

Kiekis	Aprašymas
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1	Hydro MPC-E 3 CRIE 10-2
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Atkreipkite dėmesį! Paveikslėlyje parodytas produktas gali skirtis nuo tikrojo

Produkto Nr.: [98389640](#)

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

All pumps are variable-speed pumps.

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 corresponds 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 speed adjustment of the pumps.
- * The system performance is adjusted to the demand by starting and stopping 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:

:vertical multistage centrifugal pumps, type CRIE 10-2

- * 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 and 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 EN DIN 1.4571
- * Stainless steel base frame EN DIN 1.4301 up to CR 64. Above CR 64, the pumps are placed on a galvanised 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 (analogue 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.

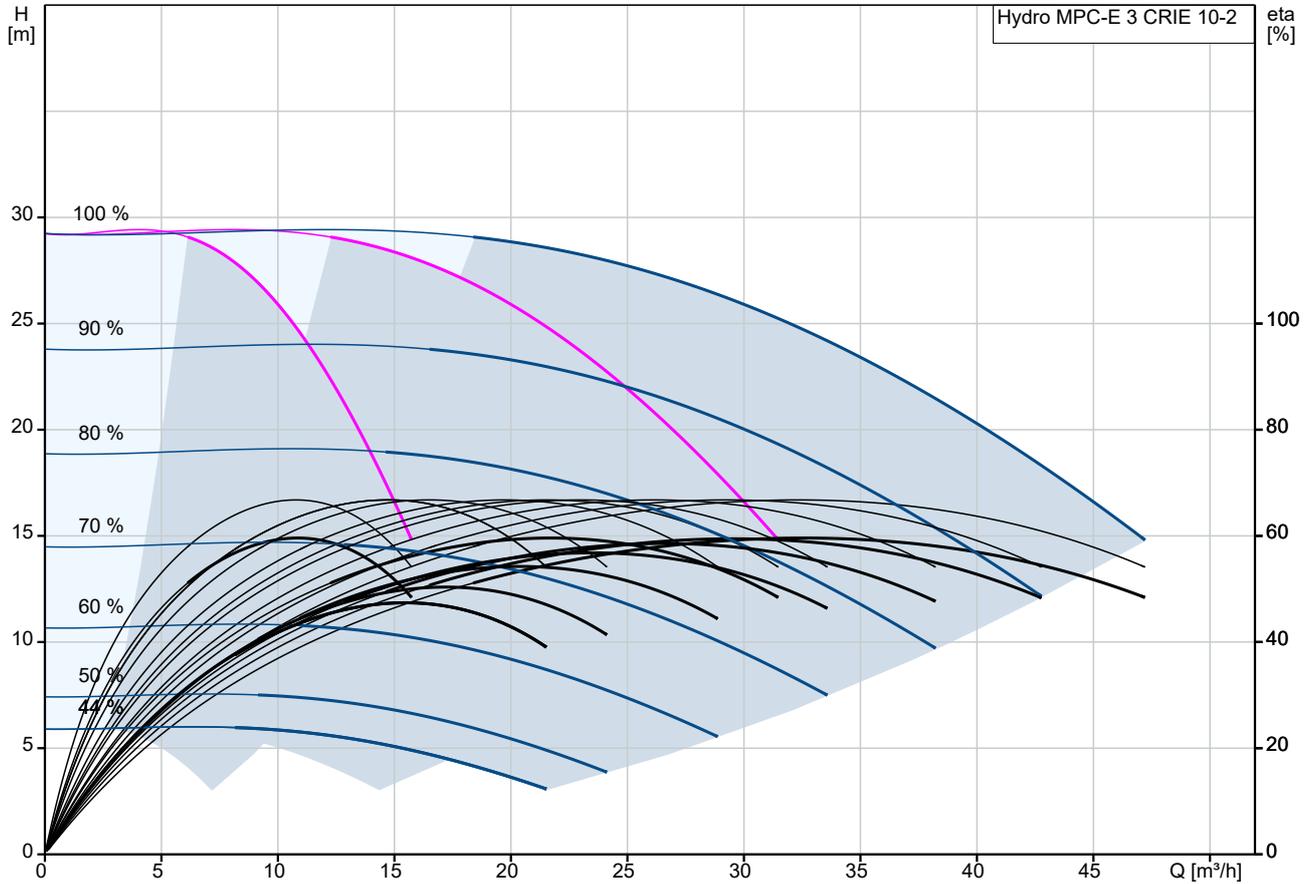
Dry-running protection and diaphragm tank are available according to the list of accessories.

