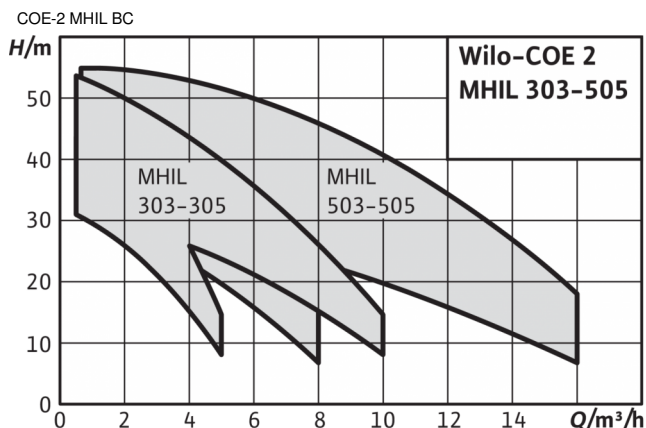


Series description: Wilo-COE-2 MHIL BC



Construction

Ready for connection, non self-priming water-supply unit with 2 parallel-switched, horizontally arranged high-pressure multistage centrifugal pumps with fixed speed in glanded design of the MHIL series, equipped with BC switchgear.

Application

- Fully automatic water supply and pressure boosting in residential buildings and small commercial locations.
- Pumping of drinking water and clean process water and other water mixtures that do not chemically or mechanically attack the materials used and do not contain any abrasive or long-fibre constituents.

Equipment/function

- Two pumps of the MHIL 3 to MHIL 5 series per system with an IE2 standard motor for 3~ motors and IE1 for 1~ motors
- Automatic pump control with BC switchgear specially for the pump management with fixed speed
- Components that come in contact with the fluid are corrosion resistant.
- Base frame made of galvanised steel
- Pipework made of galvanised steel
- Stop valve on the suction and pressure side of each pump
- Non-return valve on the pressure side of each pump
- Pressure switch on the pressure side
- Pressure gauge on the pressure side
- Optional low-water cut-out switchgear on the suction side

Scope of delivery

- Factory-mounted, ready for connection pressure boosting system checked for functionality and impermeability
- Packaging
- Installation and operating instructions

Type key

e.g.:	Wilo-COE-2MHIL305-DM/BC
COE	Compact pressure boosting system
2	Number of pumps
MHIL	Pump series
3	Rated volume flow [m³/h]
05	Number of pump stages
DM	3~ (EM: 1~)
BC	Switchgear

Technical data

- Mains connection 3~400 V, 50 Hz or 1~230 V, 50 Hz
- IE2 standard motor for 3~ from 0.75 kW (for 1~ : IE1 standard motor)
- Fuse A, AC 3 on mains side according to motor power and EVU regulations
- Max. fluid temperature of +50 °C (+70 °C optional)
- Operating pressure 10 bar
- Inlet pressure 6 bar
- R2" nominal connection diameter
- Protection class: IP 54

Materials

<TEXT>For the MHIL 3 and MHIL 5 series:<P level="1">Impellers, diffusers, stage housing made of stainless steel 1.4301</P>

<P level="1">Pump housing made of cataphoretic-coated grey cast iron EN- GJL 250</P>

<P level="1">Shaft of stainless steel 1.4028</P>

<P level="1">O-ring seals made of EPDM</P>More information on the pumps can be found in the "Pressure boosting" chapter.</TEXT>

Your advantages

- System with high-pressure multistage centrifugal pump of the MHIL series made of grey cast iron and stainless steel
- Hydraulics made of stainless steel in combination with IE2 standard motors for 3~ motors from 0.75 kW and IE1 motor for 1~ motors
- Two horizontally aligned high-pressure multistage centrifugal pumps of the MHIL series switched in parallel, for flow rates of up to 16 m³/h and delivery heads of up to 55 m
- BC switchgear: operationally necessary functions are ensured by the electromechanical technology used. The switchgear is accommodated in a plastic cabinet. Starting/stopping the pumps with a pressure switch; low-water cut-out switchgear, motor protection, pump cycling, stop delay of the pumps. An LED display provides information on alarms and pump operation and provides switches for selecting the operating mode

