 CRIE5-9 50 Hz



Popis	Hodnota
Všeobecná informace:	
Název výrobku:	HYDRO MPC-E 2 CRIE5-9
Objednávací číslo:	98389631
EAN kód:	5710629915955
	5710629915955
Techn.:	
Skutečná výpočítaná hodnota průtoku:	7.189 m³/h
Max. průtok:	20 m³/h
Výsledná dopravní výška čerpadla:	50.09 m
Max. dopravní výška:	93 m
Typ hlavního čerpadla:	CRIE5-9
Číslo hlav. čerpadla:	98390070
Počet čerpadel:	2
Zpětný ventil:	Na výtlak. stran
Materiály:	
Sbírka:	EN/DIN 1.4571/ AISI 316 Ti
Instalace:	
Rozsah okolní teploty:	5 .. 45 °C
Maximální provozní tlak:	16 bar
Max. přípustný tlak na sání:	6.7 bar
Sbírka potrubí, vstup:	R 2"
Sbírka potrubí, výstup:	R 2"
PN pro potrubní připojku:	PN16
Earth connection:	PE
System design:	A
Kapalina:	
Čerpaná kapalina:	Voda
Rozsah teploty kapaliny:	5 .. 60 °C
Vybraná teplota kapaliny:	20 °C
Hustota:	998.2 kg/m³
Elektrické údaje:	
Výkon (P2) pro hlavní čerpadlo:	2.2 kW
Frekvence el. sítě:	50 Hz
Jmenovité napětí:	3 x 380-415 V
Jmenovité elektrický proud systému:	8,2A-400V
Typ spínání (DOL, SD):	Elektronické spínání
Krytí (IEC 34-5):	IP54
Zařízení proti rušení radiového příměru:	EMC DIRECTIVE(2014/30/EU)
Number of phases of main pump:	3
Řídící jednotky:	
Control type:	E
Dry running protection, mechanical:	NONE
Nádrž:	
Objem tlakové nádoby:	0 l
Membránová tlaková nádoba:	Ne
Jiné:	
Čistá hmotnost:	121 kg
Hrubá hmotnost:	158 kg
Výrobní program:	Mezinárodní
Číslo konfiguračního souboru:	98272377
Konfigurační soubor pro Control MPC:	98271946
Konfigurační soubor pro Hydro MPC:	98272018
Země pro vodu:	DE
Tarif:	84137075

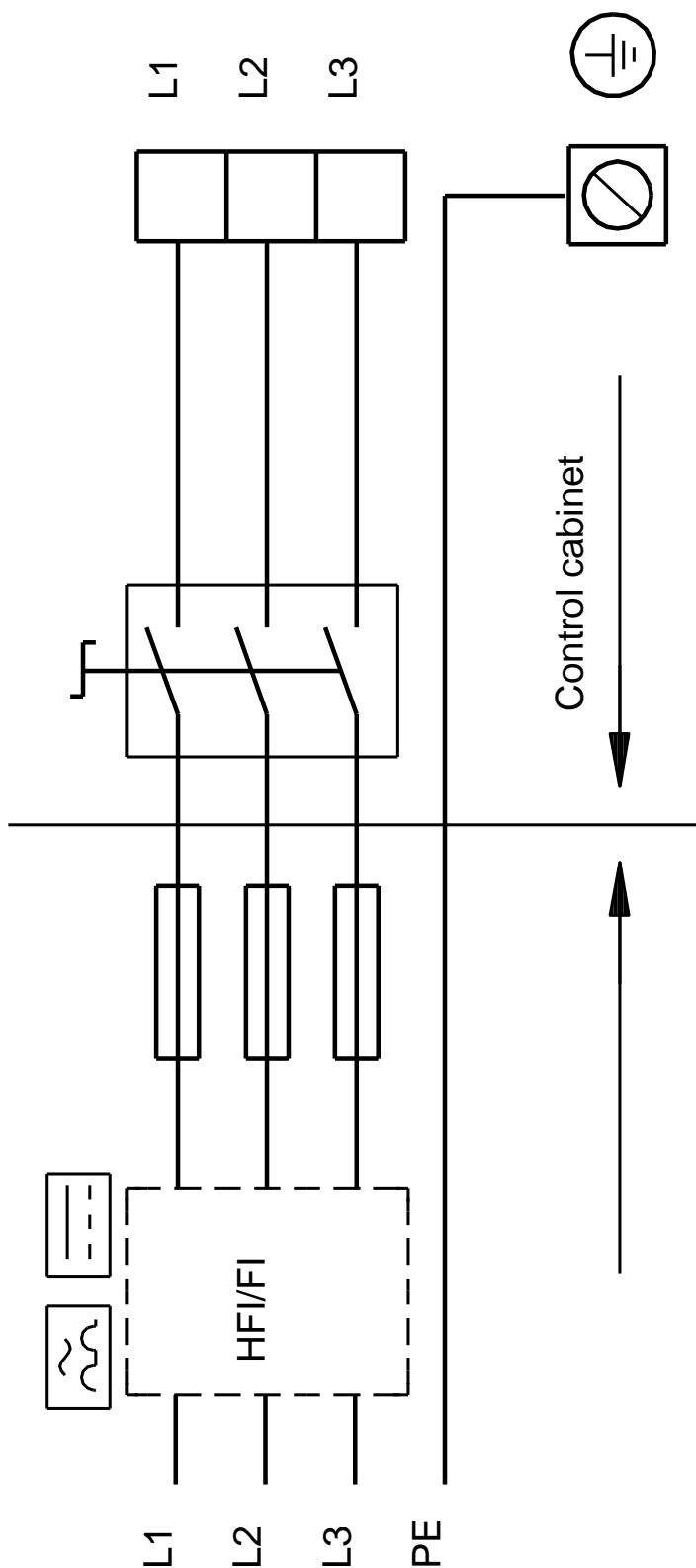


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Poznámka! Všechny jednotky musí být v[mm] jestliže není uvedeno jinak.
Poznámka: tento zjednodušený rozměrový náčrtek nezobrazuje všechny detaily.

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Upozornění! Všechny jednotky jsou v [mm], pokud není uvedeno jinak!