

COOLANT PUMP

RCE

Premium efficiency
motor

HIGH EFFICIENCY

LONG LIFE

TOUGH ON
DIRTY LIQUIDS

SEALLESS STRUCTURE

HIGH-FLOW TYPE

CE AND ROHS
COMPLIANT

TROPICAL TREATMENT※
COMPLIANT

IE3, GB2, UL MOTOR



※EXCLUDES GB-COMPLIANT PRODUCTS

Ver.2.1



High-Efficiency

RCE IE3 / GB2 / UL



High-Efficiency, High-Flow Type!

RCE

Applications: Coolant circulation and pumping



1 High efficiency, high flow

Highly efficient 3D impellers have been designed for the RCE type. By manufacturing impellers using stainless steel precision casting with very high dimensional accuracy and extremely smooth casting surfaces, the pump's maximum efficiency has been increased by approximately 12% compared to the former RCD-type pumps, and the specification flow rate has also been substantially improved.

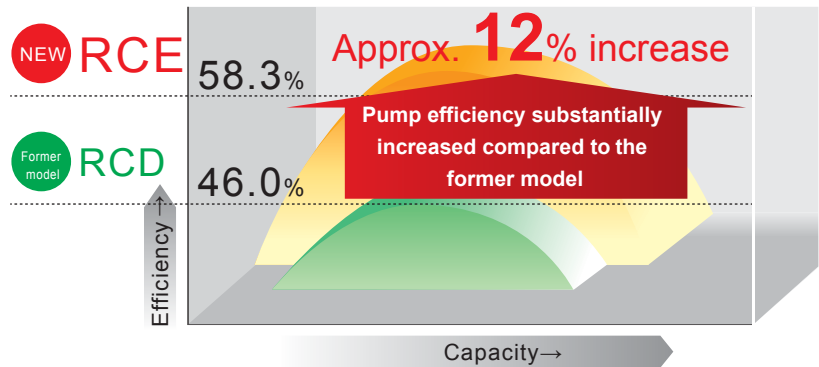
1 Adoption of 3D stainless steel impellers



Made with SCS13 for outstanding durability.

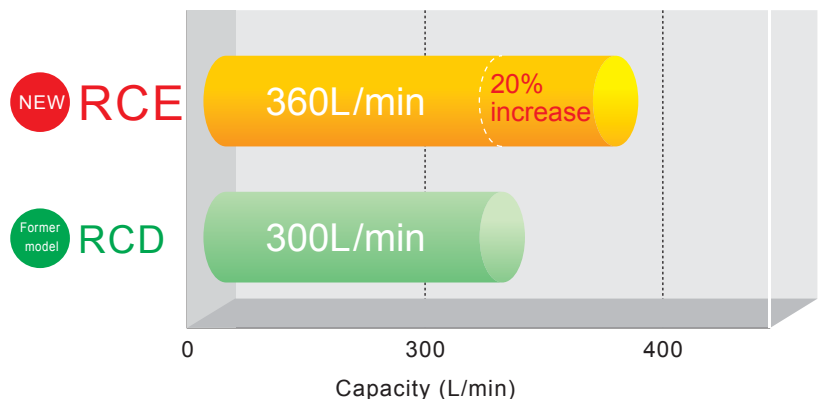
2 Increased pump efficiency

Through its substantially improved efficiency, the pump will contribute to plant equipment energy reduction and reduction of CO2.



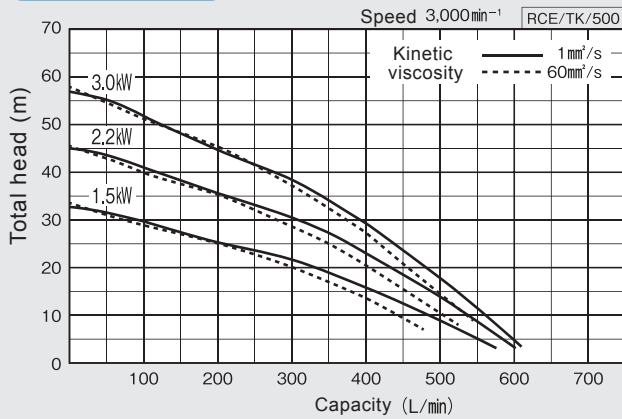
3 Increased specification flow rate range

The capacity has also been substantially improved and the maximum flow rate has been increased by 20% compared to the former model.



