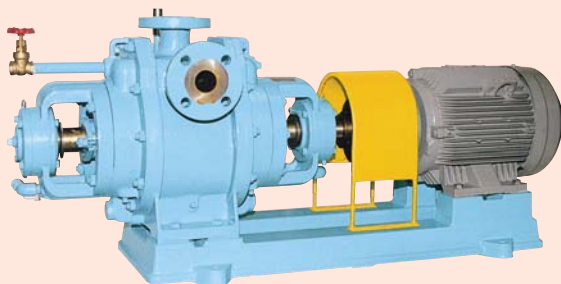
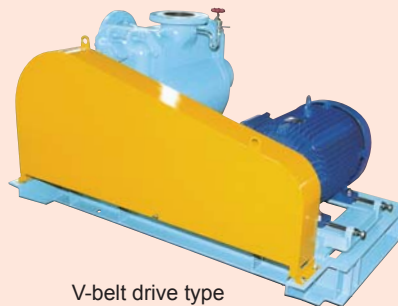


# Liquid Ring Vacuum Pump (Single-action type)

## V Model



Direct drive type



V-belt drive type

### Standard Specifications of Major Components

Item	Bore [Inlet x Outlet] (mm)					
	40 x 40	50 x 50	65 x 65	80 x 80	100 x 100	125 x 125
	150 x 150	175 x 175	200 x 200	250 x 250	300 x 300	
Applicable gas and seal liquid	Seal liquid	Water				
	Seal liquid temperature	13 to 50°C				
	Gas	Air				
	Gas temperature	Normal temperature				
	Outlet pressure	101.3 kPa abs (0 kPa G)				
Pump	Structure	Seal liquid filling method	Pressurized			
		Seal liquid pressure required	0.1 kPa G			
		Outlet type	Variable port (ball valve)			
		Shaft seal	Gland packing			
	Material	Bearing	Self-aligning roller bearing			
		Casing	FC200			
		Port plate	FC250			
Motor	Impeller	FC250				
	Shaft	SUS420J2				
	Type / Number of poles	Fully-enclosed, external fan (indoor), 4-, 6-, 8-, 10- or 12-pole				
Phase	50 Hz: 3-phase 60 Hz: 3-phase					
Piping connection		JIS10K flange (RF)				

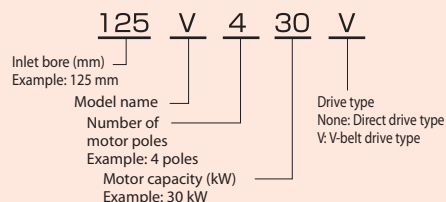
### Special Specifications

Pump	Structure	Seal liquid filling method	Self-priming
		Outlet type	Fixed port
		Shaft seal	Mechanical seal
	Material	Casing	SCS13, SCS14
		Port plate	SCS13, SCS14
		Impeller	SCS13, SCS14
Motor	Type	Shaft	SUS304, SUS316
			Fully-enclosed, external fan (outdoor)
			Drip-proof
Other	ANSI 150lb flange		Increased safety explosion-proof, Pressure-resistant explosion-proof

Contact us for custom specifications other than those noted above.

### Model Identification

The following model information is for example purposes only:

