

Wilo-CO-MHI/MVI RI-EB.

Three Phase/Single Phase Fixed Speed Booster Sets.



Wilo-CO-MHI/MVI RI-EB

Three Phase/Single Phase Fixed Speed Booster Sets



The CO-MHI/MVI Series of pressure booster sets are fully automatic and self contained units. Designed to automatically provide reliable water supplies within residential, commercial and industrial premises. The pumps are high quality stainless steel horizontal or vertical multistage pumps enabling a wide range of flow rates and discharge pressures. The design of the units lends itself to ease of installation and maintenance, while the low running noise characteristic make them suitable for use in hotels, hospitals and all building services applications.

Description

The units are manufactured using either two or three pumps. All components, pumps, pipes and controls are carefully arranged on a steel base frame c/w resilient mounts, ensuring that the floor space used is minimal, yet remaining maintenance friendly. Site installation merely requires the connection of suction and discharge pipes and appropriate single or three phase electrical supply. Remote monitoring of the set's operation to a Building Management System can be facilitated as an option. The method of sequencing the operation of pumps varies to suit the specific application, usual arrangements are Duty / Standby or Duty / Assist. Where three pumps are used a Duty / Assist / Standby cycle can be used.

Operational Cycle:

The required system pressure is maintained by the hydraulic accumulators (pressure vessels) and changes due to demand, monitored by pressure switches which will activate instantly on system

draw off. On demand the system pressure decreases and the duty pump starts, it will continue to run until the preset system pressure is restored. Should demand exceed the capacity of the duty pump, or the duty pump fail, the standby will start and run until pressure is restored. The use of minimum run timers in conjunction with the start/stop activation ensures that pump start frequency is minimised. Low water protection connections are included to allow the installation of a float switch in a break tank or pressure switch if required.

Performance

For performance range see tables A, B, C, D, E, F, G and H (composite curves).

Design Data/Specification:

Pumps: Stainless steel horizontal (end suction)/vertical multistage pumps close coupled to an IP54 TEFC, Class F motor.

Pipe Work: Suction and discharge pipe work in stainless steel, c/w an isolating valve to each pump suction, isolating and non-return valve to each pump discharge.

Pressure Vessel: 2 or 3 18 litre pressure vessels (depending on number of pumps) WRAS approved, 8 bar SWP, EPDM diaphragm (-10 to +100 dec. C), CE marked in accordance with PED.

Instrumentation/Controls: Two or three snap action SPDT pressure switches (depending on number of pumps), one 50mm 0 –10 bar pressure gauge.

Control Panel: One IP55 enclosure incorporating: door interlocked isolator,

contactor and motor protection unit per pump, low voltage control circuit, control MCB's, alternate start (between duty/standby pumps), auto change over (on motor overload), minimum run timers, pump run/trip lamps per pump, low level cut out circuit and lamp (float switch or pressure switch optional, requiring to be connected), hand/off/auto switch per pump, common volt free contacts for pump run and pump trip.

Design:

Max working Pressure:	MHI: 8 Bar MVI: 16 Bar
Voltage:	400V/3PH/50Hz 230V/1PH/50Hz
Protection Index:	IP54



