

### Features

- ① The motor and the pump are integrated for smaller sizes and lighter weights
- 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 China energy label regulation (GB18613-2012) efficiency-compliant unit (grade GB3) available
- ⑥ 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

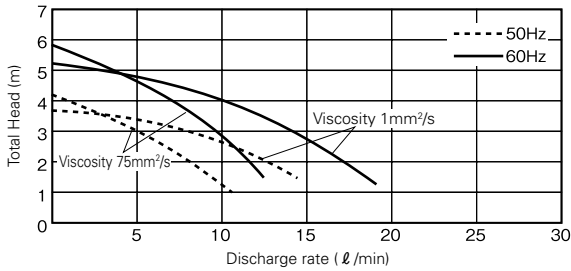
**VKN 07 5 A**

①      ②      ③      ④      ⑤

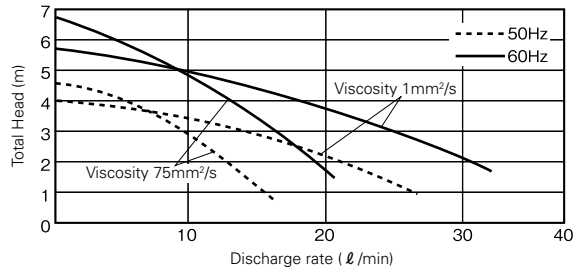
- ① Model
- ② Output code(ex. 06: 100W)
- ③ Series
- ④ Number of phases and characteristics
- ⑤ Compliance with voltage/energy efficiency regulation (no description: standard; 4Z: different voltage  
-G: China energy label regulation (GB18613-2012) efficiency-compliant unit (grade GB3) (200V, 50Hz)  
-GS: China energy label regulation (GB18613-2012) efficiency-compliant unit (grade GB3) (220/380V, 50Hz)

