4" IBQ IVR

High-speed pumps withinverter and synchronous motor

5000 RPM

The 4" IBQ IVR series submersible pumps are technologically advanced devices designed to pump clean water from deep wells. Unlike traditional pumps with an asynchronous motor operating at 2850 RPM, the 4" IBQ IVR models are equipped with modern permanent magnet synchronous motors (PM), which enable operation at speeds of up to 5000 RPM. This translates into significantly higher energy efficiency, lower mechanical losses and a compact pump design.

Integrated with a variable frequency drive (VFD), pumps in this series offer complete operational safety and a range of advancedsafety features.

The inverter system ensures:

- A smooth motor start-up, which extends its service life
- Protection against dry running
- Protection against overload, overheating, phase loss and excessively high or low supply voltage
- The ability for the installer to quickly read and interpret error codes

Thanks to their higher operating speed, 4" IBQ pumps achieve the same performance as conventional pumps, whilst being significantly smaller (up to o 60% shorter) and weight (up to 50% lighter), which translates to easier installation, transport and servicing.

Applications:

- Pumping clean water from deep wells, storage tanks and rivers
- Supplying water supply systems in single-family and multi-family homes
- Industrial and construction installations
- Irrigation and watering systems in agriculture,
- Heat pump installations and pressure boosting systems
- Applications in hard-to-reach locations where reliability and operational monitoring are essential

Technical data:

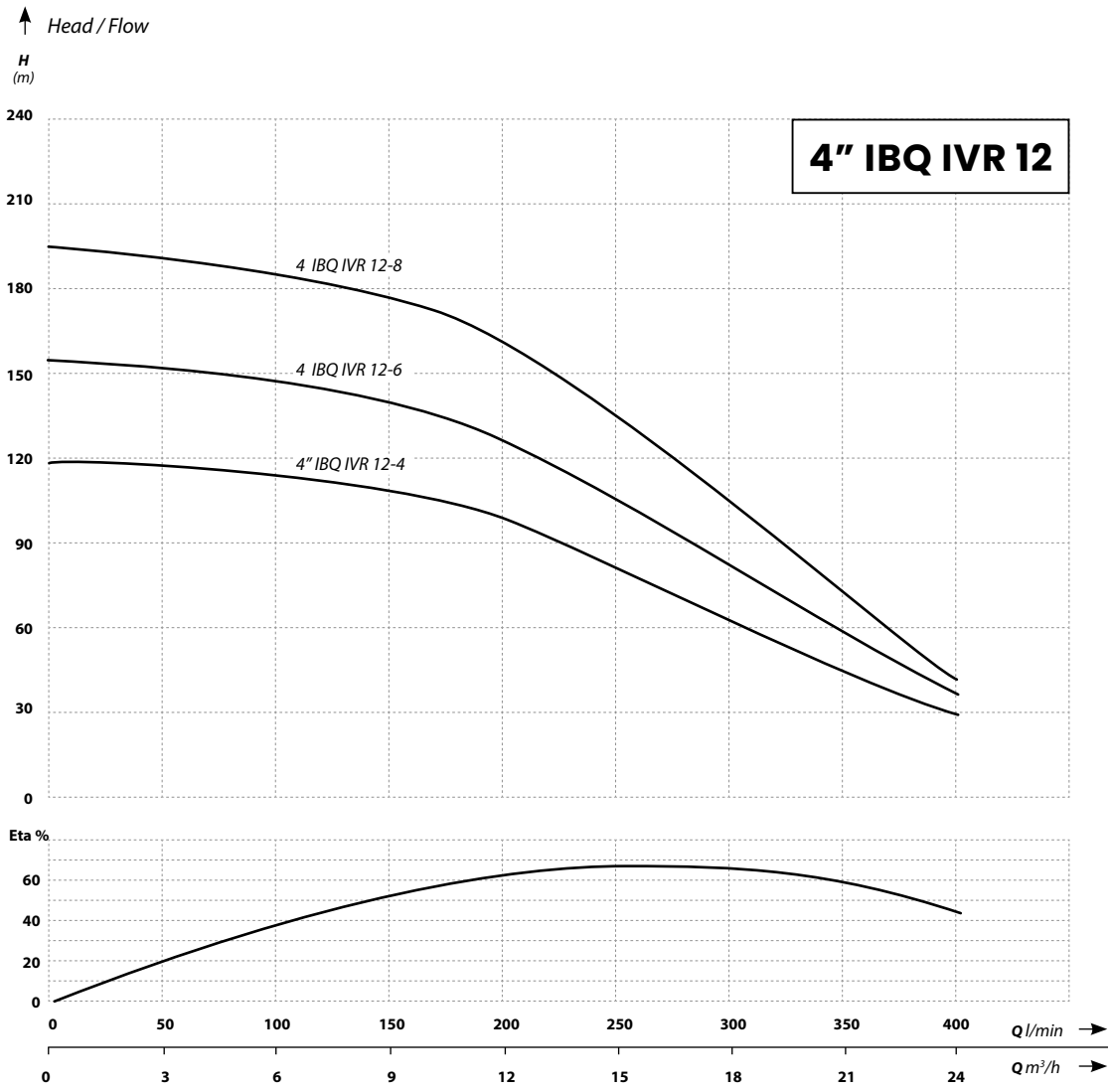
- Power supply: 3~ 380–415 V / 50 Hz (operates only with a dedicated inverter)
- Motor type: permanent magnet synchronous, filled with eco-friendly oil
- Max. speed: 5000 RPM
- Max. temperature of pumped liquid: 35°C
- Permissible sand content: 0,25%
- Min. well diameter: 4"
- Min. distance from the bottom of the well: 5 m
- Operating mode: continuous (S1) – within permissible conditions
- Motor protection class: IP68
- Installation position: vertical
- Compatible with a dedicated inverter; cannot operate on direct power supply

