



### Construction

Vertical multi-stage close coupled pumps with suction and delivery connections of the same diameter and arranged along the same axis (in-line).

All parts that come into contact with the liquid, including wet-end covers, are in chrome-nickel stainless steel with corrosion-resistant bearing sleeves lubricated by the pumped liquid.

### Applications

For water supply systems.

For clean non-explosive liquids, without solid, filamentary or abrasive matter and non-aggressive for stainless steel (with adaptation of sealing materials on request).

A universal pump for civil and industrial use, for pressure-boosting systems, fire-extinguishing systems, high-pressure washing plants, irrigation, agricultural uses and sport installations.

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### Operating conditions

Temperature of liquid: from -15 °C to +90 °C.

Operating environment temperature: up to 40 °C.

Maximum permissible pressure in pump casing: 16 bar.

### Motor

2-pole induction motor, 60 Hz (n = 3450 rpm).

**MXV-B:** three-phase 220/380 V.

**MXV-BM:** single-phase 220 V, with thermal protector up to 1,1 kW. Capacitor inside the terminal box.

Insulation class F. Protection IP 54.

Motor suitable for operation with frequency converter from 2,2 kW.

**Classification scheme IE2 for three-phase motors.**

Constructed in accordance with: EN 60034-1, EN 60034-30, EN 60335-1, EN 60335-2-41.

### Materials (wetted parts)

Component	Material
External jacket	Chrome-nickel steel
Suction casing	
Delivery casing	
Stage casing	
Impeller	
Lower cover	
Upper cover	
Spacer sleeve	
Pump shaft	Chrome-nickel steel
Plug	1.4305 EN 10088 (AISI 303)
Mechanical seal ISO 3069 - KU	Ceramic alumina/Carbon/EPDM
Wear ring	PTFE
O-ring	NBR

### Special features on request

- Other voltages.
- Protection IP 55.
- Special mechanical seal
- Pump casing seal rings in FPM.
- Higher or lower liquid or ambient temperatures.
- Flanges to screw, in chrome-nickel steel.
- Motor suitable for operation with frequency converter up to 1,5 kW.