### Selection chart (performance drawings)

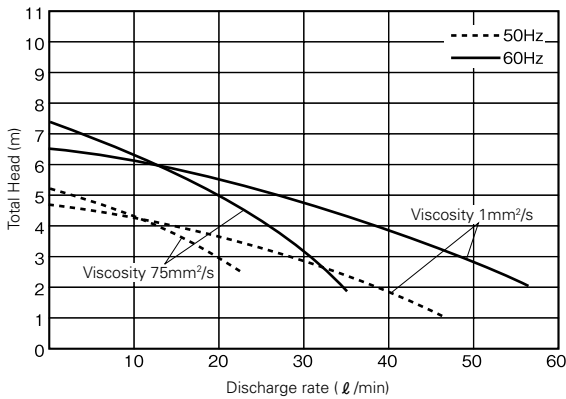
**VKN045A(L)/045A-4Z**



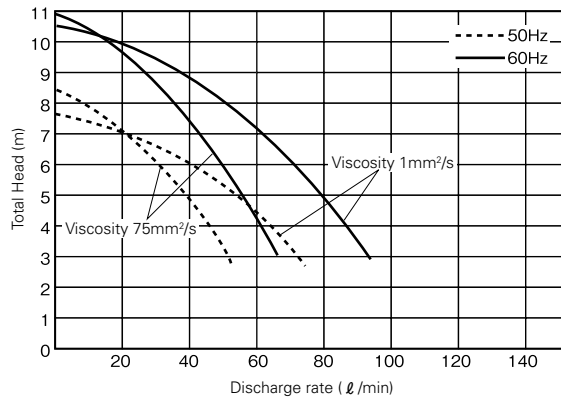
**VKN055A/055A-4Z**



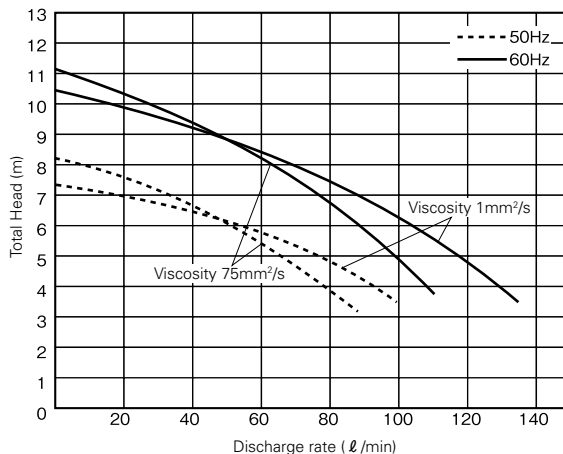
**VKN065A/065A-4Z**



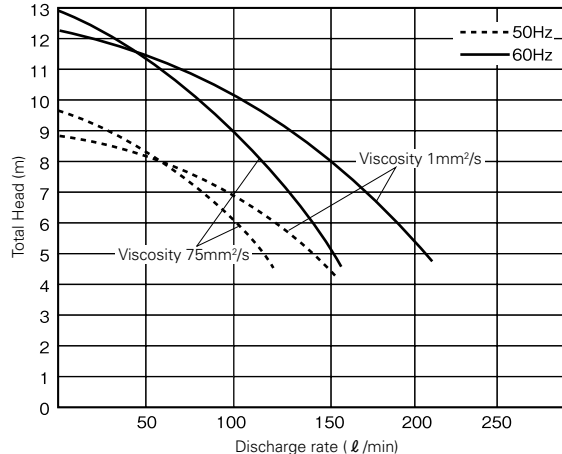
**VKN075A/075A-4Z**



**VKN085A/085A-4Z**



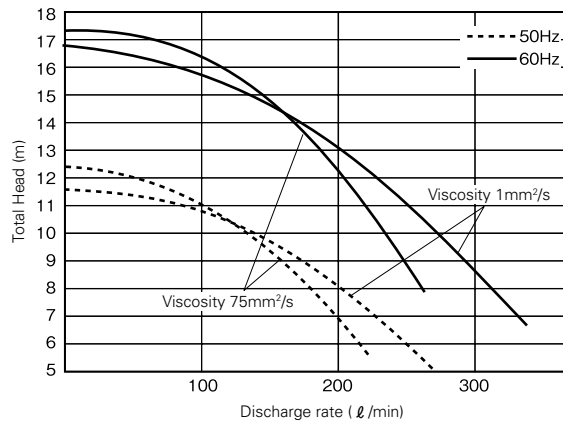
**VKN095A/095A-4Z**



Note: The discharge rate will vary significantly depending on the type of liquid circulated and the liquid's viscosity.

## Selection chart (performance drawings)

VKN115A/115A-4Z/115A-G/115A-GS



Note: The discharge rate will vary significantly depending on the type of liquid circulated and the liquid's viscosity.

## Specifications

### Standard voltage

Specifications	Type	VKN045A(L)*		VKN055A		VKN065A		VKN075A		VKN085A		VKN095A		VKN115A	
Nominal 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	0.85	1.0 1.0	1.2	1.5 1.5	2.4	2.5 2.4	3.3	4.5 4.2
Discharge rate	(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 allowed	(mm <sup>2</sup> /s)	200		75		200		75		200		75		200	
Inlet/outlet	(Rp)	1/4		3/8		3/8		1/2		3/4		1		1½	
Paint color		Munsell N1													
Standard		IEC60034-1 CE approved													
Degree of protection		IP54													

### Different voltage

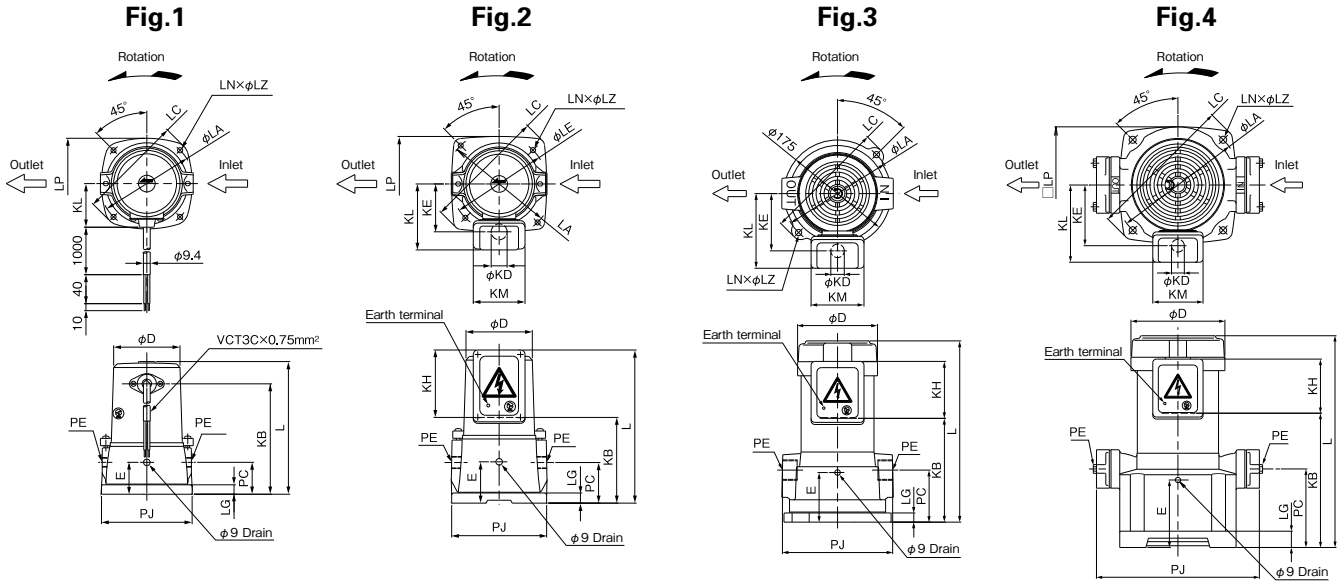
Specifications	Type	VKN045A-4Z		VKN055A-4Z		VKN065A-4Z		VKN075A-4Z		VKN085A-4Z		VKN095A-4Z		VKN115A-4Z	
Nominal output	(W)	40		60		100		180		250		400		750	
Rated voltage	(V)	380 400 415	400 440	380 400 415	400 440	380 400 415	400 440	380 400 415	400 440	380 400 415	400 440	380 400 415	400 440	380 400 415	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 0.16	0.19 0.20 0.22	0.18 0.18	0.28 0.28 0.29	0.25 0.25	0.44 0.43 0.42	0.5 0.5	0.65 0.6 0.6	0.75 0.75	1.2 1.2 1.2	1.3 1.2	1.7 1.7 1.7	2.3 2.1
Discharge rate	(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 allowed	(mm <sup>2</sup> /s)	200		75		200		75		200		75		200	
Inlet/outlet	(Rp)	1/4		3/8		3/8		1/2		3/4		1		1½	
Paint color		Munsell N1													
Standard		IEC60034-1 CE approved													
Degree of protection		IP54													