Duty charts WILO-CO-MHI/RI-EB

Table A
Wilo-CO-MHI2--/RI-EB

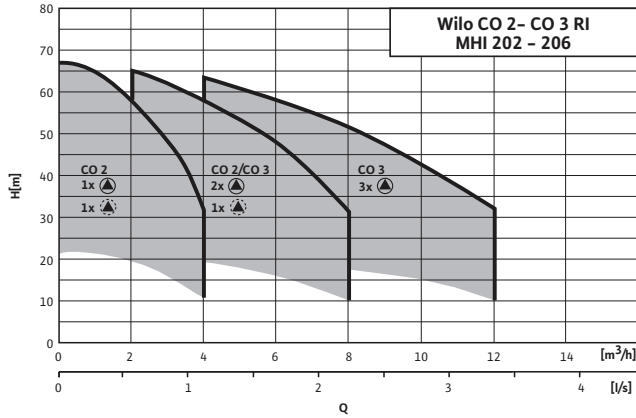


Table B
Wilo-CO-MHI4--/RI-EB

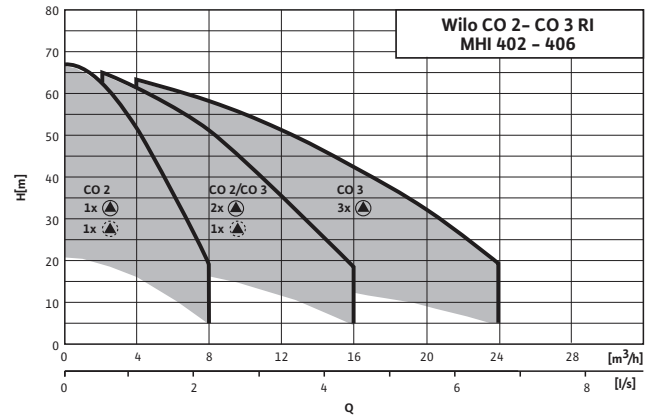


Table C
Wilo-CO-MHI8--/RI-EB

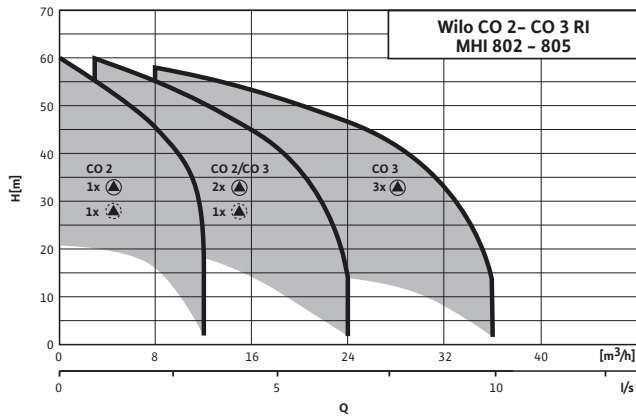
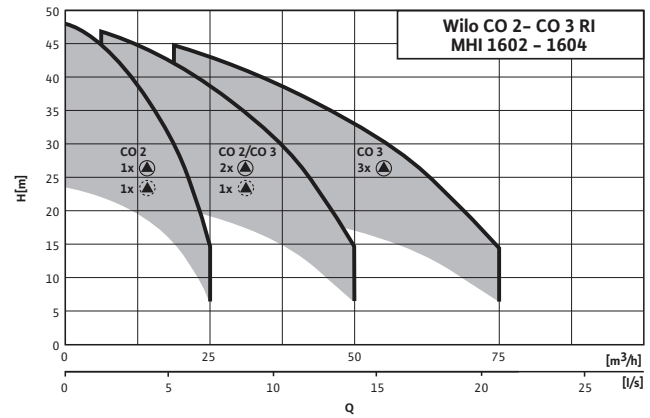