### Designation

Series MXV-B M 25-205-60

Single-phase motor (up to 1,5 kW) \_\_\_\_\_

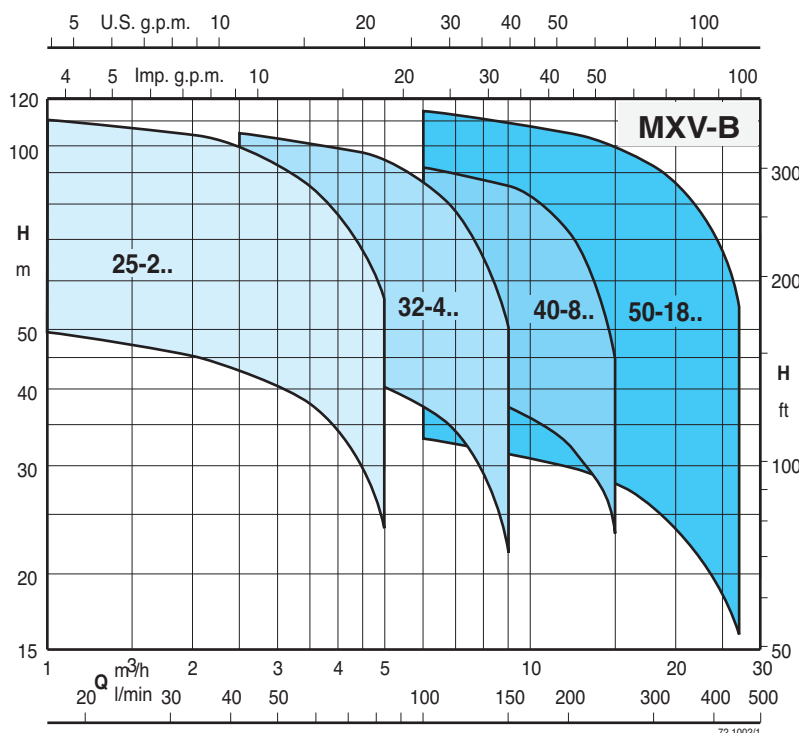
DN ports in mm \_\_\_\_\_

Rated capacity in m<sup>3</sup>/h \_\_\_\_\_

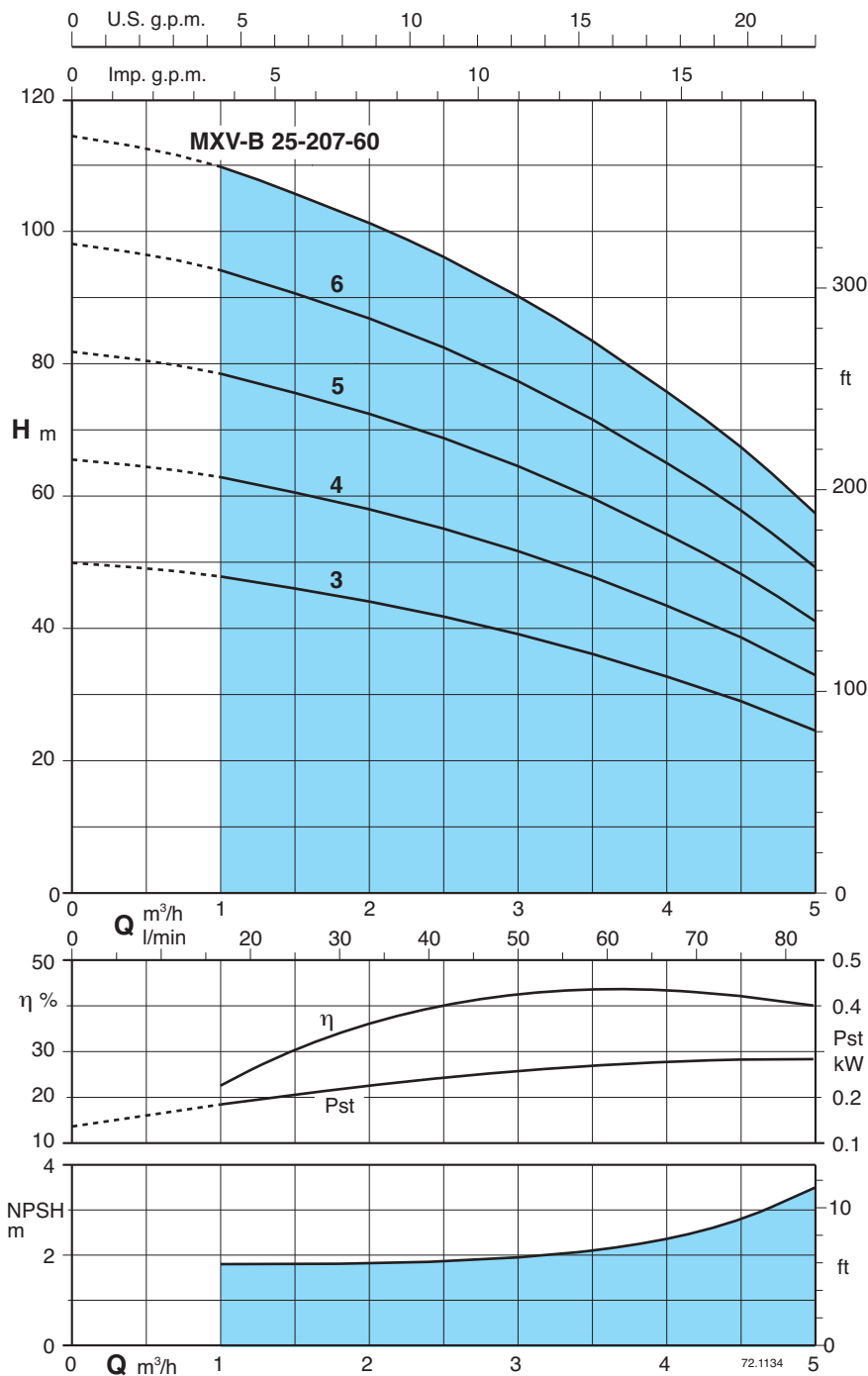
Number of stages \_\_\_\_\_

Frequency 60 Hz \_\_\_\_\_

Coverage chart n ≈ 3450 rpm



