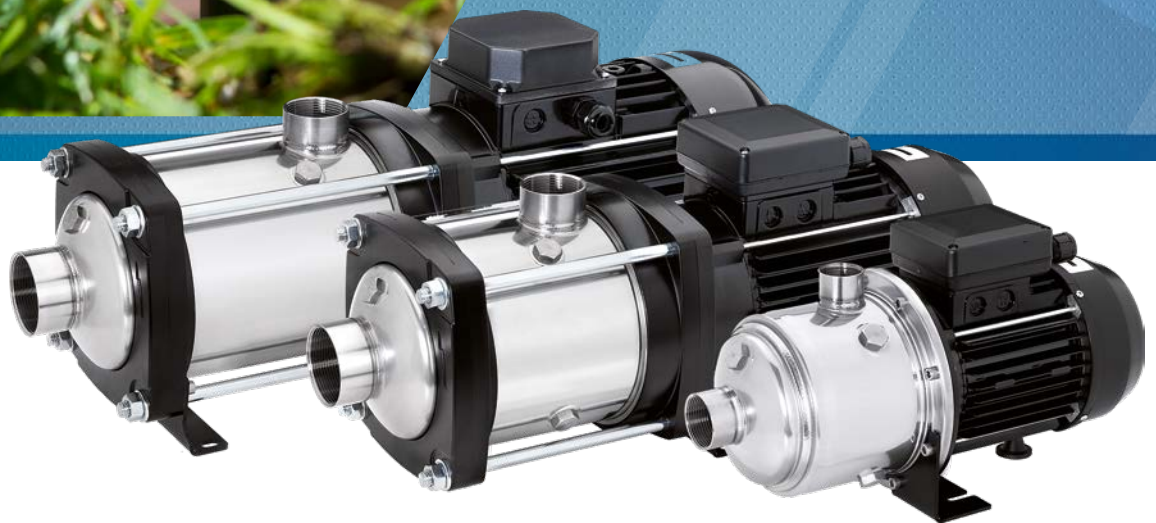




MH-MHsp SERIES 50 Hz

HORIZONTAL MULTISTAGE AND SELF-PRIMING ELECTRIC PUMPS



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NOTE: Franklin Electric S.r.l. reserves the right to amend specification without prior notice
 For the most up-to-date product information, visit franklinwater.eu.



MH SERIES



MHsp SERIES

STAINLESS STEEL HORIZONTAL MULTISTAGE (MH) AND SELF-PRIMING (MHsp) ELECTRIC PUMPS

APPLICATIONS

- Small domestic and industrial systems / Domestic water supply
- Water distribution / pressure boosting
- Irrigation / Gardening / Sprinklers / Rainwater recovery
- Industrial plants / Wash down unit
- Cooling and chilling / Heating and conditioning / Air conditioning systems
- Pumping of clear non-loaded fluids
- Other various installations

FEATURES

- Compact close-coupled design, robust and corrosion resistant
- Superior efficiency and performance
- WRAS and ACS approved
- Flexible application base plate (only for MH)
- Floating neck ring in PPS
- Heavy duty oversize motor shaft
- Impellers and diffusers are made of stainless steel
- Easy maintenance
- Mechanical seal Type E0 = Carbon graphite / Ceramic alumina / EPDM: MH 3-5-9, MHsp 3-5
- Mechanical seal Type E1 = Carbon graphite / Silicon carbide / EPDM: MH 15-20

PUMP SPECIFICATIONS

- Flow: up to 29 m³/h (MH), up to 8 m³/h (MHsp)
- Head: up to 104 m (MH and MHsp)
- Connections: Rp threaded for inlet and outlet
- Maximum working pressure 10 Bar
- Maximum allowable amount of sand 50 g/m³ (MH)
- Maximum ambient temperature 40 °C
- Liquid temperature range (MH):
 - Minimum: from -15 °C to -10 °C according to gasket material
 - Maximum: +90 °C for domestic use (uses covered by EN standard 60335-2-41);
+110 °C only for industrial use (uses other than those covered by EN standard 60335-2-41)
- Liquid temperature range (MHsp): from 0 °C up to 35 °C
- The hydraulic characteristics are guaranteed, according to ISO standard 9906:2012, grade 3B

MOTOR SPECIFICATIONS

- Single-phase
- Three-phase motor efficiency class IE3
- Asynchronous, TEFC (Totally Enclosed, Fan-Cooled)
- 2 pole
- IP55 protection motor, Insulation class F
- Standard voltage:
 - Single-phase: 220-240 V ± 5 % (thermal protection built into the motor)
 - Three-phase: 220-240 V / 380-415 V ±5 % up to 3 kW (thermal protection to be provided into the starter panel by the installer)
380-415 V / 660-690 V ±5 % from 4 kW (thermal protection to be provided into the starter panel by the installer)

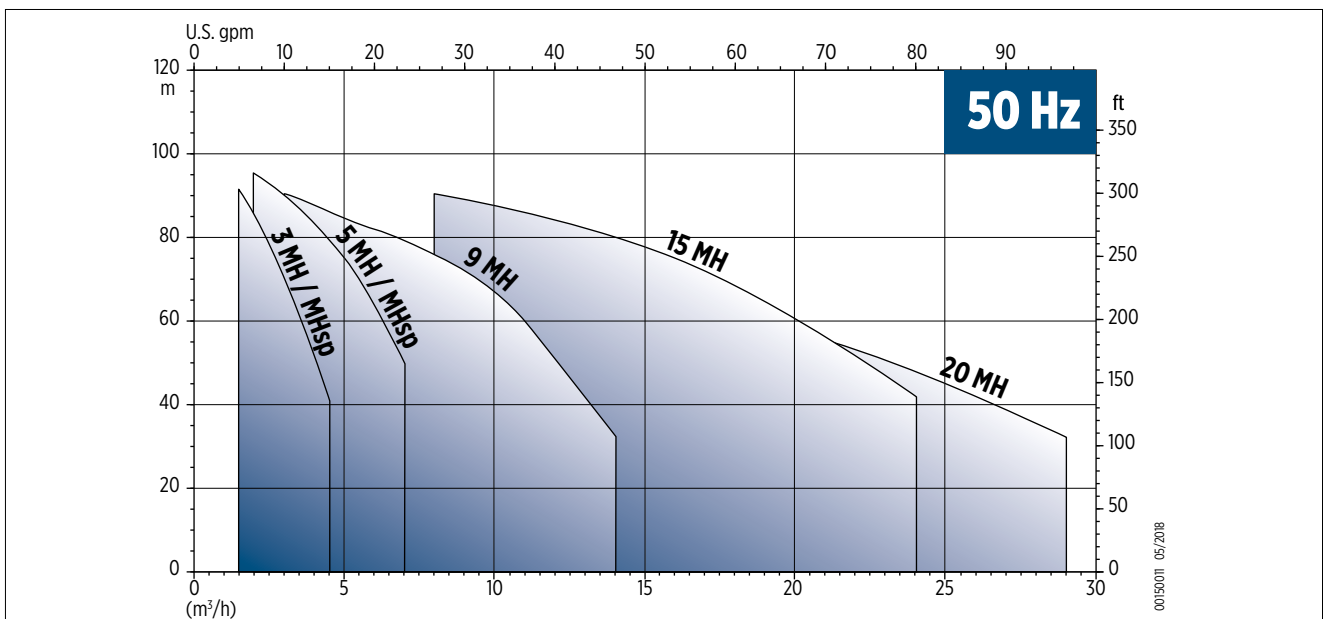


- Frequency of starts:
 - Max. 60 starts/hour for motor power up to 3 kW (with min. 1 minute resting time)
 - Max. 30 starts/hour for motor power from 4 kW (with min. 2 minute resting time)

AVAILABLE ON REQUEST

- Special mechanical seal (MH)
- Suction/discharge nozzles NPT

FAMILY CURVES



PUMP IDENTIFICATION CODE

15 3 P - 6 3 E2 IE3

- 15: Nominal flow rate in: m³/h (50 Hz) / gpm (60 Hz)
- 3: Type of connection: "B" (BSP), "P" (NPT)
- P: Type of mechanical seal: "Empty" (Std. vers.)
- 6: Frequency: "5" (50 Hz); "6" (60 Hz)
- 3: Type of mechanical seal: "Empty" (Std. vers.)
- E2: Motor efficiency class
- IE3: Motor efficiency class

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HYDRAULIC PERFORMANCE AT 50 HZ

3-5-9-15-20 MH

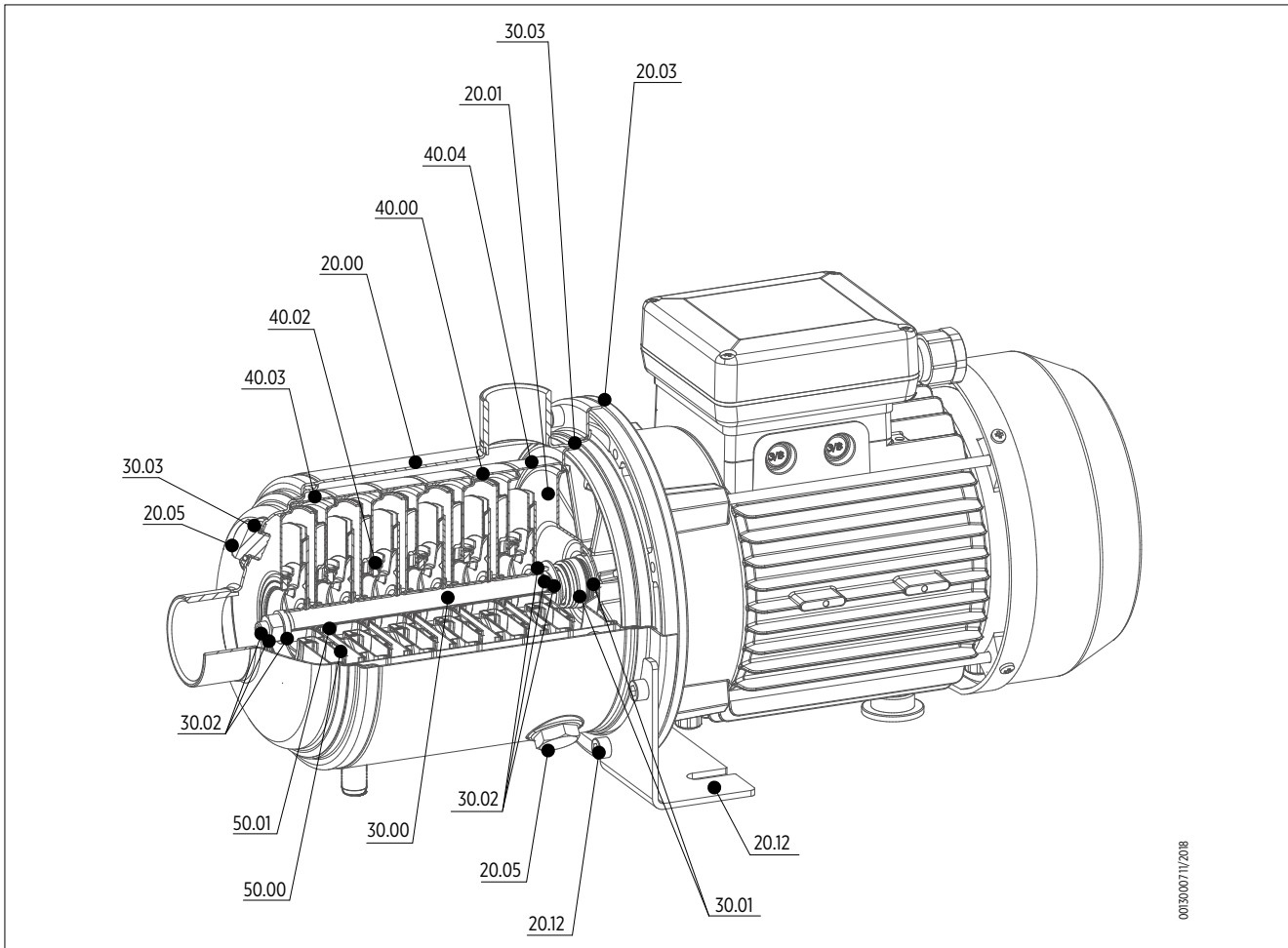
Model	No. stages	Q = DELIVERY																								
		l/min 0	25	33	42	50	58	67	75	83	92	100	117	133	150	167	183	233	267	300	333	367	417	467	483	
		m ³ /h 0	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	7	8	9	10	11	14	16	18	20	22	25	28	29	
		US GMP 0																								
		H = TOTAL HEAD OF WATER COLUMN [m]																								
3 MH	2	22.8	21.0	19.8	18.3	16.6	14.5	12.6	10.2																	
	3	33.8	30.9	29.0	26.7	24.1	21.1	18.1	14.6																	
	4	44.6	40.4	37.8	34.7	31.1	27.1	23.2	18.5																	
	5	55.1	49.4	46.1	42.2	37.7	32.7	27.7	21.9																	
	6	66.4	59.8	55.9	51.2	45.9	39.9	33.9	26.9																	
	7	76.9	68.8	64.1	58.5	52.2	45.2	38.3	30.0																	
	8	89.2	81.1	76.1	69.9	62.9	54.9	47.0	37.6																	
	9	99.9	90.5	84.7	77.8	69.8	60.8	51.9	41.3																	
	5 MH	2	23.5		21.7	21.1	20.5	19.9	19.2	18.3	17.4	16.2	15.0	11.8												
3		34.8		31.9	30.9	30.0	28.9	27.8	26.5	24.9	23.2	21.3	16.5													
4		46.2		42.4	41.1	39.9	38.5	37.0	35.2	33.2	30.9	28.4	21.9													
5		57.3		52.1	50.4	48.8	47.0	45.0	42.7	40.1	37.2	34.0	25.8													
6		69.5		64.0	62.1	60.3	58.3	56.0	53.4	50.4	47.0	43.2	33.6													
7		80.7		73.9	71.6	69.5	67.1	64.3	61.3	57.7	53.7	49.2	37.9													
8		93.9		87.1	84.8	82.6	80.1	77.1	73.8	70.0	65.5	60.6	47.9													
9		105.4		97.5	94.9	92.3	89.5	86.1	82.4	78.0	72.9	67.4	53.0													
9 MH		2	23.7				22.0	21.7	21.3	20.8	20.4	20.0	19.7	18.9	18.1	17.0	15.6	13.8	6.9							
	3	35.3				32.7	32.2	31.5	30.8	30.2	29.6	29.1	27.9	26.6	25.0	22.8	20.1	9.7								
	4	47.4				44.2	43.6	42.8	41.9	41.0	40.3	39.7	38.2	36.5	34.5	31.7	28.1	14.4								
	5	60.1				56.6	55.9	55.1	54.0	53.0	52.2	51.4	49.7	47.8	45.4	42.1	37.7	20.7								
	6	71.8				67.4	66.6	65.5	64.2	63.0	62.0	61.0	58.9	56.5	53.6	49.5	44.3	23.7								
	7	84.3				79.4	78.5	77.3	75.8	74.4	73.3	72.2	69.9	67.1	63.8	59.2	53.1	29.3								
	8	96.0				90.3	89.2	87.8	86.1	84.5	83.1	81.9	79.2	76.0	72.2	66.8	59.8	32.5								
	15 MH	2	28.5													25.0	24.5	24.0	23.5	21.7	20.1	18.2	15.9	13.2	8.8	
3		43.3													38.3	37.6	36.9	36.1	33.5	31.2	28.4	25.0	21.0	14.3		
4		57.9													51.4	50.4	49.5	48.5	45.0	42.0	38.3	33.8	28.4	19.5		
5		72.6													64.5	63.4	62.2	61.0	56.7	53.0	48.4	42.7	36.1	24.8		
6		87.5													78.2	76.9	75.5	74.1	69.0	64.7	59.2	52.5	44.6	31.0		
7		101.9													90.8	89.2	87.5	85.8	79.8	74.7	68.3	60.5	51.2	35.4		
20 MH		2	31.2													28.8	28.4	27.9	27.5	26.5	25.6	24.6	23.1	21.0	17.2	12.7
	3	46.8													43.2	42.5	41.9	41.3	39.8	38.4	36.9	34.6	31.5	25.7	19.0	16.6
	4	62.5													57.8	56.8	56.0	55.2	53.2	51.3	49.4	46.3	42.2	34.5	25.6	22.4
	5	78.5													72.8	71.7	70.6	69.7	67.3	64.9	62.6	58.9	53.9	44.3	33.2	29.2

