

Vertical multi-stage pumps

-  Clean water
-  Domestic use
-  Civil use
-  Industrial use



PERFORMANCE RANGE

- Flow rate up to **180 l/min** (10.8 m³/h)
- Head up to **114 m**

APPLICATION LIMITS

- Manometric suction lift up to **7 m**
- Liquid temperature between **-10 °C** and **+60 °C**
- Ambient temperature up to **+40 °C**
- Max. working pressure **11 bar**
- Continuous service **S1**

CONSTRUCTION AND SAFETY STANDARDS

EN 60335-1 EN 60034-1
IEC 60335-1 IEC 60034-1
CEI 61-150 CEI 2-3



EU REGULATION N. 547/2012

CERTIFICATIONS

Company with management
system certified DNV ISO 9001: QUALITY



INSTALLATION AND USE

Suitable for use with clean water and with liquids that are not chemically aggressive towards the materials from which the pump is made.

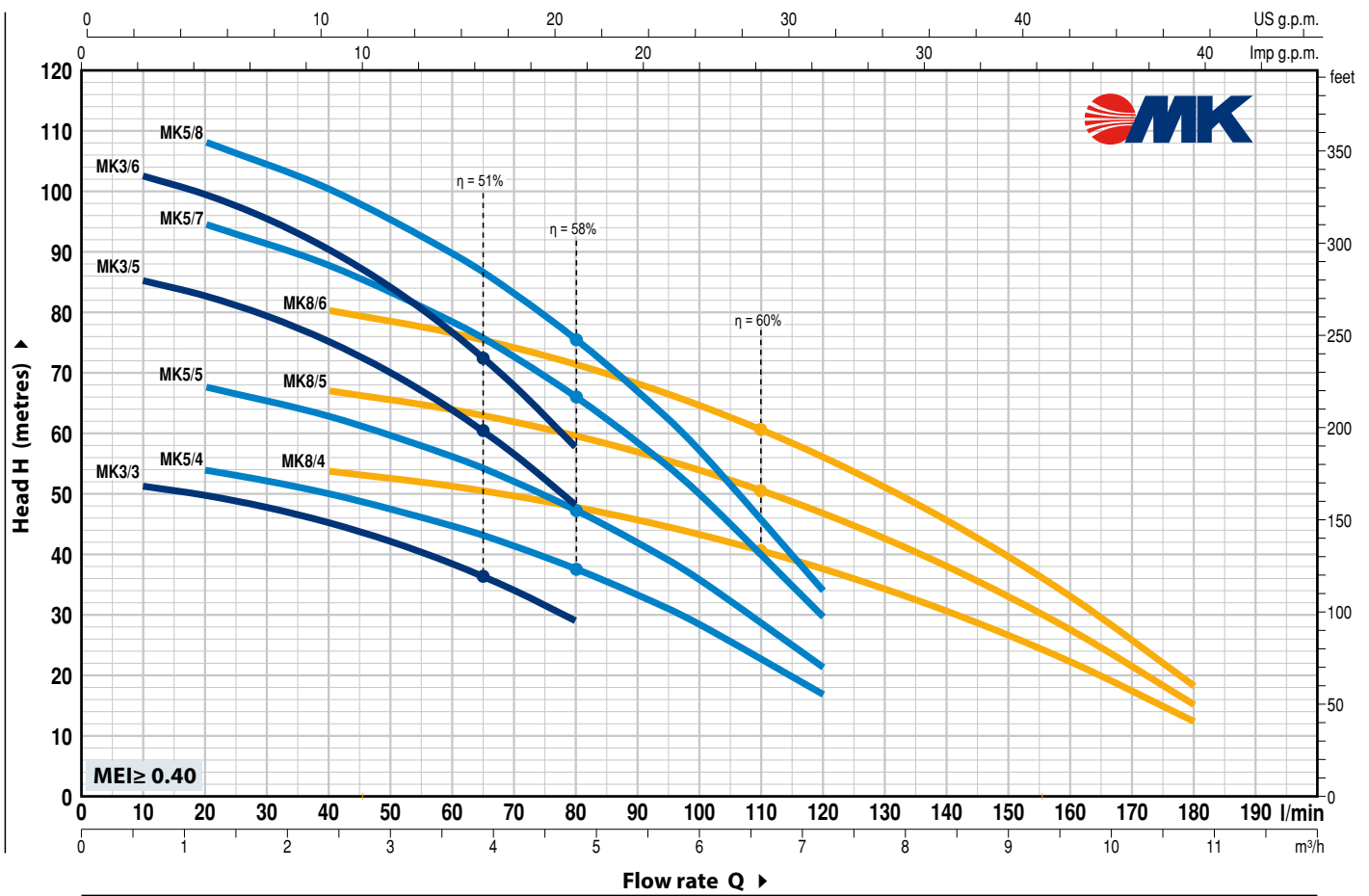
The high performance and adaptability to a wide range of applications make them an ideal choice in domestic, civil and industrial applications, in particular for the distribution of water in combination with pressure tanks and for boosting pressure in the network. Installation needs to be undertaken in well ventilated closed areas or anyway protected from bad weather.