### China energy label regulation (GB18613-2012) efficiency-compliant unit (grade GB3)

Specifications	Type	VKN115A-G	VKN115A-GS
Nominal output	(W)	750	750
Rated voltage	(V)	200	220 380
Frequency	(Hz)	50	
Rated current	(A)	3.3	3.1 1.8
Discharge rate	(l/min)	230	
Total head	(m)	7	
Max. length of suction pipe	(m)	0.7	
Max. viscosity allowed	(mm <sup>2</sup> /s)	200	
Inlet/outlet	(Rp)	1½	
Paint color		Munsell N1	
Standard		IEC60034-1 CE approved	
Degree of protection		IP44	

- Notes
- As the pump whose model number has a suffix L (with marked ★) has cable leads, it does not conform to CE marking and its degree of protection is IP23.
  - The discharge rate and total head values were obtained in tests with a liquid viscosity of 1mm<sup>2</sup>/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

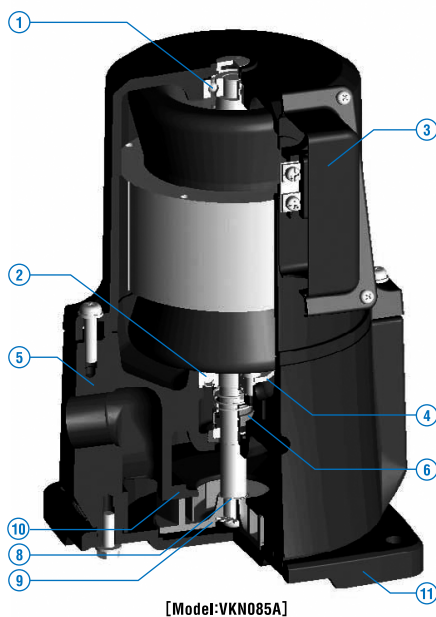


### Dimensions

(Unit: mm)

Type	Fig.	D	E	KB	KD	KE	KH	KL	KM	L	LA	LC	LE	LG	LN	LP	LZ	PC	PE	PJ	Approx. mass (kg)
VKN045L	1	92	44	151	—	—	—	61	—	183	130	145	—	13	4	125	7	44	Rp¼	123	4.5
VKN045A(-4Z)	2	92	44	96	22	67	93	93	73	189	130	145	—	13	4	125	7	44	Rp¼	125	4.5
VKN055A(-4Z)	2	92	57	119	22	67	93	93	73	212	130	169	132	14	4	131	7	56	Rp⅜	132	6.5
VKN065A(-4Z)	2	92	56	119	22	67	93	93	73	212	150	169	132	14	4	131	7	56	Rp⅜	132	7.5
VKN075A(-4Z)	2	111	63	143	22	78	93	104	73	236	164	194	160	15	4	153	10	63	Rp½	150	11.0
VKN085A(-4Z)	2	122	71	157	22	81	93	107	73	250	170	194	160	15	4	153	10	71	Rp¾	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	Rp1½	280	29.0
VKN115A-G	4	162	116	231	22	105	93	133	87	364	220	253	—	28	4	200	12	135	Rp1½	280	29.0
VKN115A-GS	4	162	116	231	27	108	93	146	94	364	220	253	—	28	4	200	12	135	Rp1½	280	29.0