Table D
Wilo-CO-MHI16--/RI-EB



Duty charts WILO-CO-MVI/RI-EB

Table E
Wilo-CO-MVI2--/RI-EB

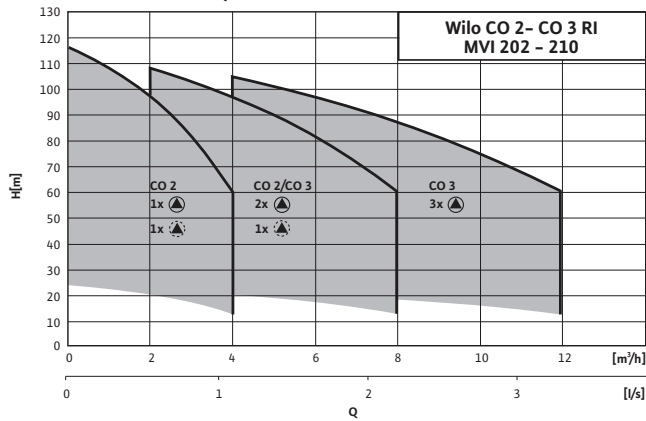


Table F
Wilo-CO-MVI4--/RI-EB

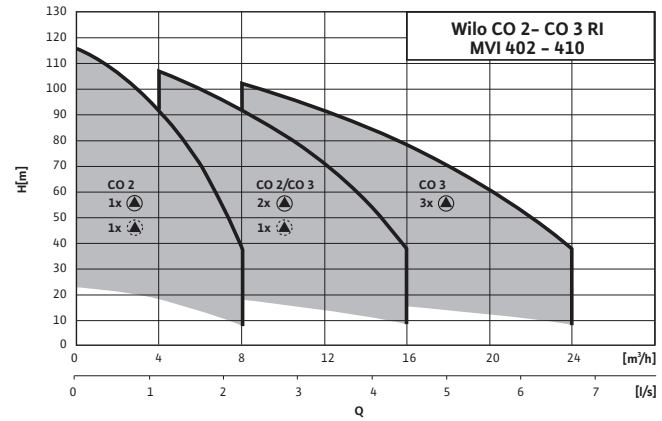


Table G
Wilo-CO-MVI8--/RI-EB

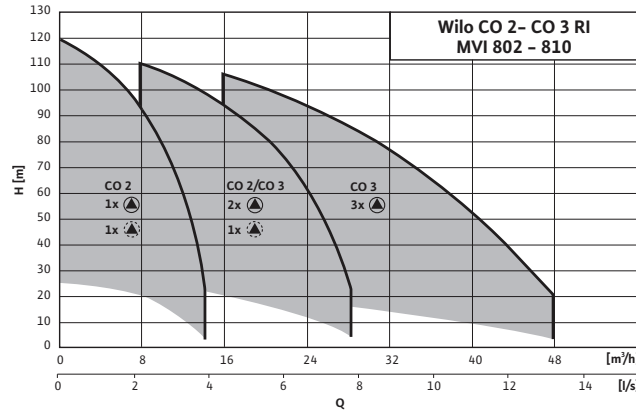
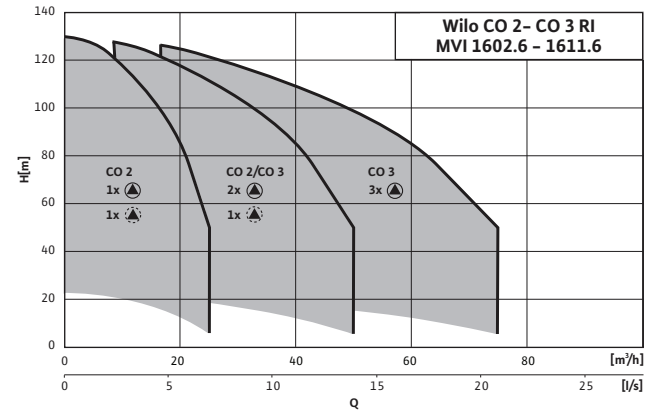
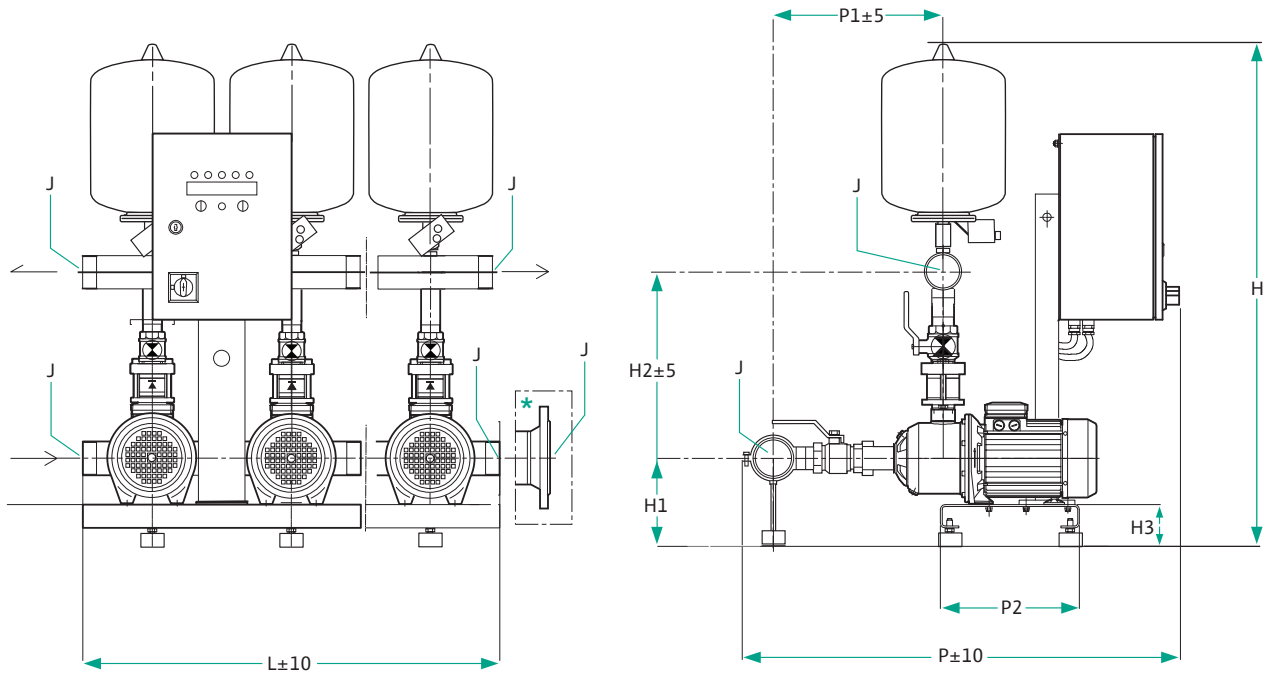