3-5 MHsp

Phase	Model	No. stages	Q = DELIVERY																						
			l/min 0	25	33	42	50	58	67	75	83	92	100	117											
			m ³ /h 0	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	7											
		US GMP 0																							
		H = TOTAL HEAD OF WATER COLUMN [m]																							
1 ~	3 MHsp	4	43.5	38	35	32	28.5	24.5	20																
		5	54	46.5	43	39	34	29	23.5	17															
	5 MHsp	4	46.4		42.8	41.6	40.4	39.1	37.6	35.9	33.9	31.6	29.1	22.7											
		5	57.6		52.8	51.2	49.6	47.9	45.9	43.7	41.1	38.2	35.0	26.9											
3 ~	3 MHsp	4	44.6	40.4	37.8	34.7	31.1	27.1	23.2	18.5															
		5	55.1	49.4	46.1	42.2	37.7	32.7	27.7	21.9															
	5 MHsp	4	46.2		42.4	41.1	39.9	38.5	37.0	35.2	33.2	30.9	28.4	21.9											
		5	57.3		52.1	50.4	48.8	47.0	45.0	42.7	40.1	37.2	34.0	25.8											

Spare parts and materials

MH 3-5-9



PARTS IN CONTACT WITH LIQUID

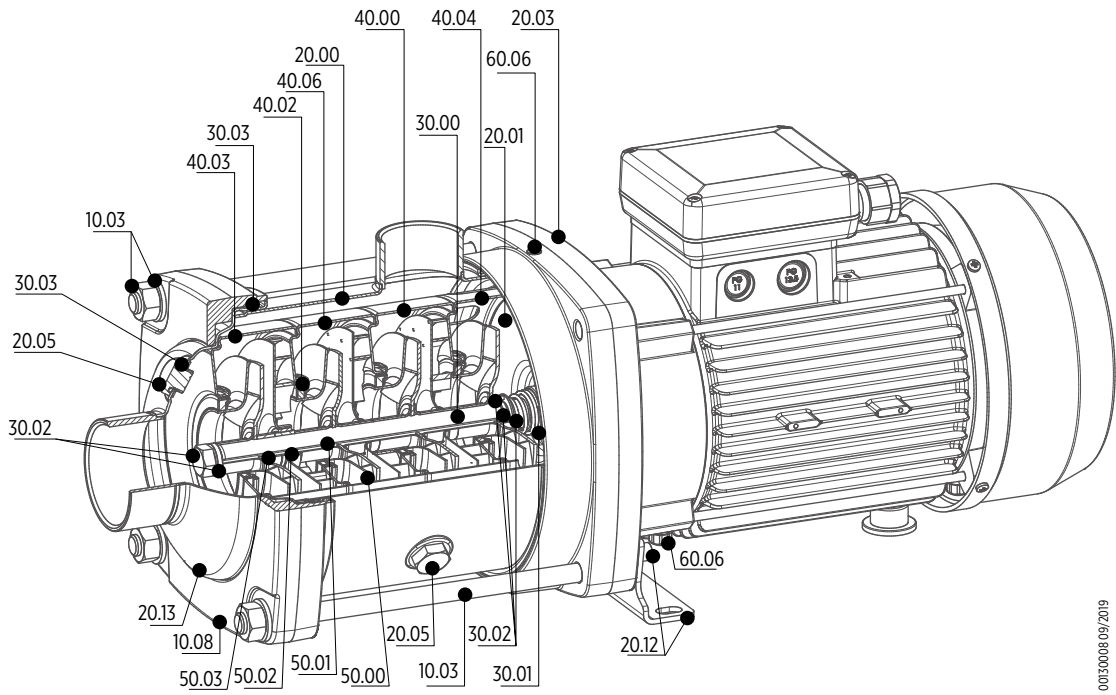
Ref. No.	Part description	Material	Standard			
			I version		N version	
			ASTM/AISI	DIN/EN	ASTM/AISI	DIN/EN
20.00	Outer case	Stainless steel	AISI 304	1.4301	AISI 316 L	1.4404
20.01	Mechanical seal housing	Stainless steel	AISI 304	1.4301	AISI 316 L	1.4404
20.05	Filling plug	Stainless steel	AISI 304	1.4301	AISI 316	1.4401
30.00	Pump shaft	Stainless steel	AISI 304	1.4301	AISI 316	1.4401
30.01	Kit mechanical seal	Carbon graphite / Ceramic alumina / EPDM	-	-	-	-
30.02	Mechanical seal fastening kit	Stainless steel	AISI 304	1.4301	AISI 316	1.4401
30.03	Kit O-rings	EPDM	-	-	-	-
40.00	Stage housing and diffuser	Stainless steel	AISI 304	1.4301	AISI 316 L	1.4404
40.02	Floating neck ring	Stainless steel and PPS	AISI 304	1.4301	AISI 316 L	1.4404
40.03	Initial stage housing	Stainless steel	AISI 304	1.4301	AISI 316 L	1.4404
40.04	Last Stage with diffuser	Stainless steel	AISI 304	1.4301	AISI 316 L	1.4404
50.00	Impeller	Stainless steel	AISI 304	1.4301	AISI 316 L	1.4404
50.01	Impeller spacers	Stainless steel	AISI 304	1.4301	AISI 316 L	1.4404

SPARE PARTS LIST

Ref. No.	Part description
20.00	Outer case
20.01	Mechanical seal housing
20.03	Motor bracket
20.05	Filling plug
20.12	Support foot and screws
30.00	Pump shaft
30.01	Kit mechanical seal
30.02	Mechanical seal fastening kit

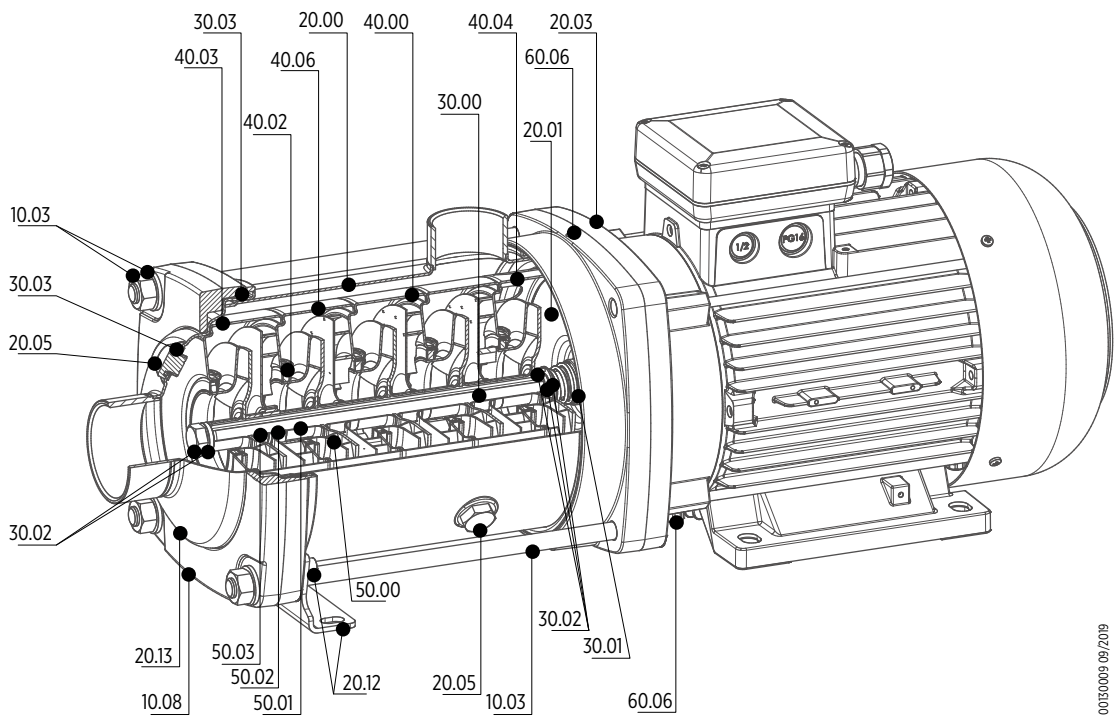
Ref. No.	Part description
30.03	Kit O-rings
40.00	Stage housing and diffuser
40.02	Floating neck ring
40.03	Initial stage housing
40.04	Last Stage with diffuser
50.00	Impeller
50.01	Impeller spacer

