



# EH - EHsp SERIES 50 Hz

HORIZONTAL MULTISTAGE AND SELF-PRIMING PUMPS





# INDEX

<b>STAINLESS STEEL HORIZONTAL MULTISTAGE (EH) AND SELF-PRIMING (EHsp) PUMPS .....</b>	<b>2</b>
Family curves.....	3
Pump identification code.....	3
<b>MATERIALS/FLUIDS COMPATIBILITY</b>	
EH 3-5-9-15-20.....	4
EHsp 3-5.....	4
<b>TABLE OF HYDRAULIC PERFORMANCE AT 50Hz</b>	
EH 3-5-9-15-20.....	5
EHsp 3-5.....	5
<b>MECHANICAL SEAL SPECIFICATIONS .....</b>	<b>6</b>
<b>MOTOR SPECIFICATIONS .....</b>	<b>7</b>
<b>EH SERIES - TECHNICAL DATA AND PERFORMANCE CURVES</b>	
EH 3.....	10
EH 5.....	12
EH 9.....	14
EH 15.....	16
EH 20.....	18
<b>EHsp SERIES - TECHNICAL DATA AND PERFORMANCE CURVES</b>	
EHsp 3.....	22
EHsp 5.....	24
<b>PUMP SECTION AND LIST AND MAIN COMPONENTS</b>	
EH 3-5-9.....	27
EH 15-20.....	28
EHsp 3-5.....	30

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](http://franklinwater.eu).

# STAINLESS STEEL HORIZONTAL MULTISTAGE (EH) AND SELF-PRIMING (EHsp) 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
- Other various installations

## FEATURES

- Compact close-coupled design, robust and corrosion resistant / Superior efficiency and performance
- Flexible application base plate
- Floating neck ring in PPS
- Heavy duty oversize motor shaft
- Impellers and diffusers are made of stainless steel in order to achieve durability
- Easy maintenance
- Strong and leak-proof motor ball bearing fitted in the motor
- Pumping of clear non-loaded fluids
- Mechanical seal Type E0 = carbon/ceramic/EPDM: EH 3-5-9, EHsp 3-5
- Mechanical seal Type E1 = carbon/silicon carbide/EPDM: EH 15-20

## PUMP SPECIFICATIONS

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

## MOTOR SPECIFICATIONS

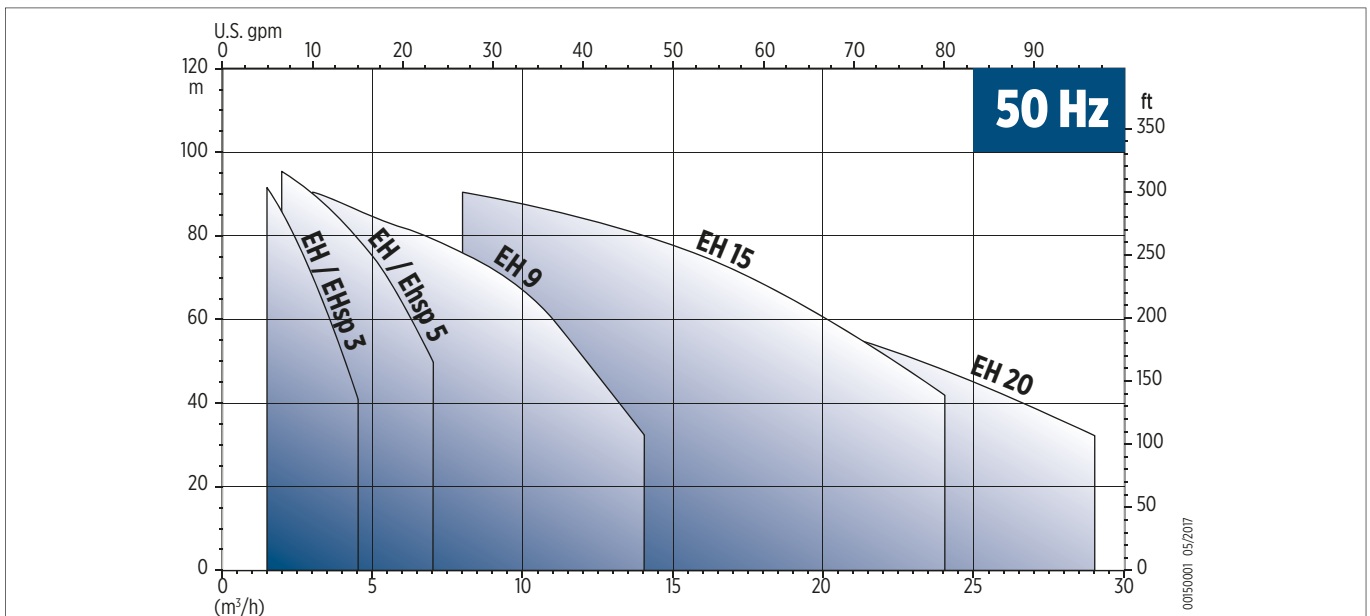
- Single-phase
- Three-phase motor efficiency class IE3
- Asynchronous, TEFC (Totally Enclosed, Fan-Cooled)
- 2 pole
- IP55 protection motor, Insulation class F
- Standard voltage

- Single-phase: 220-240 V ± 5 %. Thermal protection built into the motor.
- Three-phase: 220-240 / 380-415 V ± 5 % up to 3 kW. Thermal protection to be provide into the starter panel by the installer.  
380-415 / 660-690 V ± 5 % from 4 kW. Thermal protection to be provide into the starter panel by the installer.
- Starts per hour: for motor power up to 3 kW the allowed starts are 60. Waiting time between two consecutive starts 1 minute.  
for motor power from 4 kW the allowed starts are 30. Waiting time between two consecutive starts 2 minutes.

### AVAILABLE ON REQUEST

- Special mechanical seal (EH)
- Discharge inlet/outlet NPT

### FAMILY CURVES



### PUMP IDENTIFICATION CODE

15 / 03 I 022 T 5 E1

- Three-phase motor efficiency (IE3)
- Pumps speciality - Standard configuration if empty
- Mechanical seal type
- Frequency: 5 (50Hz); 6 (60Hz)
- M (Single phase); T (Three phase)
- Motor power kW x 10
- Pump material: I (AISI304); N(AISI316)
- Number of stages
- Nominal flow rate in m³/h
- Pump model: EH (standard)  
EHsp (self-priming)

00140001EN 05/2017

## EH 3-5-9-15-20

### MATERIALS/FLUIDS COMPATIBILITY

Pos.	Parts description	Type	I version		N version	
			ASTM/AISI	DIN/EN	ASTM/AISI	DIN/EN
20.00	Pump casing	Stainless steel	AISI 304	1.4301	AISI 316	1.4401
20.02	Seal housing disc	Stainless steel	AISI 304	1.4301	AISI 316	1.4401
20.05	Filing and drain plug	Stainless steel	AISI 304	1.4301	AISI 316	1.4401
20.07	Inlet cover (only for EH 15-20)	Stainless steel	AISI 304	1.4301	AISI 316	1.4401
30.05	O-Ring	EPDM	-	-	-	-
30.06	Mechanical seal	EH 3-5-9	Carbon / Ceramic / EPDM			
		EH 15-20	Carbon / Silicon Carbide / EPDM			
30.08	Rotor and Pump shaft	Stainless steel	AISI 304	1.4301	AISI 316	1.4401
30.09	Screws, nuts and washers	Stainless steel	AISI 304	1.4301	AISI 316	1.4401
40.00	Stage housing and diffuser	Stainless steel	AISI 304	1.4301	AISI 316	1.4401
40.01	Last stage with holes	Stainless steel	AISI 304	1.4301	AISI 316	1.4401
40.02	Floating neck ring assembly	Stainless steel and PPS	AISI 304	-	-	-
40.03	Initial stage housing	Stainless steel	AISI 304	1.4301	AISI 316	1.4401
40.04	Stage housing and diffuser with bearing (only for EH 15-20)	Stainless steel, Tungsten Carbide	AISI 304	1.4301	AISI 316	1.4401
50.00	Impeller	Stainless steel	AISI 304	1.4301	AISI 316	1.4401
50.01	Impeller spacers	Stainless steel	AISI 304	1.4301	AISI 316	1.4401
50.02	Intermediate sleeve (only for EH 15-20)	Tungsten Carbide	-	-	-	-
50.03	Intermediate sleeve spacer (only for EH 15-20)	Stainless Steel	AISI 304	1.4301	AISI 316	1.4401

## EHsp 3-5

### MATERIALS/FLUIDS COMPATIBILITY

Pos.	Parts description	Type	Material	
			ASTM/AISI	DIN/EN
20.00	Pump casing	Stainless steel	AISI 304	1.4301
20.02	Seal housing disc	Stainless steel	AISI 304	1.4301
20.05	Filing and drain plug	Stainless steel	AISI 304	1.4301
30.05	O-Ring	EPDM	-	-
30.06	Mechanical seal	Carbon / Ceramic / EPDM	-	-
30.08	Rotor and Pump shaft	Stainless steel	AISI 304	1.4301
30.09	Screws, nuts and washers	Stainless steel	AISI 304	1.4301
40.00	Stage housing and diffuser	Stainless steel	1.4301	1.4401
40.01	Last stage with holes	Stainless steel	1.4301	1.4401
40.02	Floating neck ring assembly	Stainless steel and PPS	-	-
40.03	Initial stage housing	Stainless steel	1.4301	1.4401
40.05	Stage housing with priming valve	Stainless steel	AISI 301 / AISI 304	1.4310 / 1.4301
50.00	Impeller	Stainless steel	AISI 304	1.4301
50.01	Impeller spacers	Stainless steel	AISI 304	1.4301