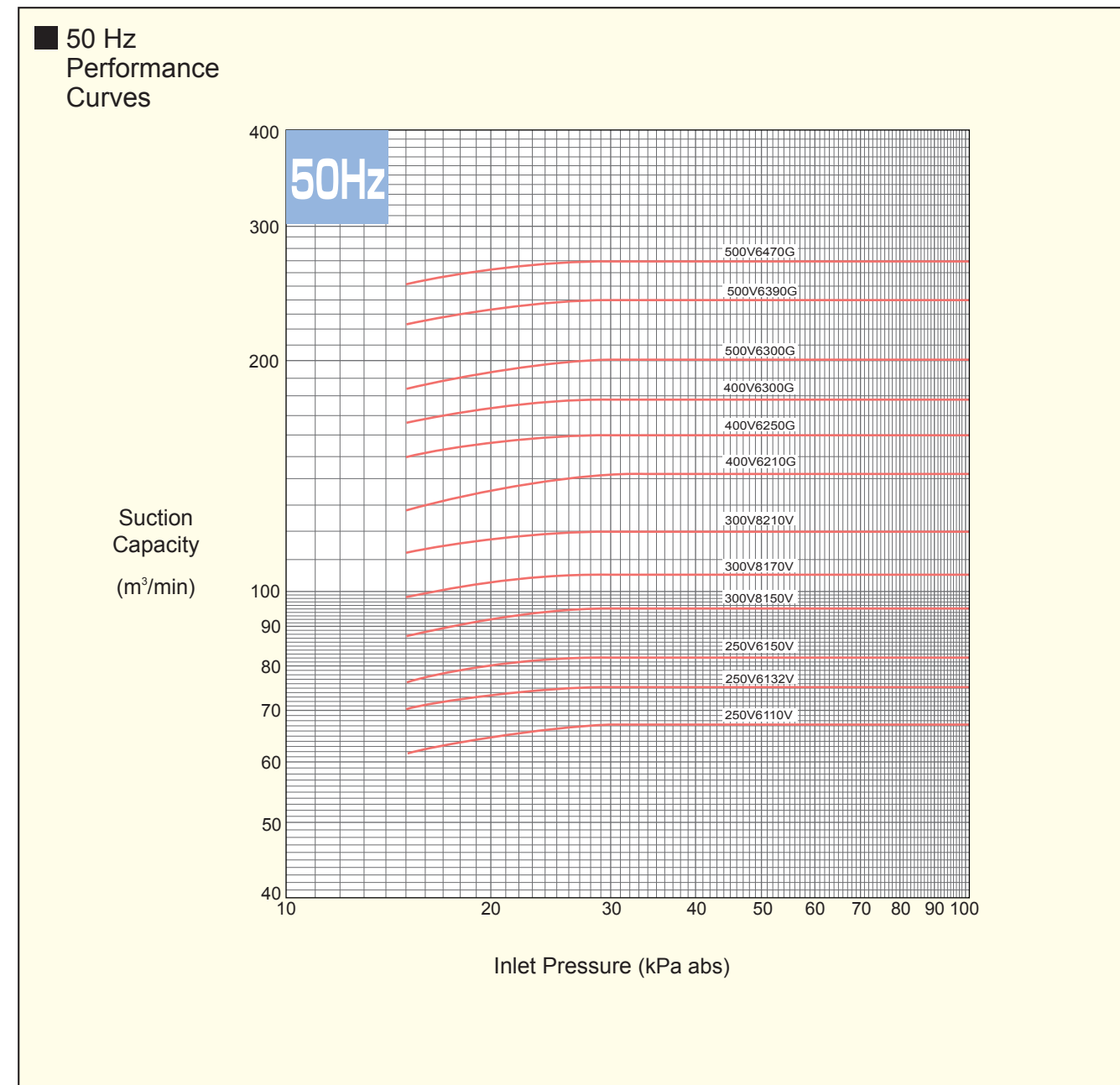