CONFIGURATION UP TO 3 KW



00150008 09/2019

CONFIGURATION FROM 4 KW



00150009 09/2019

PARTS IN CONTACT WITH LIQUID

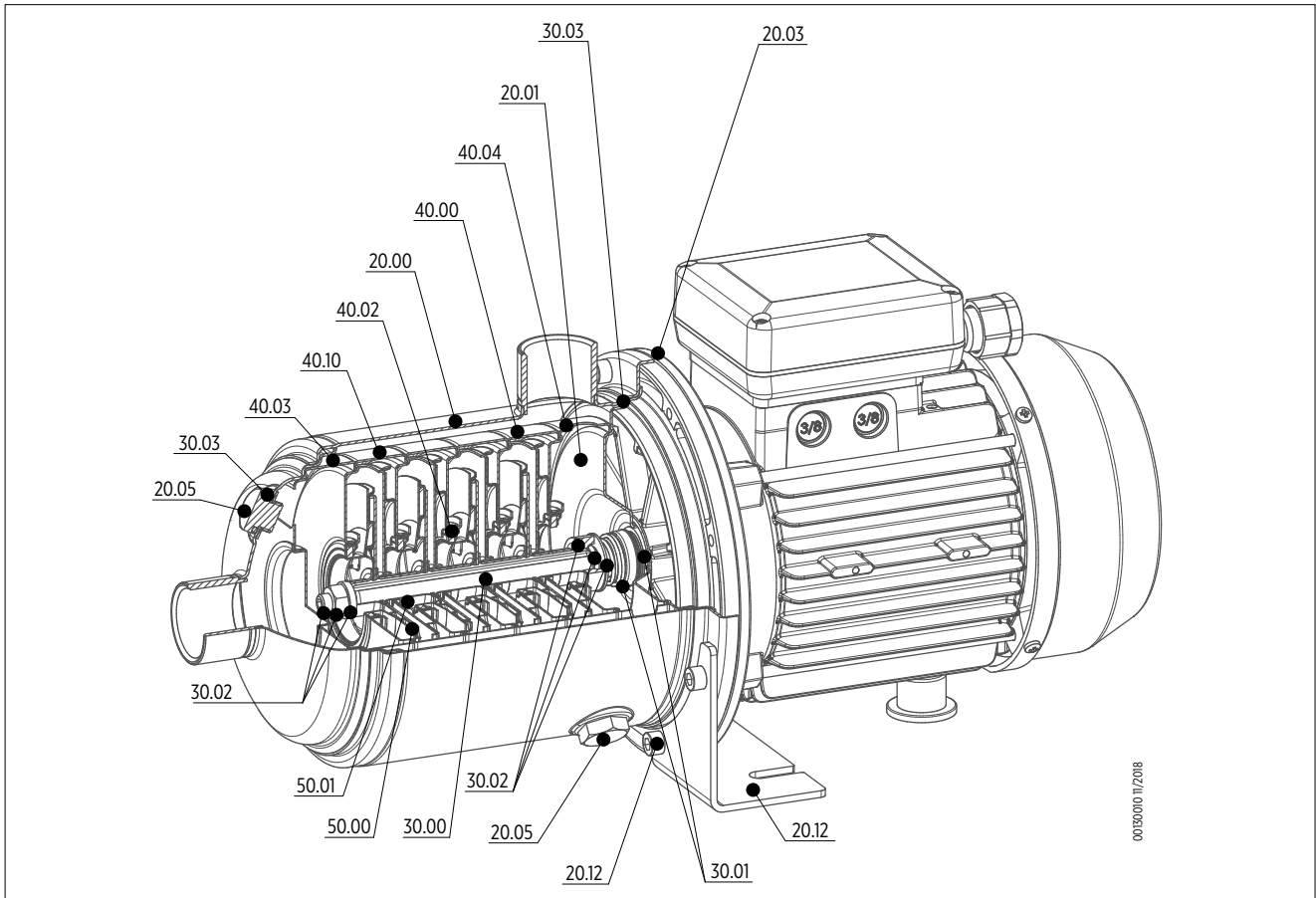
Ref. No.	Part description	Material	Standard			
			I version		N version	
			ASTM	DIN/EN	ASTM	DIN/EN
20.00	Outer case	Stainless steel	AISI 304	1.4301	AISI 316 L	1.4404
20.01	Mechanical seal housing	Stainless steel	AISI 304	1.4301	AISI 316	1.4401
20.05	Filling plug	Stainless steel	AISI 304	1.4301	AISI 316	1.4401
20.13	Inlet cover	Stainless steel	AISI 304	1.4301	AISI 316	1.4401
30.00	Pump shaft	Stainless steel	AISI 304	1.4301	AISI 316	1.4401
30.01	Kit mechanical seal	Carbon graphite / Silicon carbide (SiC) / EPDM	-	-	-	-
30.02	Mechanical seal fastening kit	Stainless steel	AISI 304	1.4301	AISI 316	1.4401
30.03	Kit O-rings	EPDM	-	-	-	-
40.00	Stage housing and diffuser	Stainless steel	AISI 304	1.4301	AISI 316 L	1.4404
40.02	Floating neck ring	Stainless steel and PPS	AISI 304	1.4301	AISI 316 L	1.4404
40.03	Initial stage housing	Stainless steel	AISI 304	1.4301	AISI 316 L	1.4404
40.04	Last Stage with diffuser	Stainless steel	AISI 304	1.4301	AISI 316 L	1.4404
40.06	Stage housing and diffuser with bearing	Stainless steel, Tungsten carbide (WC)	AISI 304	1.4301	AISI 316 L	1.4404
50.00	Impeller	Stainless steel	AISI 304	1.4301	AISI 316 L	1.4404
50.01	Impeller spacer	Stainless steel	AISI 304	1.4301	AISI 316 L	1.4404
50.02	Intermediary sleeve	Tungsten carbide (WC)	-	-	-	-
50.03	Intermediary sleeve spacer	Stainless steel	AISI 304	1.4301	AISI 316 L	1.4404

SPARE PARTS LIST

Ref. No.	Part description
10.03	Tie bolts, washers and nuts
10.08	Pre-load flange
20.00	Outer case
20.01	Mechanical seal housing
20.03	Motor bracket
20.05	Filling plug
20.12	Support foot and screws
20.13	Inlet cover
30.00	Pump shaft
30.01	Kit mechanical seal
30.02	Mechanical seal fastening kit

Ref. No.	Part description
30.03	Kit O-rings
40.00	Stage housing and diffuser
40.02	Floating neck ring
40.03	Initial stage housing
40.04	Last Stage with diffuser
40.06	Stage housing and diffuser with bearing
50.00	Impeller
50.01	Impeller spacer
50.02	Intermediate sleeve
50.03	Intermediate sleeve spacer
60.06	Kit motor spare components

MHsp 3-5



PARTS IN CONTACT WITH LIQUID

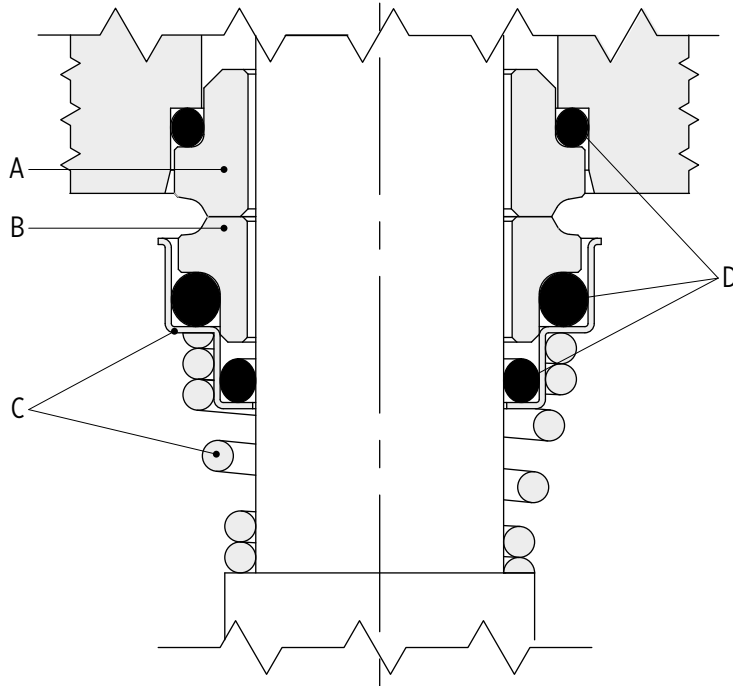
Pos.	Part description	Material	Standard	
			ASTM	DIN/EN
20.00	Outer case	Stainless steel	AISI 304	1.4301
20.01	Mechanical seal housing	Stainless steel	AISI 304	1.4301
20.05	Filling plug	Stainless steel	AISI 304	1.4301
30.00	Pump shaft	Stainless steel	AISI 304	1.4301
30.01	Mechanical seal	Carbon graphite / Ceramic alumina / EPDM	-	-
30.02	Mechanical seal fastening kit	Stainless steel	AISI 304	1.4301
30.03	Kit O-rings	EPDM	-	-
40.00	Stage housing and diffuser	Stainless steel	AISI 304	1.4301
40.02	Floating neck ring	Stainless steel and PPS	AISI 304	1.4301
40.03	Initial stage housing	Stainless steel	AISI 304	1.4301
40.04	Last Stage with diffuser	Stainless steel	AISI 304	1.4301
40.10	Stage housing with priming valve	Stainless steel	AISI 301 and 304	1.4310 and 1.4301
50.00	Impeller	Stainless steel	AISI 304	1.4301
50.01	Impeller spacer	Stainless steel	AISI 304	1.4301

SPARE PARTS LIST

Ref. No.	Part description
20.00	Outer case
20.01	Mechanical seal housing
20.03	Motor bracket
20.05	Filling plug
20.12	Support foot and screws
30.00	Pump shaft
30.01	Kit mechanical seal
30.02	Mechanical seal fastening kit

Ref. No.	Part description
30.03	Kit O-rings
40.00	Stage housing and diffuser
40.02	Floating neck ring
40.03	Initial stage housing
40.04	Last Stage with diffuser
40.10	Stage housing with priming valve
50.00	Impeller
50.01	Impeller spacer

MECHANICAL SEAL SPECIFICATIONS



00130012 05/2017

STANDARD VERSION

Model	Type					Position				Temperature [°C]
						A Stationary part	B Rotating part	C Other components	D Elastomers	
MH 3 - 5 - 9 / MHsp 3 - 5										
E0	V	B	G	E	Ceramic alumina	Carbon graphite	AISI 316	EPDM	-15 ÷ +110	
MH 15 - 20										
E1	B	Q	G	E	Carbon graphite	Silicon carbide	AISI 316	EPDM	-15 ÷ +110	

AVAILABLE ON REQUEST (ONLY FOR MH)

Model	Type					Position				Temperature [°C]
						A Stationary part	B Rotating part	C Other components	D Elastomers	
E2	Q	Q	G	E	Silicon Carbide	Silicon Carbide	AISI 316	EPDM	-15 ÷ +110	
V3*	Q	Q	G	V	Silicon Carbide	Silicon Carbide	AISI 316	FKM	-10 ÷ +110	
V8*	Q	U	G	V	Silicon Carbide	Tungsten Carbide	AISI 316	FKM	-10 ÷ +110	

* on request version with stopper pin

Type	Material
B	Carbon graphite
E	EPDM
G	AISI 316
Q	Silicon carbide
V	FKM
V	Ceramic alumina
U	Tungsten carbide

MOTOR SPECIFICATIONS

- Asynchronous, TEFC (Totally Enclosed, Fan-Cooled)
- 2 pole
- IP55
- Insulation class F
- Frequency of starts:
 - Max. 60 starts/hour for motor power up to 3 kW (with min. 1 minute resting time)
 - Max. 30 starts/hour for motor power from 4 kW (with min. 2 minute resting time)

SINGLE-PHASE VERSION AT 50 HZ

- Standard voltage 220-240 V $\pm 5\%$
- Thermal protection built into the motor

P _n [kW]	MOTOR SIZE	INPUT CURRENT I _n [A]	Capacitor		230 V - 50 Hz							
			230V	μF	V	η _N [min ⁻¹]	I _s /I _N	η %	cos φ	T _N [Nm]	T _s /T _N	T _M /T _N
0.33	71	2.50	16	450	2920	6.5	64.8	0.88	1.08	1.00	1.60	
0.45	71	3.00	16	450	2890	5.4	69.7	0.92	1.5	0.72	1.60	
0.55	71	3.50	16	450	2860	4.6	72.6	0.94	1.83	0.59	1.85	
0.75	71	4.67	16	450	2790	3.5	72.2	0.97	2.56	0.42	1.87	
0.9	71	5.45	30	450	2875	4.8	75.3	0.93	3	0.47	1.67	
1.1	71	6.60	30	450	2820	3.9	77.0	0.96	3.7	0.38	1.86	
1.3	80	7.46	30	450	2860	4.2	80.8	0.94	4.35	0.57	1.86	
1.5	80	8.56	30	450	2830	3.6	79.9	0.95	5.05	0.50	1.92	
1.85	80	10.90	30	450	2760	2.8	76.6	0.96	6.4	0.39	2.40	
2.2	90	12.60	60	450	2870	2.2	76.7	0.99	7.3	0.51	1.99	

