

2/3 KVCXE MCE/P DCONNECT

VARIABLE SPEED PRESSURE BOOSTER SETS WITH MCE/P AND DCONNECT



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TECHNICAL DATA

Operating range: 0.5 m³/h to 36 m³/h with head up to 112 m

Type of pumped liquid: Clean, free of solids and abrasive substances, non-viscous, non-aggressive, non-crystallised and chemically neutral.

Liquid temperature: From 0 °C to +40 °C

Maximum ambient temperature: +40 °C

Maximum operating pressure: 12 bar / 1200 kPa

Protection class of the pump: IP 55

Insulation class: F

Single phase power input: 230 V 50 Hz

Three phase power input: $3x400 \, \text{V} \, 50 \, \text{Hz} \, / \, 3x400 \, \text{V} \, 50 \, \text{Hz} + \text{N}$

Special versions on request: Alternative voltages or frequencies, models

with up to four pumps

Pressure booster sets with 2 or 3 KVCX pumps with MCE-P inverter and DConnect Box installed as standard, designed for pressure boosting in civil and commercial applications and for watering systems used also in agriculture. DConnect Box included as standard, installed in an IP65 panel. The DConnection cloud service can be accessed via the site internetofpumps.com or the DConnect App (for Android or iOS) which has an extremely user-friendly interface for controlling the installations remotely and receiving alarms in real time.

CONSTRUCTION CHARACTERISTICS OF THE PUMP

Impellers, diffuser bodies, diffusers and suction body in technopolymer. AISI 304 stainless steel pump liner with delivery connection and adjustment rings. Carbon-ceramic mechanical seal.

CONSTRUCTION CHARACTERISTICS OF THE MOTOR

Air-cooled asynchronous motor. Stainless steel pump shaft. Single-phase version with built-in thermal and current protection, and permanent split capacitor as standard. Protection to be provided by the user for the three-phase version.

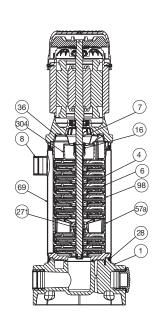
FEATURES OF THE INVERTER

MCE/P is an inverter for control and electrical protection. It is air-cooled by the motor fan and has a display for easy configuration. It can also drive three-phase pumps of up to 15 kW. Pressure sensor provided with the set. Flow sensor available as an accessory.

MATERIALS

N.	PARTS*	MATERIALS
1	PUMP BODY	TECHNOPOLYMER A
4	IMPELLER	TECHNOPOLYMER B
6	DIFFUSER	TECHNOPOLYMER B
7	SHAFT WITH ROTOR	AISI 303 STAINLESS STEEL X10 CrNi S 1089 UNI 6900/71
16	MECHANICAL SEAL	SILICON CARBIDE/SILICON
28	OR RING	EPDM RUBBER
36	SEAL HOLDING DISC	AISI 304 STAINLESS STEEL X5 CrNi 1810 UNI 6900/71
57a	INTERMEDIATE STAGE	TECHNOPOLYMER B
69	LINER	AISI 304 STAINLESS STEEL X5 CrNi 1810 UNI 6900/71
98	DIFFUSER BODY	TECHNOPOLYMER B
271	CENTERING BUSHING	BRONZE B 14
304	CONVEYOR	TECHNOPOLYMER B
8	DNM	AISI 304 STAINLESS STEEL X5 CrNi 1810 UNI 6900/71

^{*} In contact with the liquid





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MCE/P INVERTER



CONSTRUCTION FEATURES OF THE ELECTRONICS: MCE/P INVERTER

The inverter continuously adjusts the rotation speed of the electric pump, keeping the pressure constant, even when the flow rate varies.