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

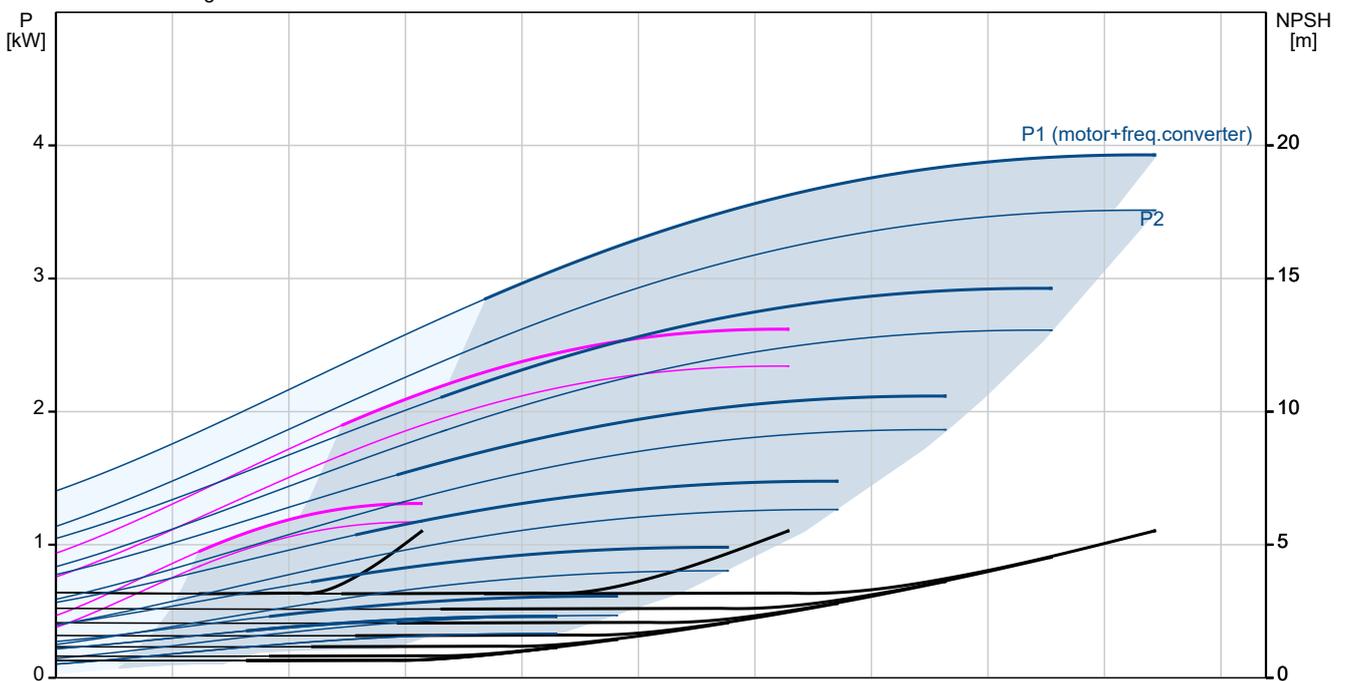
- * Intelligent multipump controller, CU 352.
- * Constant-pressure control through continuous variable speed adjustment of each individual pump.
- * PID controller with adjustable PI parameters ($K_p + T_i$).
- * Constant pressure at setpoint, independent of inlet pressure.
- * Soft pressure build-up (to prevent water hammer during startup).