THREE-PHASE VERSION AT 50 HZ

- IE3 Premium Efficiency Motors
- IE efficiency according to IEC 60034-30-1:2014
- Electrical performance according to IEC 60034-2-1:2007
- Standard voltage:
 - 220-240 / 380-415 V $\pm 5\%$ up to 3 kW
 - 380-415 / 660-690 V $\pm 5\%$ from 4 kW
- Thermal protection to be provided into the starter panel by the installer

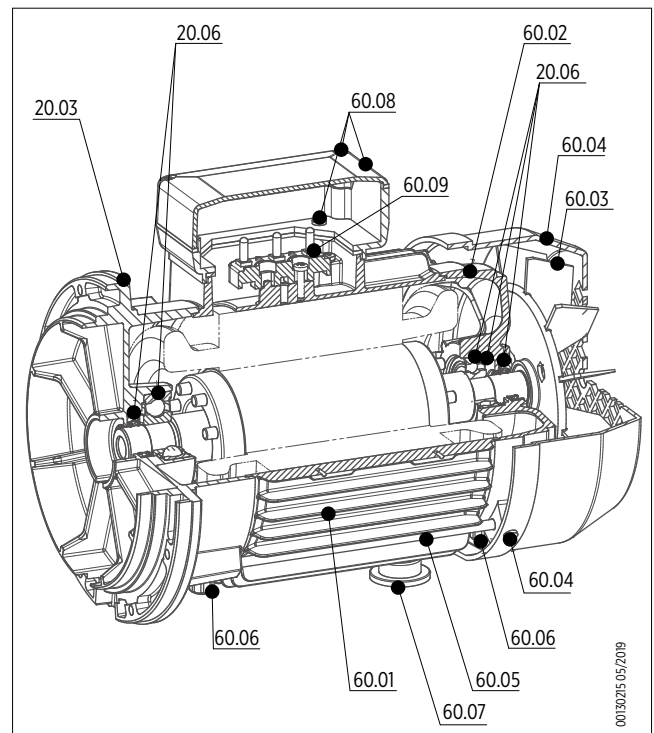
P _n [kW]	Rendimento / Efficiency η _n %						IE
	Δ 230 V Y 400 V			Δ 400 V Y 690 V			
	4/4	3/4	2/4	4/4	3/4	2/4	
0.75	80.9	81.5	79.6	-	-	-	3
1.1	82.7	84.6	84.2	-	-	-	
1.5	84.3	85.7	85.3	-	-	-	
2.2	86.1	86.7	85.4	-	-	-	
3	87.1	87.5	86.1	-	-	-	
4	-	-	-	88.1	88.7	87.7	
5.5	-	-	-	89.2	89.4	88.1	

P_N [kW]	MOTOR SIZE	N. of poles	f_N [Hz]	400 V 50 Hz				
				$\cos \phi$	I_s / I_N	T_N [Nm]	T_s / T_N	T_M / T_N
0.75	71	2	50	0.83	6.8	2.6	3.6	3.7
1.1	71			0.82	5.9	3.7	3.2	3.1
1.5	80			0.79	6.8	5.1	3.2	3.2
2.2	90			0.8	9.6	7.3	4.3	4.4
3	90			0.83	9.6	9.9	4.7	4.9
4	100			0.85	8.1	13.2	2.8	3
5.5	112			0.81	8.4	18.1	4.3	4.5

P_N [kW]	VOLTAGE U_N				n_N [min ⁻¹]	Motor operating conditions		
	Δ 230 V	Y 400 V	Δ 400 V	Y 690 V		Altitude Above Sea Level [m]	T. amb min/max [°C]	ATEX
	I_N [A]							
0.75	2.8	1.6	-	-	2800	≤ 1000	-15 / 40	No
1.1	4.1	2.3	-	-	2840			
1.5	5.7	3.3	-	-	2830			
2.2	8.0	4.6	-	-	2880			
3	10.4	6.0	-	-	2900			
4	-	-	7.7	4.4	2900			
5.5	-	-	11.0	6.4	2900			

MOTOR SPARE PARTS

Ref. No.	Part description
20.03	Motor bracket
20.06	Kit bearings
60.01	Motor housing and stator
60.02	Bearing housing
60.03	Fan
60.04	Fan cover and screws
60.05	Motor tie rods
60.06	Kit motor spare components
60.07	Motor housing foot
60.08	Terminal box cover and base
60.09	Terminal board



MH Series

Technical data and Performance curves at 50 Hz

3 MH - TECHNICAL DATA AT 50 HZ

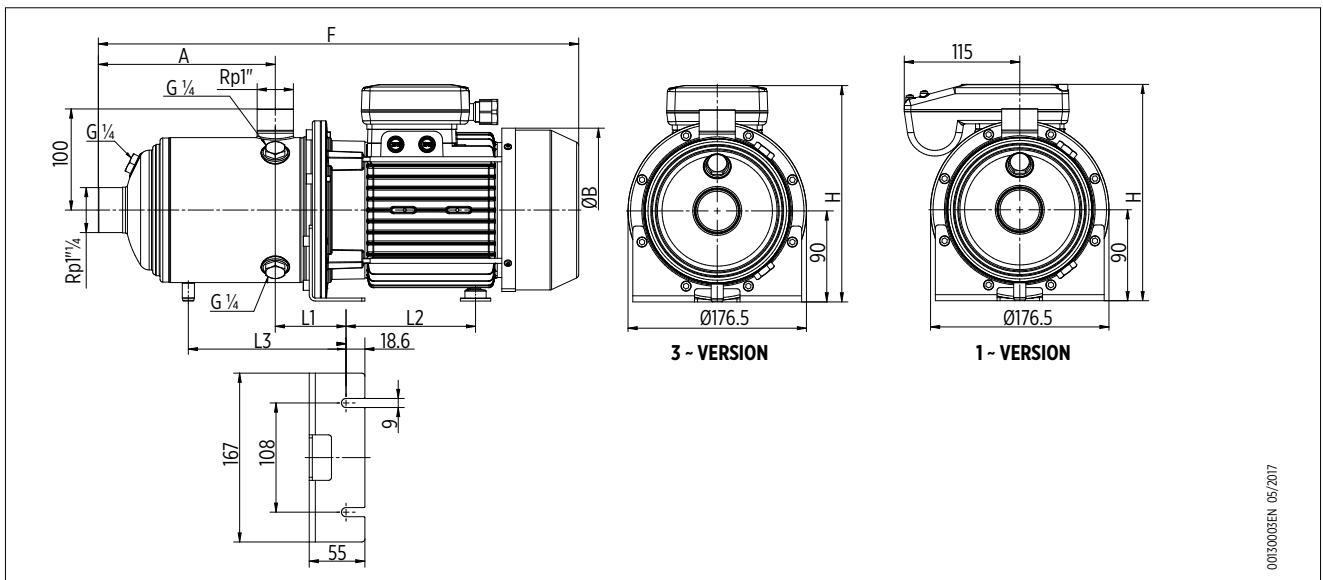
SINGLE-PHASE VERSION

Model	No. stages	Order No.	Motor Size	Motor nominal Power		Input Power [kW]	Capacitor 450 V μ F	Input Current [A] 220-240 V	Dimensions [mm]							Weight [Kg]
				[kW]	[HP]				A	F	\varnothing B	H	L1	L2	L3	
3 MH	2	96140003102	71	0.33	0.45	0.46	16	2.5	103	361	144	207	70	101	-	11.2
	3	96140003103	71	0.45	0.6	0.60	16	3.0	103	361	144	207	70	101	-	11.4
	4	96140003104	71	0.55	0.75	0.76	16	3.7	127	385	144	207	70	101	-	11.8
	5	96140003105	71	0.75	1	0.91	16	4.3	151	409	144	207	70	101	-	12.4
	6	96140003106	71	0.9	1.2	1.13	30	5.4	175	433	144	207	70	101	-	14.4
	7	96140003107	71	1.1	1.5	1.28	30	6.0	199	457	144	207	70	101	180	15
	8	96140003108	80	1.3	1.8	1.43	30	6.9	223	523	162	214	70	128	204	18.8
	9	96140003109	80	1.5	2	1.58	30	7.5	247	547	162	214	70	128	228	19.4

THREE-PHASE VERSION

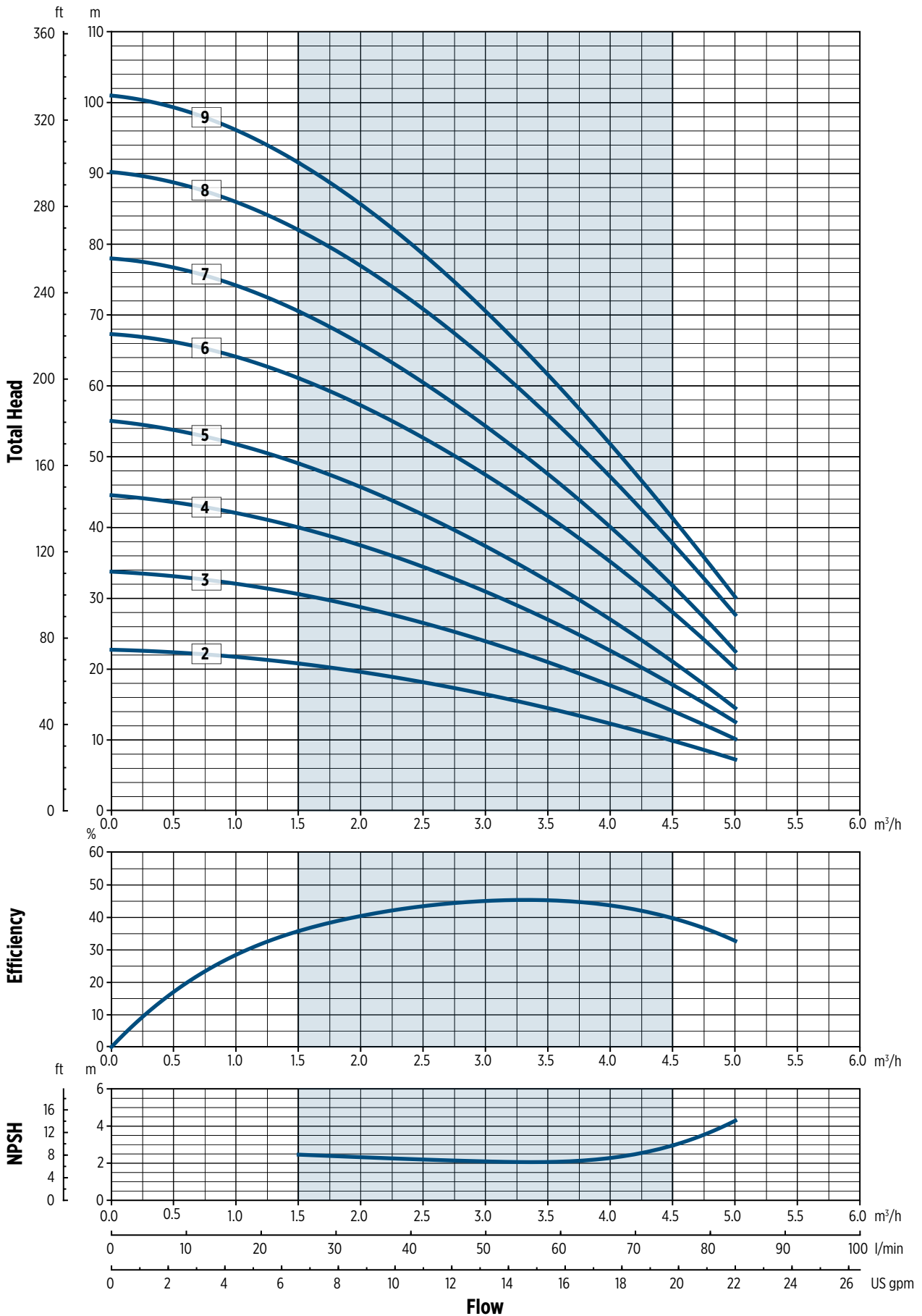
Model	No. stages	Order No.	Motor Size	Motor nominal Power		Input Power [kW]	Input Current [A]		Dimensions [mm]							Weight [Kg]
				[kW]	[HP]		220-240 V	380-415 V	A	F	\varnothing B	H	L1	L2	L3	
3 MH	2	96140003302	71	0.75	1	0.41	1.9	1.1	103	363	144	207	70	101	-	10.8
	3	96140003303	71	0.75	1	0.57	2.1	1.2	103	363	144	207	70	101	-	11
	4	96140003304	71	0.75	1	0.72	2.4	1.4	127	387	144	207	70	101	-	11.6
	5	96140003305	71	0.75	1	0.87	2.7	1.6	151	411	144	207	70	101	-	12
	6	96140003306	71	1.1	1.5	1.02	3.3	1.9	175	435	144	207	70	101	-	13.2
	7	96140003307	71	1.1	1.5	1.17	3.6	2.1	199	459	144	207	70	101	180	13.8
	8	96140003308	80	1.5	2	1.39	4.8	2.8	223	520	162	214	70	128	204	17.6
	9	96140003309	80	1.5	2	1.55	5.1	3.0	247	544	162	214	70	128	228	18.2