# EH 3-5-9-15-20

## TABLE OF HYDRAULIC PERFORMANCE AT 50 HZ

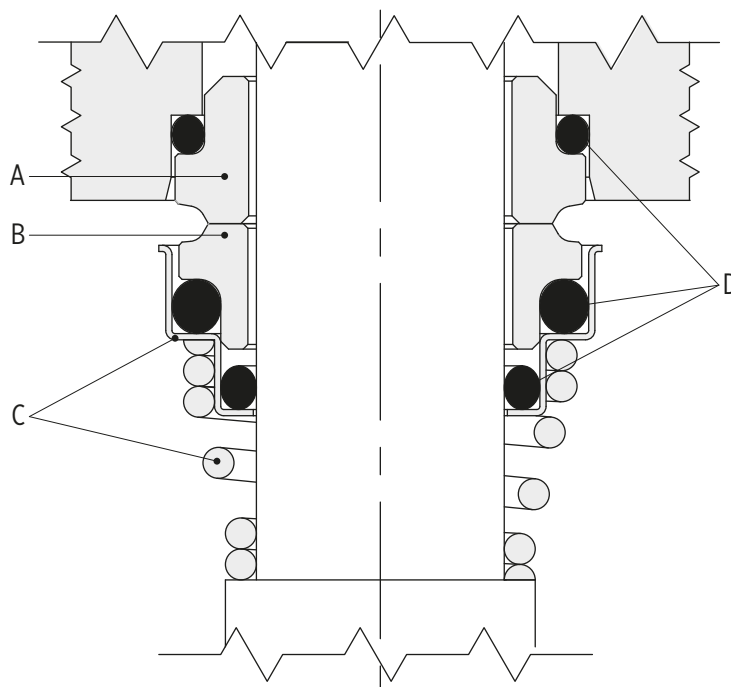
Pump model	Q = DELIVERY																							
	l/min 0	25	33	42	50	58	67	75	83	92	100	117	133	150	167	183	233	267	300	333	367	417	467	483
	m <sup>3</sup> /h 0	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	7	8	9	10	11	14	16	18	20	22	25	28	29
US GMP 0	6.6	8.8	11.0	13.2	15.4	17.6	19.8	22.01	24.2	26.4	30.8	35.2	39.6	44.02	48.4	61.6	70.4	79.2	88.05	96.8	110.07	123.2	127.6	
H = TOTAL M.HEAD OF WATER COLUMN [m]																								
EH 3/2	23	21	19.5	18	16.5	14.5	12.5	10																
EH 3/3	33.5	30.5	29	26.5	24	21	17.5	14																
EH 3/4	44.5	40	37.5	34.5	31	27	23	18																
EH 3/5	55	49	46	42	37	32.5	27	21																
EH 3/6	67.5	61	57	53	47	41.5	35	28																
EH 3/7	78	70.5	66	60.5	54	47.5	40	32																
EH 3/8	90	82	77	71	64	56	47	38																
EH 3/9	101	91.5	85.5	79	70.5	61.5	52	41																
EH 5/2	23.5		21.5	21	20.5	19.5	19	18	17	16	15	11.5												
EH 5/3	34.5		31.5	31	29.5	28.5	27.5	26	25	23	21	16												
EH 5/4	46.5		43	42	41	39.5	38	36	34	32	29	23												
EH 5/5	58		53	51.5	50	48.5	46.5	44	41.5	38.5	35.5	27.5												
EH 5/6	70		64.5	63	61	59	56.5	54	51	47.5	43.5	34												
EH 5/7	81.5		74.5	72.5	70	68	65	61.5	58	54	49.5	38.5												
EH 5/8	92.5		84	82	79	76.5	73	69	65	60	54.5	42												
EH 5/9	104		95.5	93	90.5	87.5	83.5	79.5	75	70	64	50												
EH 9/2	23.5				22	21.5	21	20.5	20	20	19.5	18.5	18	17	15.5	13.5	6.5							
EH 9/3	35.5				33	32.5	32	31.5	31	30.5	30	28.5	27.5	26	24	21	11							
EH 9/4	48				45	44.5	43.5	43	42	41.5	41	39.5	38	36	33	29.5	16							
EH 9/5	59.5				55.5	55	54	53	52	51	50	48.5	46.5	44	40.5	36	18.5							
EH 9/6	71				66	65	64	62.5	61.5	60	59	57	54.5	51	47	41.5	21							
EH 9/7	84				79.5	78.5	77.5	76	74.5	73.5	72	70	67	64	59.5	53.5	29.5							
EH 9/8	96				90.5	89.5	88	86	84.5	83	82	79.5	76	72.5	67	60	32.5							
EH 15/2	29												26	25.5	25.5	25	23	21.5	19.5	17.5	14.5	9.5		
EH 15/3	44												39.5	39	38	37.5	34.5	32.5	29.5	26	22	14.5		
EH 15/4	58.5												53	52	51.5	50.5	47	44	40	35.5	30	20		
EH 15/5	73												65.5	64.5	63.5	62.5	57.5	54	49	43.5	36.5	24		
EH 15/6	87.5												79.5	78	77	75.5	71	67	61.5	54	46	31.5		
EH 15/7	102												92	90.5	89	87.5	82	77.5	70.5	62	52.5	36		
EH 20/2	31												28.5	28	27.5	27	26	25	24	22.5	20.5	16.5	12	10
EH 20/3	46.5												43	42.5	41.5	41	39.5	38	36.5	34.5	31.5	25.5	19	16
EH 20/4	62.5												58	57	56	55.5	53.5	51.5	49.5	46.5	42.5	34.5	26	22
EH 20/5	78.5												72.5	71.5	70.5	69.5	67	64.5	62	58.5	53.5	43.5	32.5	28

# EHsp 3-5

## TABLE OF HYDRAULIC PERFORMANCE AT 50 HZ

Pump model	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 <sup>3</sup> /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	6.6	8.8	11.0	13.2	15.4	17.6	19.8	22.01	24.2	26.4	30.8	35.2	39.6	44.02	48.4	61.6	70.4	79.2	88.05	96.8	110.07	123.2	127.6	
H = TOTAL M.HEAD OF WATER COLUMN [m]																								
EHsp 3/4	43.5	38.0	35.0	32.0	28.5	24.5	20.0	15.0																
EHsp 3/5	54.0	46.5	43.0	39.0	34.0	29.0	23.5	17.0																
EHsp 3/4T	44.0	38.5	35.5	32.0	29.0	25.0	20.0	15.0																
EHsp 3/5T	54.0	47.0	43.0	39.0	35.0	30.0	24.0	18.0																
EHsp 5/4	45.0		42.0	41.0	39.5	38.0	36.0	34.0	32.0	30.0	27.0	20.0												
EHsp 5/5	56.0		51.5	50.0	48.0	46.5	44.0	42.0	39.0	36.0	33.0	24.0												
EHsp 5/4T	45.0		41.5	40.0	39.0	37.0	36.0	34.0	32.0	30.0	26.5	20.0												
EHsp 5/5T	55.5		51.0	49.0	47.5	45.5	43.0	41.0	38.0	35.0	31.5	23.0												

# MECHANICAL SEAL SPECIFICATIONS



00130012 05/2017

## STANDARD VERSION

Model	Type				Position				Temperature [°C]
					A Stationary part	B Rotating part	C Other components	D Elastomers	
EH 3 - 5 - 9 / EHsp 3 - 5									
E0	V	B	G	E	Ceramic	Graphite	AISI 316	EPDM	-15°C +110°C
EH 15 -20									
E1	B	Q	G	E	Graphite	Silicon Carbide	AISI 316	EPDM	-15°C +110°C

## AVAILABLE ON REQUEST (only for EH)

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°C +110°C
V3*	Q	Q	G	V	Silicon Carbide	Silicon Carbide	AISI 316	FKM	-10°C +110°C
V8*	Q	U	G	V	Silicon Carbide	Tungsten Carbide	AISI 316	FKM	-10°C +110°C

\* 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
- Starts per hour
  - for motor power up to 3 kW the allowed starts are 60. Waiting time between two consecutive starts 1 minute
  - for motor power from 4 kW the allowed starts are 30. Waiting time between two consecutive starts 2 minutes

### SINGLE-PHASE VERSION AT 50 Hz

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

P <sub>N</sub> [kW]	MOTOR SIZE	INPUT CURRENT I <sub>N</sub> [A]	Capacitor		230 V - 50 Hz						
			μF	V	n <sub>N</sub> [min <sup>-1</sup> ]	I <sub>s</sub> / I <sub>N</sub>	η %	cos θ	T <sub>N</sub> [Nm]	T <sub>s</sub> / T <sub>N</sub>	T <sub>M</sub> / T <sub>N</sub>
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 provide into the starter panel by the installer

P <sub>N</sub> [kW]	Rendimento / Efficiency $\eta_N$ %						IE
	$\Delta$ 230 V Y 400 V			$\Delta$ 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 <sub>N</sub> [kW]	MOTOR SIZE	N. of poles	f <sub>N</sub> [Hz]	400 V 50 Hz				
				cos $\theta$	I <sub>s</sub> / I <sub>N</sub>	T <sub>N</sub> [Nm]	T <sub>s</sub> / T <sub>N</sub>	T <sub>M</sub> / T <sub>N</sub>
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 <sub>N</sub> [kW]	VOLTAGE U <sub>N</sub>				n <sub>N</sub> [min <sup>-1</sup> ]	Motor operating conditions		
	$\Delta$ 230 V	Y 400 V	$\Delta$ 400 V	Y 690 V		Altitude Above Sea Level [m]	T <sub>amb</sub> min/max [°C]	ATEX
	I <sub>N</sub> [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			

# **EH Series**

## **Technical data and Performance curves**

# EH 3

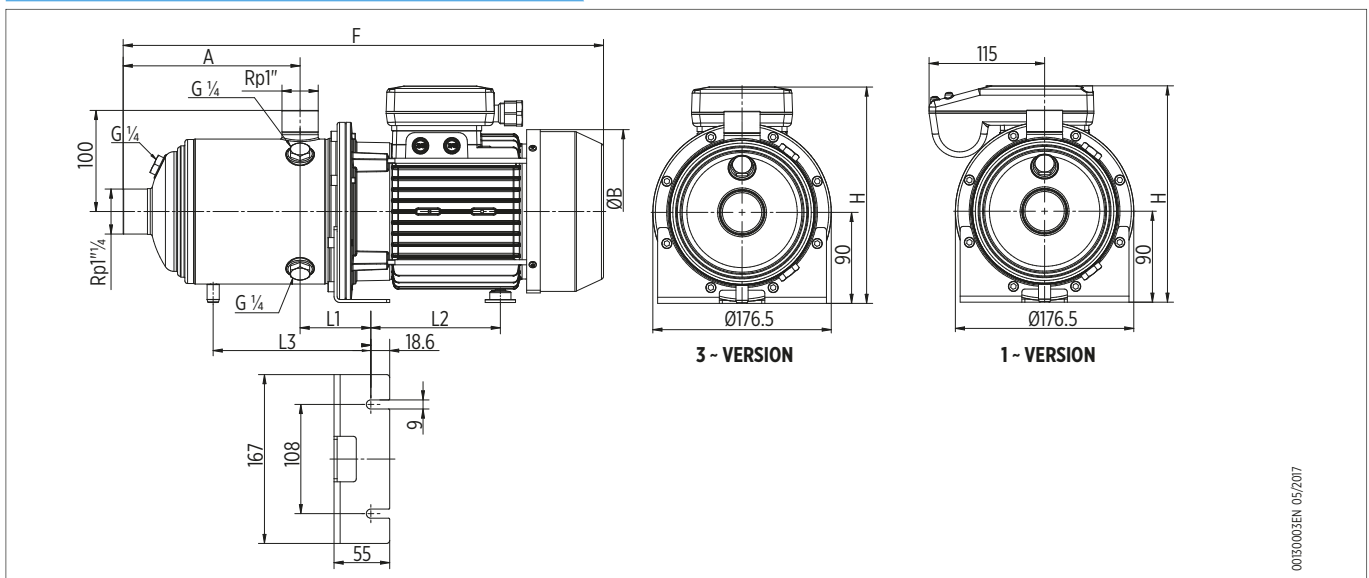
## 1 ~ ELECTRIC PUMP TECHNICAL DATA

Pump model	Motor Size	MOTOR NOMINAL POWER		INPUT POWER [kW]	Capacitor 450V $\mu$ F	INPUT CURRENT [A]	Dimensions [mm]						Weight [Kg]	
		[kW]	[HP]				220-240 V	A	F	$\varnothing$ B	H	L1		L2
EH 3/2	71	0.33	0.45	0.46	16	2.5	103	361	144	207	70	101	-	11.2
EH 3/3	71	0.45	0.6	0.60	16	3.0	103	361	144	207	70	101	-	11.4
EH 3/4	71	0.55	0.75	0.76	16	3.7	127	385	144	207	70	101	-	11.8
EH 3/5	71	0.75	1	0.91	16	4.3	151	409	144	207	70	101	-	12.4
EH 3/6	71	0.9	1.2	1.13	30	5.4	175	433	144	207	70	101	-	14.4
EH 3/7	71	1.1	1.5	1.28	30	6.0	199	457	144	207	70	101	180	15
EH 3/8	80	1.3	1.8	1.43	30	6.9	223	523	162	214	70	128	204	18.8
EH 3/9	80	1.5	2	1.58	30	7.5	247	547	162	214	70	128	228	19.4