### Characteristic curves and performance $n \approx 3450$ rpm



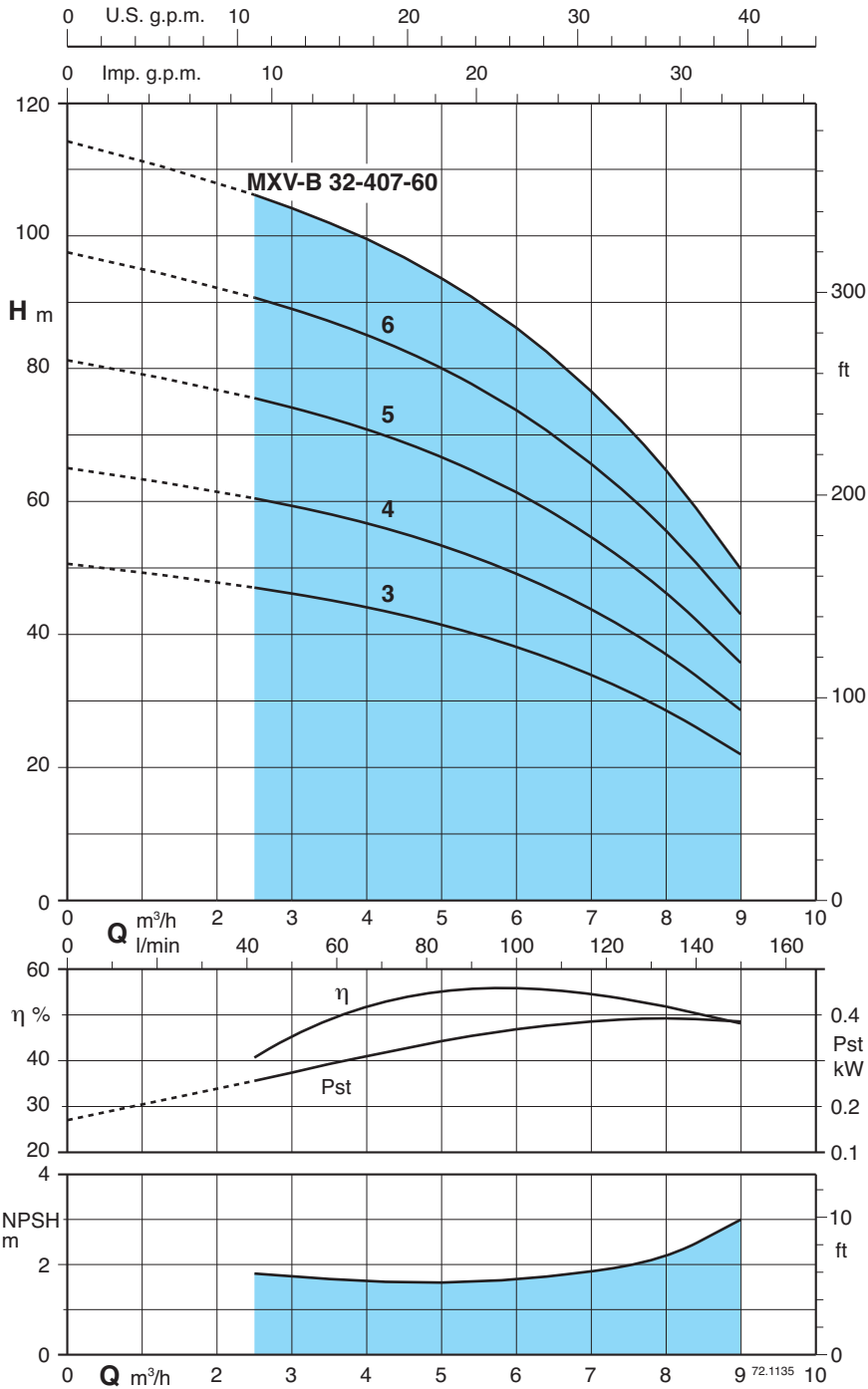
Test results with clean cold water, without gas content. A safety margin of + 0.5 m is recommended for the NPSH value. Tolerances in accordance with UNI EN ISO 9906:2012.

Head and power values valid for liquids with density  $\rho = 1,0 \text{ kg/dm}^3$  and kinematic viscosity  $\nu = \text{max } 20 \text{ mm}^2/\text{sec}$ .