DIMENSIONAL DRAWINGS



003000BEN 05/2017

3 MH - TECHNICAL DATA AT 50 HZ



00120041EN 05/2018

5 MH - TECHNICAL DATA AT 50 HZ

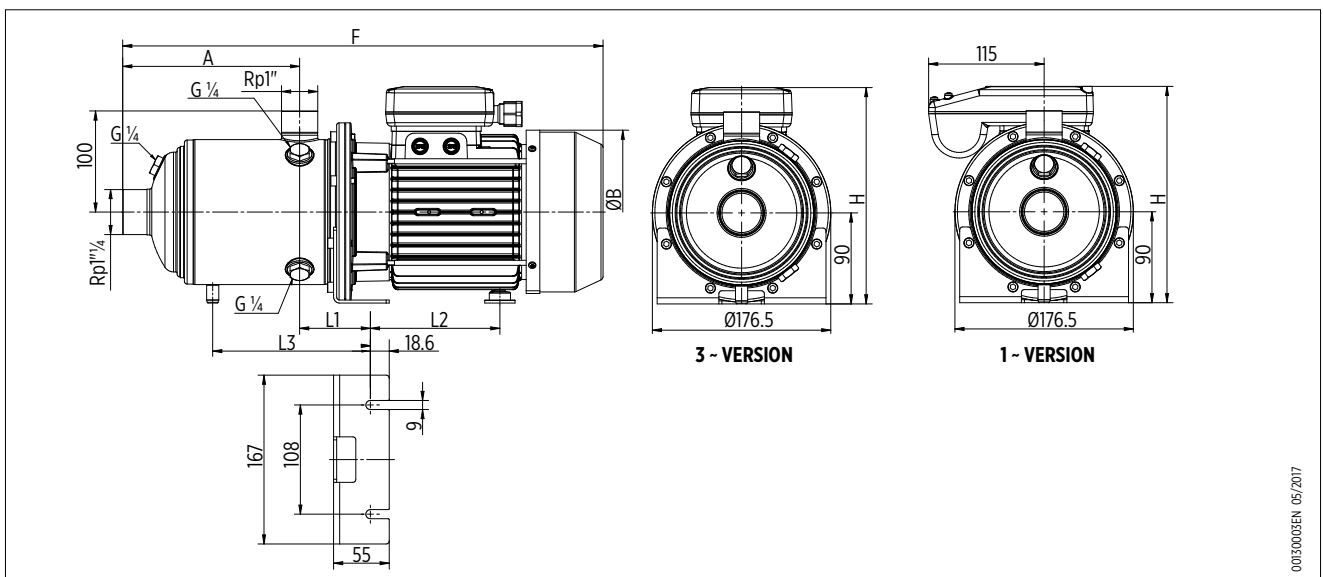
SINGLE-PHASE VERSION

Model	No. stages	Order No.	Motor Size	Motor nominal Power		Input Power [kW]	Capacitor 450 V μ F	Input Current [A]	Dimensions [mm]							Weight [Kg]
				[kW]	[HP]				220-240 V	A	F	\varnothing B	H	L1	L2	
5 MH	2	96140005102	71	0.45	0.6	0.59	16	3.0	103	361	144	207	70	101	-	11.2
	3	96140005103	71	0.55	0.75	0.81	16	3.9	103	361	144	207	70	101	-	11.4
	4	96140005104	71	0.9	1.2	1.10	30	5.3	127	385	144	207	70	101	-	13.4
	5	96140005105	71	1.1	1.5	1.32	30	6.2	151	409	144	207	70	101	-	14
	6	96140005106	80	1.3	1.8	1.53	30	7.3	175	475	162	214	70	128	-	17.8
	7	96140005107	80	1.5	2	1.74	30	8.2	199	499	162	214	70	128	180	18.2
	8	96140005108	90	1.85	2.5	2.40	60	10.5	223	567	179	221	70	172	204	24.2
	9	96140005109	90	2.2	3	2.59	60	11.4	247	592	179	221	70	172	228	24.8

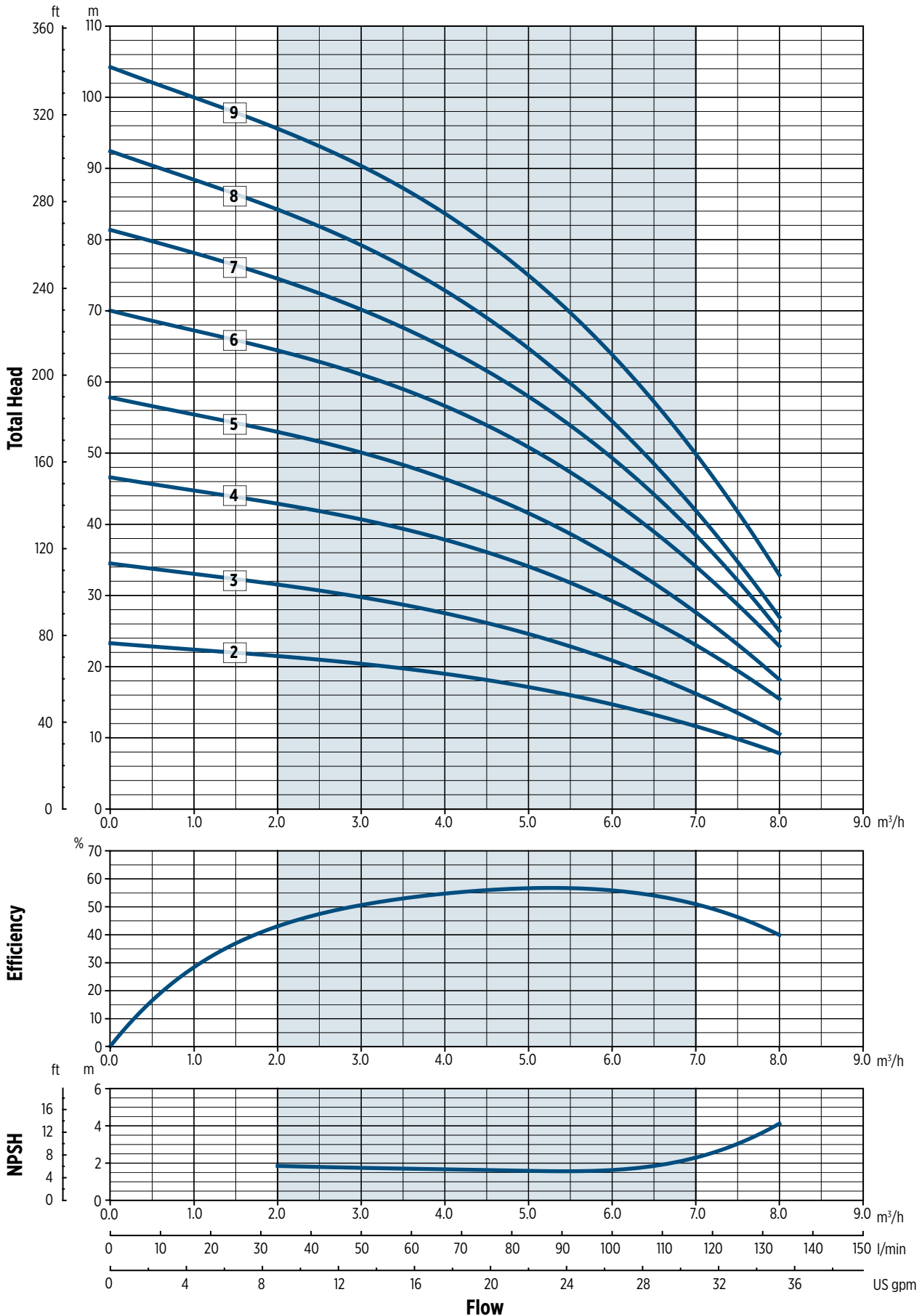
THREE-PHASE VERSION

Model	No. stages	Order No.	Motor Size	Motor nominal Power		Input Power [kW]	Input Current [A]		Dimensions [mm]							Weight [Kg]
				[kW]	[HP]		220-240 V	380-415 V	A	F	\varnothing B	H	L1	L2	L3	
5 MH	2	96140005302	71	0.75	1	0.55	2.1	1.2	103	363	144	207	70	101	-	10.8
	3	96140005303	71	0.75	1	0.77	2.5	1.4	103	363	144	207	70	101	-	11
	4	96140005304	71	1.1	1.5	0.99	3.2	1.9	127	387	144	207	70	101	-	12.2
	5	96140005305	71	1.1	1.5	1.21	3.7	2.2	151	411	144	207	70	101	-	12.6
	6	96140005306	80	1.5	2	1.50	5.0	2.9	175	472	162	214	70	128	-	16.6
	7	96140005307	80	1.5	2	1.72	5.5	3.2	199	496	162	214	70	128	180	17
	8	96140005308	90	2.2	3	2.06	6.8	3.9	223	567	179	221	70	172	204	23
	9	96140005309	90	2.2	3	2.29	7.4	4.3	247	591	179	221	70	172	228	23.4

DIMENSIONAL DRAWINGS



5 MH - TECHNICAL DATA AT 50 HZ



0020042EN 05/2018

9 MH - TECHNICAL DATA AT 50 HZ

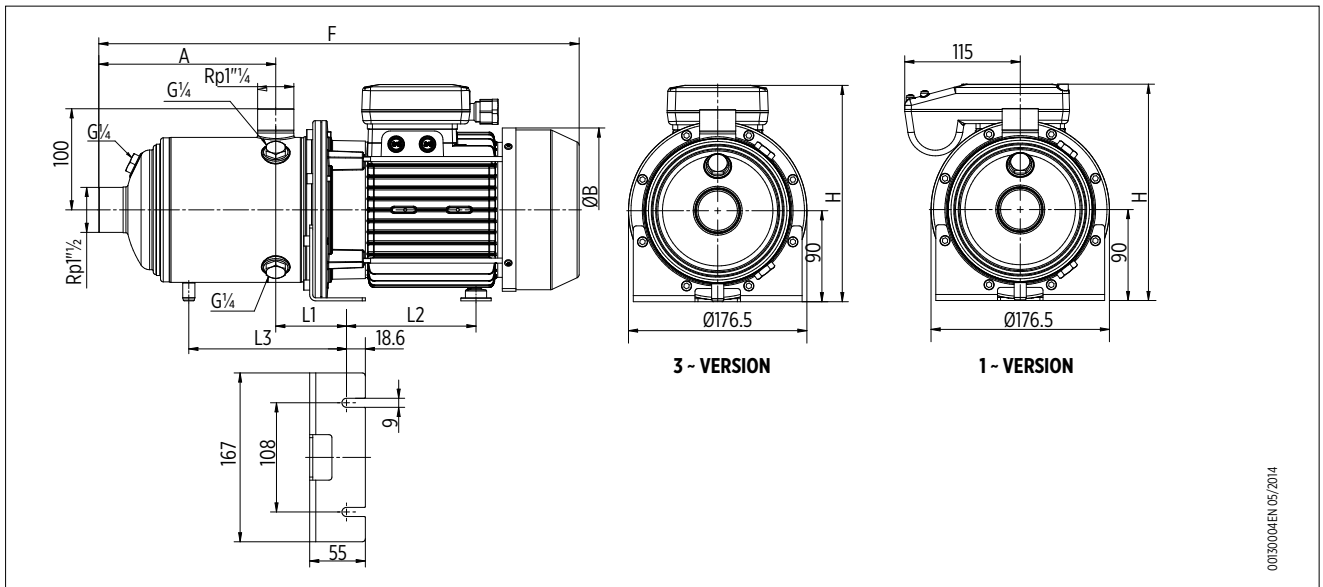
SINGLE-PHASE VERSION

Model	No. stages	Order No.	Motor Size	Motor nominal Power		Input Power [kW]	Capacitor 450 V μ F	Input Current [A] 220-240 V	Dimensions [mm]						Weight [Kg]	
				[A]	[HP]				A	F	\varnothing B	H	L1	L2		L3
9 MH	2	96140009102	71	0.75	1	0.91	16	4.3	118	380	144	207	74	101	-	11.6
	3	96140009103	71	1.1	1.5	1.35	30	6.3	118	380	144	207	74	101	-	13.2
	4	96140009104	80	1.5	2	1.74	30	8.2	148	452	162	214	74	128	-	17
	5	96140009105	90	2.2	3	2.51	60	11.1	178	527	179	221	74	172	-	23
	6	96140009106	90	2.2	3	2.89	60	12.7	208	557	179	221	74	172	192	23.8

