Submittal Data

PROJECT:	UNIT TAG:	QUANTITY:
	TYPE OF SERVICE:	
REPRESENTATIVE:	SUBMITTED BY:	DATE:
ENGINEER:	APPROVED BY:	DATE:
CONTRACTOR:	ORDER NO.:	DATE:

Hydro MPC-E 6 CRE 64-2



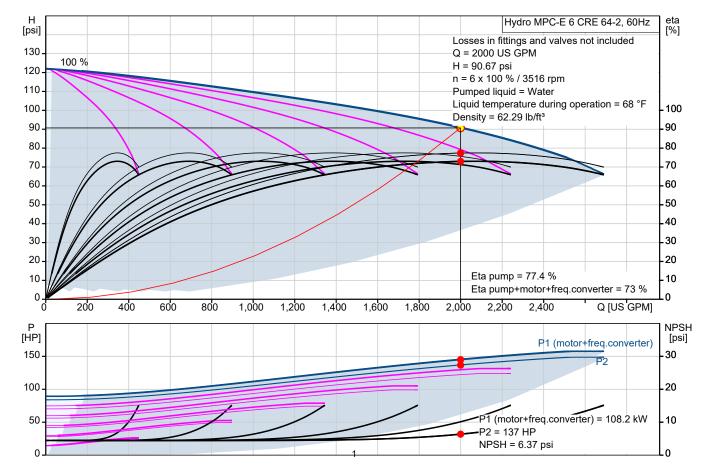
Advanced and energy efficient pressure boosting system for boosting of clean water. Available with 2-6 parallel connected pumps, Integrated advanced controller and all necessary fittings

Note! Product picture may differ from actual product

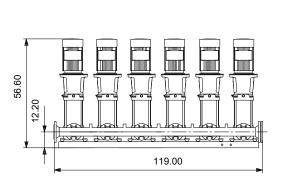
Conditions of Service		
Flow:	2000 US GPM	
Head:	90.67 psi	
Efficiency:	73 %	
Liquid:	Water	
Temperature:	68 °F	
NPSH required:	6.365 psi	
Specific Gravity:	1.000	

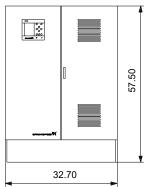
Pump Data	
Liquid temperature range:	41 179.6 °F
Maximum ambient temperature:	104 °F
Product number:	93067757

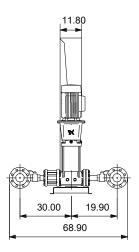
Motor Data	a
Mains frequency:	60 Hz
Enclosure class:	IP54



Submittal Data







Materials:



Date: 17/09/2025

Project:

Reference Number:

Client:

Client Number:

Contact:

Qty. | Description

Hydro MPC-E 6 CRE 64-2



Note! Product picture may differ from actual product

Product No.: 93067757

Pressure booster system supplied as a compact packaged assembly certified and listed by UL (Category QCZJ – Packaged Pumping Systems) for conformance to US and Canadian standards.

The Hydro MPC-E systems with Grundfos MLE motors from 0.5 to 30 hp (0.37 to 22 kW) have a total efficiency which exceeds the Super Premium Efficiency EuP IE5 level according to IEC 60034-30-1.

Approvals:

NSF61/NSF372 – Drinking Water and Low Lead approval. OSHPD Seismic certification available on MPC E CR(CUE) systems.

All pumps are variable-speed pumps.

Each pump is equipped with an integrated variable-frequency drive motor (MLE motor).

- Hydro MPC-E maintains 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, operating hours and fault.
- All pumps in operation will run at equal speed.

The system consists of these parts:

- vertical multistage centrifugal pumps, type CRE 45-3
- rotating pump parts in contact with the pumped liquid are made of ANSI 304 stainless steel as standard and available as ANSI 316 stainless steel as an option.

Pump bases and pump heads are made of cast iron (Class 30) as standard and ANSI 316 stainless steel as an option.

The pumps are equipped with the service-friendly cartridge-type mechanical-shaft seal HQQE (SiC/SiC/EPDM).

- Inlet and outlet manifolds are made of 316 stainless steel.
- Base frame is made of 304 stainless steel.
- One non-return valve (check valve) and two isolating valves for each pump.
- Adapter with isolating valve for connection of diaphragm tank.
- Pressure gauge and pressure transducer on each inlet and outlet manifold.

Dry-running protection is standard with use of pressure transducer on inlet manifold.

 Steel operating panel with UL Type 3R (MPC E CRE) or Type 12 MPC E CR(CUE) enclosure rating, including main disconnect switch, all required fuses, motor protection, switching equipment and microprocessor-controlled CU 352.