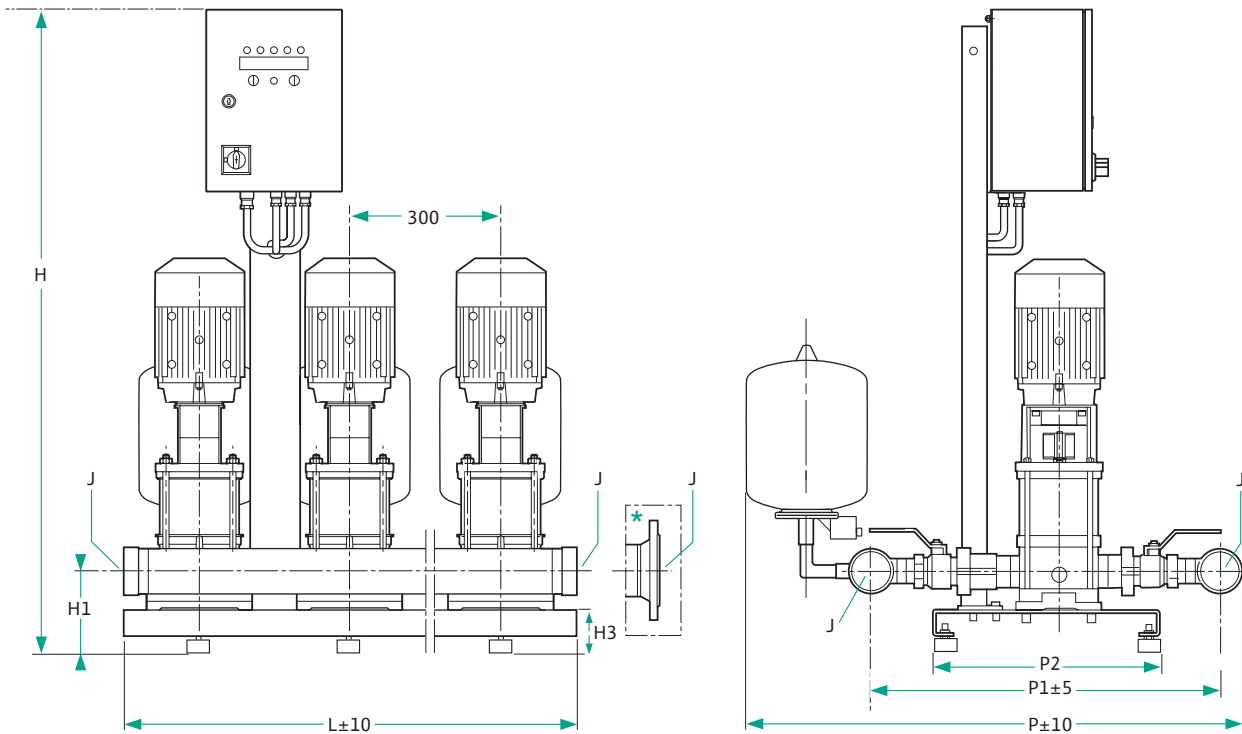
Table H
Wilo-CO-MVI16--/RI-EB





MODEL REF	MAX RATING			DIMENSIONS IN MM								
	P2 Kw	230V Amp	400V Amp	L	P	P1	P2	H	H1	H2	H3	J
CO 2MHI202/RI-EB	1.1	8.0	3.4	600	925	280	300	1020	170	395	80	2" BSP
CO 2MHI203/RI-EB	1.1	8.0	3.4	600	925	280	300	1020	170	395	80	2" BSP
CO 2MHI204/RI-EB	1.1	8.0	3.4	600	975	328	300	1020	170	395	80	2" BSP
CO 2MHI205/RI-EB	1.5	10.2	4.2	600	975	328	300	1020	170	395	80	2" BSP
CO 2MHI206/RI-EB	2.2	14.4	6.2	600	1000	352	300	1020	170	395	80	2" BSP
CO 2MHI402/RI-EB	1.1	8.0	3.4	600	945	299	300	1020	170	395	80	2" BSP
CO 2MHI403/RI-EB	1.1	8.0	3.4	600	945	299	300	1020	170	395	80	2" BSP
CO 2MHI404/RI-EB	1.5	10.2	4.2	600	990	347	300	1020	170	395	80	2" BSP
CO 2MHI405/RI-EB	2.2	14.4	6.2	600	990	347	300	1020	170	395	80	2" BSP
CO 2MHI406/RI-EB	3.0	18.4	7.6	600	1015	371	300	1020	170	395	80	2" BSP
CO 2MHI802/RI-EB	1.5	10.2	4.0	600	880	323	300	1030	170	402	80	2 1/2" BSP
CO 2MHI803/RI-EB	2.2	13.6	5.6	600	880	323	300	1030	170	402	80	2 1/2" BSP
CO 2MHI804/RI-EB	3.0	19.6	7.0	600	940	383	300	1030	170	402	80	2 1/2" BSP
CO 2MHI805/RI-EB	3.7	-	9.9	600	940	383	300	1030	170	402	80	2 1/2" BSP
CO 2MHI1602/RI-EB	3.0	-	7.6	600	930	368	300	1040	170	443	80	3" BSP
CO 2MHI1603/RI-EB	3.7	-	9.9	600	930	368	300	1040	170	443	80	3" BSP