Materials:

- Pump outer casing: AISI 304 stainless steel
- Discharge casing: AISI 304 SS
- Suction housing: AISI 304 SS
- Diffuser: plastic, PC
- Impeller: plastic, POM
- Shaft: AISI 304 stainless steel
- Shaft coupling: AISI 304 stainless steel
- Support ring: AISI 304 stainless steel
- Motor outer casing: AISI 304 stainless steel
- Upper motor housing: AISI 304 SS, ASTM 30 cast iron
- Lower motor housing: AISI 304 stainless steel
- Mechanical seal: special seal for deep wells
- Shaft: AISI 304 stainless steel, ASTM 5140
- Seal lubricating oil: eco-friendly oil

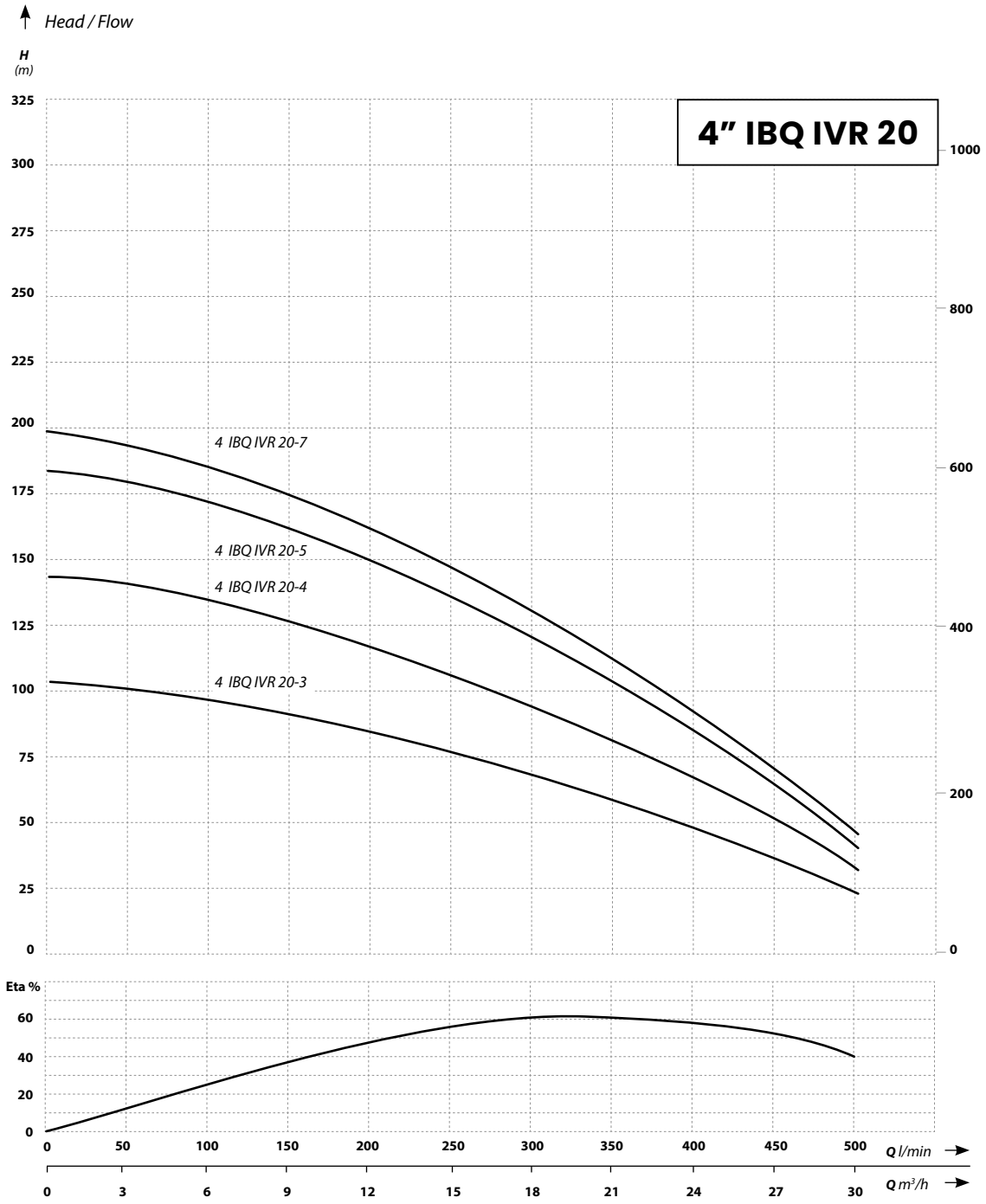
EAN	Model	DN (inches))	Dimensions (mm)			Weight (kg)		
			P	M	T	P	M	T
5903887266628	4 IBQ IVR 12-4	2	509	419	928	4,3	11,1	15,4
5903887267298	4 IBQ IVR 12-6	2	594	459	1053	4,9	13	17,9
5903887267304	4 IBQ IVR 12-8	2	712	509	1221	5,8	15,5	21,3
5903887267311	4 IBQ IVR 20-3	2	493	419	912	3,6	11,1	14,7
5903887267328	4 IBQ IVR 20-4	2	586	459	1045	4,2	13	17,2
5903887267335	4 IBQ IVR 20-5	2	716	509	1225	5,2	15,5	20,7
5903887267342	4 IBQ IVR 20-7	2	763	559	1322	5,5	18,2	23,7
5903887267359	4 IBQ IVR 30-3	2½	658	459	1117	5	13	18
5903887267366	4 IBQ IVR 30-4	2½	732	509	1241	5,4	15,5	20,9
5903887267373	4 IBQ IVR 30-5	2½	881	559	1440	6,6	18,2	24,8
5903887258715	4 IBQ IVR 30-6	2½	987	609	1596	7,3	20,7	28
5903887258722	4 IBQ IVR 30-7	2½	1062	659	1721	8	23,2	31,2

4" IBQ IVR cont.