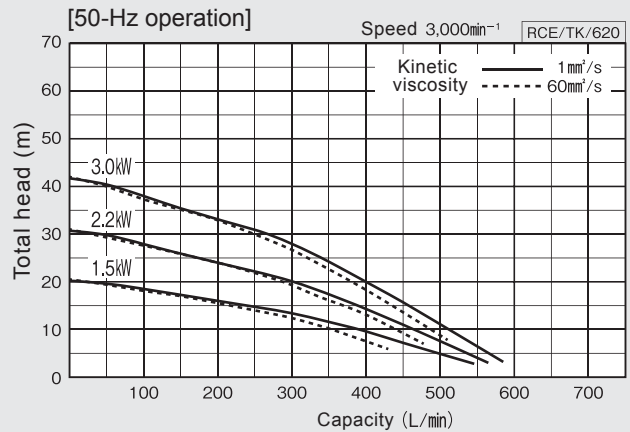
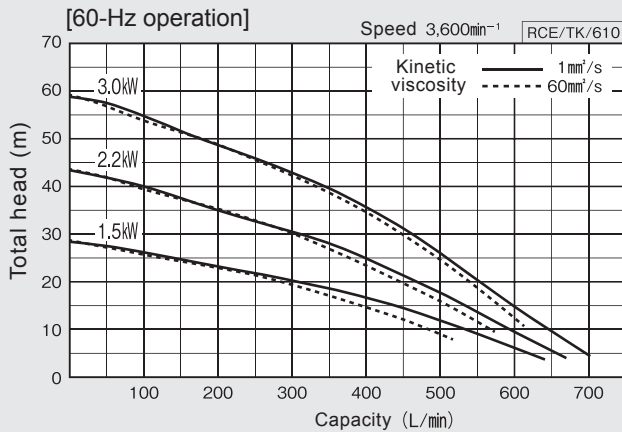
Selection chart / specification table

For 50 Hz only



Bore mm	Model	Motor kW	Frequency Hz	Standard specification		Voltage V	Current A
				Capacity L/min	Total head m		
40	RCE-405AE1.5	1.5	50	360	18	200	8.4
	RCE-405AE2.2	2.2	50	360	26	200	11.5
	RCE-405AE3.0	3.0	50	360	33	200	14.5
	RCE-405AE1.5T4	1.5	50	360	18	380/400	4.3/4.2
	RCE-405AE2.2T4	2.2	50	360	26	380/400	5.9/5.7
	RCE-405AE3.0T4	3.0	50	360	33	380/400	7.3/7.4