Pst = Power with reference to one stage.  
P2 Rated motor power output.  
IA/IN = D.O.L. starting current / Rated current

	3 ~ 220 V 380 V			1 ~ 220 V		P2		Q m³/h l/min	0	1	1,5	2	2,5	3	3,5	4	4,5	5
	A	A	IA/IN	A	IA/IN	kW	HP											
MXV-B 25-203-60	4,5	2,6	5,2	MXV-BM 25-203-60	6,5	2,9	0,75	1	49,9	47,8	46,2	44	41,8	39	35,8	32,1	28,3	24,1
MXV-B 25-204-60	5,7	3,5	5,5	MXV-BM 25-204-60	8,5	3	1,1	1,5	65	62	60,3	57,8	54,9	51,5	47,6	43,2	38,4	33
MXV-B 25-205-60	9	5,2	5,4	MXV-BM 25-205-60	10,6	3,8	1,5	2	81,5	78	75,4	72,3	68,6	64,4	59,5	54	48	41
MXV-B 25-206-60/A	11,1	6,4	7,3				2,2	3	98	94	90,5	86,7	82,3	77,2	71,4	64,8	57,6	49
MXV-B 25-207-60/A	11,1	6,4	7,3				2,2	3	114	110	105,6	101,2	96	90,1	83,3	75,5	67	57

### Characteristic curves and performance $n \approx 3450$ rpm



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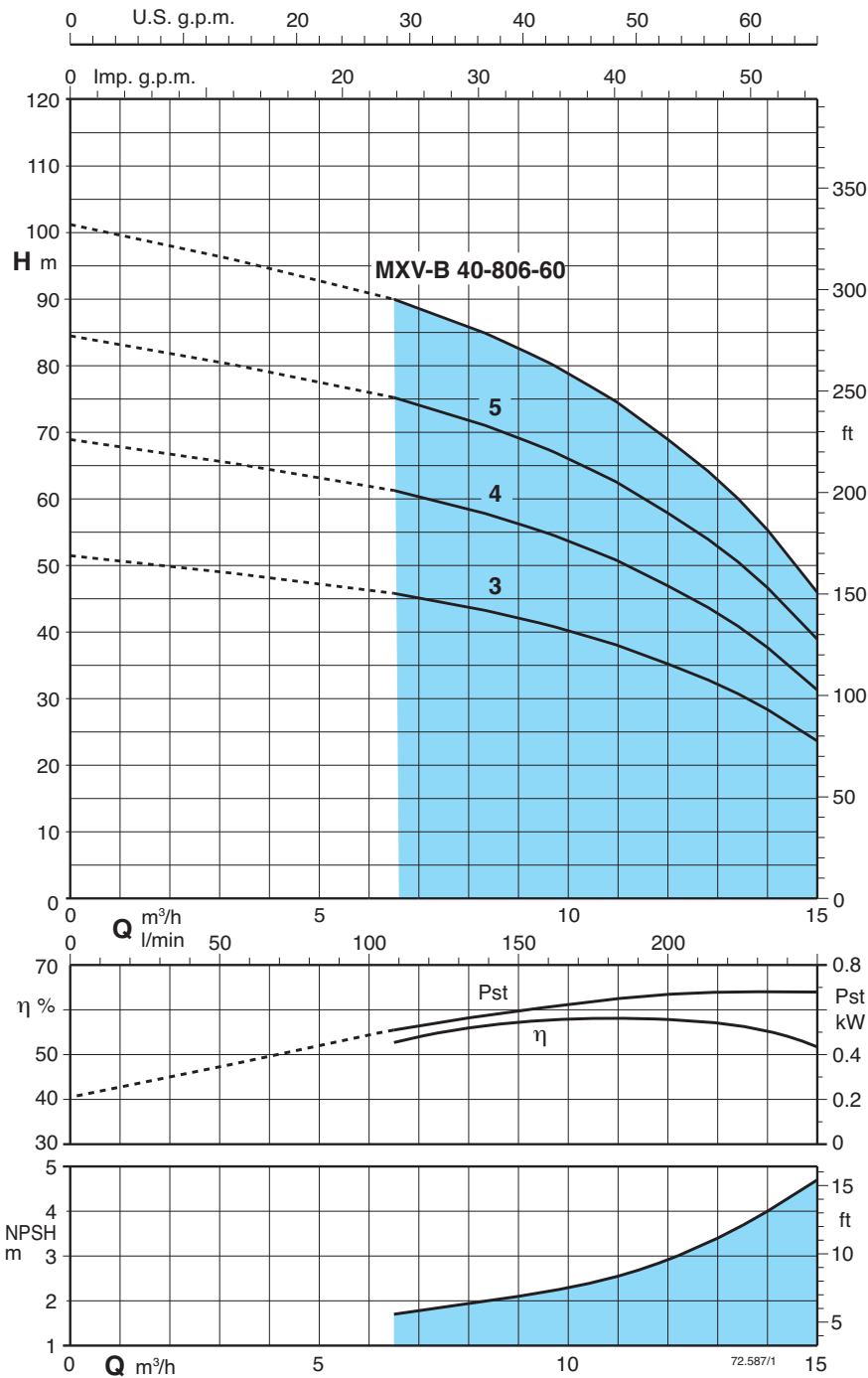
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P2 Rated motor power output.  
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	3 ~ 220 V 380 V			1 ~ 220 V		P2		Q m³/h l/min	H m									
	A	A	IA/IN	A	IA/IN	kW	HP		0	2,5	3	3,5	4	5	6	7	8	9
MXV-B 32-403-60	5,7	3,3	5,5	MXV-BM 32-403-60	8,5	3	1,1	1,5	0	41,6	50	58,3	66,6	83,3	100	116	133	150
MXV-B 32-404-60/A	11,1	6,4	7,3				2,2	3	50,5	47	46,2	45,2	44	41,5	38	34	28,4	22
MXV-B 32-405-60/A	11,1	6,4	7,3				2,2	3	65	61	60	58,2	56,8	53,4	49,2	43,8	37	29
MXV-B 32-406-60/A	11,1	6,4	7,3				2,2	3	82	76	74,3	72,7	71	66,8	61,5	54,7	46,3	36
MXV-B 32-407-60/A		7,7	8,4				3	4	97	91	89,1	87,3	85,2	80,1	73,8	65,7	55,5	43
									114	106	104	102	99,4	93,5	86,1	76,6	64,8	50