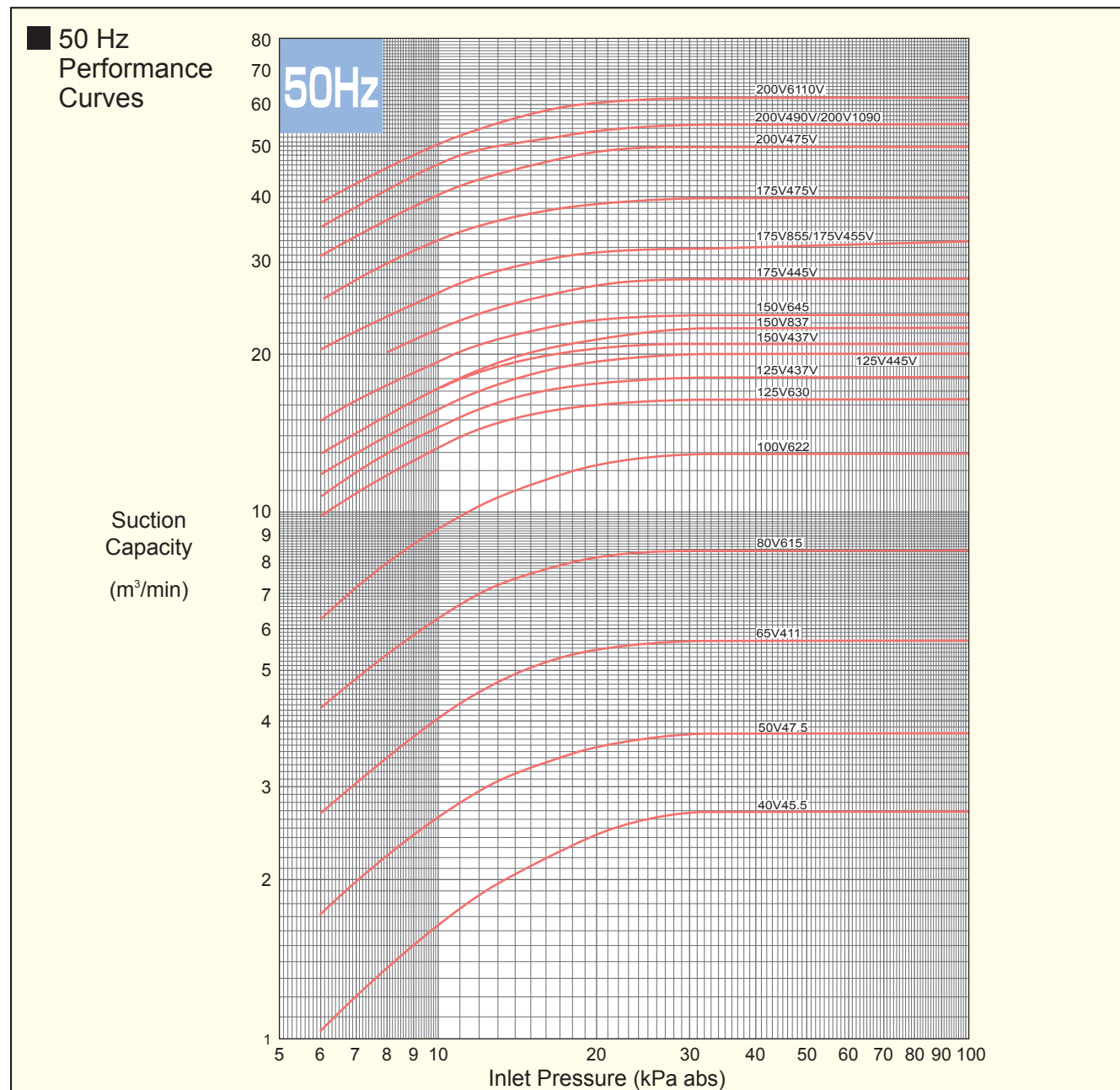