### Sectional drawing



[Model:VKN085A]

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

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

**Features**

- ① About 30% pressure level increase compared with the standard type
- ② The motor and the pump are integrated for smaller sizes and lighter weights
- ③ With the self-priming function, the unit can be easily installed in confined areas
- ④ EU RoHS Directive (Restriction of Use of Six Hazardous Substances) compliant
- ⑤ Meets the EU Directive for CE marking
- ⑥ 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.

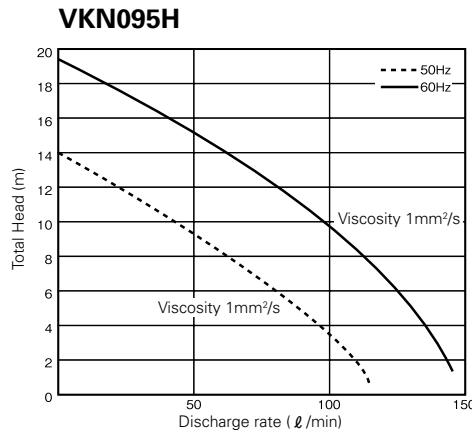
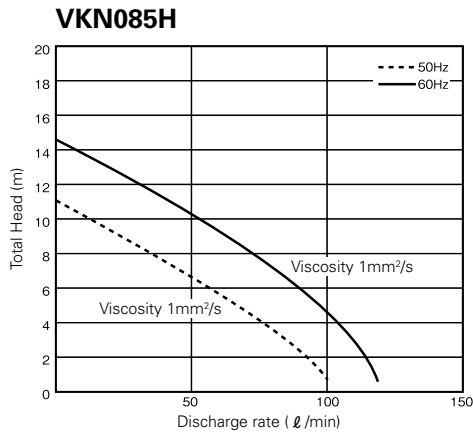
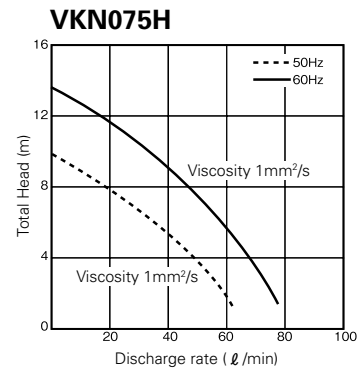
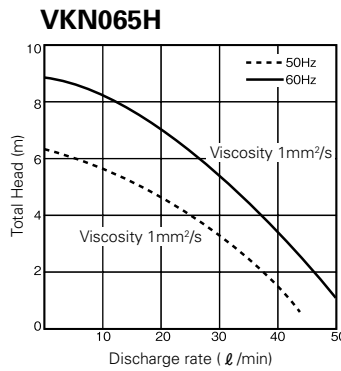
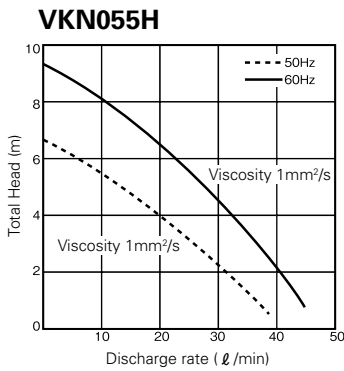
**How to read the model type**

**VKN 07 5 H**

- ①
- ②
- ③
- ④

- ① Model
- ② Output code(ex. 06: 100W)
- ③ Series
- ④ Number of phases and characteristics (H: 3 phases; pressure type)

**Selection chart (performance drawings)**



**Specifications**

Specifications	Type	VKN055H		VKN065H		VKN075H		VKN085H		VKN095H	
Nominal output	(W)	60		100		180		250		400	
Rated voltage	(V)	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
Rated current	(A)	0.42	0.55/0.52	0.55	0.6/0.6	0.9	1.2/1.1	1.2	1.5/1.5	2.4	2.5/2.4
Discharge rate	(l/min)	10	10	10	10	20	20	20	20	20	20
Total head	(m)	4.5	7	5	7.5	7	11	8	12	12	17
Max. length of suction pipe	(m)	0.7		0.7		0.7		0.6		0.6	
Max. viscosity allowed	(mm <sup>2</sup> /s)	37.5		37.5		37.5		37.5		37.5	
Inlet/outlet	(Rp)	3/8		3/8		1/2		3/4		1	
Paint color		Munsell N1									
Standard		IEC60034-1 CE approved									
Degree of protection		IP54									

Note: The discharge rate and total head values were obtained in tests with a liquid viscosity of 1mm<sup>2</sup>/s (same as tap water at normal temperature). Note that the pumps cannot be used with water.