OPTIONS AVAILABLE ON REQUEST

- Other voltages or 60 Hz frequency

CHARACTERISTIC CURVES AND PERFORMANCE DATA

50 Hz n = 2900 min⁻¹ HS = 0 m



MODEL		POWER (P ₂)		▲	Q	Flow rate														
Single-phase	Three-phase	kW	HP			m ³ /h	0	0.6	1.2	2.4	3.6	4.8	6.0	7.2	8.4	9.6	10.8			
					l/min	0	10	20	40	60	80	100	120	140	160	180				
MK _m 3/3	MK 3/3	0.75	1	IE3	H metri	52.5	51.5	50	45	38.5	29									
MK _m 3/5	MK 3/5	1.1	1.5			87	85	83	75	64	48									
MK _m 3/6	MK 3/6	1.5	2			105	103	100	90	77	58									
MK _m 5/4	MK 5/4	0.75	1	IE3		57	-	54	50	45	37.5	28.5	17							
MK _m 5/5	MK 5/5	1.1	1.5			71	-	67.5	62.5	56	47	35.5	21.5							
MK _m 5/7	MK 5/7	1.5	2			99	-	95	88	78	66	50	30							
MK _m 5/8	MK 5/8	2.2	3	114		-	108	100	90	75	57	34								
MK _m 8/4	MK 8/4	1.1	1.5	IE3		56	-	-	53.5	51	47.5	43	37.5	30.5	22.1	12				
MK _m 8/5	MK 8/5	1.5	2			70	-	-	67	64	59.5	54	47	38	27.5	15.5				
MK _m 8/6	MK 8/6	2.2	3			84	-	-	80	77	72	64.5	56	45.5	33	18.5				

Q = Flow rate H = Total manometric head HS = Suction height

Tolerance of characteristic curves in compliance with EN ISO 9906 Grade 3B.

▲ Three-phase motor efficiency class (IEC 60034-30-1)

POS. COMPONENT CONSTRUCTION CHARACTERISTICS

1	SUCTION BODY	Cast iron with an Epoxy Electro Coating complete with threaded suction port ISO 228/1				
2	EXTERNAL SLEEVE	Stainless steel AISI 304				
3	DELIVERY BODY	Cast iron with an Epoxy Electro Coating complete with threaded delivery port ISO 228/1				
4	IMPELLERS AND DIFFUSERS	Noryl®				
5	DIAPHRAGMS	Stainless steel AISI 304 complete with anti-wear rings				
6	MOTOR SHAFT	Stainless steel AISI 431				
7	MECHANICAL SEAL	<i>Seal Model</i>	<i>Shaft Diameter</i>	<i>Stationary ring</i>	<i>Rotational ring</i>	<i>Elastomer</i>
		FN-18	Ø 18 mm	Graphite	Ceramic	NBR
8	BEARINGS	6304 ZZ / 6204 ZZ				

