GRUNDFOS HYDRO BOOSTERS FOR EVERY APPLICATION

GRUNDFOS HYDRO MPC S/F/EF

A VERSATILE BOOSTER SYSTEM WITH GRUNDFOS CU352 CONTROLLER

- CR/CRI/CRN
- IE3 motors as standard
- CED coated or stainless steel manifolds
- System offered with fixed speed or with a single or multiple frequency drives

GRUNDFOS HYDRO Multi-E BOOSTER

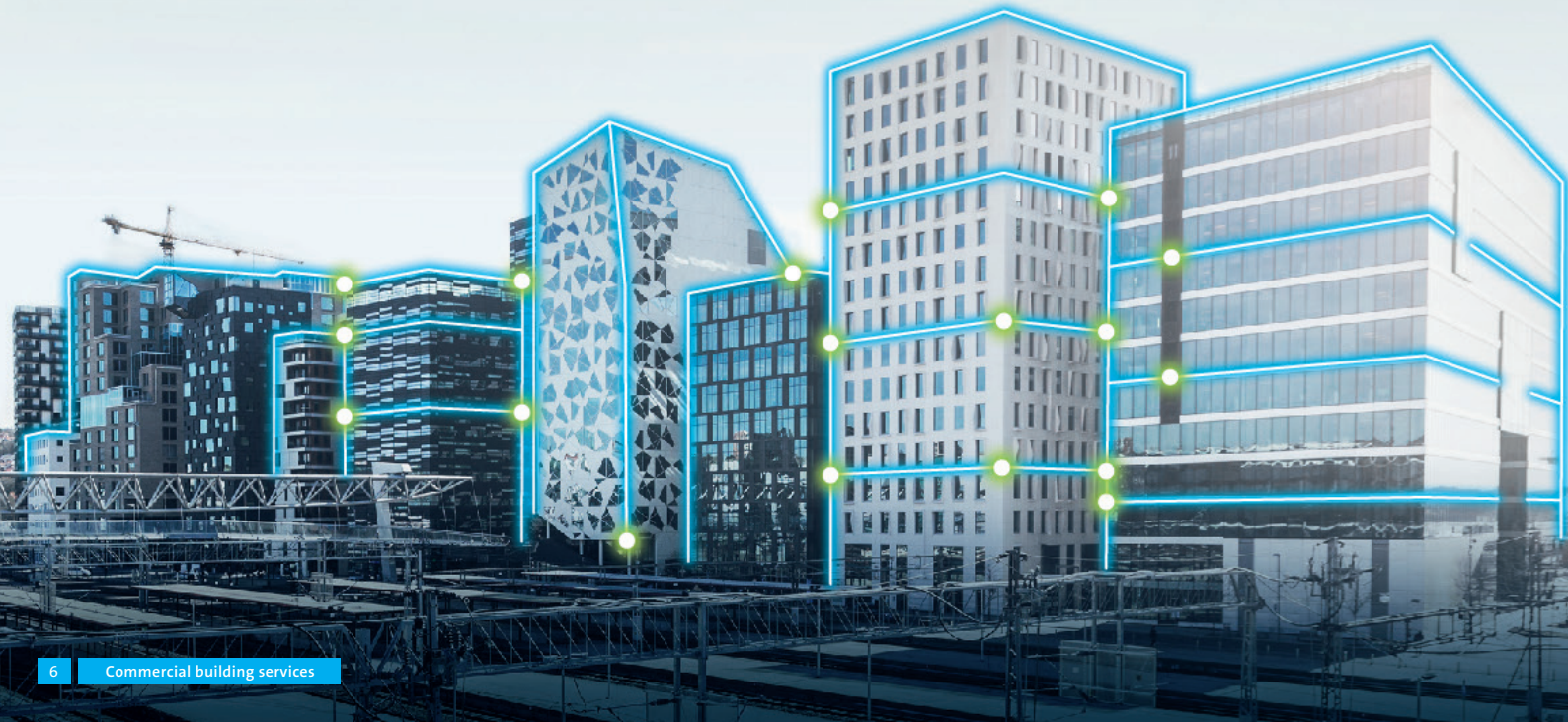
SIMPLE YET MOST EFFICIENT BOOSTER SYSTEM

- CRE/CRIE/CRNE pumps vertical multistage pumps
- Offered with IE3/IE5 motors
- Resident controller within pumps
- System offered with integrated frequency drives

GRUNDFOS HYDRO MULTI-B

SIMPLE - FUNCTIONAL - COST EFFECTIVE

- CR/CRI/CRN/CM Multistage pumps
- Offered with CU323 controller
- CED coated manifolds and baseframe
- System offerd with single or multiple frequency drives



