

## Features

- ① The motor and the pump are integrated into one for smaller size and lighter weight
- ② With the self-priming function, the unit can be easily installed in confined areas
- ③ EU RoHS Directive (Restriction of Use of Six Hazardous Substances) compliant
- ④ Meets the EU Directive for CE marking
- ⑤ Enhanced protection against mist and other environmental elements



## Structure

Mechanical seal structure. The motor section and pump section are integrated and cast iron is used in the pump's main unit.

## How to read the model type

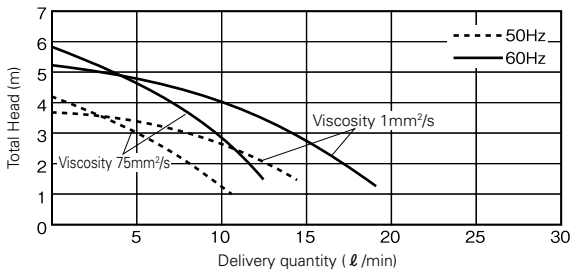
**VKN 07 5 A**

①      ②      ③      ④      ⑤

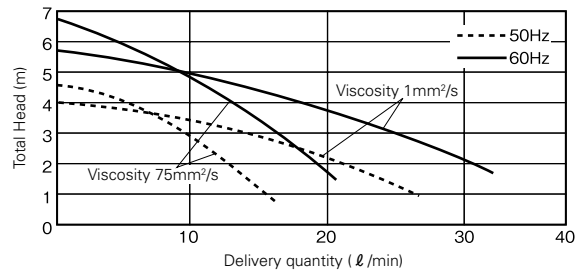
- ① Model
- ② Output code (ex. 06: 100W)
- ③ Model
- ④ Number of phases and characteristics
- ⑤ Voltage (blank: standard; -4Z: different voltage)