## 3 ~ ELECTRIC PUMP TECHNICAL DATA

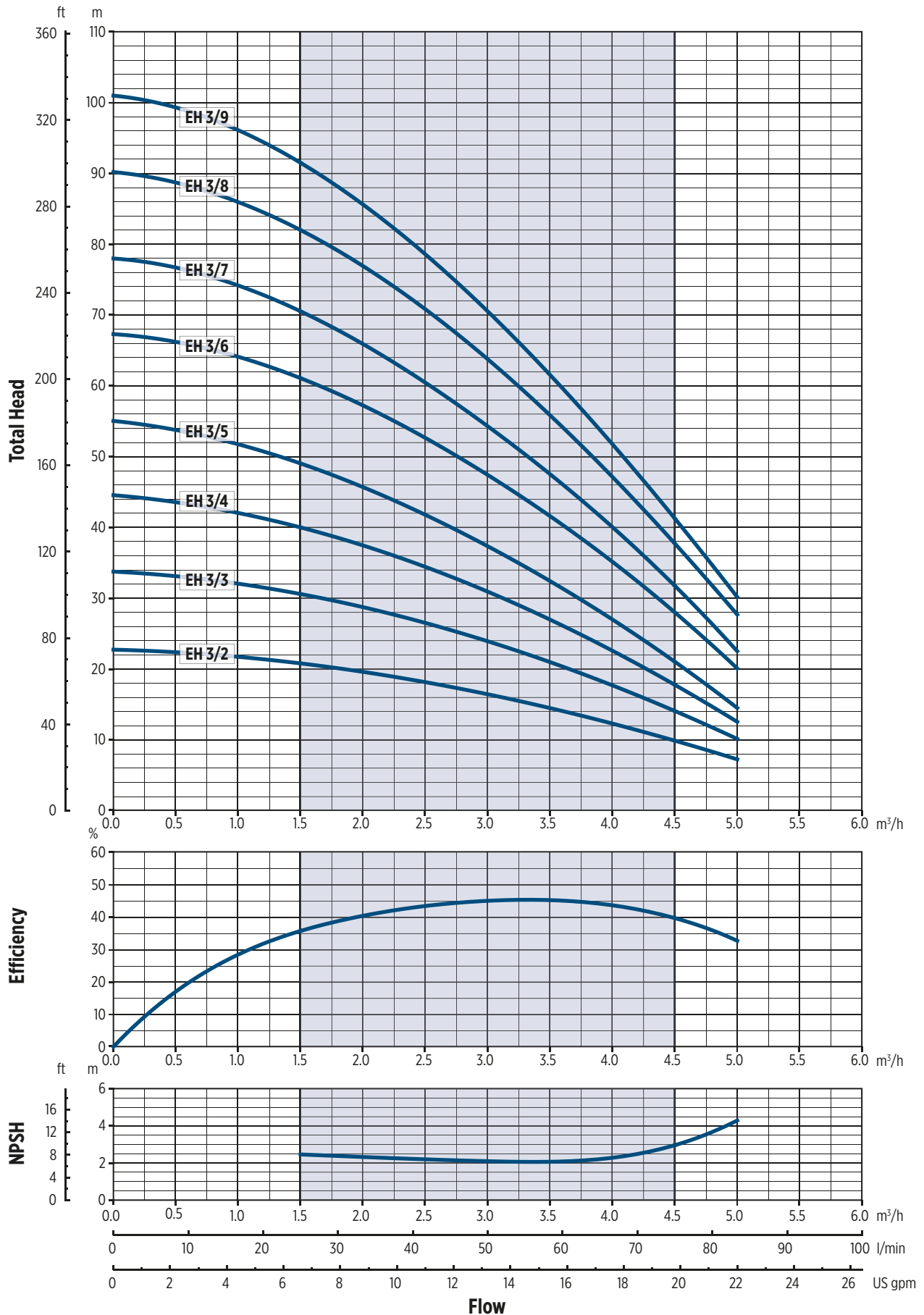
Pump model	Motor Size	MOTOR NOMINAL POWER		INPUT POWER [kW]	INPUT CURRENT [A]		Dimensions [mm]						Weight [Kg]	
		[kW]	[HP]		220-240 V	380-415 V	A	F	$\varnothing$ B	H	L1	L2		L3
EH 3/2T	71	0.75	1	0.41	1.9	1.1	103	363	144	207	70	101	-	10.8
EH 3/3T	71	0.75	1	0.57	2.1	1.2	103	363	144	207	70	101	-	11
EH 3/4T	71	0.75	1	0.72	2.4	1.4	127	387	144	207	70	101	-	11.6
EH 3/5T	71	0.75	1	0.87	2.7	1.6	151	411	144	207	70	101	-	12
EH 3/6T	71	1.1	1.5	1.02	3.3	1.9	175	435	144	207	70	101	-	13.2
EH 3/7T	71	1.1	1.5	1.17	3.6	2.1	199	459	144	207	70	101	180	13.8
EH 3/8T	80	1.5	2	1.39	4.8	2.8	223	520	162	214	70	128	204	17.6
EH 3/9T	80	1.5	2	1.55	5.1	3.0	247	544	162	214	70	128	228	18.2

## DIMENSIONAL DRAWINGS



0030005EN 05/2017

# PERFORMANCE CURVES 50 Hz



0012005EN 05/2017

# EH 5

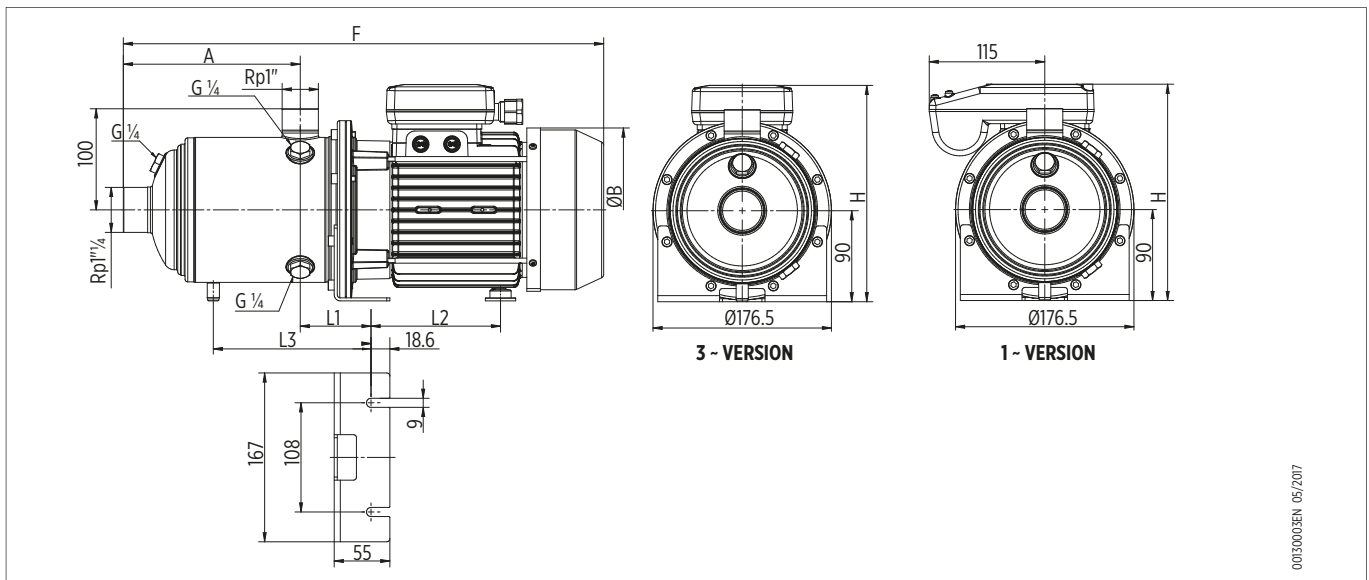
## 1 ~ ELECTRIC PUMP TECHNICAL DATA

Pump model	Motor Size	MOTOR NOMINAL POWER		INPUT POWER [kW]	Capacitor 450V $\mu$ F	INPUT CURRENT [A]	Dimensions [mm]						Weight [Kg]	
		[kW]	[HP]				220-240 V	A	F	$\varnothing$ B	H	L1		L2
EH 5/2	71	0.45	0.6	0.59	16	3.0	103	361	144	207	70	101	-	11.2
EH 5/3	71	0.55	0.75	0.81	16	3.9	103	361	144	207	70	101	-	11.4
EH 5/4	71	0.9	1.2	1.10	30	5.3	127	385	144	207	70	101	-	13.4
EH 5/5	71	1.1	1.5	1.32	30	6.2	151	409	144	207	70	101	-	14
EH 5/6	80	1.3	1.8	1.53	30	7.3	175	475	162	214	70	128	-	17.8
EH 5/7	80	1.5	2	1.74	30	8.2	199	499	162	214	70	128	180	18.2
EH 5/8	90	1.85	2.5	2.40	60	10.5	223	567	179	221	70	172	204	24.2
EH 5/9	90	2.2	3	2.59	60	11.4	247	592	179	221	70	172	228	24.8

## 3 ~ ELECTRIC PUMP TECHNICAL DATA

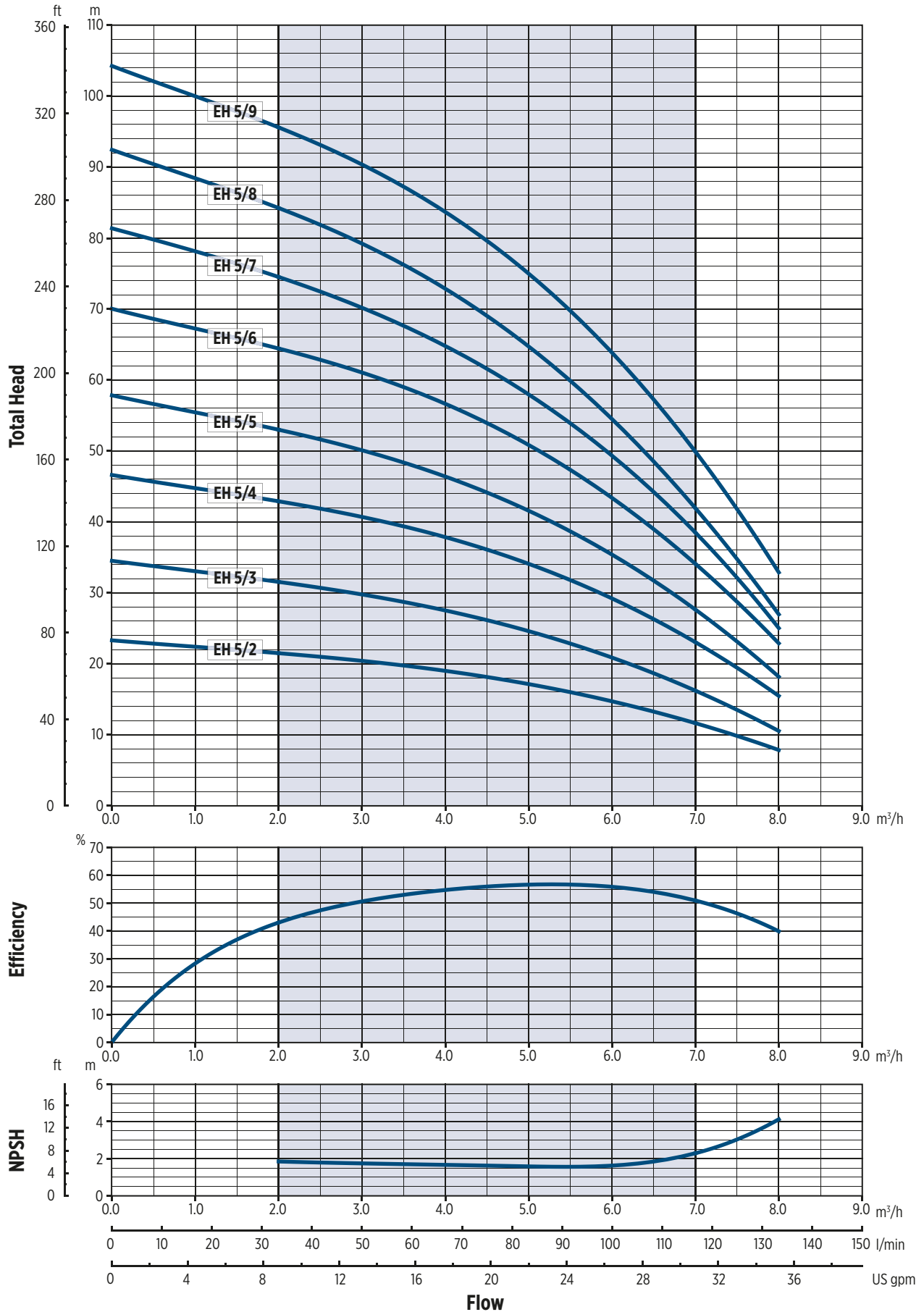
Pump model	Motor Size	MOTOR NOMINAL POWER		INPUT POWER [kW]	INPUT CURRENT [A]		Dimensions [mm]						Weight [Kg]	
		[kW]	[HP]		220-240 V	380-415 V	A	F	$\varnothing$ B	H	L1	L2		L3
EH 5/2T	71	0.75	1	0.55	2.1	1.2	103	363	144	207	70	101	-	10.8
EH 5/3T	71	0.75	1	0.77	2.5	1.4	103	363	144	207	70	101	-	11
EH 5/4T	71	1.1	1.5	0.99	3.2	1.9	127	387	144	207	70	101	-	12.2
EH 5/5T	71	1.1	1.5	1.21	3.7	2.2	151	411	144	207	70	101	-	12.6
EH 5/6T	80	1.5	2	1.50	5.0	2.9	175	472	162	214	70	128	-	16.6
EH 5/7T	80	1.5	2	1.72	5.5	3.2	199	496	162	214	70	128	180	17
EH 5/8T	90	2.2	3	2.06	6.8	3.9	223	567	179	221	70	172	204	23
EH 5/9T	90	2.2	3	2.29	7.4	4.3	247	591	179	221	70	172	228	23.4