### Standard Accessories (Direct Drive Type)

- Common base ..... 1 pc
- Foundation bolt ..... 1 set
- Motor ..... 1 pc
- Shaft coupling ..... 1 set
- Safety cover ..... 1 set
- Seal liquid control valve ..... 1 pc

### Optional Accessories

- Vacuum gauge with cock
- Separator tank
- Temporary strainer
- Gas check valve
- Seal liquid flow meter
- Gas ejector



50 Hz Standard Specifications (at a seal liquid temperature of 15°C)

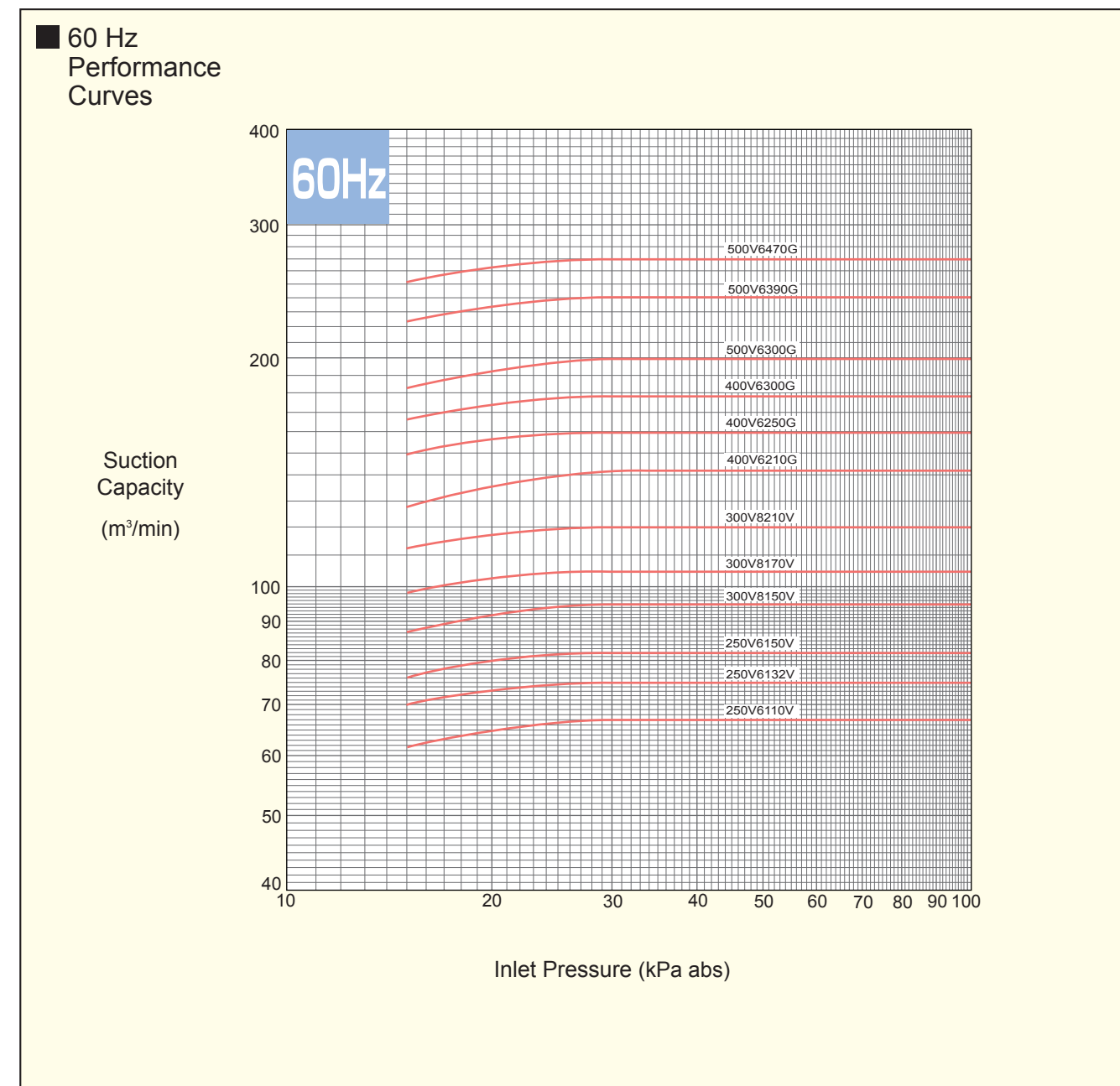
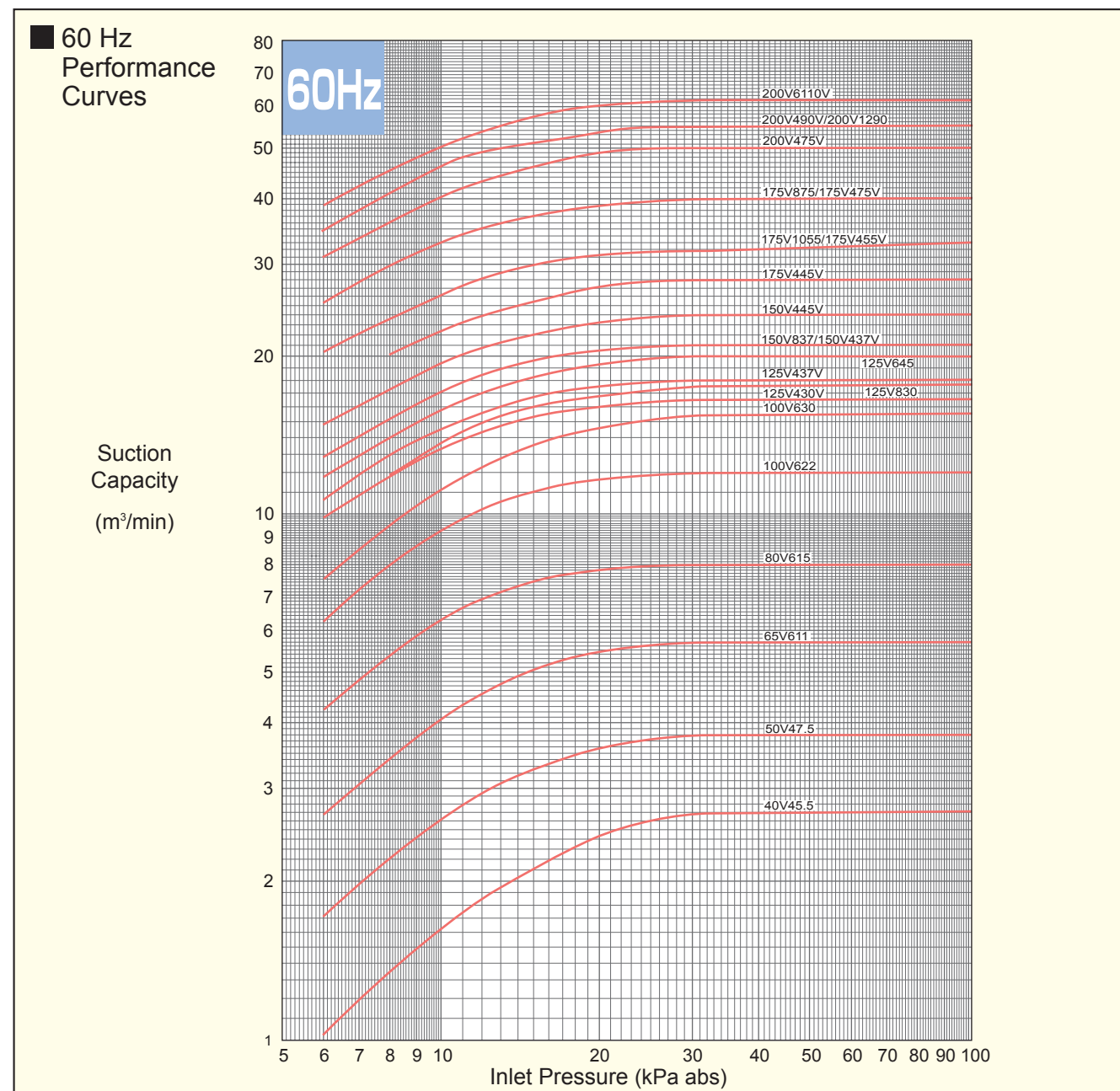
Bore [Inlet × Outlet] (mm)	Model	Drive type	Rotation speed (min <sup>-1</sup> )	Motor capacity (kW)	Number of poles	Suction capacity [suction condition] (m <sup>3</sup> /min)						Inlet pressure (kPa G)	Approx. seal liquid flow rate* (L/min)
						Inlet pressure (kPa abs)							
						-93.3	-90.6	-86.6	-80.0	-66.6	0		
						8.0	10.7	14.7	21.3	34.7	101.3	14.7	
40 × 40	40V45.5	Direct drive type	1450	5.5	4	1.35	1.72	2.1	2.5	2.7	2.7	20	
50 × 50	50V47.5	Direct drive type	1450	7.5	4	2.22	2.75	3.25	3.64	3.8	3.8	25	
65 × 65	65V411	Direct drive type	1450	11	4	3.44	4.26	5.02	5.55	5.7	5.7	30	
80 × 80	80V615	Direct drive type	970	15	6	5.4	6.6	7.6	8.3	8.5	8.5	35	