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1	<ul style="list-style-type: none">* On and off operation at low flow.* Automatic cascade control of pumps for optimum efficiency.* Selection of min. time between start and stop, automatic pump changeover and pump priority.* Automatic pump test function to prevent idle pumps from seizing.* Possibility of standby pump allocation.* Possibility of backup sensor (redundant primary sensor).* Secondary sensor (possible to switch to another sensor or setpoint).* Multisensor (up to 6 sensors to impact the setpoint).* Manual operation.* Possibility of external setpoint influence.* Log function.* Setpoint ramp.* Possibility of digital remote-control functions:* System on and off.* Max., min. or user-defined duty range.* 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 and alarms.* Display and indication functions:* Colour screen display.* Green light for operating indications and red light for fault indications.* Potential-free changeover switches for operation and fault.* Grundfos bus communication. <p>It is possible to add CIM communication modules for communicating with SCADA/BMS.</p> <p>Complete pumps, pipes and cables as well as Control MPC are mounted on the base frame. The booster system has been preset and tested.</p> <p>Galimi slėgio kėlimo sistemos variantai.</p> <table data-bbox="225 1503 694 1682"><tr><td>Skystis:</td><td>Vanduo</td></tr><tr><td>Maks. sistemos slėgis:</td><td>16 bar</td></tr><tr><td>Debitas (sistemos):</td><td>47.1 m³/h</td></tr><tr><td>Nom. sistemos srovė:</td><td>9.3 A</td></tr><tr><td>Nominali galia:</td><td>1.5 kW</td></tr></table>	Skystis:	Vanduo	Maks. sistemos slėgis:	16 bar	Debitas (sistemos):	47.1 m ³ /h	Nom. sistemos srovė:	9.3 A	Nominali galia:	1.5 kW
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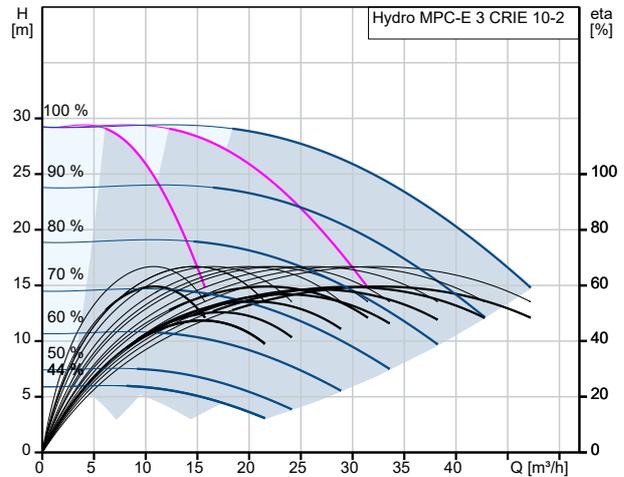
98389640 Hydro MPC-E 3 CRIE 10-2



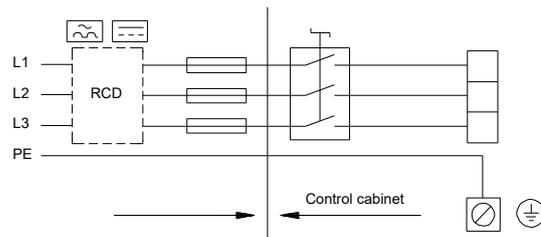
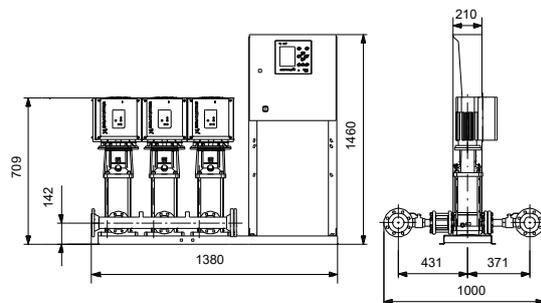
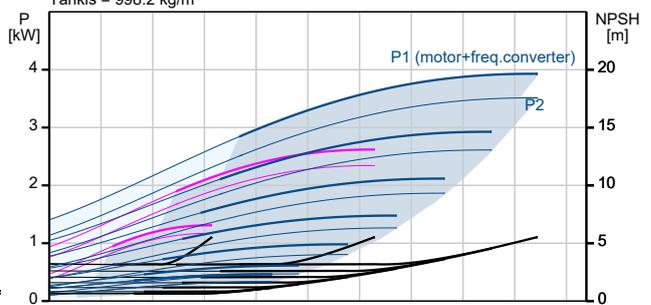
Nuotoliai armatūroje ir vožtuvuose neįskaityti
 Siurbiamas skystis = Vanduo
 Skysčio temperatūra darbo metu = 20 °C
 Tankis = 998.2 kg/m³