## DIMENSIONAL DRAWINGS



0010003EN 05/2017

# PERFORMANCE CURVES 50 Hz



002006EN 05/2017

# EH 9

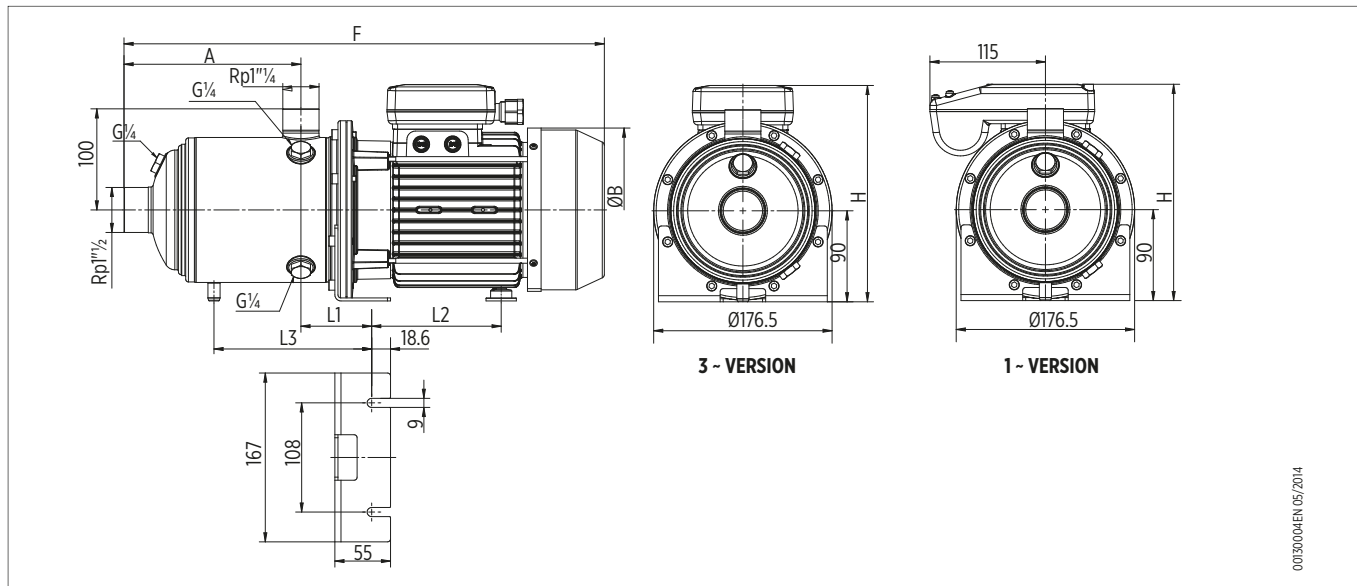
## 1 ~ ELECTRIC PUMP TECHNICAL DATA

Pump model	Motor Size	MOTOR NOMINAL POWER		INPUT POWER [kW]	Capacitor 450V $\mu$ F	INPUT CURRENT [A]	Dimensions [mm]						Weight [Kg]	
		[kW]	[HP]				A	F	$\varnothing$ B	H	L1	L2		L3
EH 9/2	71	0.75	1	0.91	16	4.3	118	380	144	207	74	101	-	11.6
EH 9/3	71	1.1	1.5	1.35	30	6.3	118	380	144	207	74	101	-	13.2
EH 9/4	80	1.5	2	1.74	30	8.2	148	452	162	214	74	128	-	17
EH 9/5	90	2.2	3	2.51	60	11.1	178	527	179	221	74	172	-	23
EH 9/6	90	2.2	3	2.89	60	12.7	208	557	179	221	74	172	192	23.8
EH 9/7	90	2.2	3	3.30	60	14.5	238	587	179	221	74	172	222	24.4

## 3 ~ ELECTRIC PUMP TECHNICAL DATA

Pump model	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
EH 9/2T	71	0.75	1	0.87	2.7	1.6	118	382	144	207	74	101	-	11.2
EH 9/3T	71	1.1	1.5	1.24	3.8	2.2	118	382	144	207	74	101	-	12
EH 9/4T	80	1.5	2	1.70	5.5	3.2	148	449	162	214	74	128	-	15.8
EH 9/5T	90	2.2	3	2.20	7.1	4.1	178	526	179	221	74	172	-	21.8
EH 9/6T	90	2.2	3	2.61	8.2	4.7	208	556	179	221	74	172	192	22.4
EH 9/7T	90	3	4	3.08	9.5	5.5	238	621	179	221	74	172	222	26
EH 9/8T	90	3	4	3.49	10.4	6.0	268	651	179	221	74	172	252	26.6

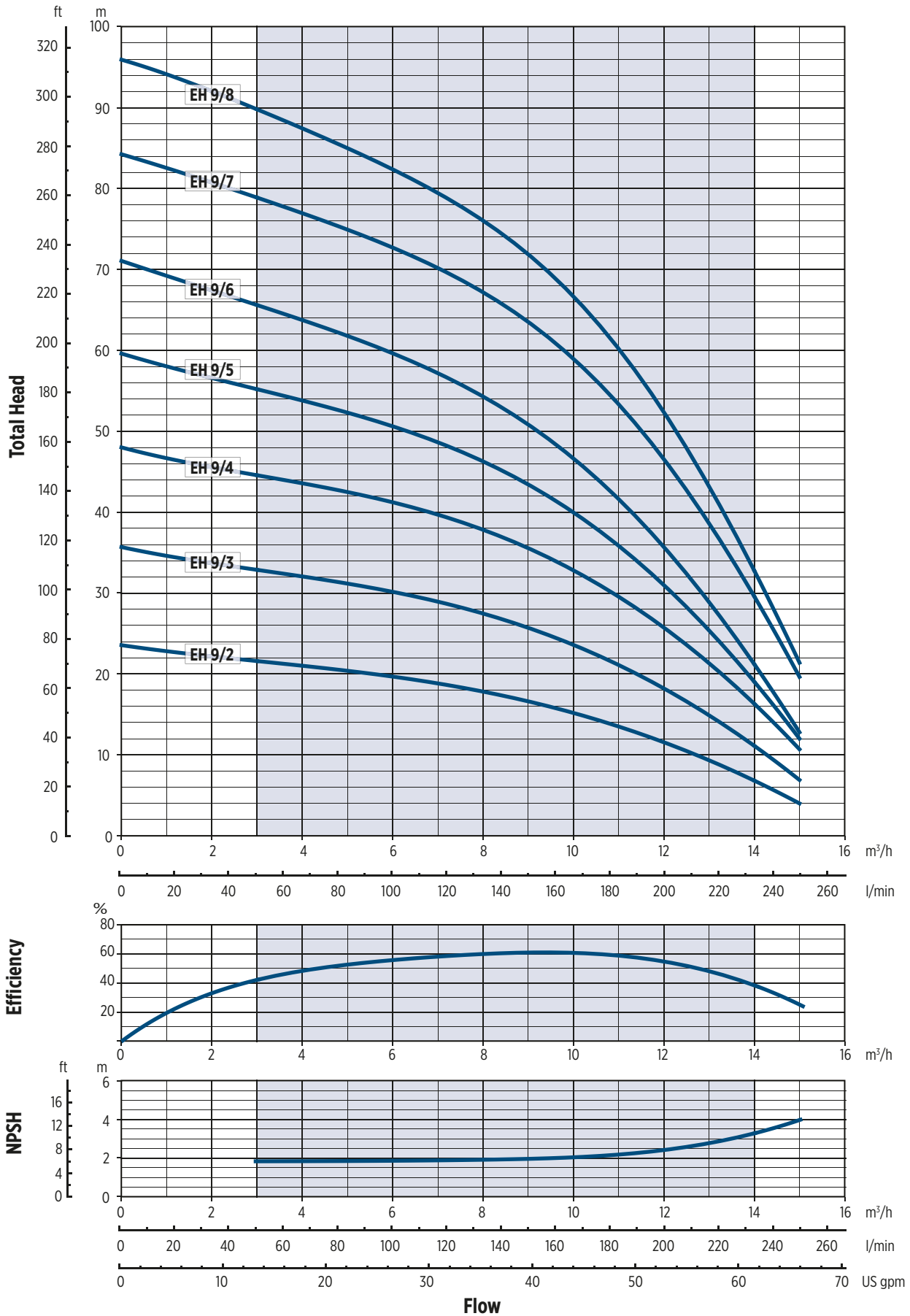
## DIMENSIONAL DRAWINGS



0030004EN 05/2014



# PERFORMANCE CURVES 50 Hz



0012007EN 05/2017

# EH 15

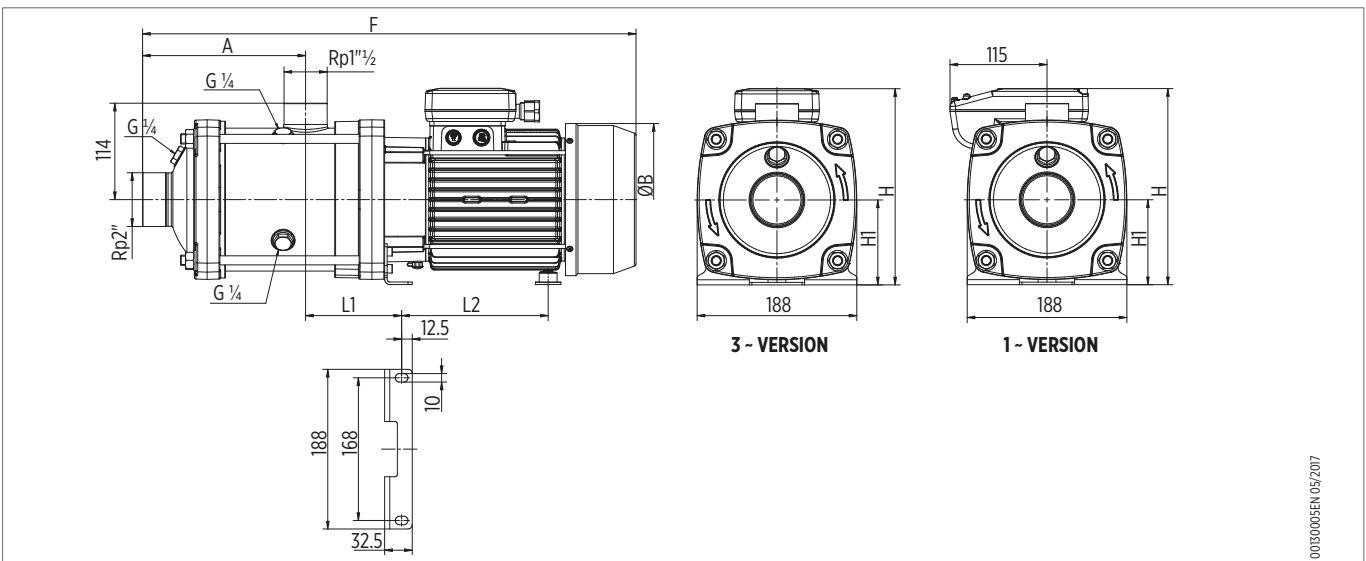
## 1 ~ ELECTRIC PUMP TECHNICAL DATA

Pump model	Motor size	MOTOR NOMINAL POWER		INPUT POWER [kW]	Capacitor 450V $\mu$ 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
EH 15/2	80	1.5	2	1.63	30	7.7	144	488	162	224	100	113	129	-	-	-	-	20.2
EH 15/3	90	2.2	3	2.74	60	12.1	144	533	179	231	100	113	173	-	-	-	-	25.4