THREE-PHASE VERSION

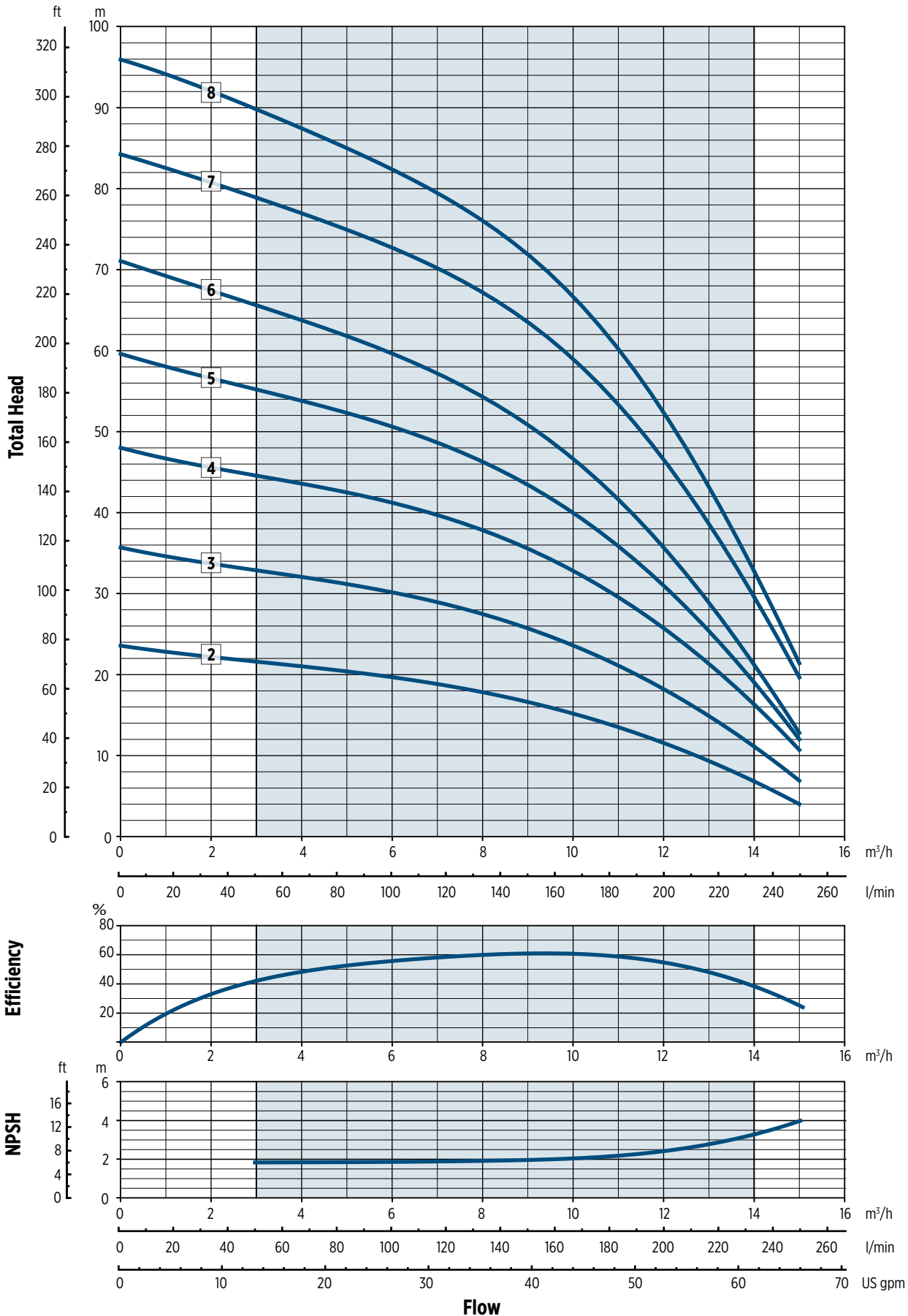
Model	No. stages	Order No.	Motor Size	Motor nominal Power		Input Power [kW]	Input Current [A]		Dimensions [mm]						Weight [Kg]	
				[kW]	[HP]		220-240 V	380-415 V	A	F	\varnothing B	H	L1	L2		L3
9 MH	2	96140009302	71	0.75	1	0.87	2.7	1.6	118	382	144	207	74	101	-	11.2
	3	96140009303	71	1.1	1.5	1.24	3.8	2.2	118	382	144	207	74	101	-	12
	4	96140009304	80	1.5	2	1.70	5.5	3.2	148	449	162	214	74	128	-	15.8
	5	96140009305	90	2.2	3	2.20	7.1	4.1	178	526	179	221	74	172	-	21.8
	6	96140009306	90	2.2	3	2.61	8.2	4.7	208	556	179	221	74	172	192	22.4
	7	96140009307	90	3	4	3.08	9.5	5.5	238	621	179	221	74	172	222	26
	8	96140009308	90	3	4	3.49	10.4	6.0	268	651	179	221	74	172	252	26.6

DIMENSIONAL DRAWINGS



00130004EN 05/2014

9 MH - TECHNICAL DATA AT 50 HZ



00720045EN 05/2017

15 MH - TECHNICAL DATA AT 50 HZ

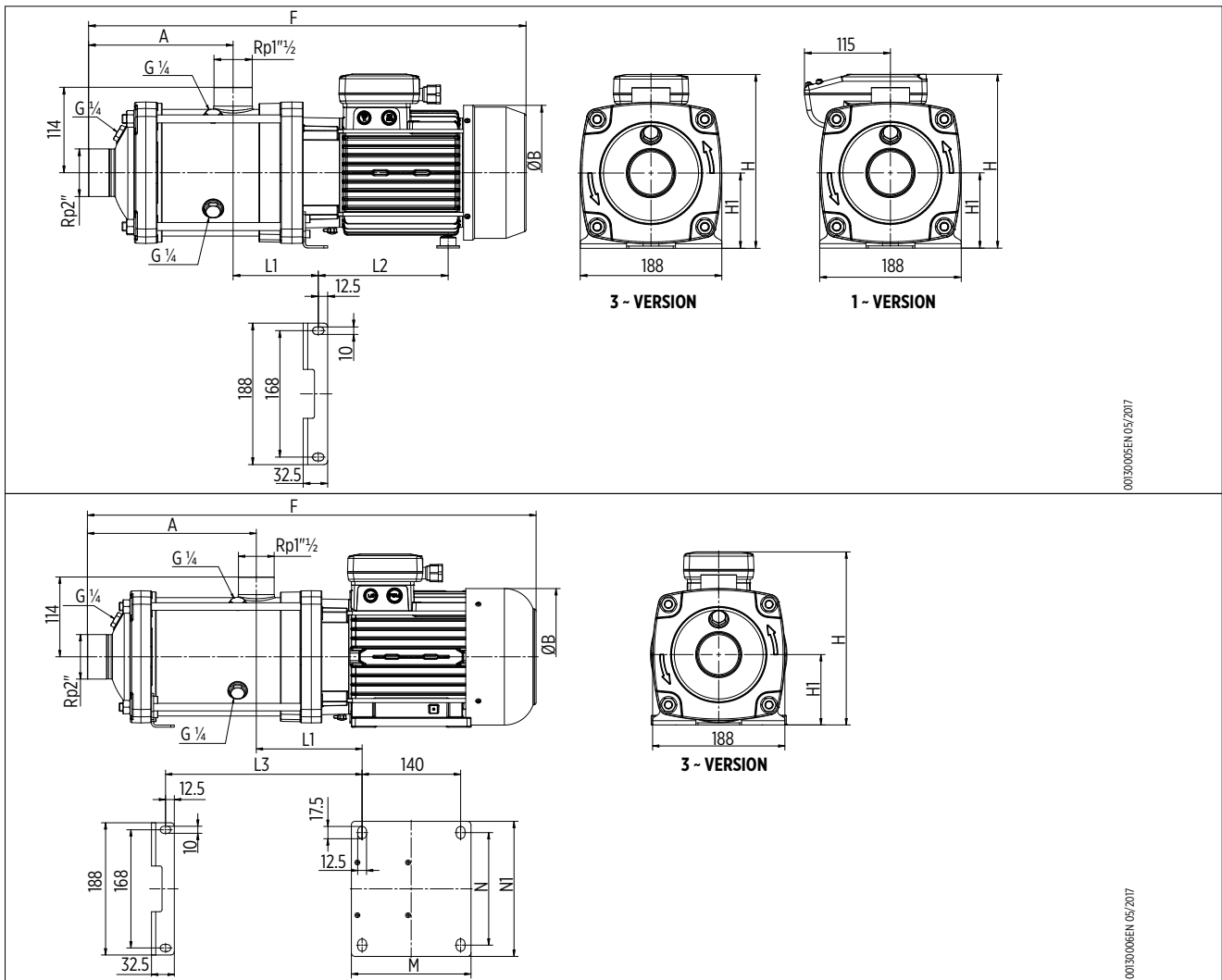
SINGLE-PHASE VERSION

Model	No. stages	Order No.	Motor size	Motor nominal Power		Input Power [kW]	Capacitor 450 V μ F	Input Current [A] 220-240 V	Dimensions [mm]									Weight [Kg]		
				[kW]	[HP]				A	F	\varnothing B	H	H1	L1	L2	L3	M		N	N1
15 MH	2	96140015102	80	1.5	2	1.63	30	7.7	144	488	162	224	100	113	129	-	-	-	-	20.2
	3	96140015103	90	2.2	3	2.74	60	12.1	144	533	179	231	100	113	173	-	-	-	-	25.4

THREE-PHASE VERSION

Model	No. stages	Order No.	Motor size	Motor nominal Power			Input Current [A]			Dimensions [mm]									Weight [Kg]		
				[kW]	[HP]	[kW]	220-240 V	380-415 V	660-690 V	A	F	\varnothing B	H	H1	L1	L2	L3	M		N	N1
15 MH	2	96140015302	80	1.5	2	1.60	5.3	3.0	-	144	485	162	224	100	113	129	-	-	-	-	18.8
	3	96140015303	90	2.2	3	2.45	7.8	4.5	-	144	532	179	231	100	113	173	-	-	-	-	24.4
	2	96140015304	90	3	4	3.28	9.9	5.7	-	192	615	179	231	100	113	173	-	-	-	-	28.6
	3	96140015305	100	4	5.5	4.09	-	7.0	4.1	240	670	194	246	100	150	-	279	170	160	192	37
	2	96140015306	112	5.5	7.5	4.95	-	9.3	5.4	288	732	218	263	112	152	-	329	180	190	220	46.2
	3	96140015307	112	5.5	7.5	5.71	-	10.3	6.0	336	780	218	263	112	152	-	377	180	190	220	47.6