100 × 100	100V622	Direct drive type	970	22	6	8.0	9.7	11.3	12.5	13	13	50	
125 × 125	125V630	Direct drive type	970	30	6	11.8	13.8	15.3	16.2	16.5	16.5	60	
125 × 125	125V437V	Belt drive type	1070	37	4	13	15	16.7	17.7	18	18	70	
125 × 125	125V445V	Belt drive type	1150	45	4	14.0	16.3	18.2	19.5	20	20	70	
150 × 150	150V437V	Belt drive type	870	37	4	15.3	17.7	19.6	20.7	21	21	70	
150 × 150	150V837	Direct drive type	730	37	8	15.3	17.8	20.2	21.6	22.5	22.5	70	
150 × 150	150V645	Direct drive type	970	45	6	17.3	20	22	23.5	24	24	70	
175 × 175	175V445V	Belt drive type	650	45	4	20.1	23.1	25.5	27.5	28	28	70	
175 × 175	175V855	Direct drive type	730	55	8	23.8	27.2	30.0	31.6	32	33	100	
175 × 175	175V455V	Belt drive type	730	55	4	23.8	27.2	30.0	31.6	32	33	100	
175 × 175	175V475V	Belt drive type	870	75	4	30.0	34.1	37.2	39.3	40	40	100	
200 × 200	200V475V	Belt drive type	530	75	4	36.2	41.7	46.0	49.2	50	50	130	
200 × 200	200V1090	Direct drive type	590	90	10	41	47.5	51	54	55	55	130	
200 × 200	200V490V	Belt drive type	590	90	4	41	47.5	51	54	55	55	130	
200 × 200	200V6110V	Belt drive type	670	110	6	45.5	52	57.5	61	62	62	150	