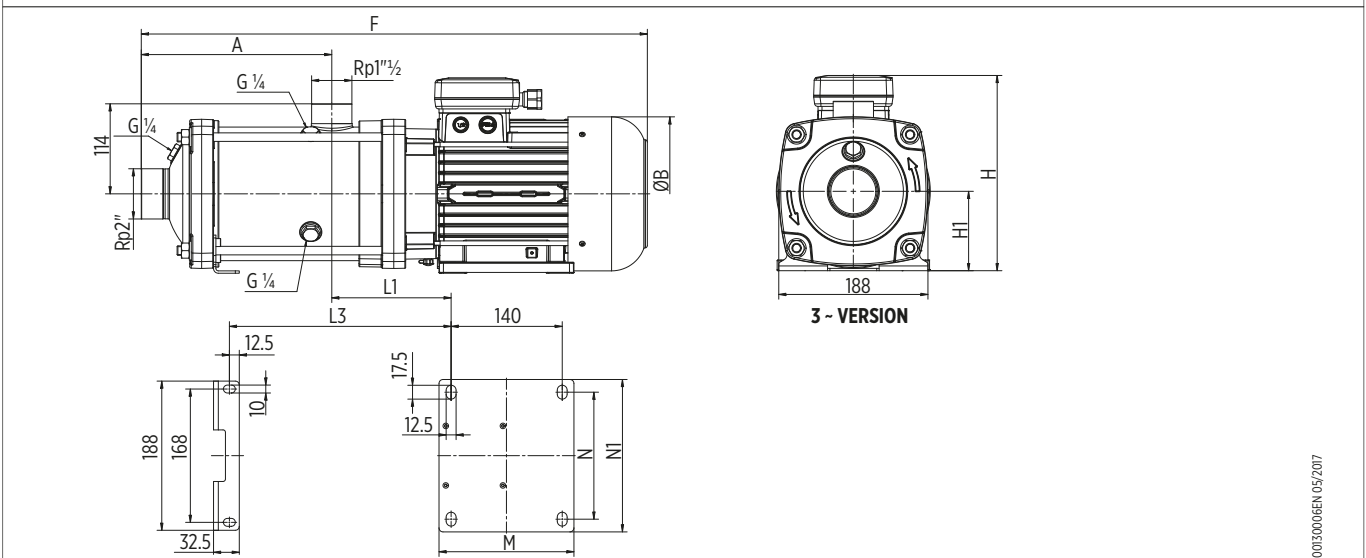
## 3 ~ ELECTRIC PUMP TECHNICAL DATA

Pump model	Motor size	MOTOR NOMINAL POWER		INPUT POWER [kW]	INPUT CURRENT [A]			Dimensions [mm]									Weight [Kg]		
		[kW]	[HP]		220-240 V	380-415 V	660-690 V	A	F	$\varnothing$ B	H	H1	L1	L2	L3	M		N	N1
EH 15/2T	80	1.5	2	1.60	5.3	3.0	-	144	485	162	224	100	113	129	-	-	-	-	18.8
EH 15/3T	90	2.2	3	2.45	7.8	4.5	-	144	532	179	231	100	113	173	-	-	-	-	24.4
EH 15/4T	90	3	4	3.28	9.9	5.7	-	192	615	179	231	100	113	173	-	-	-	-	28.6
EH 15/5T	100	4	5.5	4.09	-	7.0	4.1	240	670	194	246	100	150	-	279	170	160	192	37
EH 15/6T	112	5.5	7.5	4.95	-	9.3	5.4	288	732	218	263	112	152	-	329	180	190	220	46.2
EH 15/7T	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

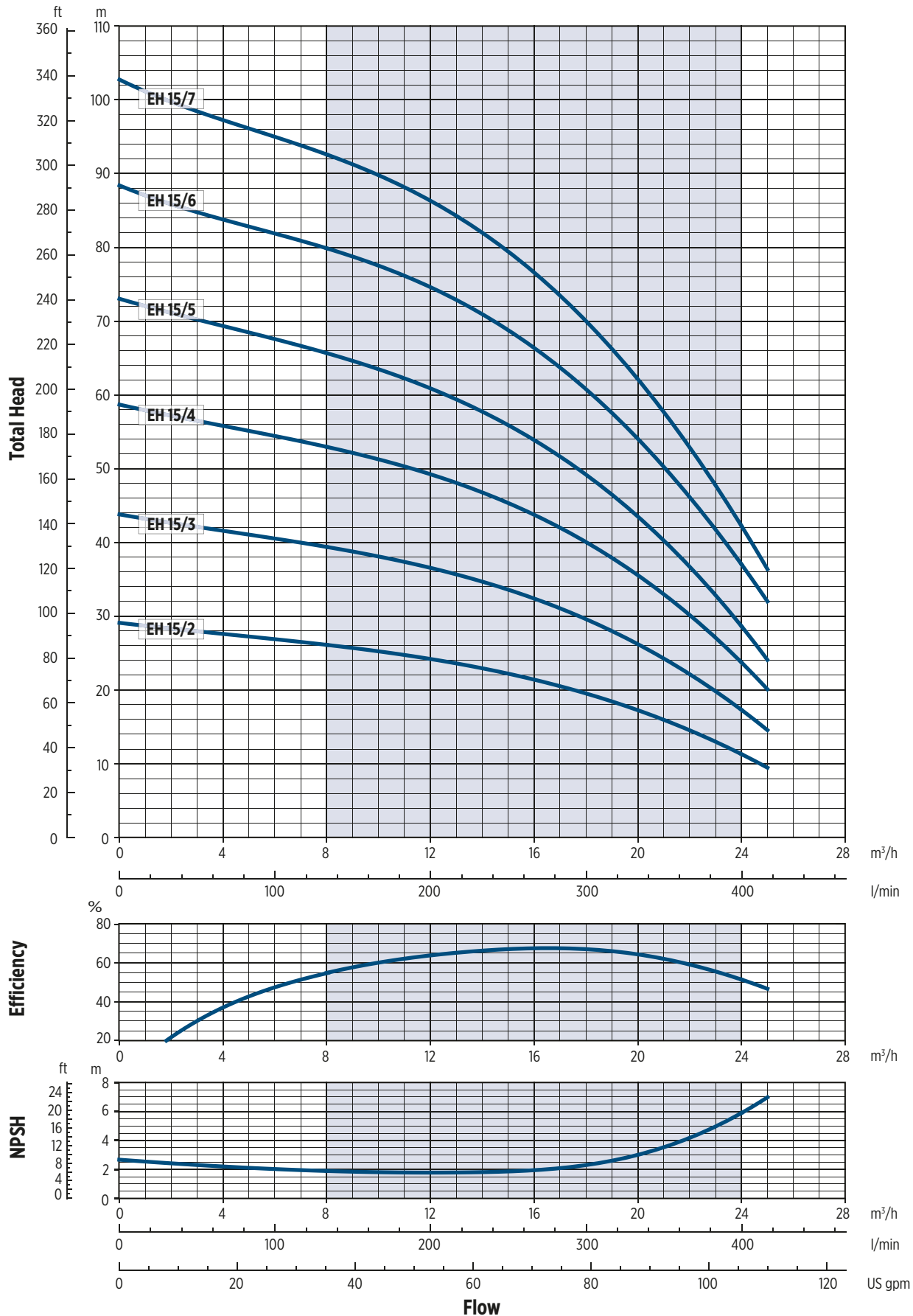


00130005EN 05/2017



00130006EN 05/2017

# PERFORMANCE CURVES 50 Hz



0012008EN/05/2017

# EH 20

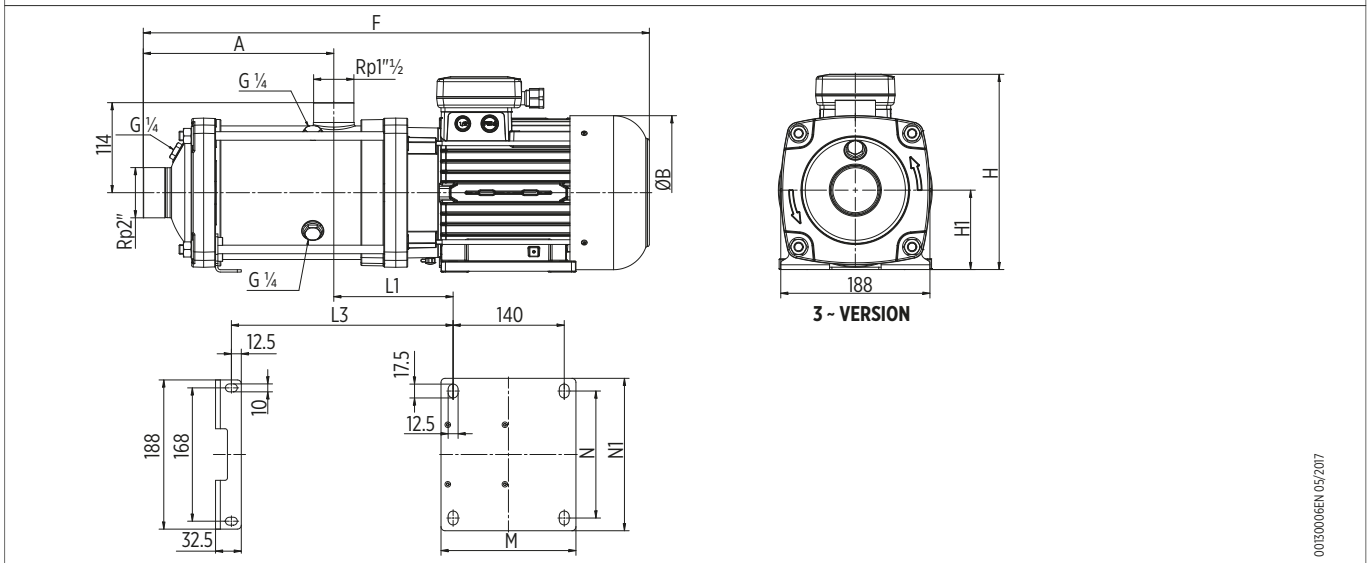
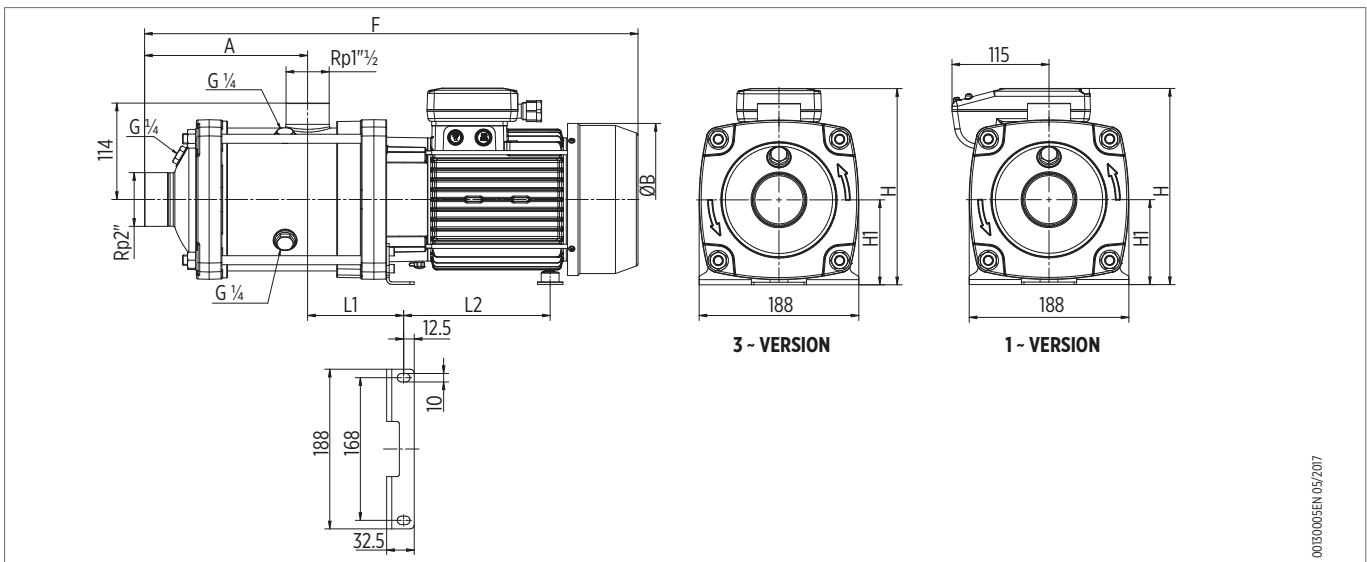
## 1 ~ ELECTRIC PUMP TECHNICAL DATA

Pump model	Motor size	MOTOR NOMINAL POWER		INPUT POWER [kW]	Capacitor 450V $\mu$ 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
EH 20/2	90	2.2	3	2.59	60	11.4	144	533	179	231	100	113	173	-	-	-	-	25.2