DIMENSIONAL DRAWINGS

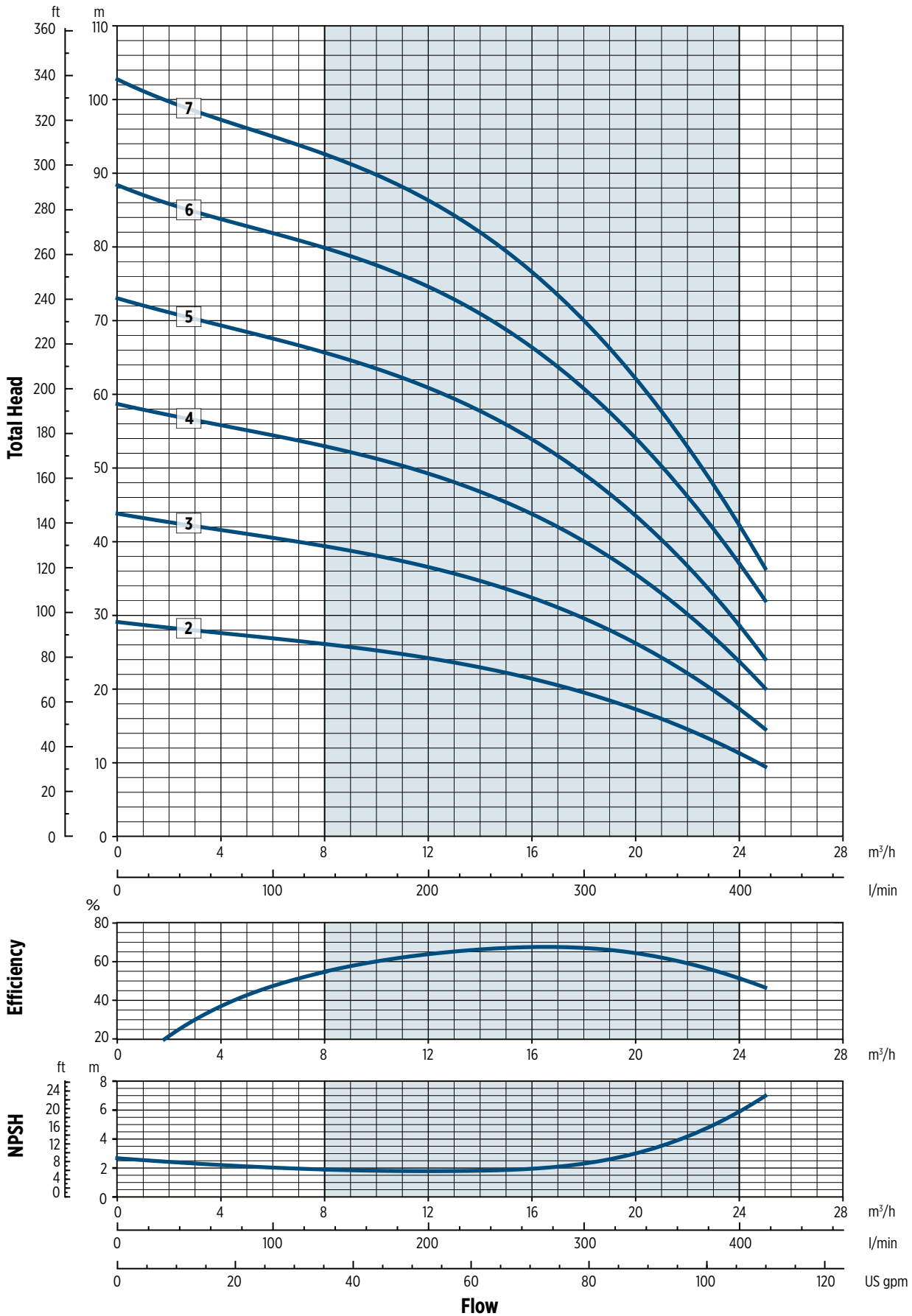


0013006SEN/05/2017

0013006SEN/05/2017



15 MH - TECHNICAL DATA AT 50 HZ



00120044EN 05/2018

20 MH - TECHNICAL DATA AT 50 HZ

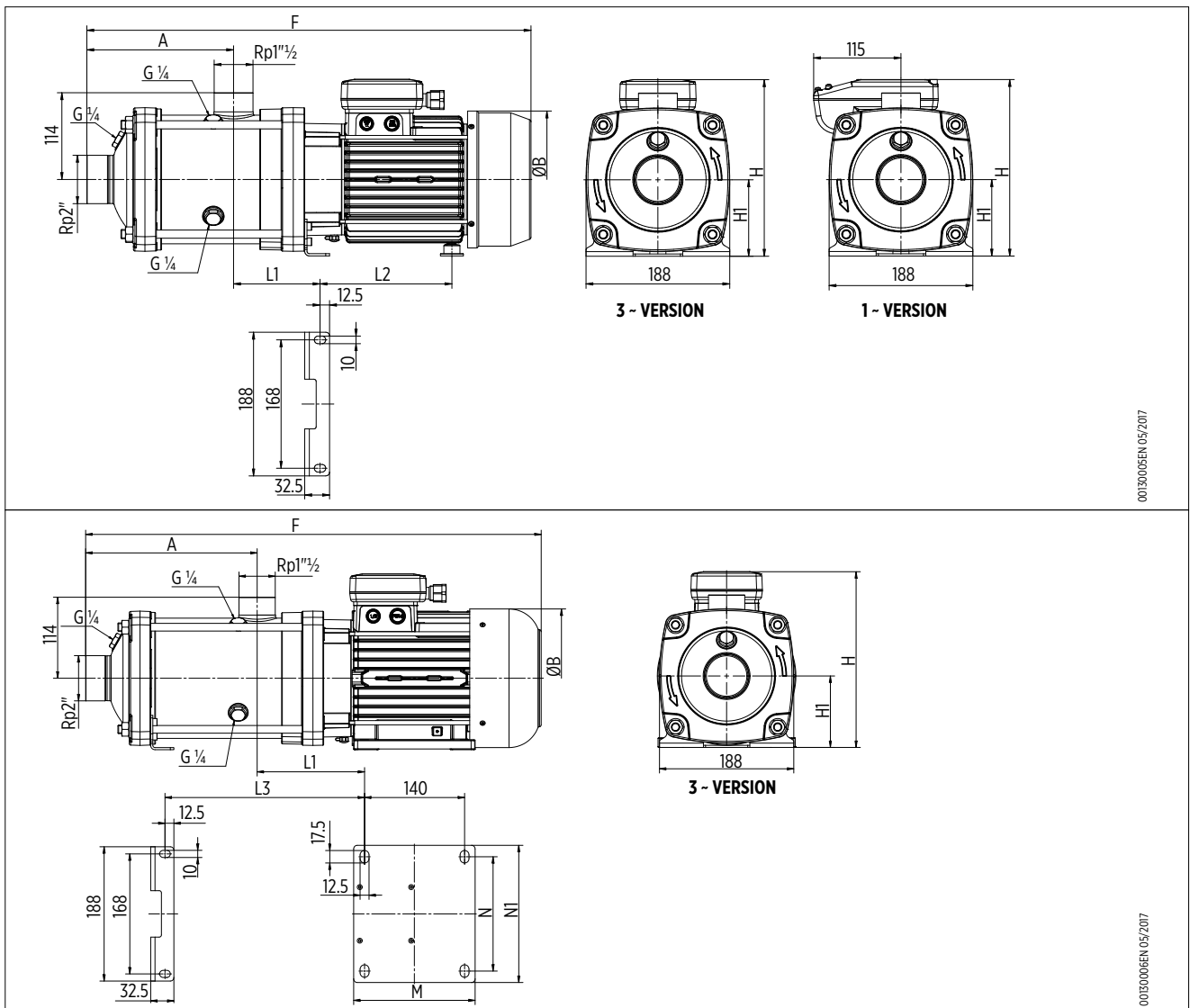
SINGLE-PHASE VERSION

Model	No. stages	Order No.	Motor size	Motor Nominal Power		Input Power	Capacitor 450 V	Input Current [A]	Dimensions [mm]											Weight [Kg]
				[kW]	[HP]				[kW]	μF	220-240 V	A	F	ØB	H	H1	L1	L2	L3	
20 MH	2	96140020102	90	2.2	3	2.59	60	11.4	144	533	179	231	100	113	173	-	-	-	-	25.2

THREE-PHASE VERSION

Model	No. stages	Order No.	Motor size	Motor Nominal Power			Input Power			Input Current [A]			Dimensions [mm]									Weight [Kg]
				[kW]	[HP]	[kW]	220-240 V	380-415 V	660-690 V	A	F	ØB	H	H1	L1	L2	L3	M	N	N1		
20 MH	2	96140020302	90	2.2	3	2.29	7.4	4.3	-	144	532	179	231	100	113	173	-	-	-	-	24.2	
	3	96140020303	90	3	4	3.43	10.3	5.9	-	144	567	179	231	100	113	173	-	-	-	-	27.2	
	4	96140020404	100	4	5.5	4.53	-	7.7	4.4	192	622	194	246	100	150	-	231	170	160	192	35.8	
	5	96140020505	112	5.5	7.5	5.69	-	10.3	6.0	240	684	218	263	112	152	-	281	180	190	220	45	

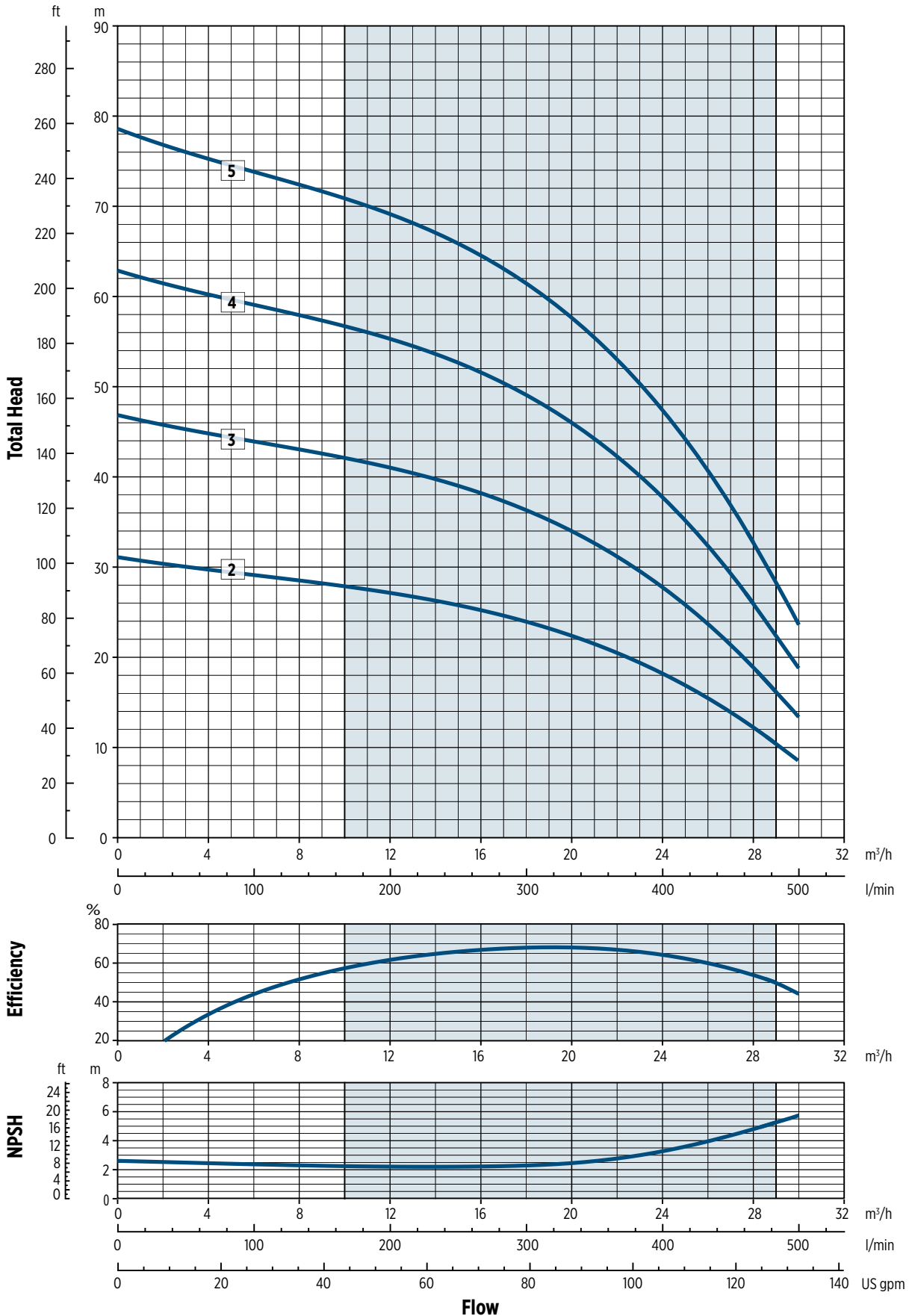
DIMENSIONAL DRAWINGS



00130005EN 05/2017

005000EN 05/2017

20 MH - TECHNICAL DATA AT 50 HZ



001204SEN 05/2018



MHsp Series

Technical data and Performance curves at 50 Hz

3 MHsp - TECHNICAL DATA AT 50 HZ

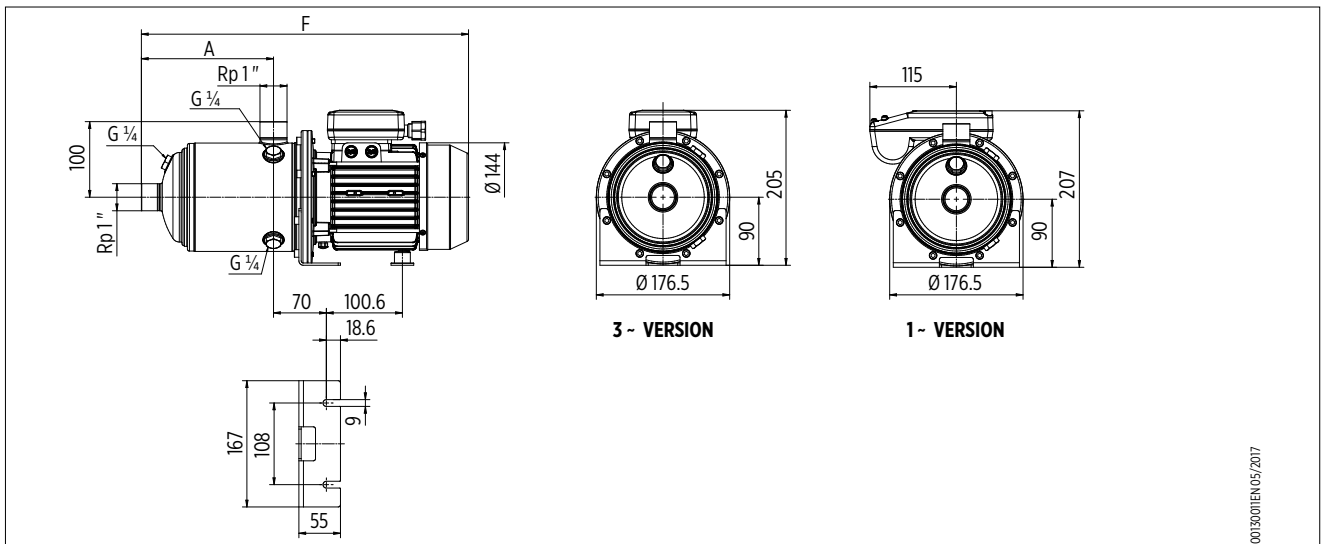
SINGLE-PHASE VERSION

Model	No. stages	Order No.	Motor size	Motor Nominal Power		Input Power	Capacitor 450 V	Input Current [A]	Dimensions [mm]		Weight [Kg]
				[kW]	[HP]				A	F	
3 MHsp	4	96144003104	71	0.55	0.75	0.79	16	3.8	175	433	12.6
	5	96144003105	71	0.75	1	0.95	16	4.5	199	457	13

