

Pressure boosting

Single pumps

Series description Wilo-Economy MHI



Design

Non-self-priming multistage pump

Type key

Example: **MHI 205N-1/E/3-460-60-2**

MHI	Multistage horizontal high-pressure centrifugal pump
2	Volume flow in m ³ /h
05	Number of impellers
N	IE2 motor
1	Material 1 = 1.4301 (AISI 304) 2 = 1.4404 (AISI 316L)
E	Type of gasket E = EPDM V = FKM (Viton)
3	1 = 1~ (single-phase AC) 3 = 3~ (three-phase AC)
460	Connection voltage in V
60	Frequency in Hz
2	Number of poles

Application

- Water supply and pressure boosting
- Commerce and industry
- Cooling water circulation systems
- Washing and sprinkling systems
- Stainless steel pump in monobloc design
- Threaded connection
- Single-phase or three-phase motor
- Single-phase AC motor with integrated thermal motor protection

Special features/product advantages

- IEC three-phase AC motor (460 V ≥ 0.75 kW: IE2)
- All parts that come in contact with the fluid are made of stainless steel 1.4301 (AISI 304) or 1.4404 (AISI 316 L)
- Compact design
- All relevant components are KTW and WRAS certified

Technical data

- Mains connection 1~ 220 V (±10 %), 60 Hz
- Mains connection 3~ 220 V (±10 %), 60 Hz (Δ), 380 V (±10 %), 60 Hz (Y) or optionally 265 V (±10 %), 60 Hz (Δ), 460 V (±10 %), 60 Hz (Y)
- Fluid temperature -15 to +110 °C
- Max. operating pressure 10 bar
- Max. inlet pressure 6 bar
- Protection class IP 54
- Nominal diameters of pipe connections Rp 1, Rp 1 ¼ or Rp 1 ½, depending on type

Materials

- Impellers, stage chambers and pump housing stainless steel 1.4301/1.4404
- Shaft stainless steel 1.4404
- Gasket EPDM (EP 851)/FKM (Viton)
- Mechanical seal B-carbon/tungsten carbide
- Bearing tungsten carbide
- Pump base aluminium

Scope of delivery

- Pump
- Installation and operating instructions

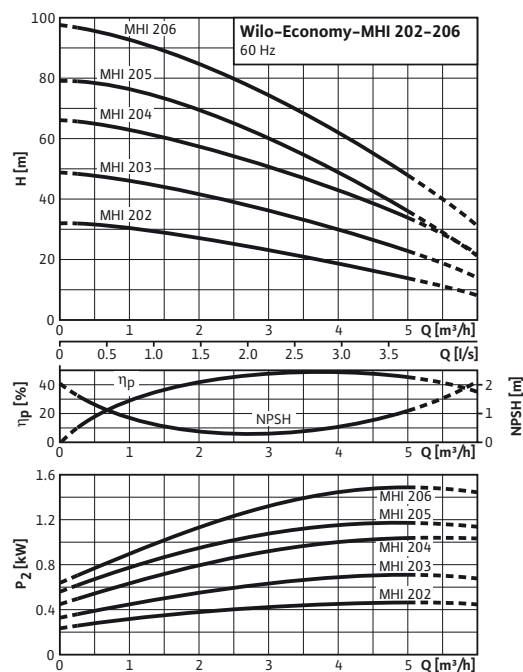
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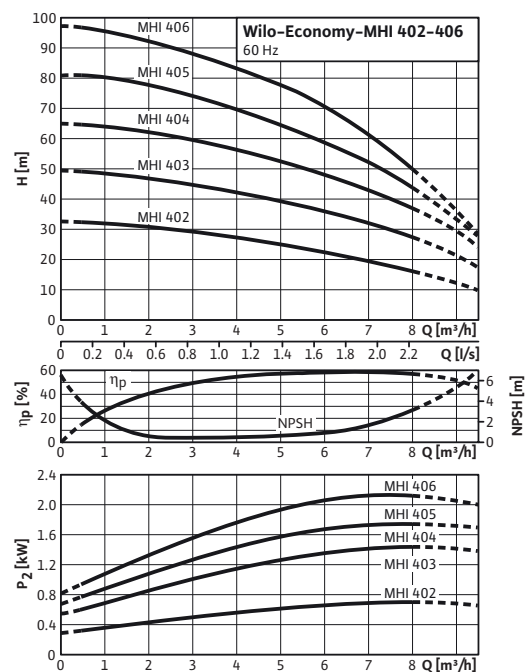