CO 2MHI1604/RI-EB	5.0	-	11.7	600	980	413	300	1040	180	443	80	3" BSP
CO 3MHI202/RI-EB	1.65	12.0	5.1	900	925	280	300	1080	170	395	80	2" BSP
CO 3MHI203/RI-EB	1.65	12.0	5.1	900	925	280	300	1080	170	395	80	2" BSP
CO 3MHI204/RI-EB	1.65	12.0	5.1	900	975	328	300	1080	170	395	80	2" BSP
CO 3MHI205/RI-EB	2.25	15.3	6.3	900	975	328	300	1080	170	395	80	2" BSP
CO 3MHI206/RI-EB	3.3	21.6	9.3	900	1000	352	300	1080	170	395	80	2" BSP
CO 3MHI402/RI-EB	1.65	12.0	5.1	900	945	299	300	1080	170	395	80	2" BSP
CO 3MHI403/RI-EB	1.65	12.0	5.1	900	945	299	300	1080	170	395	80	2" BSP
CO 3MHI404/RI-EB	2.25	15.3	6.3	900	990	347	300	1080	170	395	80	2" BSP
CO 3MHI405/RI-EB	3.3	21.6	9.3	900	990	347	300	1080	170	395	80	2" BSP
CO 3MHI406/RI-EB	4.5	27.6	11.4	900	1015	371	300	1080	170	395	80	2" BSP
CO 3MHI802/RI-EB	2.25	15.3	6.0	900	880	323	300	1090	170	402	80	2 1/2" BSP
CO 3MHI803/RI-EB	3.3	20.4	8.4	900	880	323	300	1090	170	402	80	2 1/2" BSP
CO 3MHI804/RI-EB	4.5	29.4	10.5	900	940	383	300	1090	170	402	80	2 1/2" BSP
CO 3MHI805/RI-EB	5.55	-	14.85	900	940	383	300	1090	170	402	80	2 1/2" BSP
CO 3MHI1602/RI-EB	4.5	-	11.4	900	1100	381	300	1120	170	456	80	DN 100*
CO 3MHI1603/RI-EB	5.55	-	14.85	900	1100	381	300	1120	170	456	80	DN 100*
CO 3MHI1604/RI-EB	7.5	-	17.55	900	1150	426	300	1120	180	456	80	DN 100*