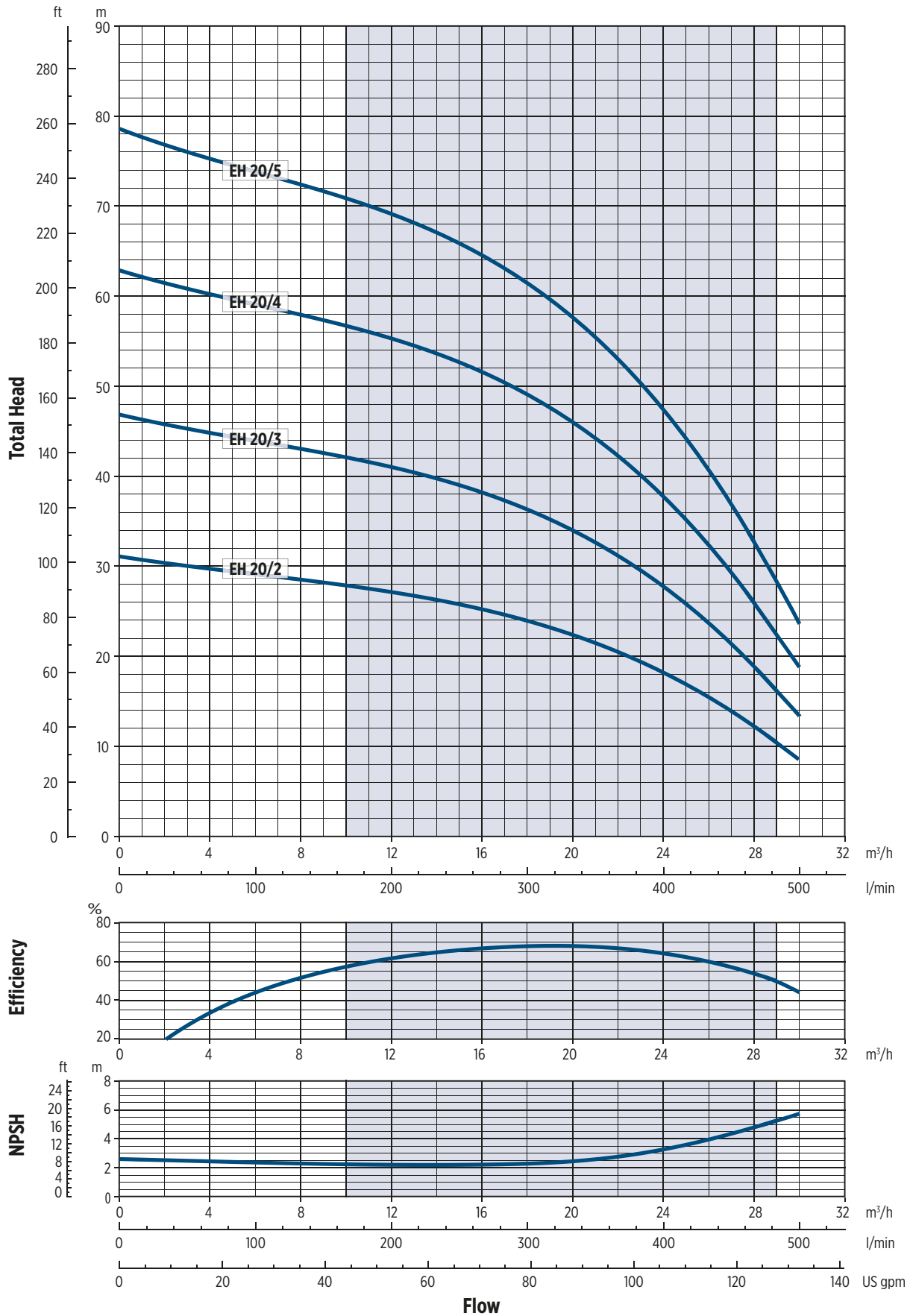
## 3 ~ ELECTRIC PUMP TECHNICAL DATA

Pump model	Motor size	MOTOR NOMINAL POWER		INPUT POWER [kW]	INPUT CURRENT [A]			Dimensions [mm]									Weight [Kg]		
		[kW]	[HP]		220-240 V	380-415 V	660-690 V	A	F	$\varnothing$ B	H	H1	L1	L2	L3	M		N	N1
EH 20/2T	90	2.2	3	2.29	7.4	4.3	-	144	532	179	231	100	113	173	-	-	-	24.2	
EH 20/3T	90	3	4	3.43	10.3	5.9	-	144	567	179	231	100	113	173	-	-	-	27.2	
EH 20/4T	100	4	5.5	4.53	-	7.7	4.4	192	622	194	246	100	150	-	231	170	160	192	35.8
EH 20/5T	112	5.5	7.5	5.69	-	10.3	6.0	240	684	218	263	112	152	-	281	180	190	220	45

## DIMENSIONAL DRAWINGS



# PERFORMANCE CURVES 50 Hz



002009EN05/2017



# **EHsp Series**

## **Technical data and Performance curves**

# EHsp 3

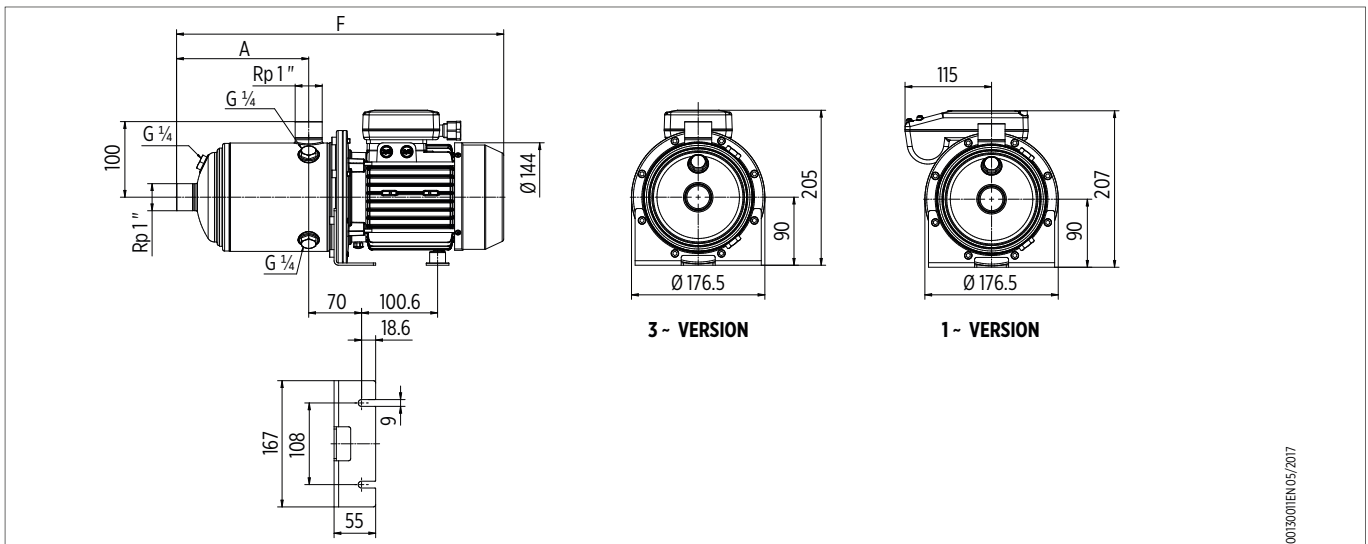
## 1 ~ ELECTRIC PUMP TECHNICAL DATA

Pump model	Motor size	MOTOR NOMINAL POWER		INPUT POWER [kW]	Capacitor 450V μF	INPUT CURRENT [A] 220-240 V	Dimensions [mm]		Weight [Kg]
		[kW]	[HP]				A	F	
EHsp 3/4	71	0.55	0.75	0.79	16	3.8	175	433	12.6
EHsp 3/5	71	0.75	1	0.95	16	4.5	199	457	13

## 3 ~ ELECTRIC PUMP TECHNICAL DATA

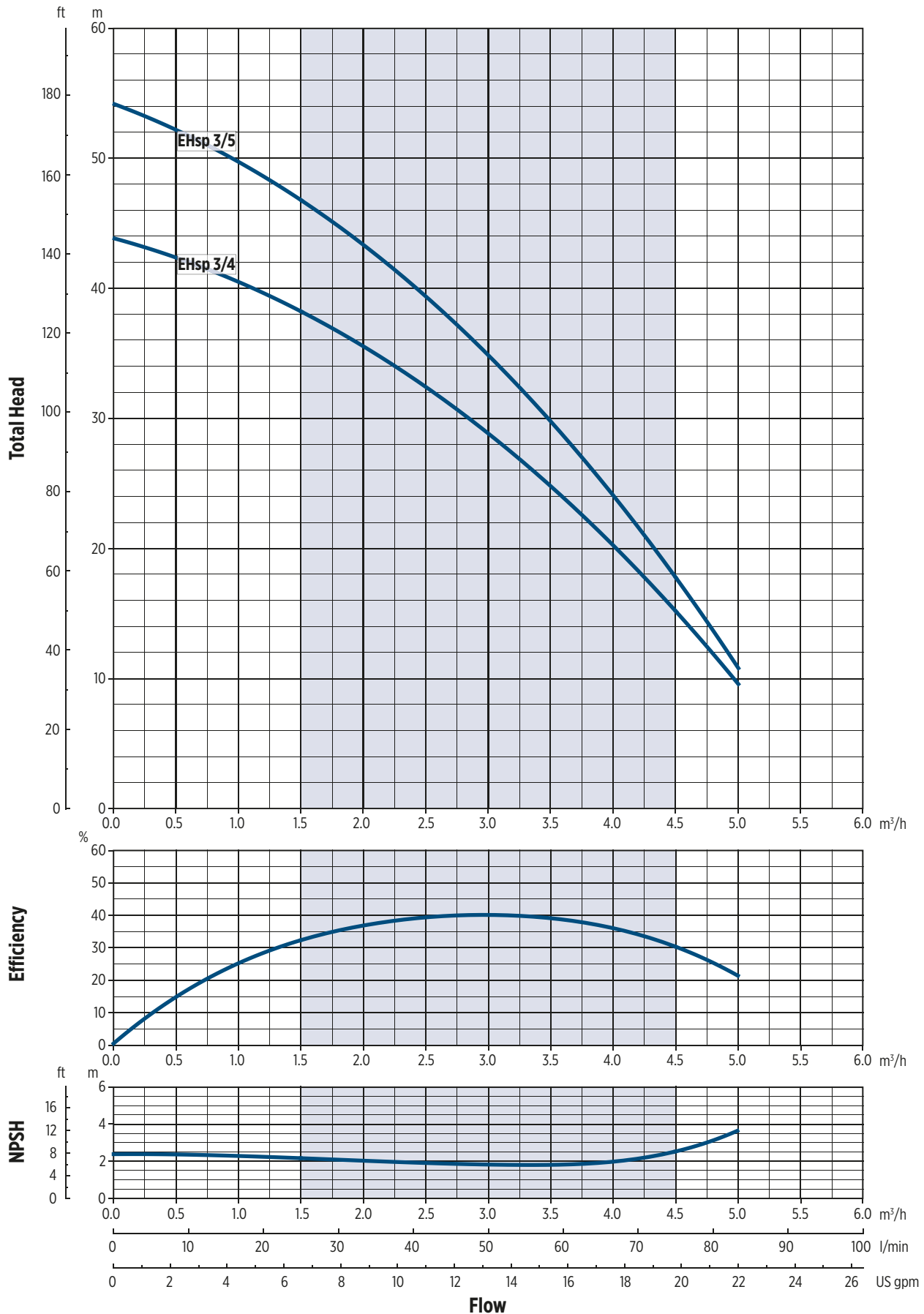
Pump model	Motor size	MOTOR NOMINAL POWER		INPUT POWER [kW]	INPUT CURRENT [A] 220-240 V	Dimensions [mm]		Weight [Kg]
		[kW]	[HP]			A	F	
EHsp 3/4 T	71	0.75	1	0.75	2.4	175	435	12.2
EHsp 3/5 T	71	0.75	1	0.91	2.8	199	459	12.8