Pump curves, electrical connection Wilo-Economy MHI

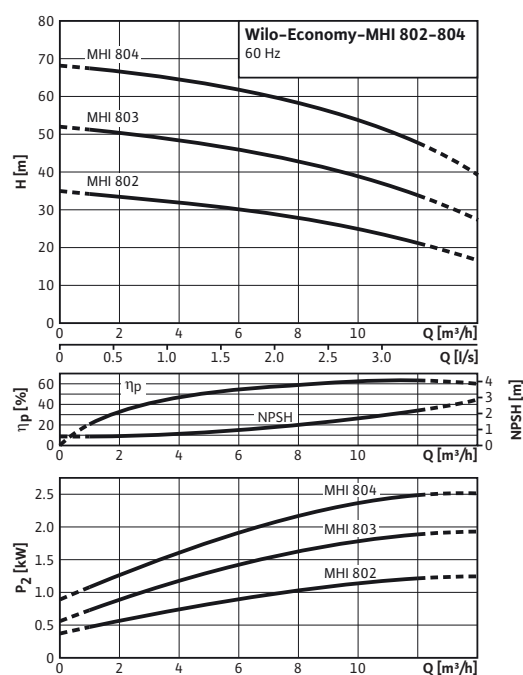
Wilo-Economy MHI 202 – 206



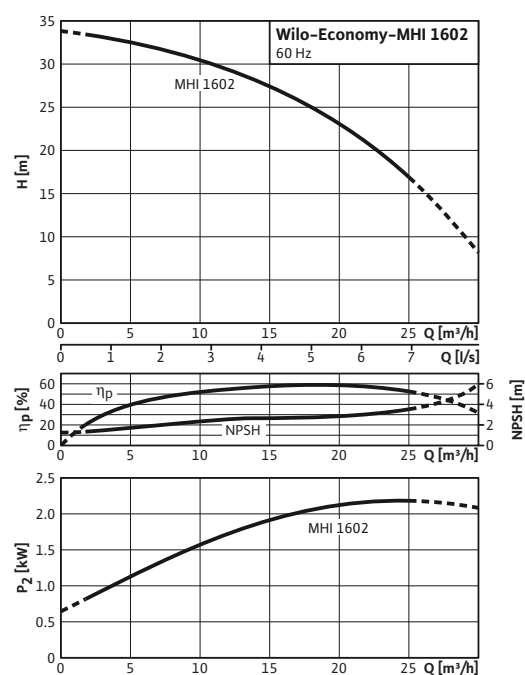
Wilo-Economy MHI 402 – 406



Wilo-Economy MHI 802 – 804



Wilo-Economy MHI 1602



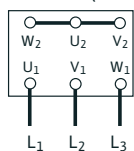
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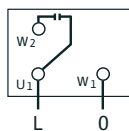
Terminal diagram, motor data Wilo-Economy MHI

Electrical connection

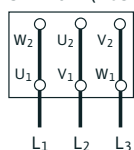
3~380 V (460 V) Y



1~220 V



3~220 V (265 V) Δ



Motor data 1~

Economy MHI	Mains voltage	Nominal motor power	Nominal current 1~220 V, 60 Hz
	–	P_2	I
	–	kW	A
MHI 202	1-220-60	0.55	3.70
MHI 203	1-220-60	0.75	5.20
MHI 204	1-220-60	1.10	8.40
MHI 205	1-220-60	1.10	8.40
MHI 206	1-220-60	1.50	10.80
MHI 402	1-220-60	0.75	5.20
MHI 403	1-220-60	1.10	8.40
MHI 404	1-220-60	1.50	10.80
MHI 802	1-220-60	1.50	10.80