Series description: Wilo-COE-2 MHIL BC

Description/construction

- Base frame: made of galvanised steel, to be fastened to a concrete foundation
- Pipework: Complete pipework made of galvanised steel, suitable for the connection of all standard pipe materials; the pipework is designed according to the hydraulic output of the pressure boosting system.
- Pumps: Two pumps of the MHIL 3 to MHIL 5 series switched in parallel; all pump components that come in contact with the fluid are made of stainless steel/cataphoretic-coated grey cast iron. KTW/WRAS approval for all components that come in contact with the fluid. More information on the pumps can be found in the "Pressure boosting" chapter.
- Valves: Each pump is equipped with an ACS-tested ball shut-off valve on the suction and pressure side and with a KTW-tested non-return valve on the pressure side.
- Diaphragm pressure vessel: A diaphragm pressure vessel is to be designed and installed according to the installation situation.
- Pressure sensor: A pressure sensor is installed and connected to the BC switchgear on the pressure side of each pump.
- Pressure indication: On the pressure gauge on the pressure side
- Switchgear: The system is standard-equipped with a BC switchgear.



Product list: Wilo-COE-2 MHIL BC

Product description	Mains connection	Maximum operating pressure <i>PN</i>	Number of standby pumps	Gross weight, approx. <i>m</i>	Article number
COE-2 MHIL BC 303-EM/BC	1~230 V, 50 Hz	10 bar	0	73.0 kg	4164933
COE-2 MHIL BC 304-EM/BC	1~230 V, 50 Hz	10 bar	0	75.0 kg	4164934
COE-2 MHIL BC 305-EM/BC	1~230 V, 50 Hz	10 bar	0	83.0 kg	4164935
COE-2 MHIL BC 503-EM/BC	1~230 V, 50 Hz	10 bar	0	73.0 kg	4164936
COE-2 MHIL BC 504-EM/BC	1~230 V, 50 Hz	10 bar	0	85.0 kg	4164937
COE-2 MHIL BC 505-EM/BC	1~230 V, 50 Hz	10 bar	0	83.0 kg	4164938
COE-2 MHIL BC 304/BC	3~400 V, 50 Hz	10 bar	0	75.0 kg	4164939
COE-2 MHIL BC 305/BC	3~400 V, 50 Hz	10 bar	0	86.0 kg	4164940
COE-2 MHIL BC 503/BC	3~400 V, 50 Hz	10 bar	0	73.0 kg	4164941
COE-2 MHIL BC 504/BC	3~400 V, 50 Hz	10 bar	0	85.0 kg	4164942
COE-2 MHIL BC 505/BC	3~400 V, 50 Hz	10 bar	0	86.0 kg	4164943



Data sheet: COE-2 MHIL BC 303-EM/BC

Approved field of application

Max. fluid temperature T	55 °C
Max. ambient temperature T	40 °C
Max. operating pressure p	10 bar
Pipe connection on the pressure side DN_d	G 2
Pipe connection on the suction side DN_s	G 2
Number of standby pumps	0
Number of operating pumps	2

Materials

Pump housing	5.1301, EN-GJL-250
Shaft	1.4028, X30Cr13
Gasket material	EPDM
Mechanical seal	Q1BE3GG

Motor data

Mains connection	1~230 V, 50 Hz
Voltage tolerance	$\pm 10\%$
Insulation class	F
Protection class	IP54
Rated power P_2	0.55 kW
Rated current I_N	4.10 A
Motor efficiency η_M 50%	59.2
Motor efficiency η_M 75%	64.4
Motor efficiency η_M 100%	63.9

Information for order placements

Net weight, approx. m	48 kg
Article number	4164933
Brand	Wilo



Data sheet: COE-2 MHIL BC 304-EM/BC

Approved field of application

Max. fluid temperature T	55 °C
Max. ambient temperature T	40 °C
Max. operating pressure p	10 bar
Pipe connection on the pressure side DN_d	G 2
Pipe connection on the suction side DN_s	G 2
Number of standby pumps	0
Number of operating pumps	2

Materials

Pump housing	5.1301, EN-GJL-250
Shaft	1.4028, X30Cr13
Gasket material	EPDM
Mechanical seal	Q1BE3GG

Motor data

Mains connection	1~230 V, 50 Hz
Voltage tolerance	±10 %
Insulation class	F
Protection class	IP54
Rated power P_2	0.55 kW
Rated current I_N	4.10 A
Motor efficiency η_M 50%	59.2
Motor efficiency η_M 75%	64.4
Motor efficiency η_M 100%	63.9