9 CAPACITOR

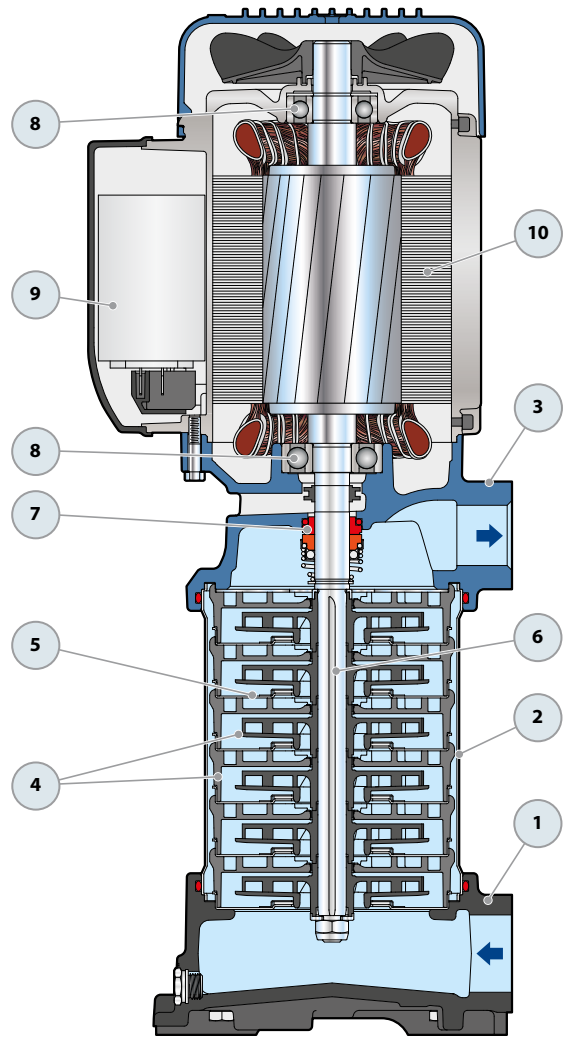
10 ELECTRIC MOTOR

MKm: single-phase 230 V - 50 Hz
with thermal overload protector incorporated into the winding