Motor data 3~

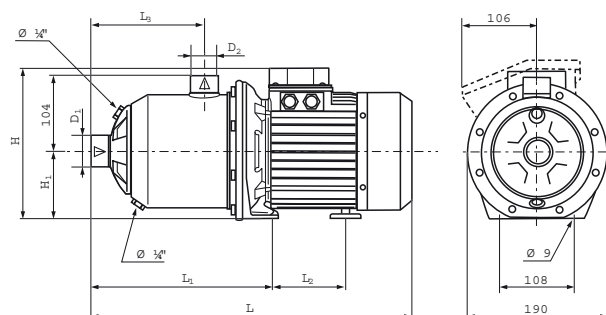
Economy MHI	Mains voltage	Nominal motor power	Nominal current 3~220 V, 60 Hz	Nominal current 3~380 V, 60 Hz	Nominal current 3~265 V, 60 Hz	Nominal current 3~460 V, 60 Hz	Motor efficiency		
							η_m 50%	η_m 75%	η_m 100%
							%		
MHI 202	3-220-380-60	0.55	–	–	–	–	–	–	–
MHI 203N	3-265-460-60	0.75	3.4	1.96	3.4	1.96	74.0	77.0	79.0
MHI 204N	3-265-460-60	1.10	4.8	2.80	4.8	2.80	80.0	82.0	82.5
MHI 205N	3-265-460-60	1.10	4.8	2.80	4.8	2.80	80.0	82.0	82.5
MHI 206N	3-265-460-60	1.50	6.8	3.90	6.8	3.90	79.0	82.0	84.0
MHI 402N	3-265-460-60	0.75	3.4	1.96	3.4	1.96	74.0	77.0	79.0
MHI 403N	3-265-460-60	1.10	4.8	2.80	4.8	2.80	80.0	82.0	82.5
MHI 404N	3-265-460-60	1.50	6.8	3.90	6.8	3.90	79.0	82.0	84.0
MHI 405N	3-265-460-60	2.20	9.2	5.30	9.2	5.30	82.0	84.0	85.5
MHI 406N	3-265-460-60	2.20	9.2	5.30	9.2	5.30	82.0	84.0	85.5
MHI 802N	3-265-460-60	1.50	6.8	3.90	6.8	3.90	79.0	82.0	84.0
MHI 803N	3-265-460-60	2.20	9.2	5.30	9.2	5.30	82.0	84.0	85.5
MHI 804N	3-265-460-60	2.20	9.2	5.30	9.2	5.30	82.0	84.0	85.5
MHI 1602N	3-265-460-60	2.20	9.2	5.30	9.2	5.30	82.0	84.0	85.5

Motor efficiency based on 265 V, 60 Hz (IE2)

Dimensions, weights Wilo-Economy MHI

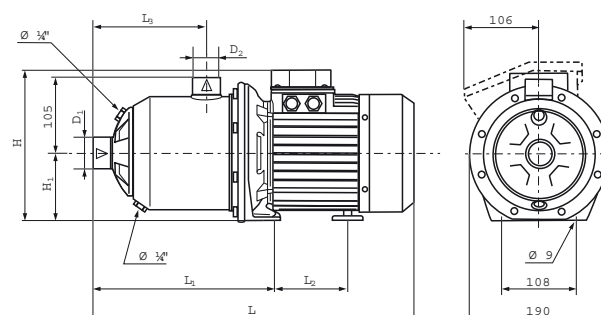
Dimension drawing

Wilo-Economy MHI 202 – 804



Dimension drawing

Wilo-Economy MHI 1602



Dimensions, weights 1~

Economy MHI	Dimensions											Weight approx.
	Ø D1	Ø D2	L	L1	L2	L3	L4	L5	H2	H	H1	m
	Rp		mm									kg
MHI 202	1	1	375	204	95	109.5	51	106	104	216	90	9.8
MHI 203	1	1	375	204	95	109.5	51	106	104	216	90	10.8
MHI 204	1	1	448	252	103.5	157.5	51	106	104	224	90	12.8
MHI 205	1	1	448	252	103.5	157.5	51	106	104	224	90	13.3
MHI 206	1	1	472	276	103.5	181.5	51	106	104	224	90	14.5
MHI 402	1¼	1	375	204	95	109.5	51	106	104	216	90	10.8
MHI 403	1¼	1	400	204	103.5	109.5	51	106	104	224	90	12.9
MHI 404	1¼	1	448	252	103.5	157.5	51	106	104	224	90	15
MHI 802	1½	1¼	412	216	103.5	121.5	51	106	104	224	90	18.6

Dimensions, weights 3~

Economy MHI	Dimensions											Weight approx.
	Ø D1	Ø D2	L	L1	L2	L3	L4	L5	H2	H	H1	m
	Rp		mm									kg
MHI 202	1	1	375	204	95	109.5	51		104	192	90	8.9
MHI 203N	1	1	409	204	110	109.5	51	52	104	219	90	12.6
MHI 204N	1	1	457	252	110	157.5	51	52	104	219	90	12.8
MHI 205N	1	1	457	252	110	157.5	51	52	104	219	90	13.8
MHI 206N	1	1	523	276	148	181.5	51	52	104	240	90	19.1
MHI 402N	1¼	1	409	204	110	109.5	51	52	104	219	90	12.6
MHI 403N	1¼	1	409	204	110	109.5	51	52	104	219	90	12.9
MHI 404N	1¼	1	499	252	148	157.5	51	52	104	240	90	17.4
MHI 405N	1¼	1	499	252	148	157.5	51	52	104	240	90	18.5
MHI 406N	1¼	1	523	276	148	181.5	51	52	104	240	90	23.2
MHI 802N	1½	1¼	463	216	148	121.5	51	52	104	240	90	16.7
MHI 803N	1½	1¼	463	216	148	121.5	51	52	104	240	90	17.5
MHI 804N	1½	1¼	523	276	148	181.5	51	52	104	240	90	24
MHI 1602N	2	1½	482	236	148	138	55	52	105	240	90	23.7