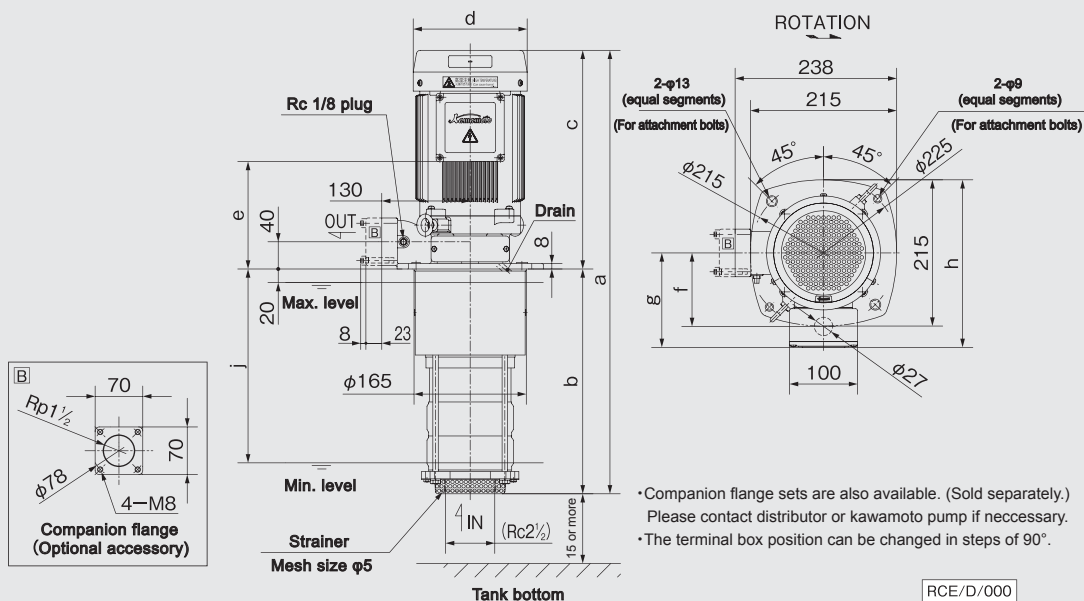
For 50/60 Hz



Bore mm	Model	Motor kW	Operational frequency Hz	Standard specification		Voltage V	Current A
				Capacity L/min	Total head m		
40	RCE-406AE1.5	1.5	60	360	18	200/220/230	8.4/7.8/7.6
			(50)	(360)	(11)	(200)	(5.9)
	RCE-406AE2.2	2.2	60	360	26	200/220/230	12.5/11.5/11
			(50)	(360)	(17)	(200)	(8.2)
	RCE-406AE3.0	3.0	60	360	38	200/220/230	16/15/14.5
			(50)	(360)	(23)	(200)	(11.5)
	RCE-406AE1.5T4	1.5	60	360	18	400/440/460	4.2/3.9/3.8
			(50)	(360)	(11)	(380/400)	(3/3)
	RCE-406AE2.2T4	2.2	60	360	26	400/440/460	6.2/5.7/5.5
			(50)	(360)	(17)	(380/400)	(4.2/4.1)
	RCE-406AE3.0T4	3.0	60	360	38	400/440/460	8/7.5/7.3
			(50)	(360)	(23)	(380/400)	(5.7/5.8)

For information on the RCE-G (GB2) type and RCE-U (UL & NEMA Premium (IE3)) type, please inquire.

Dimensional Drawings Inquire specification sheet and drawings in case of actual working plan.



RCE/D/000

Units : mm

Bore mm	Model	Motor kW	a	b	c	d	e	f	g	h	j	Mass
												kg
40	RCE-405AE1.5(T4)	1.5	653	331	322	φ168	158	108	139	246	285	35
	RCE-405AE2.2(T4)	2.2	669	331	338	φ194	174	121	152	259	285	41
	RCE-405AE3.0(T4)	3.0	749	381	368	φ194	204	121	152	259	335	50

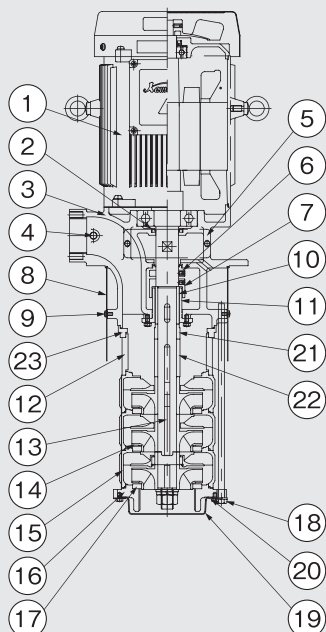
RCE/d/500

Units : mm

Bore mm	Model	Motor kW	a	b	c	d	e	f	g	h	j	Mass
												kg
40	RCE-406AE1.5(T4)	1.5	653	331	322	φ168	158	108	139	246	285	35
	RCE-406AE2.2(T4)	2.2	669	331	338	φ194	174	121	152	259	285	41
	RCE-406AE3.0(T4)	3.0	749	381	368	φ194	204	121	152	259	335	50

RCE/d/600

Structure drawing



No.	Name	Material
1	Motor	—
2	Oil Seal	NBR
3	Discharge casing	FC
4	Plug	SWCH10K
5	Cover	SPCC
6	Deflector	S45C
7	Deflector	S45C
8	Cover	SPCC
9	Screw	C2700
10	Sleeve	SUS440
11	Bush	S45C
12	Spacer	S45C
13	Key	SUS403
14	Impeller	SCS13
15	Stage casing	SCS13
16	Suction casing	FC
17	Wear ring	FCD
18	Bolt	SS400
19	Strainer	SPCC
20	Plain washer	SS400
21	Sleeve	S45C
22	Sleeve	S45C
23	Spacer	S45C