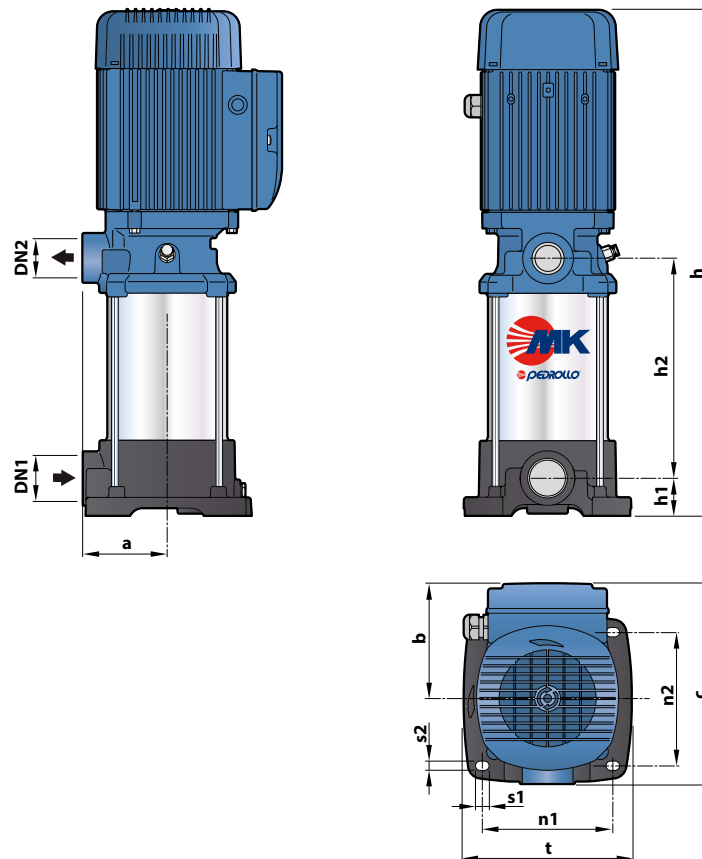
MK: three-phase 230/400 V - 50 Hz

⇒ **The three-phase pumps are fitted with high performance motors in class IE3 (IEC 60034-30-1)**

- Insulation: class F
- Protection: IP X4



DIMENSIONS AND WEIGHT



MODEL		PORTS		N. STAGES	DIMENSIONS mm											kg	
Single-phase	Three-phase	DN1	DN2		a	h	h1	h2	n1	n2	t	b	c	s1	s2	1~	3~
MKm 3/3	MK 3/3	1¼"	1"	3	93	447	41.5	132.5	143	146	185	127	220	14.5	10	20.0	20.1
MKm 3/5	MK 3/5			5		501		186.5								22.0	22.0
MKm 3/6	MK 3/6			6		528		213.5								23.9	24.0
MKm 5/4	MK 5/4			4		474		159.5								20.5	20.6
MKm 5/5	MK 5/5			5		501		186.5								21.9	22.0
MKm 5/7	MK 5/7			7		555		240.5								24.6	24.1
MKm 5/8	MK 5/8			8		602		267.5								27.6	27.2
MKm 8/4	MK 8/4			4		474		159.5								21.6	21.6
MKm 8/5	MK 8/5			5		501		186.5								23.3	23.1
MKm 8/6	MK 8/6			6		548		213.5								26.7	26.6

ABSORPTION AND CAPACITORS

MODEL	VOLTAGE		CAPACITANCE (230 V or 240 V)
	230 V	240 V	
MKm 3/3	6.0 A	5.8 A	25 µF - 450 VL
MKm 3/5	7.8 A	7.5 A	31.5 µF - 450 VL
MKm 3/6	9.5 A	9.1 A	45 µF - 450 VL
MKm 5/4	5.7 A	5.5 A	25 µF - 450 VL
MKm 5/5	7.1 A	6.8 A	31.5 µF - 450 VL
MKm 5/7	9.3 A	8.9 A	45 µF - 450 VL
MKm 5/8	10.0 A	9.6 A	50 µF - 450 VL
MKm 8/4	7.8 A	7.5 A	31.5 µF - 450 VL
MKm 8/5	9.7 A	9.3 A	45 µF - 450 VL
MKm 8/6	11.1 A	10.6 A	50 µF - 450 VL

MODEL	VOLTAGE					
	230 V	400 V	690 V	240 V	415 V	720 V
MK 3/3	4.3 A	2.5 A	1.4 A	4.1 A	2.4 A	1.3 A
MK 3/5	5.2 A	3.0 A	1.7 A	5.0 A	2.9 A	1.6 A
MK 3/6	6.1 A	3.5 A	2.0 A	5.8 A	3.4 A	1.9 A
MK 5/4	4.3 A	2.5 A	1.4 A	4.1 A	2.4 A	1.3 A
MK 5/5	4.7 A	2.7 A	1.6 A	4.5 A	2.6 A	1.5 A
MK 5/7	6.1 A	3.5 A	2.0 A	5.8 A	3.4 A	1.9 A
MK 5/8	7.4 A	4.3 A	2.5 A	7.1 A	4.1 A	2.4 A
MK 8/4	5.2 A	3.0 A	1.7 A	5.0 A	2.9 A	1.6 A
MK 8/5	6.1 A	3.5 A	2.0 A	5.8 A	3.4 A	1.9 A
MK 8/6	7.8 A	4.5 A	2.6 A	7.5 A	4.3 A	2.5 A