### Characteristic curves and performance $n \approx 3450$ rpm



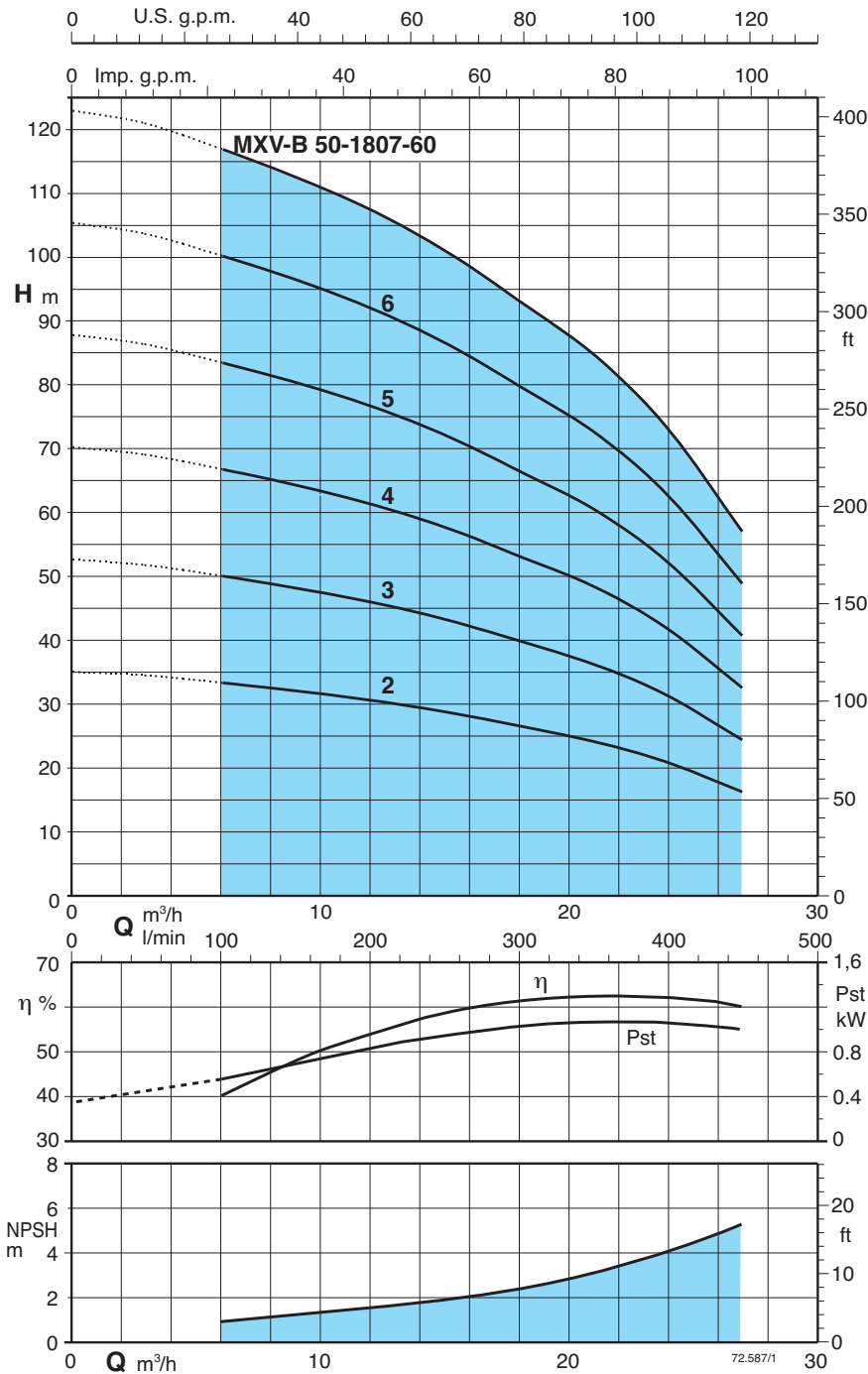
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 P2 Rated motor power output.  
 IA/IN = D.O.L. starting current / Rated current