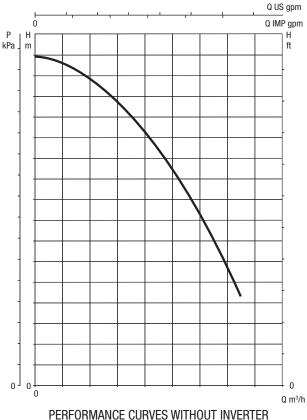
The other electric pumps in the sets (up to 8 pumps), also with variable speed, are activated in cascade after the first one has reached maximum speed. Through modulation, they compensate the pressure fluctuations of the system.

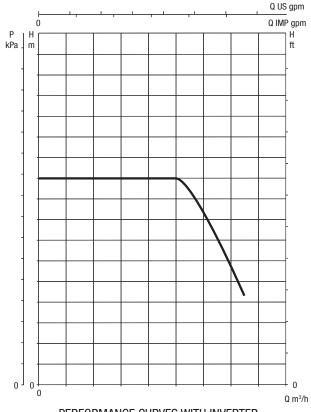
For every operating cycle, it is possible to switch the restart to a different pump, therefore ensuring even use of all electric pumps.

It is possible to set operation times for each individual pump, switching to another pump after such set times.

The "SP" pressure can be adjusted by the user using the "+" and "-" keys found on the MCE/P (as a rule, all the pumps are set to the same pressure value). With the new MCE/P, it is sufficient to set the data on one of the devices, and it will be automatically propagated to the other pumps of the system.

MODES OF OPERATION





PERFORMANCE CURVES WITH INVERTER

The inverter is capable of maintaining a constant pressure even when the flow rate varies.

The operating pressure can be adjusted by the user.

A good pressure set-point is between 1/3 and 2/3 of the maximum head of the electric pump. In this way, high efficient of the pump is maintained, together with maximum saving.

The MCE/P does not block the pump if the pressure is not reached, but the flow is present. This prevents service interruptions (in case of high flows).



Only MCE/Ps with the DConnect READY label are compatible with DConnect



DCONNECT SERVICE

REMOTE CONTROL FOR ELECTRONIC RESIDENTIAL AND COMMERCIAL SYSTEMS

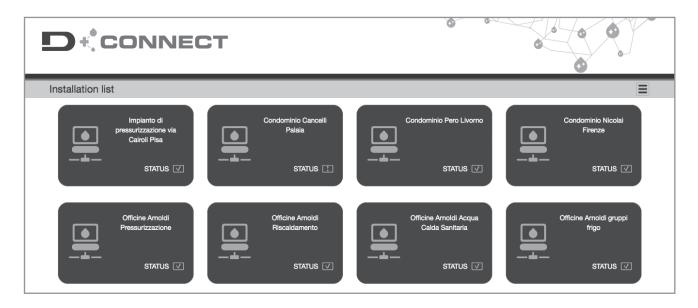
The DConnect service offers simple and intuitive remote control of your installation, without the need of a server or specialist personnel. **With DConnect, you can remotely manage your installations as if you were right in front of them.**

Thanks to the system operation charts, you will also be able to optimise operation. You will also receive prompt notifications of any system faults.

THE CONNECTIVITY SERVICE ALLOWS YOU TO:

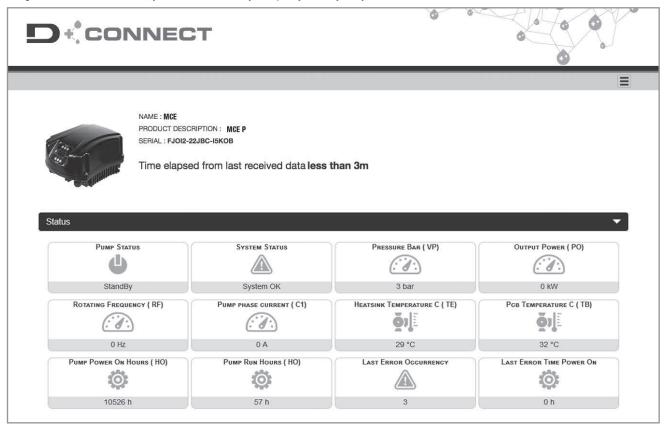
EASILY MONITOR YOUR SYSTEMS

The installations with green status are OK, while the orange ones need attention, and the red ones are experiencing problems



TAKE ANY NECESSARY ACTIONS AS IF YOU WERE RIGHT IN THE PUMP ROOM

Using the internet site or the APPs, you will be able to easily and quickly control your systems.