## Selection chart

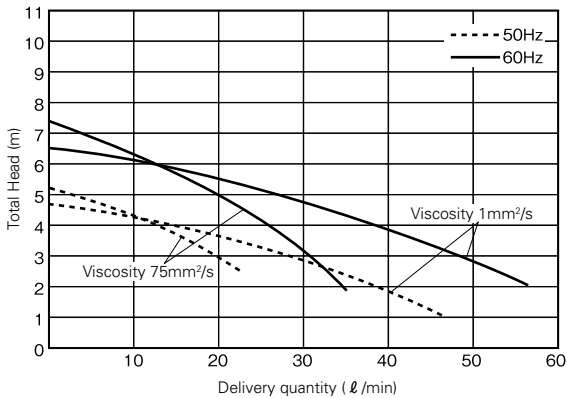
**VKN045A(L)/045A-4Z**



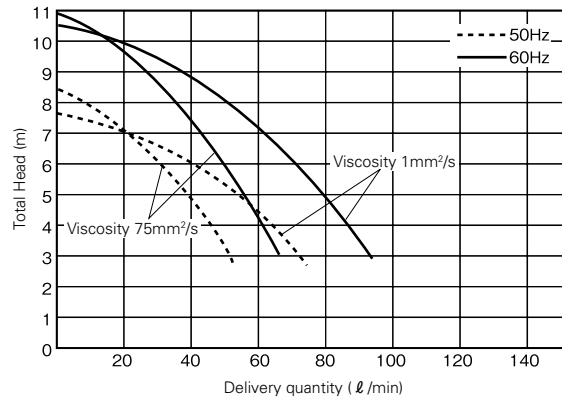
**VKN055A/055A-4Z**



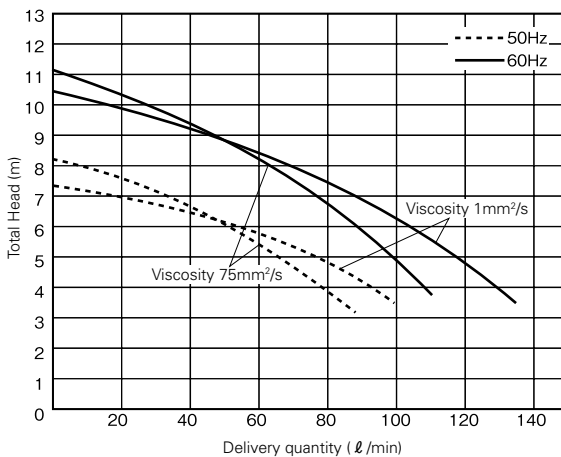
**VKN065A/065A-4Z**



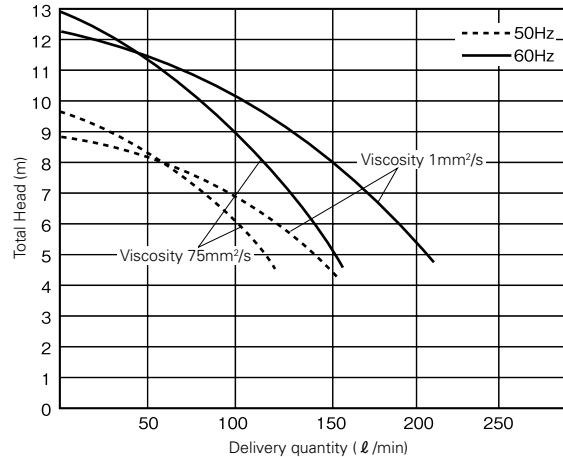
**VKN075A/075A-4Z**



**VKN085A/085A-4Z**



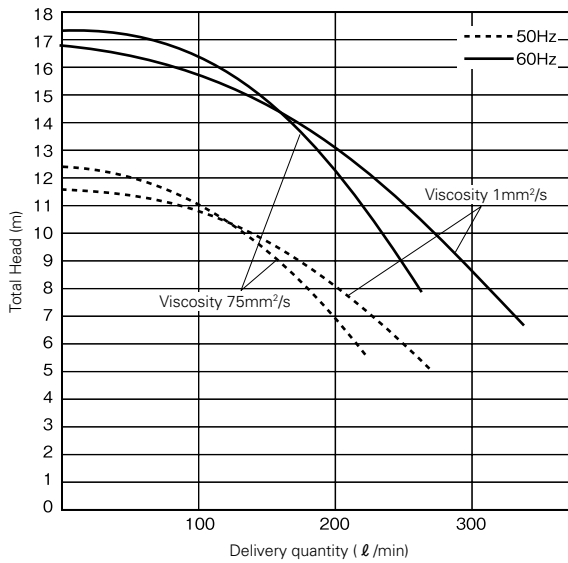
**VKN095A/095A-4Z**



Note: The delivery quantity varies according to the type of liquid circulated and the liquid's viscosity.

## Selection chart

### VKN115A/115A-4Z



Note: The delivery quantity varies according to the type of liquid circulated and the liquid's viscosity.