3 ~	220 V 380 V			P <sub>2</sub>		Q m³/h l/min	H m	0	6,5	8	9	10	11	12	13	14	15
	A	A	IA/IN	kW	HP												
MXV-B 40-803-60/A	9	5,2	5,4	1,8	2,5	0	51,8	46,5	44,2	42,4	40,8	38,3	35,5	32	28	23	
MXV-B 40-804-60/A	11,1	6,4	7,3	2,2	3	0	69	62	59	56,5	54,4	51	47,3	42,6	37,3	30,6	
MXV-B 40-805-60/A		7,7	8,4	3	4	0	84	75	72,5	70	67	63,5	60	55,5	50	43	
MXV-B 40-806-60/A		11,3	7,8	4	5,5	0	101	90	87	84	80	76,5	72	66,5	60	51,5	

### Characteristic curves and performance $n \approx 3450$ rpm



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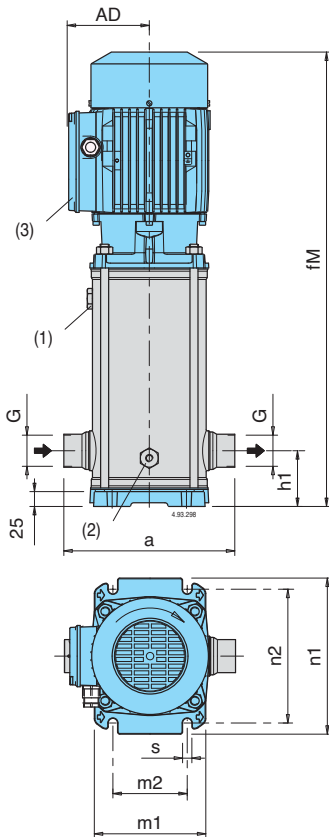
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$P_{st}$  = Power with reference to one stage.  
 $P_2$  Rated motor power output.  
 $IA/IN$  = D.O.L. starting current / Rated current

3 ~	220 V 380 V			P <sub>2</sub>		Q										
	A	A	IA/IN	kW	HP		$m^3/h$	0	6	9	12	15	18	21	24	27
MXV-B 50-1802-60/A	11,1	6,4	7,3	2,2	3	H m	0	100	150	200	250	300	350	400	450	
MXV-B 50-1803-60/A		7,7	8,4	3	4		35	33	31,8	30,2	28,3	26	23,5	20	15,8	
MXV-B 50-1804-60/A		11,3	7,8	4	5,5		52,5	49,5	47,7	45,3	42,5	39	35,2	30	23,7	
MXV-B 50-1805-60/A		13,7	8,7	5,5	7,5		70	66	63,6	60,4	56,6	52	47	40	31,6	
MXV-B 50-1806-60/A		13,7	8,7	5,5	7,5		87,5	82,5	79,5	75,5	70,7	65	58,7	50	39,5	
MXV-B 50-1806-60/A							105	99	95,4	90,6	84,9	78	70,5	60	47,4	
MXV-B 50-1807-60/A		17	9,2	7,5	10		123	116	113	106	99	91	82,2	70	55,3	