## DIMENSIONAL DRAWINGS





# PERFORMANCE CURVES 50 Hz



0012001EN/05/2017

# EHsp 5

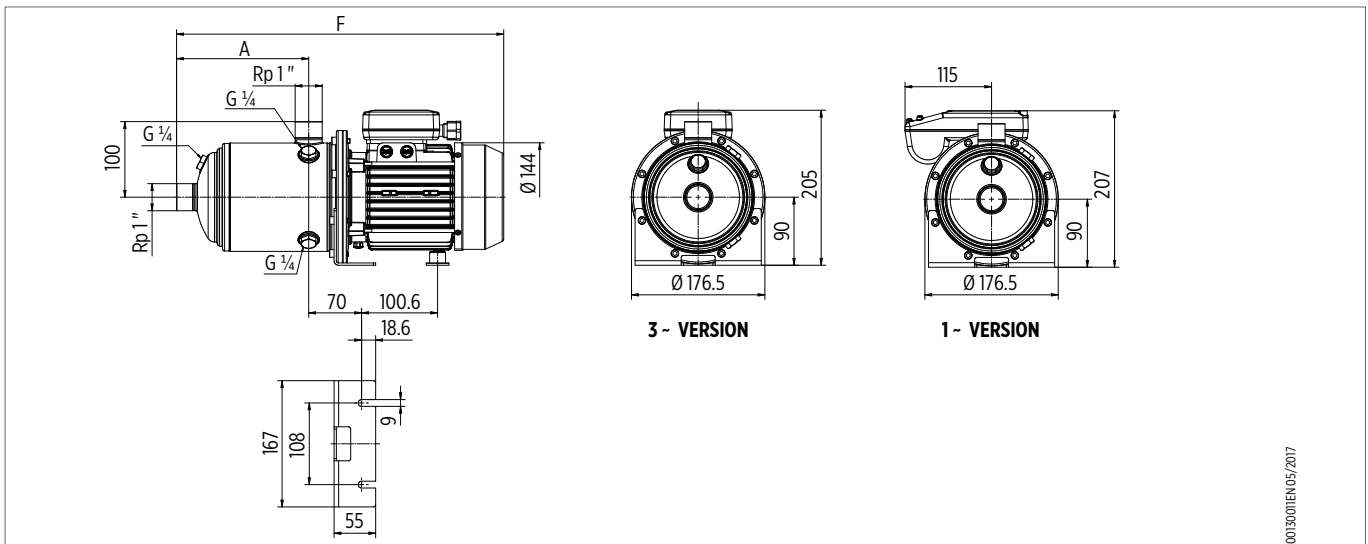
## 1 ~ ELECTRIC PUMP TECHNICAL DATA

Pump model	Motor size	MOTOR NOMINAL POWER		INPUT POWER [kW]	Capacitor 450V μF	INPUT CURRENT [A] 220-240 V	Dimensions [mm]		Weight [kg]
		[kW]	[HP]				A	F	
EHsp 5/4	71	0.9	1.2	1.10	30	5.3	175	433	14
EHsp 5/5	71	1.1	1.5	1.31	30	6.1	199	457	14.4

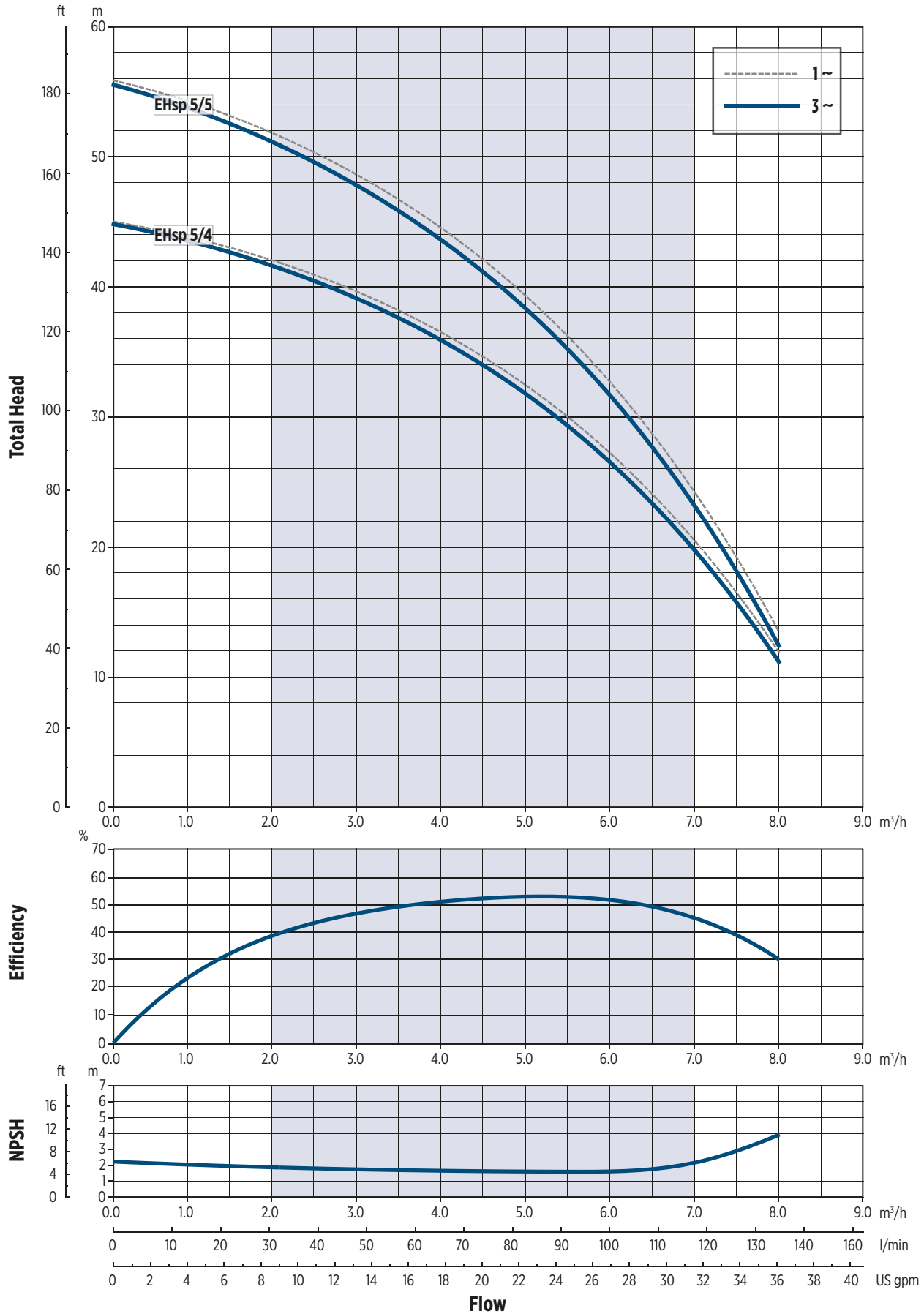
## 3 ~ ELECTRIC PUMP TECHNICAL DATA

Pump model	Motor size	MOTOR NOMINAL POWER		INPUT POWER [kW]	INPUT CURRENT [A] 220-240 V	Dimensions [mm]		Weight [Kg]
		[kW]	[HP]			A	F	
EHsp 5/4 T	71	1.1	1.5	0.99	3.2	175	435	12.8
EHsp 5/5 T	71	1.1	1.5	1.20	3.7	199	459	13.4

## DIMENSIONAL DRAWINGS



# PERFORMANCE CURVES 50 Hz

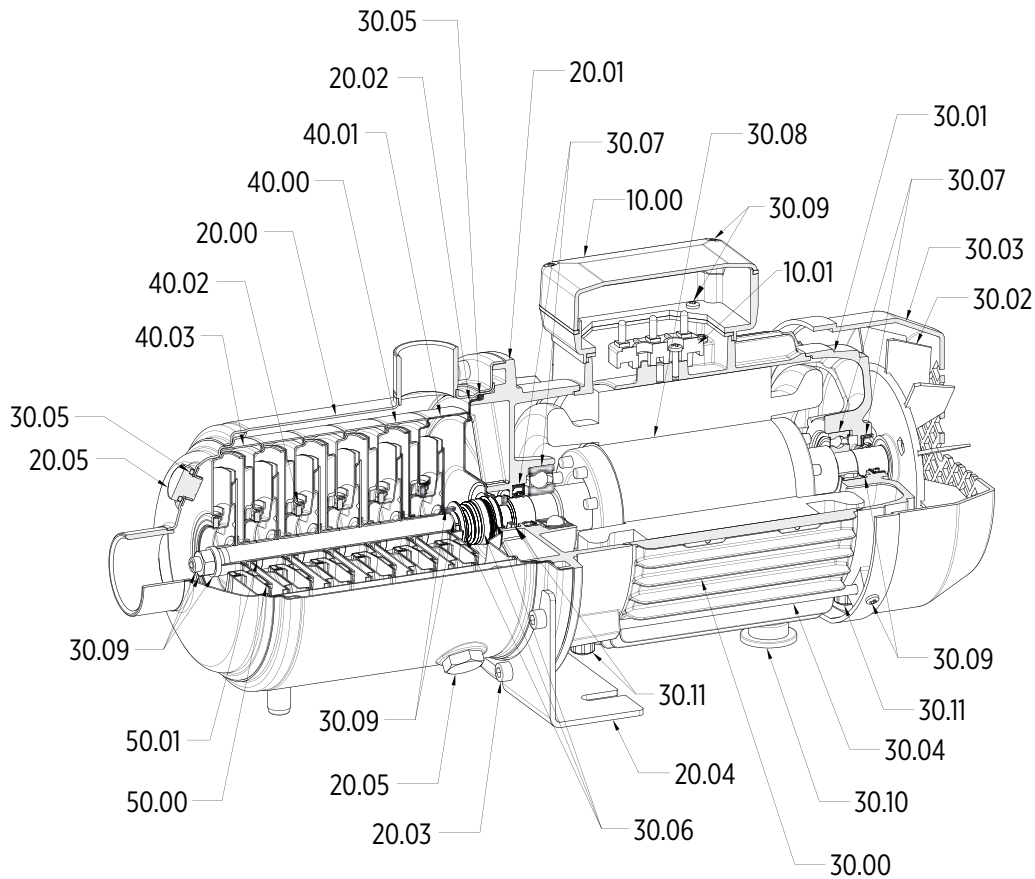


0012000EN/05/2017



# EH 3-5-9

## PUMP SECTION AND LIST AND MAIN COMPONENTS



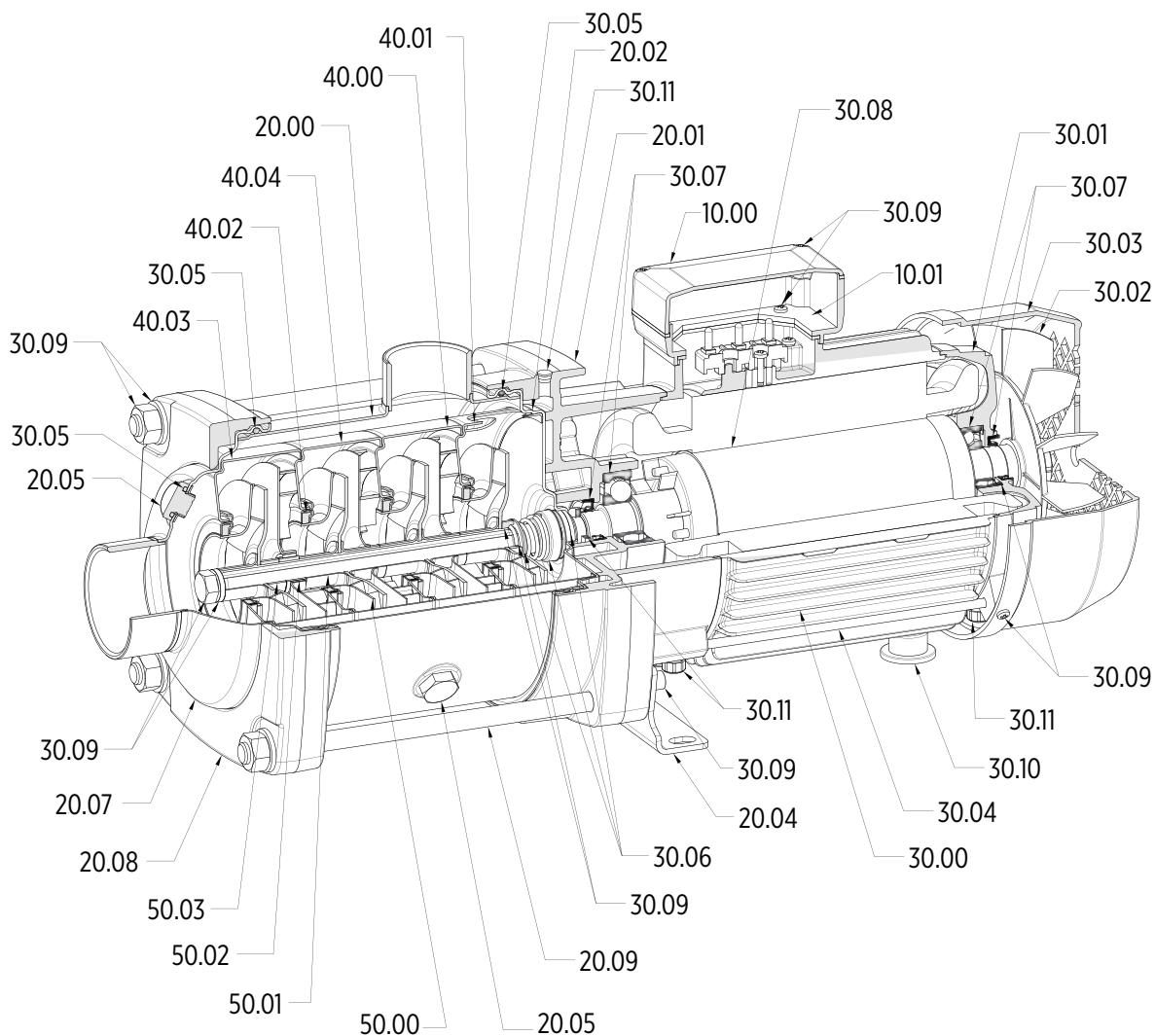
L02/50\_0003100

Ref. N.	Description
20.00	Outer case
20.01	Mechanical seal housing
20.03	Motor bracket
20.05	Filling plug
20.06	Kit bearings
20.12	Support foot and screws
30.00	Pump shaft
30.01	Kit mechanical seal
30.02	Mechanical seal fastening kit
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