## Specifications

### Standard voltage

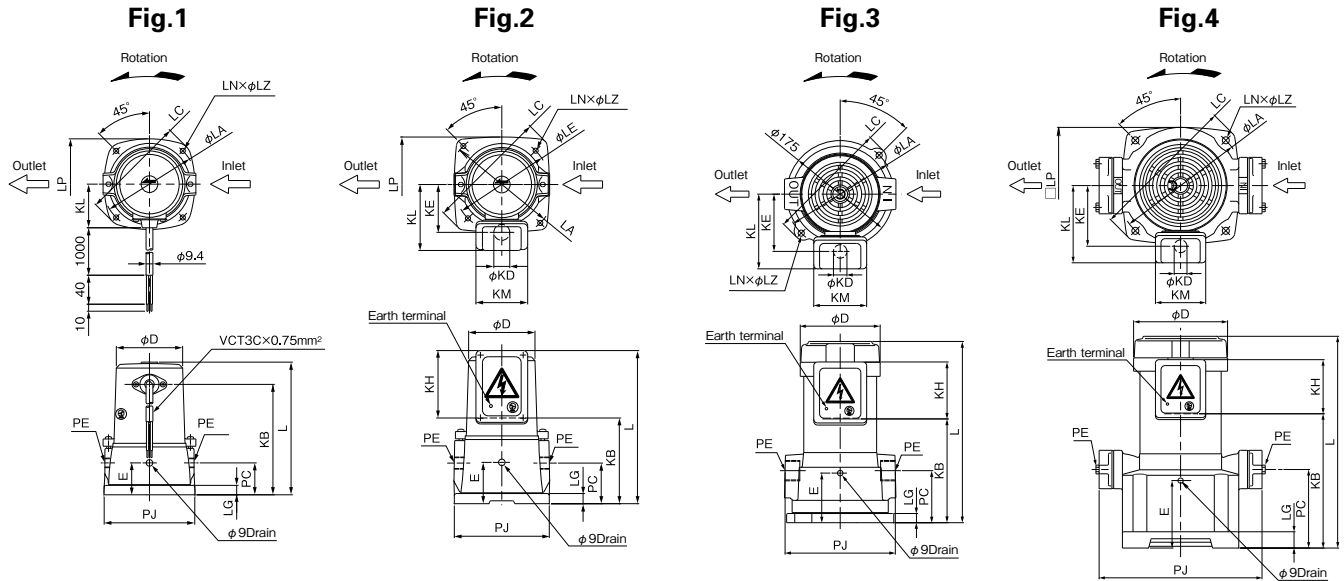
Specifications	Type	VKN045A(L)*		VKN055A		VKN065A		VKN075A		VKN085A		VKN095A		VKN115A	
Output	(W)	40		60		100		180		250		400		750	
Rated voltage	(V)	200	200 220	200	200 220	200	200 220	200	200 220	200	200 220	200	200 220	200	200 220
Frequency	(Hz)	50	60	50	60	50	60	50	60	50	60	50	60	50	60
Rated current	(A)	0.32	0.31 0.31	0.4	0.35 0.35	0.55	0.5 0.5	0.85	1.0 1.0	1.2	1.5 1.5	2.4	2.5 2.4	3.3	4.5 4.2
Delivery quantity	(l/min)	13	16	16	24	39	50	50	67	95	130	140	200	230	320
Total head	(m)	1.5		2		2		3		4		5		7	
Max. length of suction pipe	(m)	0.7		0.7		0.7		0.7		0.6		0.7		0.7	
Max. viscosity	(mm²/s)	200	75	200	75	200	75	200	75	200	75	200	75	200	75
Inlet/outlet	(PS)	1/4		3/8		3/8		1/2		3/4		1		1½	
Finish paint		Munsell N1													
Standard		IEC60034-1 CE approved													
Degree of protection		IP54													

### Different voltage

Specifications	Type	VKN045A-4Z		VKN055A-4Z		VKN065A-4Z		VKN075A-4Z		VKN085A-4Z		VKN095A-4Z		VKN115A-4Z	
Output	(W)	40		60		100		180		250		400		750	
Rated voltage	(V)	380 400 415	400 440	380 400 415	400 440	380 400 415	400 440	380 400 415	400 440	380 400 415	400 440	380 400 415	400 440	380 400 415	400 440
Frequency	(Hz)	50	60	50	60	50	60	50	60	50	60	50	60	50	60
Rated current	(A)	0.16 0.16 0.17	0.16	0.19 0.20 0.22	0.18	0.28 0.28 0.29	0.25	0.44 0.43 0.42	0.5	0.65 0.6 0.6	0.75	1.2 1.2 1.2	1.3	1.7 1.7 1.7	2.3 2.1
Delivery quantity	(l/min)	13	16	16	24	39	50	50	67	95	130	140	200	230	320
Total head	(m)	1.5		2		2		3		4		5		7	
Max. length of suction pipe	(m)	0.7		0.7		0.7		0.7		0.6		0.7		0.7	
Max. viscosity	(mm²/s)	200	75	200	75	200	75	200	75	200	75	200	75	200	75
Inlet/outlet	(PS)	1/4		3/8		3/8		1/2		3/4		1		1½	
Finish paint		Munsell N1													
Standard		IEC60034-1 CE approved													
Degree of protection		IP54													