### Assembly Drawing

Fig.1

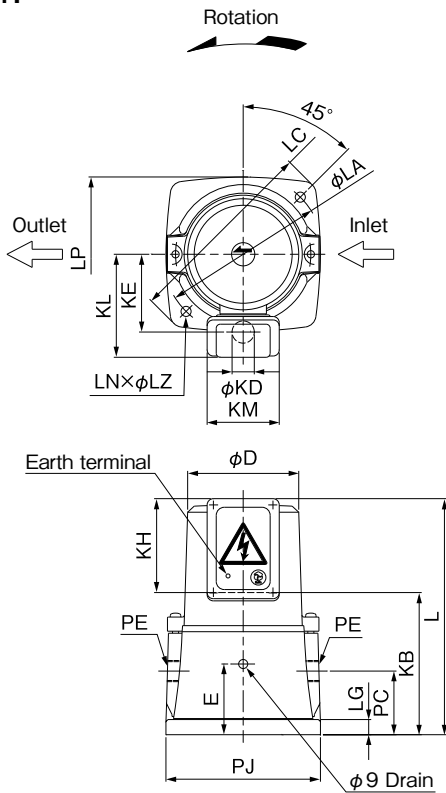
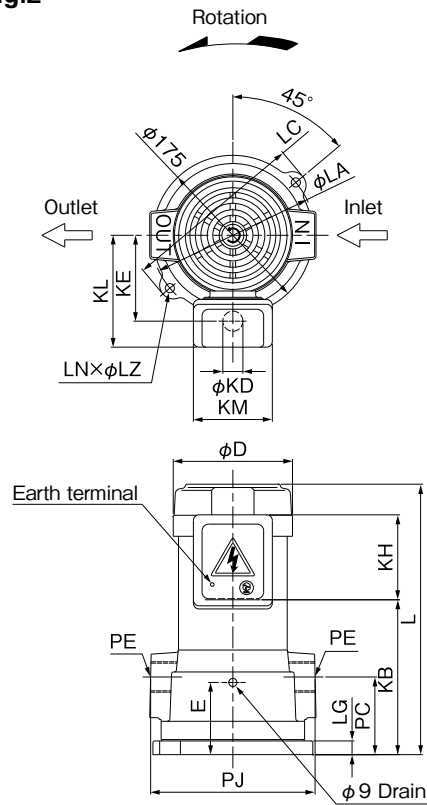


Fig.2

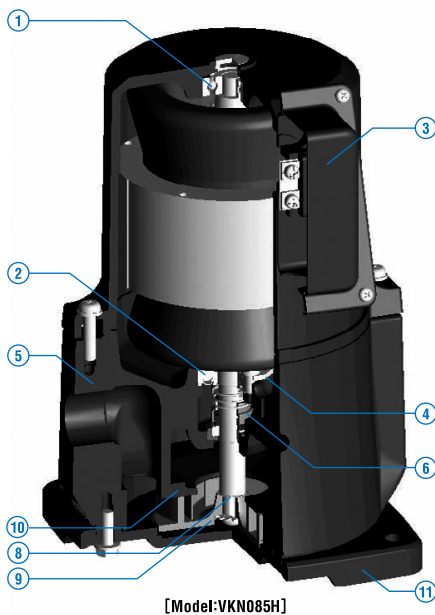


### Dimensions

(Unit : mm)

Type	Fig.	D	E	KB	KD	KE	KH	KL	KM	L	LA	LC	LG	LN	LP	LZ	PC	PE	PJ	Approx. mass (kg)
VKN055H	1	92	57	119	22	67	93	93	73	212	132	169	14	2	131	7	56	Rp $\frac{3}{8}$	132	6.5
VKN065H	1	92	57	119	22	67	93	93	73	212	132	169	14	2	131	7	56	Rp $\frac{3}{8}$	132	7.5
VKN075H	1	111	70	143	22	78	93	104	73	236	160	194	15	2	153	10	63	Rp $\frac{1}{2}$	150	11.0
VKN085H	1	122	73	157	22	81	93	107	73	250	160	194	15	2	153	10	71	Rp $\frac{3}{4}$	160	12.5
VKN095H	2	131	81	169	22	94	93	122	87	296	180	200	15	2	—	10	85	Rp1	180	14.0

### Sectional drawing



[Model:VKN085H]

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

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



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