Information for order placements

Net weight, approx. m	50 kg
Article number	4164934
Brand	Wilo



Data sheet: COE-2 MHIL BC 305-EM/BC

Approved field of application

Max. fluid temperature T	55 °C
Max. ambient temperature T	40 °C
Max. operating pressure p	10 bar
Pipe connection on the pressure side <i>DNd</i>	G 2
Pipe connection on the suction side <i>DNs</i>	G 2
Number of standby pumps	0
Number of operating pumps	2

Materials

Pump housing	5.1301, EN-GJL-250
Shaft	1.4028, X30Cr13
Gasket material	EPDM
Mechanical seal	Q1BE3GG

Motor data

Mains connection	1~230 V, 50 Hz
Voltage tolerance	±10 %
Insulation class	F
Protection class	IP54
Rated power P_2	0.75 kW
Rated current I_N	5.10 A
Motor efficiency η_M 50%	57.7
Motor efficiency η_M 75%	62.8
Motor efficiency η_M 100%	62.3

Information for order placements

Net weight, approx. m	58 kg
Article number	4164935
Brand	Wilo



Data sheet: COE-2 MHIL BC 503-EM/BC

Approved field of application

Max. fluid temperature T	55 °C
Max. ambient temperature T	40 °C
Max. operating pressure p	10 bar
Pipe connection on the pressure side DN_d	G 2
Pipe connection on the suction side DN_s	G 2
Number of standby pumps	0
Number of operating pumps	2

Materials

Pump housing	5.1301, EN-GJL-250
Shaft	1.4028, X30Cr13
Gasket material	EPDM
Mechanical seal	Q1BE3GG

Motor data

Mains connection	1~230 V, 50 Hz
Voltage tolerance	±10 %
Insulation class	F
Protection class	IP54
Rated power P_2	0.55 kW
Rated current I_N	4.10 A
Motor efficiency η_M 50%	59.2
Motor efficiency η_M 75%	64.4
Motor efficiency η_M 100%	63.9

Information for order placements

Net weight, approx. m	48 kg
Article number	4164936
Brand	Wilo



Data sheet: COE-2 MHIL BC 504-EM/BC

Approved field of application

Max. fluid temperature T	55 °C
Max. ambient temperature T	40 °C
Max. operating pressure p	10 bar
Pipe connection on the pressure side DN_d	G 2
Pipe connection on the suction side DN_s	G 2
Number of standby pumps	0
Number of operating pumps	2

Materials

Pump housing	5.1301, EN-GJL-250
Shaft	1.4028, X30Cr13
Gasket material	EPDM
Mechanical seal	Q1BE3GG

Motor data

Mains connection	1~230 V, 50 Hz
Voltage tolerance	±10 %
Insulation class	F
Protection class	IP54
Rated power P_2	0.75 kW
Rated current I_N	5.10 A
Motor efficiency η_M 50%	57.7
Motor efficiency η_M 75%	62.8
Motor efficiency η_M 100%	62.3

Information for order placements

Net weight, approx. m	60 kg
Article number	4164937
Brand	Wilo



Data sheet: COE-2 MHIL BC 505-EM/BC

Approved field of application

Max. fluid temperature T	55 °C
Max. ambient temperature T	40 °C
Max. operating pressure p	10 bar
Pipe connection on the pressure side DN_d	G 2
Pipe connection on the suction side DN_s	G 2
Number of standby pumps	0
Number of operating pumps	2

Materials

Pump housing	5.1301, EN-GJL-250
Shaft	1.4028, X30Cr13
Gasket material	EPDM
Mechanical seal	Q1BE3GG

Motor data

Mains connection	1~230 V, 50 Hz
Voltage tolerance	±10 %
Insulation class	F
Protection class	IP54
Rated power P_2	1.10 kW
Rated current I_N	7.20 A
Motor efficiency η_M 50%	56.9
Motor efficiency η_M 75%	64.3
Motor efficiency η_M 100%	67.2

Information for order placements

Net weight, approx. m	58 kg
Article number	4164938
Brand	Wilo

Data sheet: COE-2 MHIL BC 304/BC

Approved field of application

Max. fluid temperature T	55 °C
Max. ambient temperature T	40 °C
Max. operating pressure p	10 bar
Pipe connection on the pressure side DN_d	G 2
Pipe connection on the suction side DN_s	G 2
Number of standby pumps	0
Number of operating pumps	2