*Flanged PN 16



MODEL REF	MAX RATING			DIMENSIONS IN MM								
	P2 Kw	230V Amp	400V Amp	L	P	P1	P2	H	H1	H2	H3	J
CO 2MVI202/RI-EB	0.74	5.2	1.86	600	860	590	300	1350	130	-	80	2" BSP
CO 2MVI203/RI-EB	1.1	7	2.7	600	860	590	300	1350	130	-	80	2" BSP
CO 2MVI204/RI-EB	1.5	9.8	3.4	600	860	590	300	1350	130	-	80	2" BSP
CO 2MVI205/RI-EB	1.5	9.8	3.4	600	860	590	300	1350	130	-	80	2" BSP
CO 2MVI206/RI-EB	2.2	13.2	4.8	600	860	590	300	1350	130	-	80	2" BSP
CO 2MVI207/RI-EB	2.2	13.2	4.8	600	860	590	300	1550	130	-	80	2" BSP
CO 2MVI208/RI-EB	3.0	18.2	6.4	600	860	590	300	1550	130	-	80	2" BSP
CO 2MVI210/RI-EB	3.0	18.2	6.4	600	860	590	300	1550	130	-	80	2" BSP
CO 2MVI402/RI-EB	1.1	7.2	2.7	600	860	590	300	1350	130	-	80	2" BSP
CO 2MVI403/RI-EB	1.5	9.8	3.4	600	860	590	300	1350	130	-	80	2" BSP
CO 2MVI404/RI-EB	2.2	13.2	4.8	600	860	590	300	1350	130	-	80	2" BSP
CO 2MVI405/RI-EB	2.2	13.2	4.8	600	860	590	300	1350	130	-	80	2" BSP
CO 2MVI406/RI-EB	3.0	18.2	6.4	600	860	590	300	1350	130	-	80	2" BSP
CO 2MVI407/RI-EB	3.0	18.2	6.4	600	860	590	300	1550	130	-	80	2" BSP
CO 2MVI408/RI-EB	3.7	-	7.8	600	860	590	300	1550	130	-	80	2" BSP
CO 2MVI410/RI-EB	4.4	-	9.0	600	860	590	300	1550	130	-	80	2" BSP
CO 2MVI802/RI-EB	1.5	9.6	3.4	600	985	695	450	1350	160	-	80	2 1/2" BSP
CO 2MVI803/RI-EB	2.2	13.2	4.8	600	985	695	450	1350	160	-	80	2 1/2" BSP
CO 2MVI804/RI-EB	3.0	18.2	6.4	600	985	695	450	1550	160	-	80	2 1/2" BSP
CO 2MVI805/RI-EB	3.7	-	7.8	600	985	695	450	1550	160	-	80	2 1/2" BSP
CO 2MVI806/RI-EB	4.4	-	9.0	600	985	695	450	1550	160	-	80	2 1/2" BSP
CO 2MVI807/RI-EB	6.0	-	12.0	600	985	695	450	1550	160	-	80	2 1/2" BSP
CO 2MVI808/RI-EB	6.0	-	12.0	600	985	695	450	1550	160	-	80	2 1/2" BSP
CO 2MVI810/RI-EB	7.4	-	14.8	600	985	695	450	1550	160	-	80	2 1/2" BSP
CO 2MVI1602-6/RI-EB	3.0	-	6.4	600	995	710	450	1550	170	-	80	3" BSP
CO 2MVI1603-6/RI-EB	4.4	-	9.0	600	995	710	450	1550	170	-	80	3" BSP
CO 2MVI1604-6/RI-EB	6.0	-	12.0	600	995	710	450	1550	170	-	80	3" BSP
CO 2MVI1605-6/RI-EB	7.4	-	14.8	600	995	710	450	1550	170	-	80	3" BSP
CO 2MVI1606-6/RI-EB	8.0	-	15.8	600	995	710	450	1550	170	-	80	3" BSP
CO 2MVI1607-6/RI-EB	11.0	-	21.6	600	995	710	450	1550	170	-	80	3" BSP
CO 2MVI1608-6/RI-EB	11.0	-	21.6	600	995	710	450	1550	170	-	80	3" BSP
CO 2MVI1609-6/RI-EB	15.0	-	27.6	600	995	710	450	1550	170	-	80	3" BSP
CO 2MVI1610-6/RI-EB	15.0	-	27.6	600	995	710	450	1550	170	-	80	3" BSP
CO 2MVI1611-6/RI-EB	15.0	-	27.6	600	995	710	450	1550	170	-	80	3" BSP