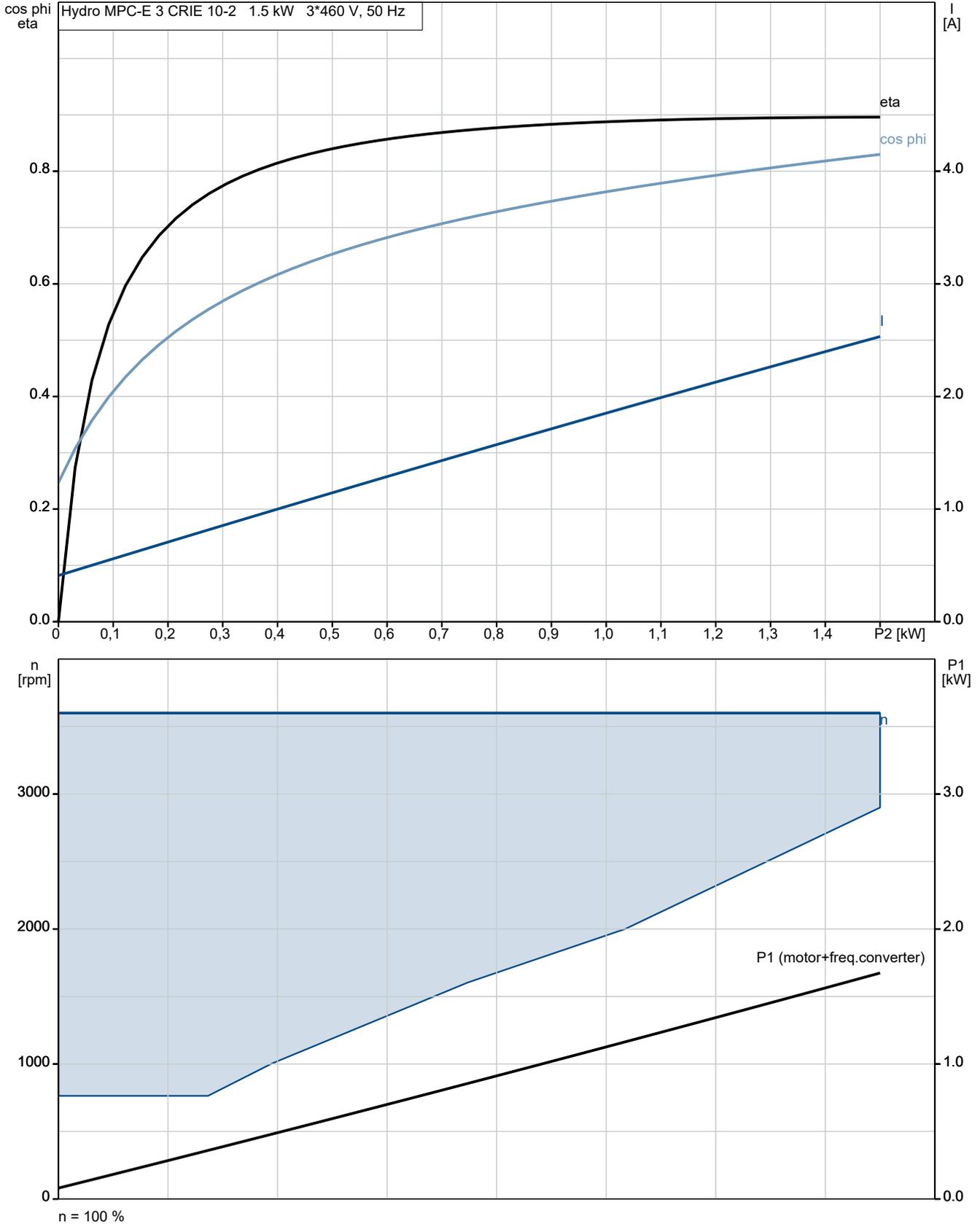
Aprašymas	Vertė
Bendra informacija:	
Produkto pavadinimas:	Hydro MPC-E 3 CRIE 10-2
Produkto Nr.:	98389640
EAN numeris:	5710629916044
Techniniai duomenys:	
Nominalus debitas:	33.69 m ³ /h
Maks. debitas:	47.1 m ³ /h
Nominalus slėgio aukštis:	24.07 m
Maks. slėgio aukštis:	29.2 m
Pagrindinio siurblio pavadinimas:	CRIE 10-2
Pagrindinio siurblio Nr.:	98390284
Siurblių skaičius:	3
Atbulinis vožtuvas:	išvado pusėje
Medžiagos:	
Kolektoriai:	EN 1.4571/ AISI 316 Ti
Įrengimas:	
Aplinkos temperatūros intervalas:	5 .. 40 °C
Maksimalus darbinis slėgis:	16 bar
Maksimalus leistinas slėgis įvade:	13.1 bar
Vamzdyno įvadas:	DN80
Vamzdyno išvadas:	DN80
Slėgis:	PN 16
Įžeminimas:	PE
Sistemos projektas:	A
Skystis:	
Siurbiamas skystis:	Vanduo
Skysčio temperatūros diapazonas:	5 .. 60 °C
Skysčio temperatūra eksploataavimo metu:	20 °C
Tankis:	998.2 kg/m ³
Elektrotechniniai duomenys:	
Pagrindinio siurblio galia (P2):	1.5 kW
Elektros tinklo dažnis:	50 / 60 Hz
Nominali įtampa:	3 x 380-415 V
Nominali sistemos srovė:	9.3 A
Paleidimo būdas:	Variable frequency drives
Korpuso klasė (IEC 34-5):	IP54
Radio trikdžių slopinimas:	EMC DIRECTIVE(2014/30/EU)
Pagrindinio siurblio fazių skaičius:	3
Valdikliai:	
Valdymo tipas:	E
Apsauga nuo sausos eigos, mechaninė:	NONE
Bakas:	
Diafragminis bakas:	Ne
Kita:	
Neto masė:	213 kg
Bruto masė:	259 kg
Siurblio konfigūracijos failo numeris:	98272389
Control MPC konfigūracijos failo numeris:	98271947
Hydro MPC konfigūracijos failo numeris:	98272019
Danijos VVS Nr.:	385553602