Date: 17/09/2025

Project:

Reference Number:

Client:

Client Number: Contact:

Qty. | Description

1 Diaphragm tank is available as an accessory.

Pump operation is controlled by CU352 controller, specifically designed to control parallel operation of multiple pumps with the following features and functions:

- PID controller with adjustable PI parameters (Kp + Ti)
- constant pressure at setpoint, independent of inlet pressure
- stop function (no flow shutdown)
- 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
- standby pump allocation capability
- redundant primary sensor capability
- manual operation
- proportional pressure control
- multisensor zone control with up to six zones
- differential pressure and temperature control using two separate sensors (that is outlet-inlet subtraction)
- secondary fallback sensor will revert to secondary (local) sensor upon primary (remote) sensor failure
- digital pulse water meter reading (log accumulated flow)
- forced pump changeover
- clock program
- soft pressure build-up
- external setpoint influence (via analogue input)
- emergency run (via digital input)
- password protection
- possibility of digital remote-control functions (via digital inputs):
- 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 measured values (flow, level, temp., etc.)
- built-in data-logging capability
- non-return valve (check valve) failure detection
- high system pressure protection
- low system pressure protection
- pump curve data loaded into controller to provide end-of-curve protection
- alarm log with the previous 24 warnings and alarms
- potential-free changeover switches for operation and fault
- Grundfos bus communication with optional gateway connections for all popular communication protocols
- Ethernet connection (built-in web server).

Pre-fabricated and tested packaged pump system including pumps, pipes and wiring complete with control MPC.

There are options to upgrade the pressure

boosting system.

Flow media: Water

Flow (Plant): 2690 US GPM
Flow (Pump): 2000 US GPM
Head: 90.67 psi
Nom. current of plant: 184 A
Nominal power: 24.8 HP

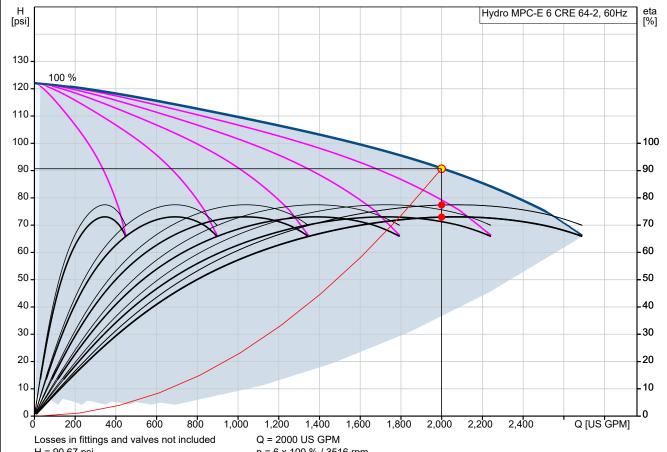


17/09/2025 Date:

Project: Client:

Reference Number: Client Number: Contact:

93067757 Hydro MPC-E 6 CRE 64-2 60 Hz



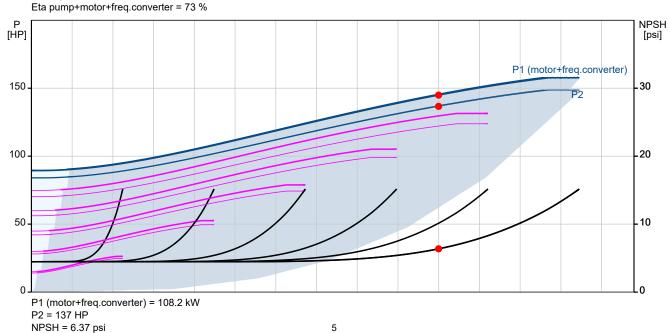
H = 90.67 psi

Pumped liquid = Water

Density = 62.29 lb/ft³

n = 6 x 100 % / 3516 rpm

Liquid temperature during operation = 68 °F Eta pump = 77.4 %





Date: 17/09/2025

Project:

Reference Number:

Rated power - P2:

Mains frequency:

Rated current of system:

Enclosure class (IEC 34-5):

Rated voltage:

Rated current:

Method of start:

Client: Client Number:

	Contact:
Value	H [psi]
	130
Hydro MPC-E 6 CRE 64-2	120 - 100 %
93067757	110 -
5715467320558	100 -
	90
2000 US GPM	80 -
2690 US GPM	70-
90.67 psi	60 - //
125.7 psi	50 -
CULUS,PROP65	40 -
CRE 64-2	30 -
93046122	10
Outlet	0
6	0
	Q = 2000
Stainless steel	n = 6 x 10 Density =
EN 1.4571	Losses in
AISI 316 TI	Liquid tem Eta pump
Stainless steel	Р [
EN 1.4301	[HP]
ASTM 304	
	100 -
41 104 °F	50
232.06 psi	
ANSI 12"	0 -
ANSI 12"	P1 (motor P2 = 137
PN 16	NPSH = 6
PE	
D	
Water	
41 179.6 °F	
68 °F	25.2
62.29 lb/ft³	
24.8 HP	
	Hydro MPC-E 6 CRE 64-2 93067757 5715467320558 2000 US GPM 2690 US GPM 90.67 psi 125.7 psi CULUS,PROP65 CRE 64-2 93046122 Outlet 6 Stainless steel EN 1.4571 AISI 316 TI Stainless steel EN 1.4301 ASTM 304 41 104 °F 232.06 psi ANSI 12" ANSI 12" PN 16 PE D Water 41 179.6 °F 68 °F 62.29 lb/ft³