Materials

Pump housing	5.1301, EN-GJL-250
Shaft	1.4028, X30Cr13
Gasket material	EPDM
Mechanical seal	Q1BE3GG

Motor data

Mains connection	3~400 V, 50 Hz
Voltage tolerance	±10 %
Insulation class	F
Protection class	IP54
Rated power P_2	0.55 kW
Rated current I_N	1.56 A

Information for order placements

Net weight, approx. m	50 kg
Article number	4164939
Brand	Wilo



Data sheet: COE-2 MHIL BC 305/BC

Approved field of application

Max. fluid temperature T	55 °C
Max. ambient temperature T	40 °C
Max. operating pressure p	10 bar
Pipe connection on the pressure side DN_d	G 2
Pipe connection on the suction side DN_s	G 2
Number of standby pumps	0
Number of operating pumps	2

Materials

Pump housing	5.1301, EN-GJL-250
Shaft	1.4301, X5CrNi18-10
Gasket material	EPDM
Mechanical seal	Q1BE3GG

Motor data

Mains connection	3~400 V, 50 Hz
Voltage tolerance	±10 %
Insulation class	F
Protection class	IP54
Rated power P_2	0.75 kW
Rated current I_N	1.95 A
Motor efficiency η_M 50%	79.5
Motor efficiency η_M 75%	80.7
Motor efficiency η_M 100%	80.7

Information for order placements

Net weight, approx. m	61 kg
Article number	4164940
Brand	Wilo

Data sheet: COE-2 MHIL BC 503/BC

Approved field of application

Max. fluid temperature T	55 °C
Max. ambient temperature T	40 °C
Max. operating pressure p	10 bar
Pipe connection on the pressure side DN_d	G 2
Pipe connection on the suction side DN_s	G 2
Number of standby pumps	0
Number of operating pumps	2

Materials

Pump housing	5.1301, EN-GJL-250
Shaft	1.4028, X30Cr13
Gasket material	EPDM
Mechanical seal	Q1BE3GG

Motor data

Mains connection	3~400 V, 50 Hz
Voltage tolerance	±10 %
Insulation class	F
Protection class	IP54
Rated power P_2	0.55 kW
Rated current I_N	1.56 A

Information for order placements

Net weight, approx. m	48 kg
Article number	4164941
Brand	Wilo

Data sheet: COE-2 MHIL BC 504/BC

Approved field of application

Max. fluid temperature T	55 °C
Max. ambient temperature T	40 °C
Max. operating pressure p	10 bar
Pipe connection on the pressure side DN_d	G 2
Pipe connection on the suction side DN_s	G 2
Number of standby pumps	0
Number of operating pumps	2

Materials

Pump housing	5.1301, EN-GJL-250
Shaft	1.4301, X5CrNi18-10
Gasket material	EPDM
Mechanical seal	Q1BE3GG

Motor data

Mains connection	3~400 V, 50 Hz
Voltage tolerance	$\pm 10\%$
Insulation class	F
Protection class	IP54
Rated power P_2	0.75 kW
Rated current I_N	1.95 A
Motor efficiency η_M 50%	79.5
Motor efficiency η_M 75%	80.7
Motor efficiency η_M 100%	80.7

Information for order placements

Net weight, approx. m	60 kg
Article number	4164942
Brand	Wilo



Data sheet: COE-2 MHIL BC 505/BC

Approved field of application

Max. fluid temperature T	55 °C
Max. ambient temperature T	40 °C
Max. operating pressure p	10 bar
Pipe connection on the pressure side DNd	G 2
Pipe connection on the suction side DNs	G 2
Number of standby pumps	0
Number of operating pumps	2

Materials

Pump housing	5.1301, EN-GJL-250
Shaft	1.4301, X5CrNi18-10
Gasket material	EPDM
Mechanical seal	Q1BE3GG

Motor data

Mains connection	3~400 V, 50 Hz
Voltage tolerance	±10 %
Insulation class	F
Protection class	IP54
Rated power P_2	1.10 kW
Rated current I_N	2.80 A
Motor efficiency η_M 50%	81.5
Motor efficiency η_M 75%	82.7
Motor efficiency η_M 100%	82.7

Information for order placements

Net weight, approx. m	61 kg
Article number	4164943
Brand	Wilo