MODEL REF	MAX RATING			DIMENSIONS IN MM								
	P2 Kw	230V Amp	400V Amp	L	P	P1	P2	H	H1	H2	H3	J
CO 3MVI202/RI-EB	1.1	7.8	2.8	900	860	590	300	1350	130	-	80	2" BSP
CO 3MVI203/RI-EB	1.65	10.5	4.1	900	860	590	300	1350	130	-	80	2" BSP
CO 3MVI204/RI-EB	2.25	14.7	5.1	900	860	590	300	1350	130	-	80	2" BSP
CO 3MVI205/RI-EB	2.25	14.7	5.1	900	860	590	300	1350	130	-	80	2" BSP
CO 3MVI206/RI-EB	3.3	19.8	7.2	900	860	590	300	1350	130	-	80	2" BSP
CO 3MVI207/RI-EB	3.3	19.8	7.2	900	860	590	300	1550	130	-	80	2" BSP
CO 3MVI208/RI-EB	4.5	27.3	9.6	900	860	590	300	1550	130	-	80	2" BSP
CO 3MVI210/RI-EB	4.5	27.3	9.6	900	860	590	300	1550	130	-	80	2" BSP
CO 3MVI402/RI-EB	1.65	10.8	4.1	900	860	590	300	1350	130	-	80	2" BSP
CO 3MVI403/RI-EB	2.25	14.7	5.1	900	860	590	300	1350	130	-	80	2" BSP
CO 3MVI404/RI-EB	3.3	19.8	7.2	900	860	590	300	1350	130	-	80	2" BSP
CO 3MVI405/RI-EB	3.3	19.8	7.2	900	860	590	300	1350	130	-	80	2" BSP
CO 3MVI406/RI-EB	4.5	27.3	9.6	900	860	590	300	1350	130	-	80	2" BSP
CO 3MVI407/RI-EB	4.5	27.3	9.6	900	860	590	300	1550	130	-	80	2" BSP
CO 3MVI408/RI-EB	5.55	-	11.7	900	860	590	300	1550	130	-	80	2" BSP
CO 3MVI410/RI-EB	6.6	-	13.5	900	860	590	300	1550	130	-	80	2" BSP
CO 3MVI802/RI-EB	2.25	14.4	5.1	900	985	695	450	1350	160	-	80	2 1/2" BSP
CO 3MVI803/RI-EB	3.3	19.8	7.2	900	985	695	450	1350	160	-	80	2 1/2" BSP
CO 3MVI804/RI-EB	4.5	27.3	9.6	900	985	695	450	1550	160	-	80	2 1/2" BSP
CO 3MVI805/RI-EB	5.55	-	11.7	900	985	695	450	1550	160	-	80	2 1/2" BSP
CO 3MVI806/RI-EB	6.6	-	13.5	900	985	695	450	1550	160	-	80	2 1/2" BSP
CO 3MVI807/RI-EB	9.0	-	18.0	900	985	695	450	1550	160	-	80	2 1/2" BSP
CO 3MVI808/RI-EB	9.0	-	18.0	900	985	695	450	1550	160	-	80	2 1/2" BSP
CO 3MVI810/RI-EB	11.1	-	22.2	900	985	695	450	1550	160	-	80	2 1/2" BSP
CO 3MVI1602-6/RI-EB	3.0	-	6.4	900	995	740	450	1550	170	-	80	DN 100*
CO 3MVI1603-6/RI-EB	6.6	-	13.5	900	995	740	450	1550	170	-	80	DN 100*
CO 3MVI1604-6/RI-EB	9.0	-	18.0	900	995	740	450	1550	170	-	80	DN 100*
CO 3MVI1605-6/RI-EB	11.1	-	22.2	900	995	740	450	1550	170	-	80	DN 100*
CO 3MVI1606-6/RI-EB	12.0	-	23.7	900	995	740	450	1550	170	-	80	DN 100*
CO 3MVI1607-6/RI-EB	16.5	-	32.4	900	995	740	450	1550	170	-	80	DN 100*
CO 3MVI1608-6/RI-EB	16.5	-	32.4	900	995	740	450	1550	170	-	80	DN 100*
CO 3MVI1609-6/RI-EB	22.5	-	41.4	900	995	740	450	1800	170	-	80	DN 100*
CO 3MVI1610-6/RI-EB	22.5	-	41.4	900	995	740	450	1800	170	-	80	DN 100*
CO 3MVI1611-6/RI-EB	22.5	-	41.4	900	995	740	450	1800	170	-	80	DN 100*

*Flanged PN 16

Accessories (to be ordered separately)

Dry-Run Protection:

- Float switch for use in storage tanks.
- Pressure switch for use on mains connections.

Audible Alarm:

- Alarm bell with mute button.

Other Wilo Publications



Subject to change without prior notice. E&OE