Ref. N.	Description
50.01	Impeller spacer
60.00	Motor housing and stator
60.01	Bearing housing
60.02	Fan
60.03	Fan cover and screws
60.04	Motor tie rods
60.05	Kit motor spare components
60.06	Motor housing foot
60.07	Terminal box cover and base
60.08	Terminal board
60.09	Capacitor
60.10	Inverter
60.11	Pressure sensor
60.12	Kit cables

# EH 15-20 (Configuration up to 3 kW)

## PUMP SECTION AND LIST AND MAIN COMPONENTS



00130008057207

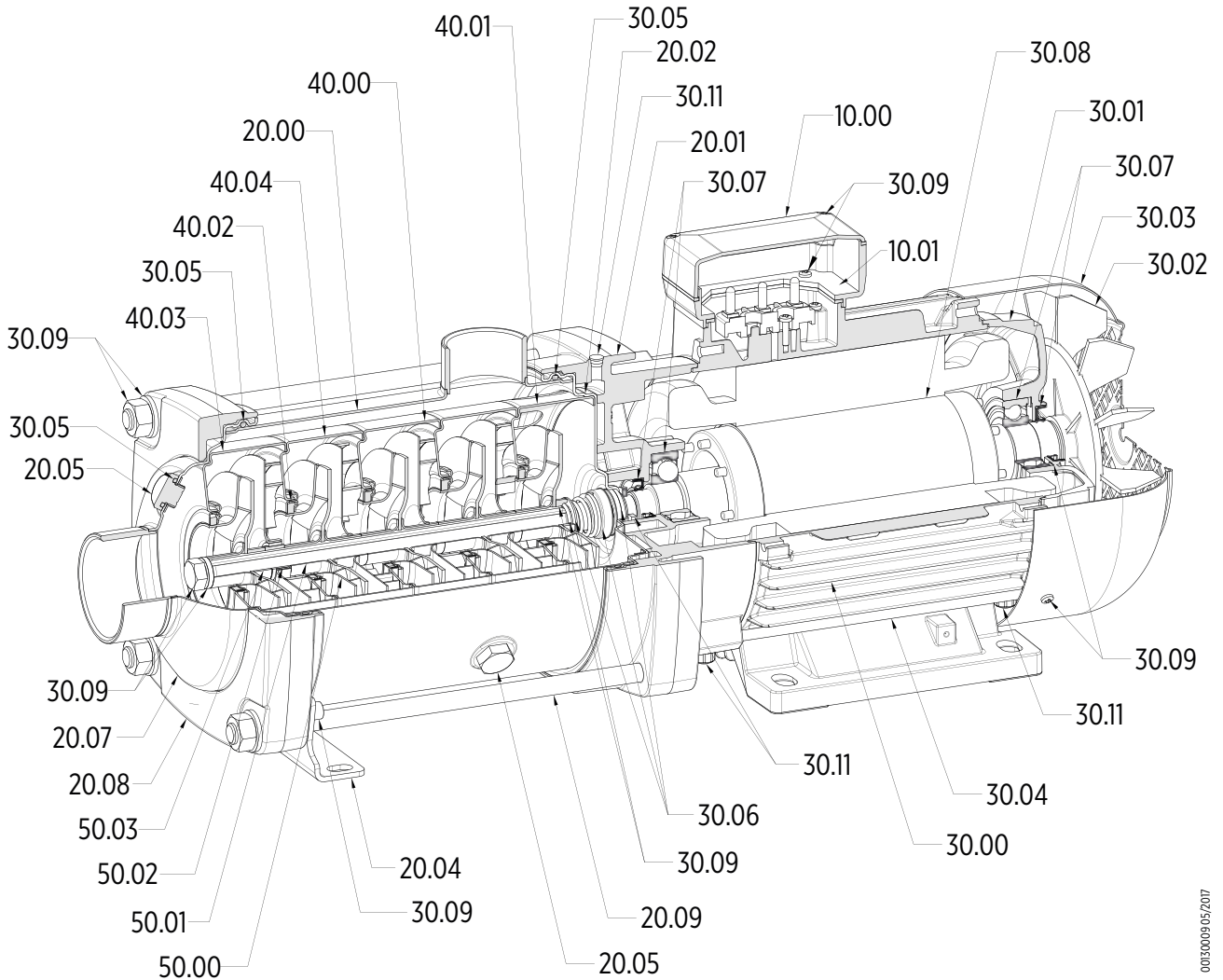
Ref. N.	Description
10.03	Tie bolts
10.04	Kit nuts and washers
10.08	Pre-load flange
20.00	Outer case
20.01	Mechanical seal housing
20.03	Motor bracket
20.05	Filling plug
20.06	Kit bearings
20.12	Support foot and screws
20.13	Inlet cover
30.00	Pump shaft
30.01	Kit mechanical seal
30.02	Mechanical seal fastening kit
30.03	Kit O-rings
40.00	Stage housing and diffuser
40.02	Floating neck ring
40.03	Initial stage housing

Ref. N.	Description
40.04	Last Stage with diffuser
40.06	Stage housing and diffuser with bearing
50.00	Impeller
50.01	Impeller spacer
50.02	Intermediary sleeve
50.03	Intermediary sleeve spacer
60.00	Motor housing and stator
60.01	Bearing housing
60.02	Fan
60.03	Fan cover and screws
60.04	Motor tie rods
60.05	Kit motor spare components
60.06	Motor housing foot
60.07	Terminal box cover and base
60.08	Terminal board
60.09	Capacitor



# EH 15-20 (Configuration from 4 kW)

## PUMP SECTION AND LIST AND MAIN COMPONENTS



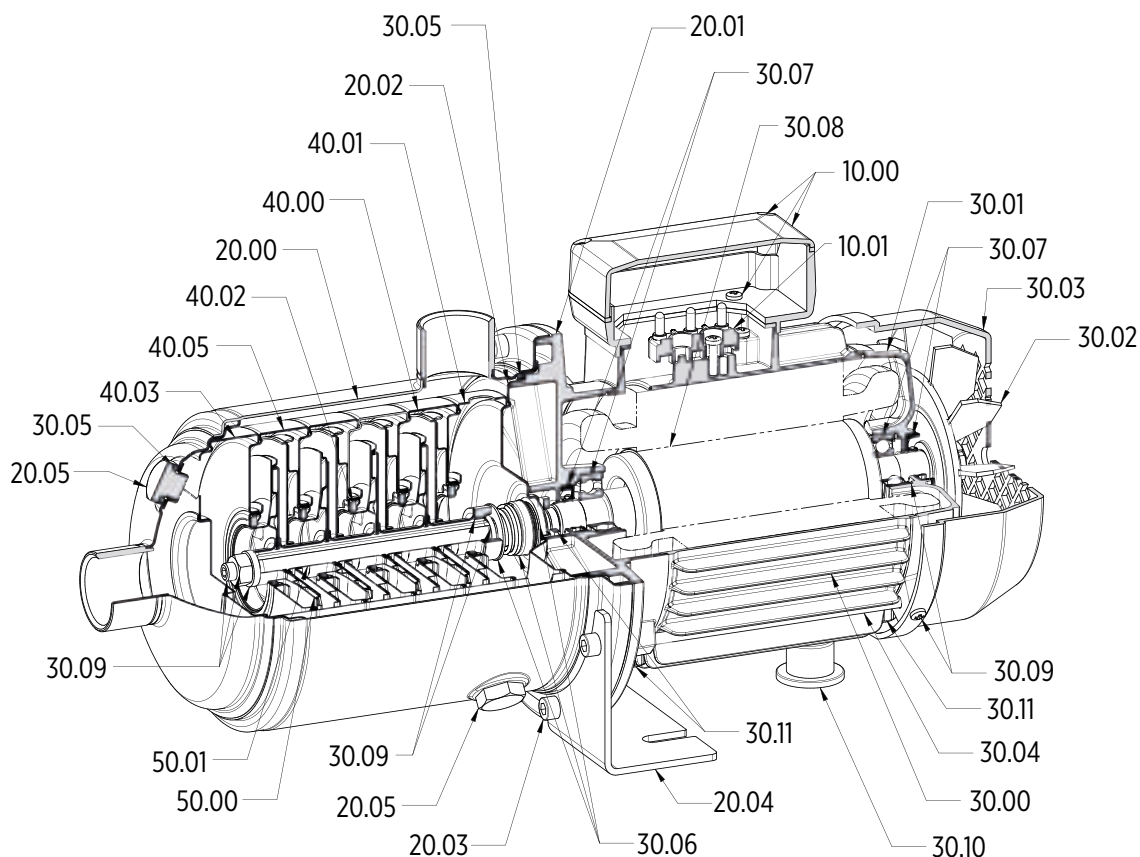
0030009/05/2017

Ref. N.	Description
10.03	Tie bolts
10.04	Kit nuts and washers
10.08	Pre-load flange
20.00	Outer case
20.01	Mechanical seal housing
20.03	Motor bracket
20.05	Filling plug
20.06	Kit bearings
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
30.03	Kit O-rings
40.00	Stage housing and diffuser
40.02	Floating neck ring
40.03	Initial stage housing

Ref. N.	Description
40.04	Last Stage with diffuser
40.06	Stage housing and diffuser with bearing
50.00	Impeller
50.01	Impeller spacer
50.02	Intermediary sleeve
50.03	Intermediary sleeve spacer
60.00	Motor housing and stator
60.01	Bearing housing
60.02	Fan
60.03	Fan cover and screws
60.04	Motor tie rods
60.05	Kit motor spare components
60.06	Motor housing foot
60.07	Terminal box cover and base
60.08	Terminal board
60.09	Capacitor

# EHsp 3-5

## PUMP SECTION AND LIST AND MAIN COMPONENTS



00130100 06/2017

Ref. N.	Description
20.00	Outer case
20.01	Mechanical seal housing
20.03	Motor bracket
20.05	Filling plug
20.06	Kit bearings
20.12	Support foot and screws
30.00	Pump shaft
30.01	Kit mechanical seal
30.02	Mechanical seal fastening kit
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

Ref. N.	Description
40.10	Stage housing with priming valve
50.00	Impeller
50.01	Impeller spacer
60.00	Motor housing and stator
60.01	Bearing housing
60.02	Fan
60.03	Fan cover and screws
60.04	Motor tie rods
60.05	Kit motor spare components
60.06	Motor housing foot
60.07	Terminal box cover and base
60.08	Terminal board
60.09	Capacitor













**Franklin Electric**

Franklin Electric S.r.l.  
Via Asolo, 7 - 36031 Dueville (Vicenza) - ITALY  
Phone: +39 0444 361114 - Fax: +39 0444 365247  
Email: sales.it@fele.com

Single member - Company subject to the control and coordination of Franklin Electric Co., Inc.

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

[franklinwater.eu](http://franklinwater.eu)

00103890EN\_REV03\_02/2018