H [psi]	Hydro MPC-E 6 CRE 64-2, 60Hz	eta [%]
130		
120 - 100 %		
110 -		ł
100		100
90		90
80		- 80
70		70
60		60
50		- 50
40-		- 40
30 -		- 30
20		- 20 10

Q = 2000 US GPM n = 6 x 100 % / 3516 rpm Density = 62.29 lb/ft³

500

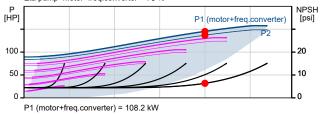
H = 90.67 psi Pumped liquid = Water Eta pump = 77.4 %

2,000

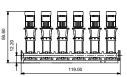
1,500

Losses in fittings and valves not included Liquid temperature during operation = 68 °F Eta pump+motor+freq.converter = 73 %

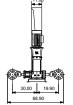
1,000



P1 (motor+freq.converter) = 108.2 kW P2 = 137 HP NPSH = 6.37 psi







Q [US GPM]

Radio interference supression:	EMC DIRECTIVE(2014/30/EU)
Number of phases of main pump:	3
Controls:	
Control type:	F

25 HP

60 Hz

27.5 A

184 A

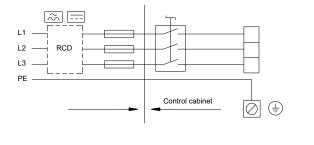
IP54

3 x 460-480 V

Variable frequency drives

Control type:	E
Dry running protection, mechanical:	PRESSURE SENSOR 0-10 BAR
Controller:	CU 352
Others:	
Net weight:	4620 lb

Others:		
Net weight:	4620 lb	
Gross weight:	5260 lb	
Shipping volume:	389 ft³	
Sales region:	Namreg	6





17/09/2025 Date:

Project: Reference Number:

Client:

Client Number: Contact:

Description	Value
Config. file no. pump:	98272463
Config. file no. Control MPC:	98271950
Config. file no. Hydro MPC:	98272054

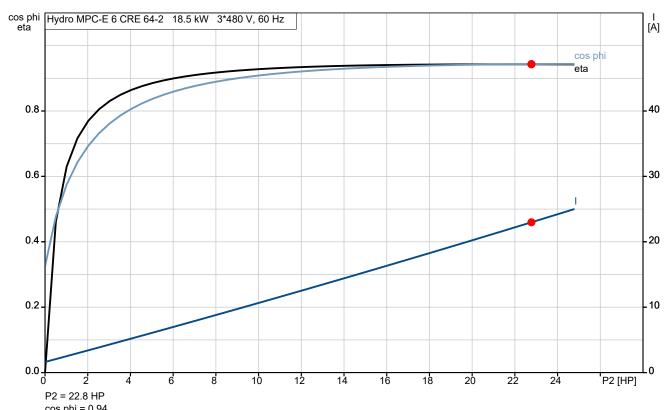


Date: 17/09/2025

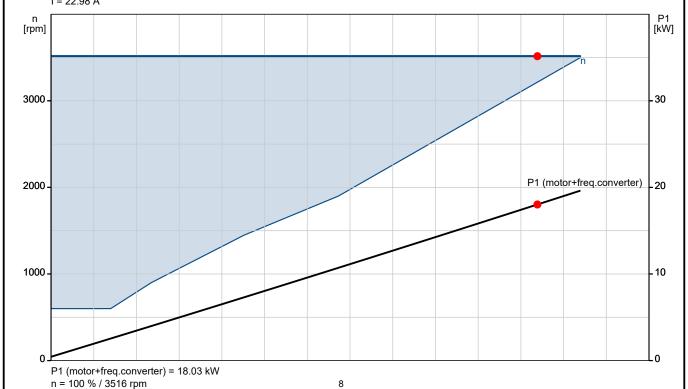
Project: Client:

Reference Number: Client Number: Contact:

93067757 Hydro MPC-E 6 CRE 64-2 60 Hz



P2 = 22.8 HP cos phi = 0.94 Eta = 94.3 % I = 22.98 A





Date: 17/09/2025

Project:

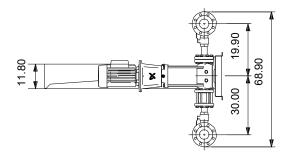
Reference Number:

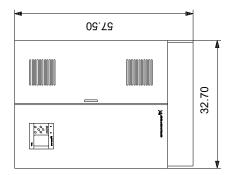
Client:

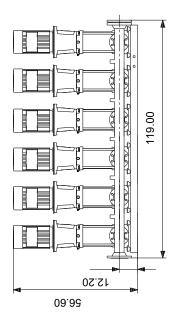
Client Number:

Contact:

93067757 Hydro MPC-E 6 CRE 64-2 60 Hz







Note! All units are in [in] unless others are stated. Disclaimer: This simplified dimensional drawing does not show all detalls.



Date: 17/09/2025

Project: Client:

Reference Number: Client Number: Contact:

93067757 Hydro MPC-E 6 CRE 64-2 60 Hz