### Dimensions and weights



Pump	Motor P <sub>2</sub>		G		mm								Net weight	
	kW	HP	ISO 228	a	h1	fM	AD	n1	n2	m1	m2	s	MXV-B kg	MXV-BM kg
MXV-B(M) 25-203-60	0,75	1	G 1	215	75	564	128	210	180	150	100	12,5	23,5	24,5
MXV-B(M) 25-204-60	1,1	1,5	G 1	215	75	564	128	210	180	150	100	12,5	24,5	25,5
MXV-B(M) 25-205-60	1,5	2	G 1	215	75	588	128	210	180	150	100	12,5	27,5	28,5
MXV-B 25-206-60/A	2,2	3	G 1	215	75	652	128	210	180	150	100	12,5	32	
MXV-B 25-207-60/A	2,2	3	G 1	215	75	676	128	210	180	150	100	12,5	33	
MXV-B(M) 32-403-60	1,1	1,5	G 1 1/4	215	75	564	128	210	180	150	100	12,5	24,5	25,5
MXV-B 32-404-60/A	2,2	3	G 1 1/4	215	75	604	128	210	180	150	100	12,5	31	
MXV-B 32-405-60/A	2,2	3	G 1 1/4	215	75	628	128	210	180	150	100	12,5	32	
MXV-B 32-406-60/A	2,2	3	G 1 1/4	215	75	652	128	210	180	150	100	12,5	33	
MXV-B 32-407-60/A	3	4	G 1 1/4	215	75	699	138	210	180	150	100	12,5	43	
MXV-B 40-803-60/A	1,8	2,5	G 1 1/2	225	80	633	128	246	215	190	130	14	32	
MXV-B 40-804-60/A	2,2	3	G 1 1/2	225	80	633	128	246	215	190	130	14	34,5	
MXV-B 40-805-60/A	3	4	G 1 1/2	225	80	686	138	246	215	190	130	14	44	
MXV-B 40-806-60/A	4	5,5	G 1 1/2	225	80	716	138	246	215	190	130	14	47,5	
MXV-B 50-1802-60/A	2,2	3	G 2	250	90	640	128	246	215	190	130	14	33,6	
MXV-B 50-1803-60/A	3	4	G 2	250	90	668	138	246	215	190	130	14	43	
MXV-B 50-1804-60/A	4	5,5	G 2	250	90	706	138	246	215	190	130	14	44	
MXV-B 50-1805-60/A	5,5	7,5	G 2	250	90	771	160	246	215	190	130	14	56	
MXV-B 50-1806-60/A	5,5	7,5	G 2	250	90	808	160	246	215	190	130	14	63,5	
MXV-B 50-1807-60/A	7,5	10	G 2	250	90	846	160	246	215	190	130	14	64	

- (1) Filling
- (2) Draining
- (3) Standard position of terminal box  
(for other positions rotate motor through 90° or 180°)

### Features

#### Wider Range of Application

All parts that come into contact with the liquid, including wet-end covers, are in chrome-nickel stainless steel. With corrosion-resistant seal rings and guide ring.

#### Low Cost Installation

Vertical construction with reduced pump height for installation in small spaces. In-line connections to simplify the piping layout with the possibility of inserting the pump in straight pipe-lines. Disassembly, inspection or cleaning of internal parts without removal of piping.

#### Robust and Reliable

The suction and discharge nozzles arranged in-line absorb the forces of the piping on the pump without the creation of distorting loads causing local friction and early wears. The lantern brackets compact and robust design maintains a sure alignment between rotating and fixed parts, reducing vibration. The upper cover design prevents entrapment of air around the mechanical seal.

#### Low-Noise Operation

The water filled shroud around the stages and thick external walls, work together for low-noise operation.