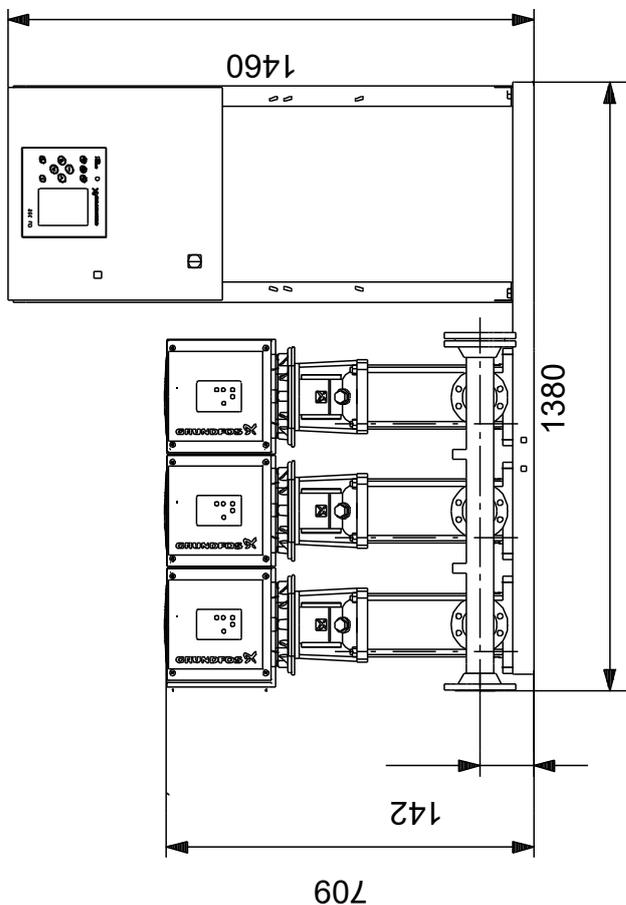
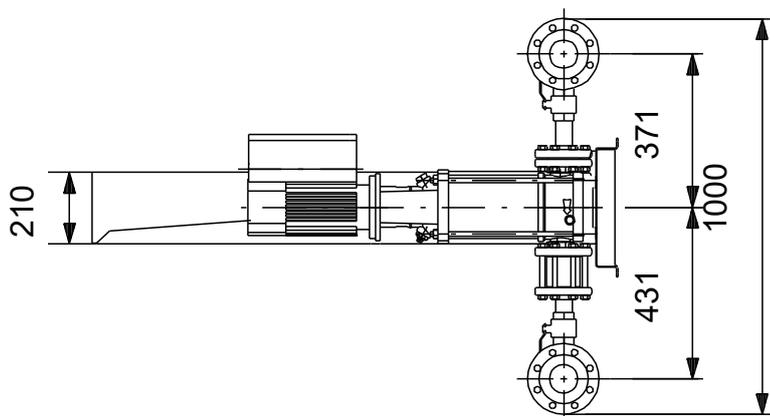
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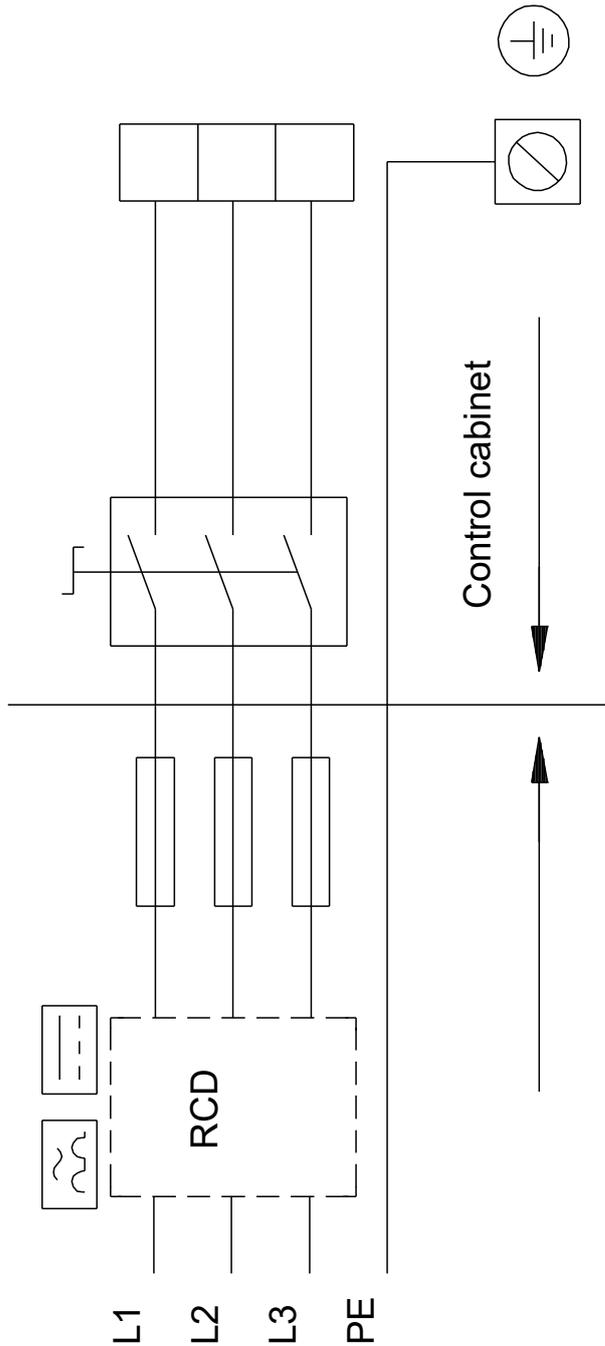


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Atkreipkite dėmesį! Visi matmenys, jei nenurodyta kitaip, pateikti milimetrais.
Atsakomybės apribojimas: šiame supaprastintame matmenų brėžinyje neparodytos visos detalės.

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