DCONNECT SERVICE

REMOTE CONTROL FOR ELECTRONIC RESIDENTIAL AND COMMERCIAL SYSTEMS

In order to use the DConnect service, registration and connected products are required.

Connect to the site: https://dconnect.dabpumps.com using Internet Browsers such as Microsoft Edge or Google Chrome.

The Android and iOS DCONNECT APPs can be downloaded from the relevant Stores:



REMOTE ALARMS

In case of alarm, the DConnect service will promptly send you a notification, so that you can check what is happening and organise a visit to the system before the issue becomes an emergency for your customer.

WHAT PRODUCTS CAN YOU MANAGE USING THE DCONNECT SERVICE?

MCE/P, MCE/C, ADAC, Active driver Plus, Ebox, Evoplus, Esybox, Esybox mini, Esybox Diver, Dtron 3.

WHAT DO YOU NEED TO USE THE SERVICE?

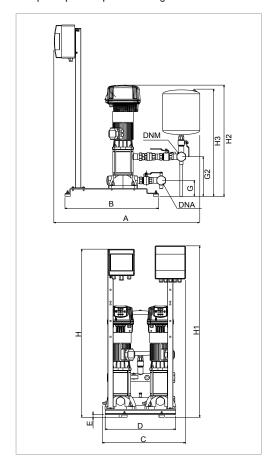
- 1. DConnect Box / Dconnect Box 2
- 2. Cables for the connection of the DConnect Box / Dconnect Box 2 to the products to control
- 3. One or more compatible products
- 4. An internet connection in the system to control

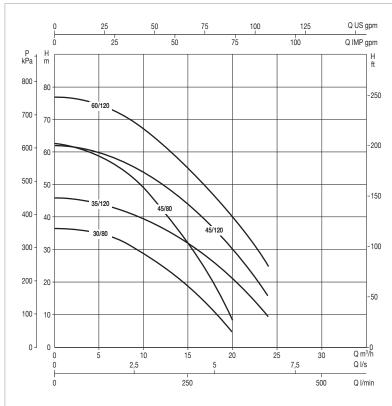
For more information visit: **www.internetofpumps.com**



2 KVCXE MCE/P DCONNECT - VARIABLE SPEED PRESSURE BOOSTER SETS WITH MCE/P AND DCONNECT

Pumped liquid temperature range: from 0 °C to +40 °C - Maximum ambient temperature: +40 °C - Max flow rate: 32 m³/h





The performance curves are based on kinematic viscosity values = 1 mm 2 /s and density equal to 1000 kg/m 3 . Curve tolerance according to ISO 9906.

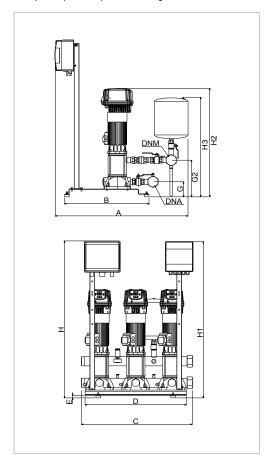
MODEL	POWER INPUT	P2 NO	MINAL	In	MCE/P MODEL		
WIUDEL	PUMP+INVERTER	kW	HP	A	IVIOE/P IVIODEL		
2KVCXE 30/80 T+N MCE/P DCONNECT	3 x 400 V ~ + N	2 x 0,9	2 x 1,2	3 x 3,8	MCE 11/P		
2KVCXE 45/80 T+N MCE/P DCONNECT	3 x 400 V ~ + N	2 x 1,5	2 x 2	3 x 6	MCE 15/P		
2KVCXE 35/120 T+N MCE/P DCONNECT	3 x 400 V ~ + N	2 x 1,1	2 x 1,5	3 x 6,4	MCE 15/P		
2KVCXE 45/120 T+N MCE/P DCONNECT	3 x 400 V ~ + N	2 x 1,85	2 x 2,5	2 x 7,6	MCE 22/P		
2KVCXE 60/120 T MCE/P DCONNECT	3 x 400 V	2 x 2,2	2 x 3	2 x 9	MCE 30/P		