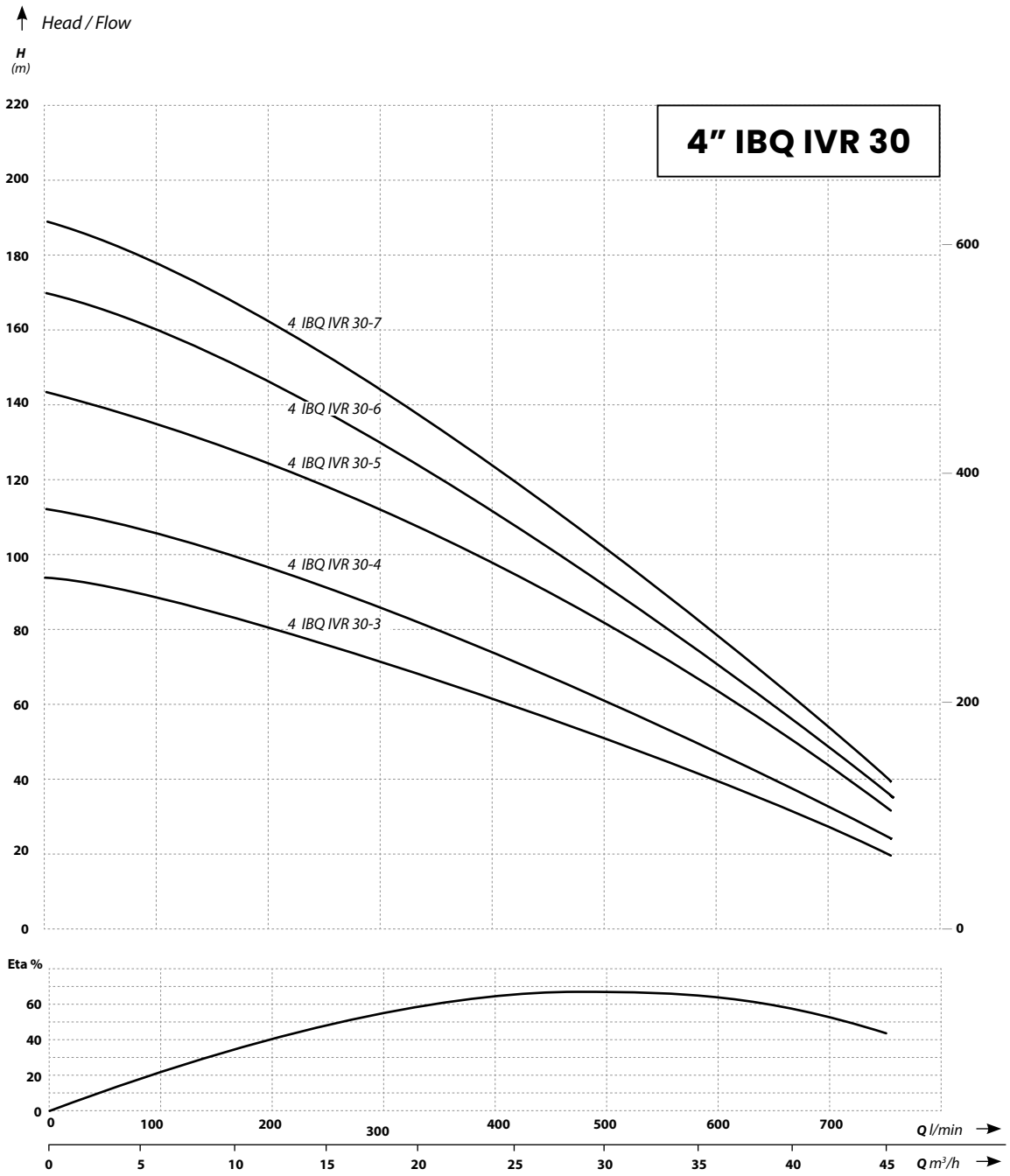
EAN	Model	P2		Head n = 5000 l/min									
		kW	HP	m³/h	0	3	6	9	12	15	18	21	24
				l/min	0	50	100	150	200	250	300	350	400
5903887266628	4 IBQ IVR 12-4	4	5,5		118	117	111	106	96	80	63	46	30
5903887267298	4 IBQ IVR 12-6	5,5	7,5	H (m)	152	151	146	139	127	102	76	58	36
5903887267304	4 IBQ IVR 12-8	7,5	10		193	189	181	175	164	131	99	70	42

4" IBQ IVR cont.



EAN	Model	P2		Head n = 5000 l/min											
		kW	HP	m³/h	0	3	6	9	12	15	18	21	24	27	30
				l/min	0	50	100	150	200	250	300	350	400	450	500
5903887267311	4 IBQ IVR 20-3	4	5,5	H (m)	100	98	95	89	83	73	64	54	45	36	22
5903887267328	4 IBQ IVR 20-4	5,5	7,5		138	135	133	125	117	103	90	73	63	50	31
5903887267335	4 IBQ IVR 20-5	7,5	10		175	171	170	161	150	132	116	98	80	64	40
5903887267342	4 IBQ IVR 20-7	9,2	12,5		195	189	189	179	167	147	129	111	89	71	44

4" IBQ IVR cont.



EAN	Model	P2		Head n = 5000 l/min									
		kW	HP	m³/h	0	6	12	18	24	30	36	42	48
				l/min	0	100	200	300	400	500	600	700	800
5903887267359	4 IBQ IVR 30-3	5,5	7,5		92	89	81	72	62	53	40	27	12
5903887267366	4 IBQ IVR 30-4	7,5	10		110	106	97	86	74	65	47	32	15
5903887267373	4 IBQ IVR 30-5	9,2	12,5	H (m)	148	144	130	114	110	80	64	44	20
5903887258715	4 IBQ IVR 30-6	11	15		166	159	146	129	112	92	71	49	22
5903887258722	4 IBQ IVR 30-7	13	17,5		185	177	162	143	113	103	79	54	25