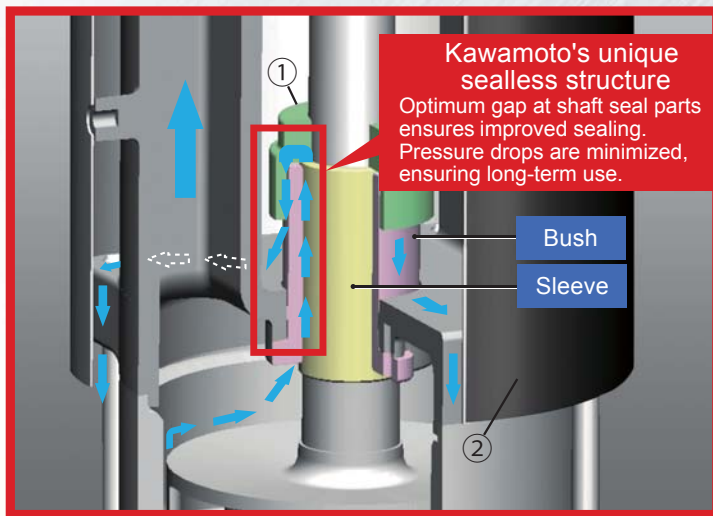
RCE/HC/000

2 Superb sealless structure

Reduced environmental impact structure PAT.

(Replaceable shaft sealing parts)
Highly durable quenched materials have been used for the shaft sealing section. Moreover, the environmental burden has been reduced through a design which allows replacement of the shaft sealing section alone if liquid leaks have become frequent as a result of wear.

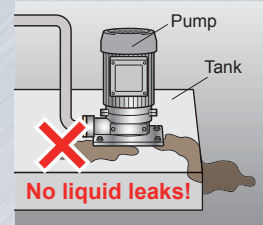
← Direction of coolant flow



▶ Sealing of the shaft sealing section has been improved by adopting unique sealless structure.

Unique double anti-splash structure PAT.

The first anti-splash cover (Fig. (1)) prevents coolant from splashing. The second anti-splash cover (Fig. (2)) around the pump also prevents coolant from splashing. That creates a double anti-splash structure.



Shaft seal part cross-sectional image



Replacement parts

- Sleeve (rotating ring) : Quenched SUS440
- Bush (fixed ring) : Quenched S45C

Standard specifications

Model / name		RCE Type Coolant Pump
Application range	Installation	Indoors
	Installation conditions	Vertical installation (Not to be installed horizontally)
	Ambient conditions	Temperature: 0 to 40°C
		Humidity: 85% RH or lower (Non condensing)
	Liquid type※	Coolant etc.
	Liquid temperature	0 to 40°C
Viscosity limit	60 mm ² /s or less	
Motor		TEFC indoor, 2 poles, three phase Efficiency: Premium efficiency (IE3)

※ : Cannot be used with clean clear water.

Model Explanation

RCE - 40 5 A E 1.5 T4
① ② ③ ④ ⑤ ⑥ ⑦

- ① Model
 - ② Bore
 - ③ Max. operational frequency 5: For 50 Hz only, 6: For 50/60 Hz
 - ④ A: Standard type
 - ⑤ E: Premium efficiency standard(IE3)
 - ⑥ Nominal pump output (kW)
 - ⑦ Blank: 200 V class T4: 400 V class
- G: Compliant with Chinese high-efficiency regulation class GB2
U: Compliant with U.S. safety standard UL certification & NEMA Premium (IE3)
- Special specifications

Standard specifications

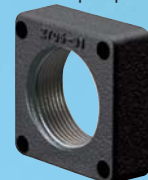
- Supports a variety of specifications
CE, RoHS, tropical treatment, child's finger

Special spec

- China BG2, U.S. UL & NEMA Premium (IE3)
Supports motors compliant with overseas standards
- Terminal box position can be changed in steps of 90°. (90°, 180°, 270°)

Separately sold parts

- Companion flange set
※ Please contact distributor or Kawamoto pump if necessary.





To reduce the environmental burden and protect the environment, we at KAWAMOTO PUMP will keep on carrying out activities as a united force under our slogan "Comfort Earth", as a company involved with the valuable resource that is "water".