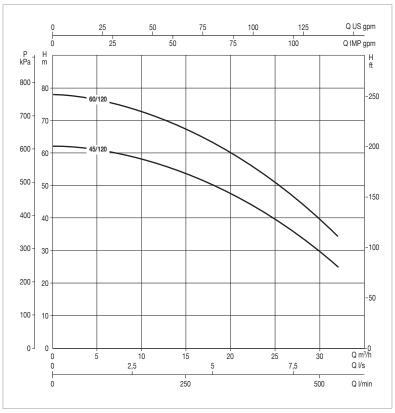
MODEL	Δ.	п	0	_	_	0	G2		114	H2	Н3	DNA	DNM	PACKIN	WEIGHT		
MODEL	A	В	C	D	E	G	u2	Н	H1	П				L/A	L/B	Н	kg
2KVCXE 30/80 T+N MCE/P DCONNECT	1096	705	626	530	20	120	244	1266	1291	788	753	2"	2"	852	1202	1413	148.5
2KVCXE 45/80 T+N MCE/P DCONNECT	1096	705	626	530	20	120	299	1266	1291	838	807	2"	2"	852	1202	1413	148.6
2KVCXE 35/120 T+N MCE/P DCONNECT	1096	705	626	530	20	120	244	1266	1291	764	753	2"	2"	852	1202	1413	148.5
2KVCXE 45/120 T+N MCE/P DCONNECT	1096	705	626	530	20	120	299	1266	1291	894	807	2"	2"	852	1202	1413	148.7
2KVCXE 60/120 T MCE/P DCONNECT	1096	705	623	530	20	120	299	1266	1291	891	807	2"	2"	852	1202	1413	148.7



3 KVCXE MCE/P DCONNECT - VARIABLE SPEED PRESSURE BOOSTER SETS WITH MCE/P AND DCONNECT

Pumped liquid temperature range: from 0 °C to +40 °C - Maximum ambient temperature: +40 °C - Max flow rate: 36 m³/h





The performance curves are based on kinematic viscosity values = 1 mm^2 /s and density equal to 1000 kg/m^3 . Curve tolerance according to ISO 9906.

MODEL	POWER INPUT	P2 NO	MINAL	In	MCE/P MODEL		
MIUDEL	PUMP+INVERTER	kW	HP	A			
3KVCXE 45/120 T+N MCE/P DCONNECT	3 x 400 V ~ + N	3 x 1,85	3 x 2,5	3 x 7,6	MCE 22/P		
3KVCXE 60/120 T MCE/P DCONNECT	3 x 400 V	3 x 2,2	3 x 3	3 x 9	MCE 30/P		

MODEL	٨	D	C	D	Е	C	G2	Н	H1	H2	H 3 DNA	DNA	DAIA	DAIA	DNM	PACKING DIMENSIONS			WEIGHT
MIODEL	A	D	U	ט	[G	u2	П	пі	ПZ			DINIVI	L/A	L/B	Н	kg		
3KVCXE 45/120 T+N MCE/P DCONNECT	1104	700	920	840	20	125	304	1301	1296	899	825	2" 1/2	2" 1/2	1352	1152	1393	168.5		
3KVCXE 60/120 T MCE/P DCONNECT	1104	700	920	840	20	125	304	1301	1296	896	825	2" 1/2	2" 1/2	1352	1152	1393	169.5		





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www.dabpumps.com



On-line product selection



DAB PUMPS LTD.

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