\* The seal liquid flow rate indicates the values at -86.6 kPa G (14.7 kPa abs).

50 Hz Standard Specifications (at a seal liquid temperature of 15°C)

Bore [Inlet × Outlet] (mm)	Model	Drive type	Rotation speed (min <sup>-1</sup> )	Motor capacity (kW)	Number of poles	Suction capacity [suction condition] (m <sup>3</sup> /min)						Inlet pressure (kPa G)	Approx. seal liquid flow rate* (L/min)
						Inlet pressure (kPa abs)							
						-93.3	-90.6	-86.6	-80.0	-66.6	0		
						8.0	10.7	14.7	21.3	34.7	101.3	14.7	
250 × 250	250V6110V	Belt drive type	430	110	6	—	—	61.5	65.5	67	67	150	
250 × 250	250V6132V	Belt drive type	480	132	6	—	—	70	74	75	75	150	
250 × 250	250V6150V	Belt drive type	530	150	6	—	—	76	81	82	82	170	
2-200 × 2-200	300V8150V	Belt drive type	350	150	8	—	—	87	93	95	95	200	
2-200 × 2-200	300V8170V	Belt drive type	385	170	8	—	—	98	104	105	105	240	
2-200 × 2-200	300V8210V	Belt drive type	435	210	8	—	—	112	118	120	120	300	
2-250 × 2-250	400V6210G	Gear drive type	290	210	6	—	—	127	137	142	142	300	
2-250 × 2-250	400V6250G	Gear drive type	330	250	6	—	—	149	158	160	160	350	
2-250 × 2-250	400V6300G	Gear drive type	365	300	6	—	—	165	175	178	178	400	
2-300 × 2-300	500V6300G	Gear drive type	230	300	6	—	—	183	195	200	200	400	
2-300 × 2-300	500V6390G	Gear drive type	275	390	6	—	—	222	235	240	240	500	
2-300 × 2-300	500V6470G	Gear drive type	310	470	6	—	—	250	265	270	270	600	

\* The seal liquid flow rate indicates the values at -86.6 kPa G (14.7 kPa abs).