Important Safety Precautions

Always read the manual thoroughly and fully comprehend the contents for safe operation before starting use. Precautions for using products safely and for preventing personal injuries or physical damage are given in the manual. ※We bear no responsibility when the above listed precautions are not observed.

- Matters falling under the following may not be covered by the warranty: uses out of the specified scope of application, failure to comply with precautions, improper repairs and alterations, matters arising from natural disasters, matters arising from the installation environment (improper power source, foreign objects, sand etc.), non-compliance with laws and regulations or standards pertaining thereto, accidental or intentional damage or injury, replacement of consumable parts, defects due to resale, etc.
- Do not use the product for applications out of the product specifications. Doing so may cause electrical shock, fire, liquid leakage, etc.
- Close attention is needed when rusting, corrosion/elution are not permissible owing to the application or liquid properties. Take into account both the pump and the rest of the equipment when considering and selecting.
- Select a product which is appropriate for your application. Inappropriate use of products may cause accidents.
- Have spare equipment ready when using pumps for critical equipment.
- Conduct construction in accordance with the applicable laws and regulations (the Technical Standards of Electric Installation, interior wiring regulation, Building Standards Act, etc.). Not only does it violate the laws and regulations, but it also may cause injuries due to electric shock, fire, falling and tipping over.
- Observe the service life of the pump, install it in a well ventilated place free from corrosive or explosive gases, salt, moisture, water vapor, condensation etc., and avoid exposing it to wind, rain and direct sunlight. In a harsh environment, electric leakage, electric shock or fire may result from deterioration of insulation in the motor or control panel, etc.
- Install buzzers, etc., as an alarm to alert failure to be noticed. Failing to do so may result in serious accidents without noticing a failure.
- Do not install in places with no drainage or places which have not been waterproofed. Liquid leaks may cause serious damage.
 - ※ We bear no responsibility for any damage arising from lack of drainage or waterproofing.
- Depending on the equipment, attach a filter etc. appropriate for your application on the discharge side before use, perform thorough flushing and check that there is no contamination. Cutting oil, rubber mold releasing agent, foreign objects etc. from the manufacturing line and cutting oil, foreign objects etc. from the pipeline may contaminate the liquid which is to be handled.
- Do not operate pumps with a specification of 50 Hz at 60 Hz. Damage may arise as a result of excess pressure or burnout of the motor etc. due to overload.
- Do not place flammables near or cover the surroundings of the pump, cable, control panel and inside the pump cover with combustibles. This may cause fires due to heating.
- The Pump should never be disassembled, repaired, or modified, or the power cable should never be replaced by anyone other than a qualified repair technician. Improper repairs could result in electric shocks, fires, faults or break
- It is recommended that both periodic and daily inspections be performed in order to ensure that the pump will operate reliably for as long as possible. Failure to perform inspections may lead to pump failure, accidents etc. For periodic inspections, please consult your distributor or our

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Distributor

* Please contact our offices listed below with questions or to request brochures.

※For any questions about pumps, please contact your nearest branch or office.

Kawamoto Pump Mfg. Co., Ltd. Headquarters
4-11 Osu, Naka-ku, Nagoya-shi
http://www.kawamoto.co.jp 〒460-8650 TEL (052) 251-7171 (Main)

Hokkaido Branch ☎ (011) 831-0131 (Main)	Kyoto Branch ☎ (075) 645-1011 (Main)
Tohoku Branch ☎ (022) 232-4095 (Main)	Osaka Branch ☎ (06) 6328-0877 (Main)
Kita Kanto Branch ☎ (048) 650-5871 (Main)	Shikoku Branch ☎ (087) 886-2236 (Main)
Tokyo Branch ☎ (03) 3946-4131 (Main)	Chugoku Branch ☎ (082) 277-3661 (Main)
Nagoya Branch ☎ (052) 249-9810 (Main)	Kyushu Branch ☎ (092) 621-7235 (Main)

Kawamoto Service 112 offices and representatives nationwide

Tokyo ☎ (03) 4526-0691 (Main)	Yokohama ☎ (045) 534-0207 (Main)
Nagoya ☎ (052) 249-9816 (Main)	O s a k a ☎ (06) 6328-7734 (Main)

Kind	RCE
No.	5630 ㊤ E