THREE-PHASE VERSION

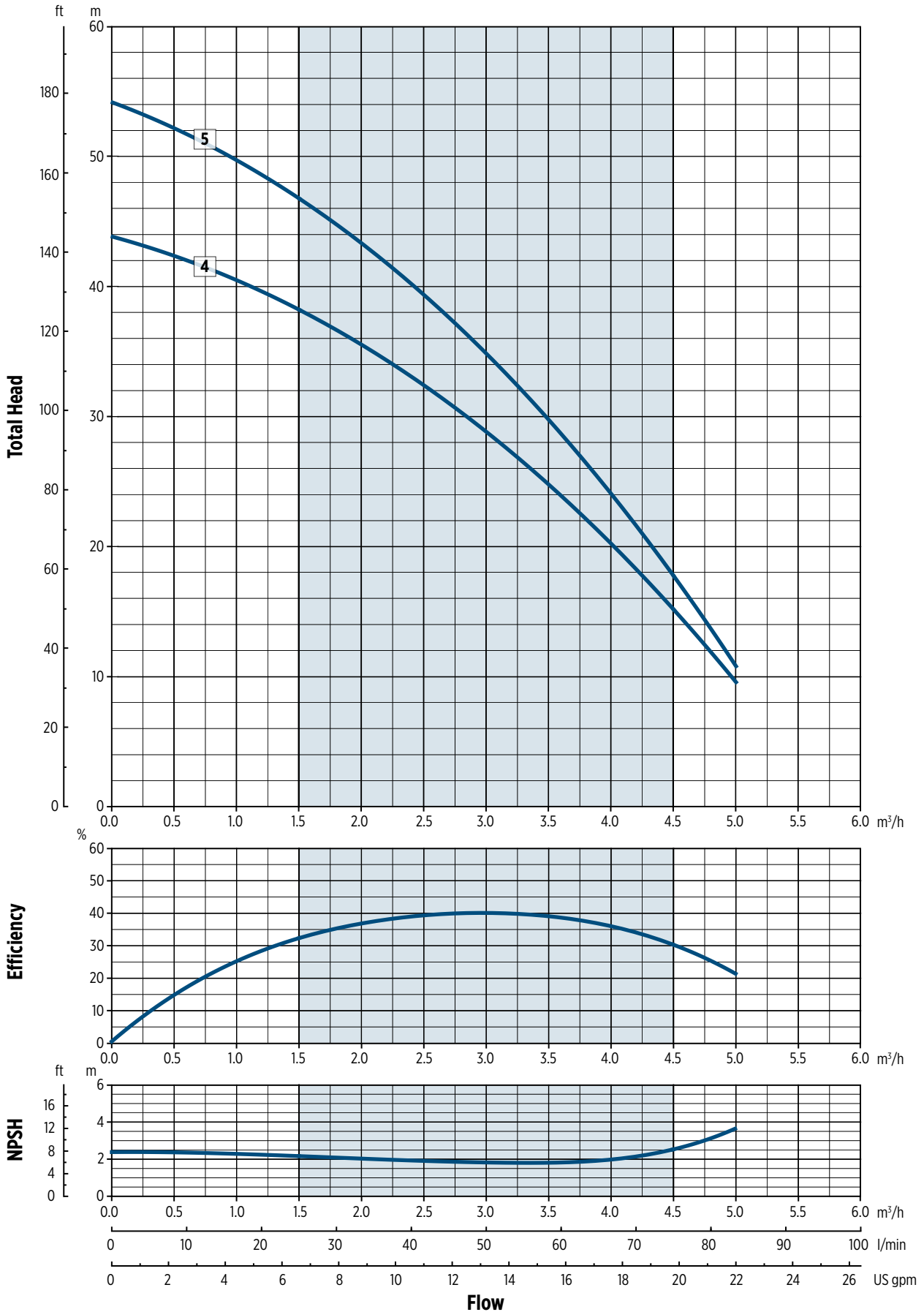
Model	No. stages	Order No.	Motor size	Motor Nominal Power		Input Power	Input Current [A]	Dimensions [mm]		Weight [Kg]
				[kW]	[HP]			A	F	
3 MHsp	4	96144003304	71	0.75	1	0.75	2.4	175	435	12.2
	5	96144003305	71	0.75	1	0.91	2.8	199	459	12.8

DIMENSIONAL DRAWINGS



0019001EN/05/2017

3 MHsp - TECHNICAL DATA AT 50 HZ



0012004GEN/05/2018

5 MHsp - TECHNICAL DATA AT 50 HZ

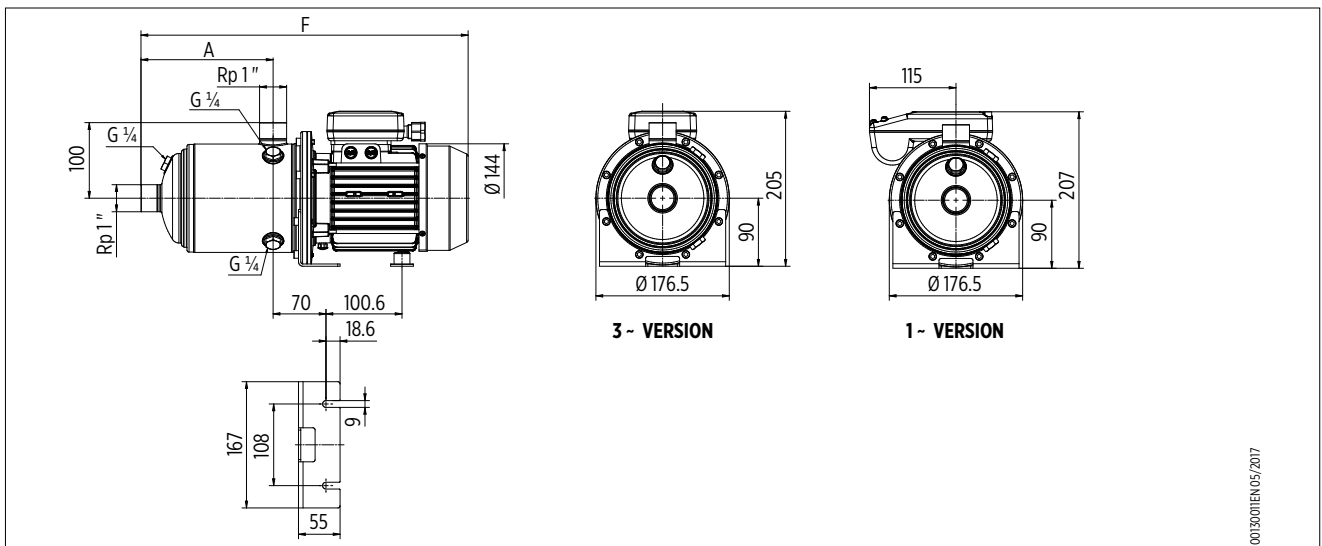
SINGLE-PHASE VERSION

Model	No. stages	Order No.	Motor size	Motor Nominal Power		Input Power	Capacitor 450 V	Input Current [A]	Dimensions [mm]		Weight [kg]
				[kW]	[HP]				A	F	
5 MHsp	4	96144005104	71	0.9	1.2	1.10	30	5.3	175	433	14
	5	96144005105	71	1.1	1.5	1.31	30	6.1	199	457	14.4

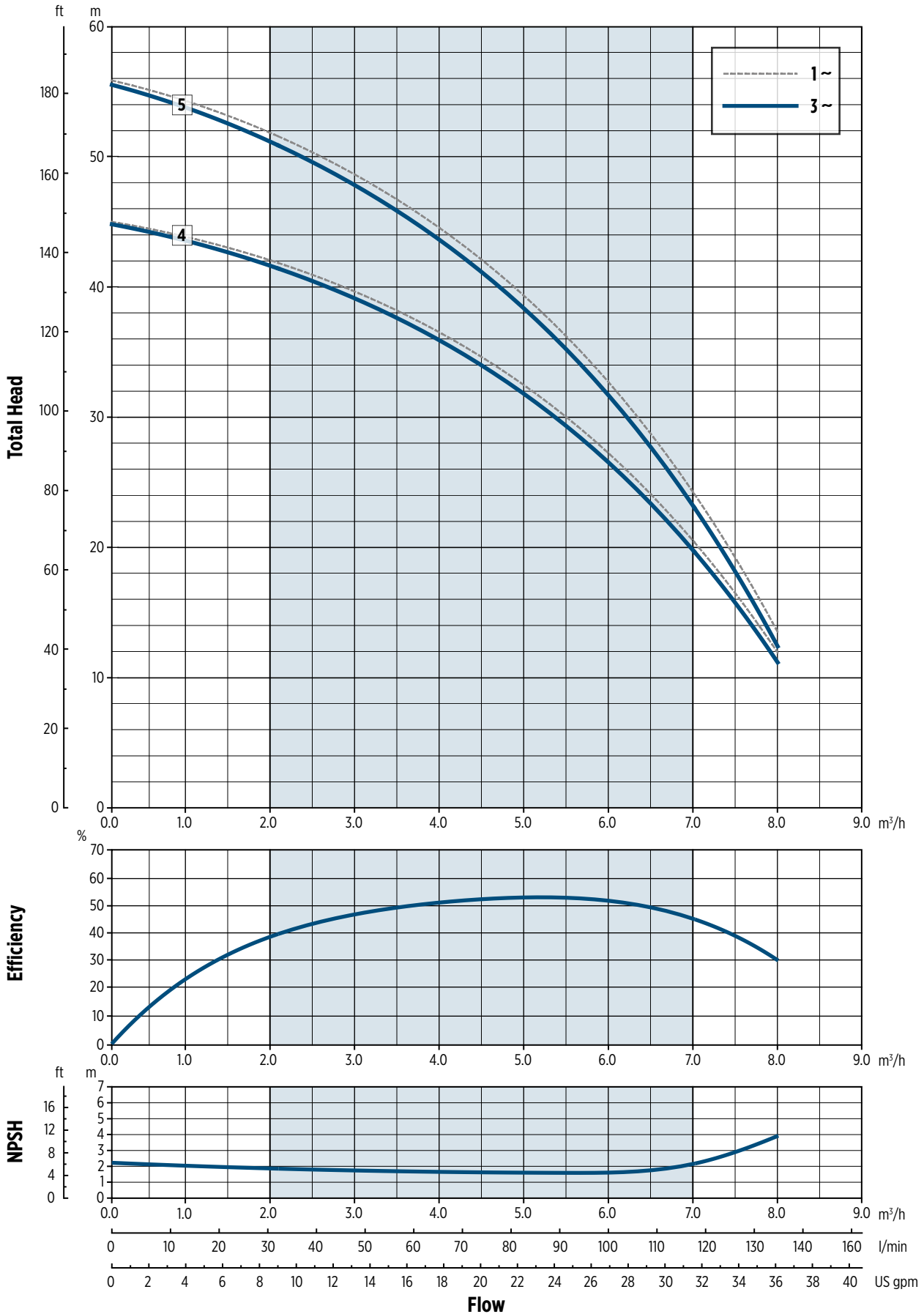
THREE-PHASE VERSION

Model	No. stages	Order No.	Motor size	Motor Nominal Power		Input Power	Input Current [A]	Dimensions [mm]		Weight [Kg]
				[kW]	[HP]			A	F	
5 MHsp	4	96144005304	71	1.1	1.5	0.99	3.2	175	435	12.8
	5	96144005305	71	1.1	1.5	1.20	3.7	199	459	13.4

DIMENSIONAL DRAWINGS



5 MHsp - TECHNICAL DATA AT 50 HZ



00120047EN/05/2018

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Franklin Electric S.r.l. reserves the right to amend specification without prior notice

00105015_EN_REV.05_03/2020