- Notes
- As the pump whose model number has a suffix L (with marked ★) has cabtyre leads, it dose not conform to CE marking and its degree of protection is IP23.
  - Delivery quantity and total head values were obtained in tests with a liquid viscosity of 1mm²/s (same as tap water at normal temperature). Note that the pumps cannot be used with water.
  - If the pipe diameter (inlet and outlet) is different from the standard diameter, the maximum length of suction pipe is inversely proportional to the square of the pipe diameter.

## Assembly Drawing

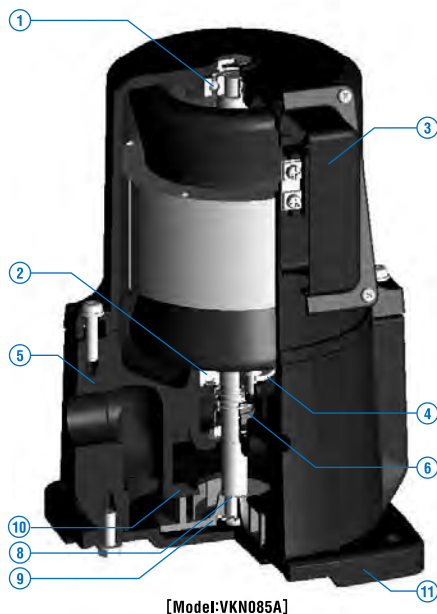


## Dimensions

(Unit : mm)

Type	Fig.	D	E	KB	KD	KE	KH	KL	KM	L	LA	LC	LE	LG	LN	LP	LZ	PC	PE	PJ	Mass (kg)
VKN045L	1	92	44	151	—	—	—	61	—	183	130	145	—	13	4	125	7	44	Rp $\frac{1}{4}$	123	4.5
VKN045A(-4Z)	2	92	44	96	22	67	93	93	73	189	130	145	—	13	4	125	7	44	Rp $\frac{1}{4}$	125	4.5
VKN055A(-4Z)	2	92	57	119	22	67	93	93	73	212	130	169	132	14	4	131	7	56	Rp $\frac{3}{8}$	132	6.5
VKN065A(-4Z)	2	92	56	119	22	67	93	93	73	212	150	169	132	14	4	131	7	56	Rp $\frac{3}{8}$	132	7.5
VKN075A(-4Z)	2	111	63	143	22	78	93	104	73	236	164	194	160	15	4	153	10	63	Rp $\frac{1}{2}$	150	11.0
VKN085A(-4Z)	2	122	71	157	22	81	93	107	73	250	170	194	160	15	4	153	10	71	Rp $\frac{3}{4}$	160	12.5
VKN095A(-4Z)	3	131	81	169	22	94	93	122	87	296	180	200	—	15	2	—	10	85	Rp1	180	14.0
VKN115A(-4Z)	4	162	116	231	22	105	93	133	87	364	220	253	—	28	4	200	12	135	Rp1 $\frac{1}{2}$	280	29.0

## Sectional drawing



No.	Parts Name	Materials
1	Deep groove ball bearing	
2	Deep groove ball bearing	
3	Terminal box	SPCC
4	End cover	SPHC
5	Pump leg	FC150
6	Mechanical seal	Carbon/ceramics
8	Adjusting washer	BsP3-1 / 2H
9	Impeller	Special resins or CAC407
10	Eddy box	FC150
11	Bottom plate	FC150

Note: Structure and other details are subject to change without notice.