Technical Information

FEATURES	HYDRO MPC				MULTI-E	MULTI-B		MULTI-S	
Control Variant	E	EF	F	S	CRE	E	ES	CM	CR
Picture									
Description	E system is with all integrated MGE motors which gives superior level of pressure regulation and energy performance.	EF system is with all external frequency converter which gives high level of pressure regulation and energy performance.	F System is with a single frequency convertor, giving user a cost effective system with pressure regulation	S system is with all constant speed pumps controlled by a CU 352 controller	Multi-E is all speed controlled system with controller resident inside the MGE motor (upto 11 kw (IE5) and 11 to 22kw (IE3)	Multi-B E system has all CM /CR pumps with Danfoss external frequency convertors. CU 323 controller gives a better cost to performance to the user	Multi-B ES system has only one speed controlled pump (External VFD) and rest are fixed speed pumps	Multi-S with CM horizontal fixed speed pumps, has advantages of being compact and sturdy	Multi-S is an optimal fixed speed booster with CR - vertical Multi stage pumps which has all basic functionality of a booster
Perfect for	Any application with changing flow where precise pressure control and high level of system optimization is needed	Any application with changing flow where precise pressure control is needed	Applications with changing flow, where user can accommodate a pressure variation	For transport of water and pressure boosting where the operating within a pressure band is accepted	For all buildings where constant pressure, low energy consumption and a small footprint is needed	Prefect booster for small and medium size commercial buildings, where limited functionality with precise pressure control is needed	Perfect booster for small and medium size commercial buildings where a pressure band is allowed	As competitive solution in the fixed speed booster market	As a competitive solution in the fixed speed booster market
Max Head [m]	155	155	155	155	100	120	125	84	103
Max Flow Rate [m3/h]	1088	1088	1088	1088	80	108	108	43,5	69
Max operating pressure [bar] std	16	16	16	16	10	16	16	10	16
Max operating pressure [bar] req.	40	40	40	40	-	-	-	-	-
Number of pumps	2 - 6	2 - 6	2 - 6	2 - 6	2 - 4	2 - 4	2 - 4	2 - 3	2 - 3
Motor Type	MGE 0.55 to 11KW (IE5)	75KW	75KW	37KW	0.55 to 11KW (IE5) 11 to 22KW (IE3)	7.5KW	7.5KW	5.5KW	7.5KW
Pump Type	CRE/CRIE/CRNE	CR/CRI/CRN	CR/CRI/CRN	CR/CRI/CRN	CRE/CRIE/CRNE	CRIE/CME/CM/CR	CRIE/CME/CM/CR	CM	CR
Energy Marking	IE5/IE3	IE3	IE3	IE3	IE5/IE3	IE5/IE3	IE5/IE3	-	IE3

FEATURES	HYDRO MPC				MULTI-E	MULTI-B		MULTI-S	
Control Variant	E	EF	F	S	CRE	E	ES	CM	CR
Controller	CU352	CU352	CU352	CU352	Grundfos GO	CU323	CU323	CS100	CS100
									
Advanced (Multiple settings and readouts)	✓	✓	✓	✓					
Medium (Basic settings and readouts)						✓	✓		
Simple (settings/readout Grundfos GO)					✓				
Basic (pressure switch adjustment)								✓	✓
Rating of most energy saving system	★★★★★	★★★★½	★★★½	★★½	★★★★½	★★★★	★★★	★★	★★
Specific energy consumption read out in display	✓	-	-	-	-	-	-	-	-
BUS Communication	✓	✓	✓	✓	✓	✓	✓	-	-
On board Ethernet Communication	✓	✓	✓	✓	-	-	-	-	-
Speed Controlled pumps	✓	✓	✓	-	✓	✓	✓	-	-
Automatic pump changeover	✓	✓	-	-	-	✓	-	-	-
Stop function	✓	✓	✓	✓	✓	✓	✓	-	-
Water shortage protection (opt)	✓	✓	✓	✓	✓	✓	✓	-	-
Tank filling application	-	-	✓	✓	✓	✓	-	✓	✓
Redundant Primary sensor	✓	✓	✓	✓	✓	-	-	-	-
Automatic resetting of dry-running fault	✓	✓	✓	✓	✓	✓	✓	✓	✓
Start-up delay between pumps	✓	✓	✓	✓	✓	✓	✓	✓	✓
Alternative Set points	✓	✓	✓	✓	-	-	-	-	-
Proportional pressure function (DDD)	✓	✓	✓	✓	-	-	-	-	-
Pilot Pump	✓	✓	✓	✓	-	-	-	-	-
Clock Program	✓	✓	✓	✓	-	-	-	-	-
Soft Pressure Build Up	✓	✓	✓	✓	-	-	-	-	-
Pump curve data	✓	✓	✓	✓	-	-	-	-	-
Flow Estimation	✓	✓	✓	✓	-	-	-	-	-
Pumps outside duty range	✓	✓	✓	✓	✓	-	-	-	
Emergency Operation	✓	✓	✓	✓	✓	✓	✓	✓	✓
Forced pump change over	✓	✓	✓	✓	✓	✓	✓	-	-
Password protection	✓	✓	✓	✓	✓	✓	✓	-	-
Pulse Meter Input for flow estimation	✓	✓	✓	✓	-	-	-	-	-
Multi-Sensor (fallback/secondary sensor)	✓	✓	✓	✓	-	-	-	-	-
Electrical overview of IO Points	✓	✓	✓	✓		-	-	-	-
Defect Non-Return valve Detection for E Pumps	✓	-	-	-	✓	-	-	-	-