**60 Hz Standard Specifications** (at a seal liquid temperature of 15°C)

Bore [Inlet × Outlet] (mm)	Model	Drive type	Rotation speed (min <sup>-1</sup> )	Motor capacity (kW)	Number of poles	Suction capacity [suction condition] (m <sup>3</sup> /min)						Approx. seal liquid flow rate <sup>*)</sup> (L/min)
						Inlet pressure (kPa G)						
						-93.3	-90.6	-86.6	-80.0	-66.6	0	
						8.0	10.7	14.7	21.3	34.7	101.3	14.7
40 × 40	40V45.5	Direct drive type	1750	5.5	4	1.35	1.72	2.1	2.5	2.7	2.7	20
50 × 50	50V47.5	Direct drive type	1750	7.5	4	2.22	2.75	3.25	3.64	3.8	3.8	25
65 × 65	65V611	Belt drive type	1150	11	6	3.44	4.26	5.02	5.55	5.7	5.7	30
80 × 80	80V615	Direct drive type	1150	15	6	5.4	6.55	7.4	7.9	8.0	8.0	35
100 × 100	100V622	Direct drive type	1150	22	6	8.0	9.7	11.0	11.8	12	12	50
100 × 100	100V630	Direct drive type	1150	30	6	9.5	11.6	13.5	14.8	15.5	15.5	60
125 × 125	125V430V	Belt drive type	970	30	4	11.8	13.8	15.3	16.2	16.5	16.5	60
125 × 125	125V830	Direct drive type	870	30	8	11.9	14.2	16.0	17.0	17.6	17.6	70
125 × 125	125V437V	Belt drive type	1070	37	4	13	15	16.7	17.7	18	18	70
125 × 125	125V645	Direct drive type	1150	45	6	14.0	16.3	18.2	19.5	20	20	70
150 × 150	150V837	Direct drive type	870	37	8	15.3	17.7	19.6	20.7	21	21	70
150 × 150	150V437V	Belt drive type	870	37	4	15.3	17.7	19.6	20.7	21	21	70
150 × 150	150V445V	Belt drive type	970	45	4	17.3	20	22	23.5	24	24	70
175 × 175	175V445V	Belt drive type	650	45	4	20.1	23.1	25.5	27.5	28	28	70
175 × 175	175V1055	Direct drive type	710	55	10	23.8	27.2	30.0	31.6	32	33	100
175 × 175	175V455V	Belt drive type	710	55	4	23.8	27.2	30.0	31.6	32	33	100
175 × 175	175V875	Direct drive type	870	75	8	30.0	34.1	37.2	39.3	40	40	100
175 × 175	175V475V	Belt drive type	870	75	4	30.0	34.1	37.2	39.3	40	40	100
200 × 200	200V475V	Belt drive type	530	75	4	36.2	41.7	46.0	49.2	50	50	130
200 × 200	200V1290	Direct drive type	590	90	12	41	47.5	51	54	55	55	130
200 × 200	200V490V	Belt drive type	590	90	4	41	47.5	51	54	55	55	130
200 × 200	200V6110V	Belt drive type	670	110	6	45.5	52	57.5	61	62	62	150

\* The seal liquid flow rate indicates the values at -86.6 kPa G (14.7 kPa abs).

**60 Hz Standard Specifications** (at a seal liquid temperature of 15°C)

Bore [Inlet × Outlet] (mm)	Model	Drive type	Rotation speed (min <sup>-1</sup> )	Motor capacity (kW)	Number of poles	Suction capacity [suction condition] (m <sup>3</sup> /min)						Approx. seal liquid flow rate <sup>*)</sup> (L/min)
						Inlet pressure (kPa G)						
						-93.3	-90.6	-86.6	-80.0	-66.6	0	
						8.0	10.7	14.7	21.3	34.7	101.3	14.7
250 × 250	250V6110V	Belt drive type	430	110	6	—	—	61.5	65.5	67	67	150
250 × 250	250V6132V	Belt drive type	480	132	6	—	—	70	74	75	75	150
250 × 250	250V6150V	Belt drive type	530	150	6	—	—	76	81	82	82	170
2-200 × 2-200	300V8150V	Belt drive type	350	150	8	—	—	87	93	95	95	200
2-200 × 2-200	300V8170V	Belt drive type	385	170	8	—	—	98	104	105	105	240
2-200 × 2-200	300V8210V	Belt drive type	435	210	8	—	—	112	118	120	120	300
2-250 × 2-250	400V6210G	Gear drive type	290	210	6	—	—	127	137	142	142	300
2-250 × 2-250	400V6250G	Gear drive type	330	250	6	—	—	149	158	160	160	350
2-250 × 2-250	400V6300G	Gear drive type	365	300	6	—	—	165	175	178	178	400
2-300 × 2-300	500V6300G	Gear drive type	230	300	6	—	—	183	195	200	200	400
2-300 × 2-300	500V6390G	Gear drive type	275	390	6	—	—	222	235	240	240	500
2-300 × 2-300	500V6470G	Gear drive type	310	470	6	—	—	250	265	270	270	600

\* The seal liquid flow rate indicates the values at -86.6 kPa G (14.7 kPa abs).