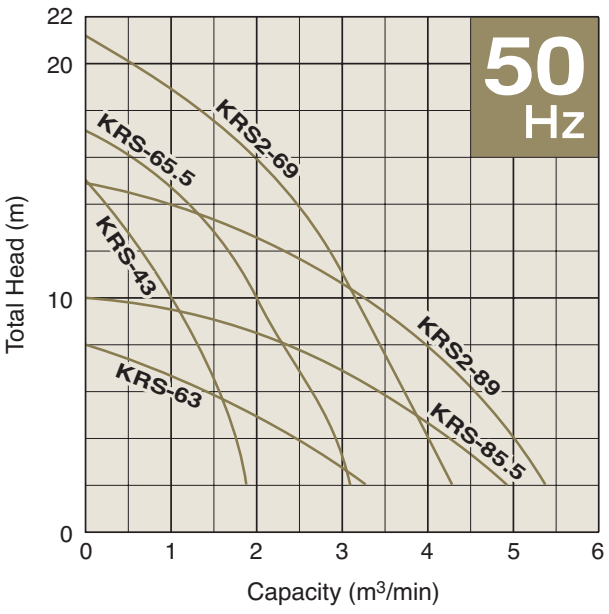
Series:	Discharge Bore:	Motor Output / Pole:
KRS(Energy-Saving)	100 - 200mm	3 - 9kW / 4-pole

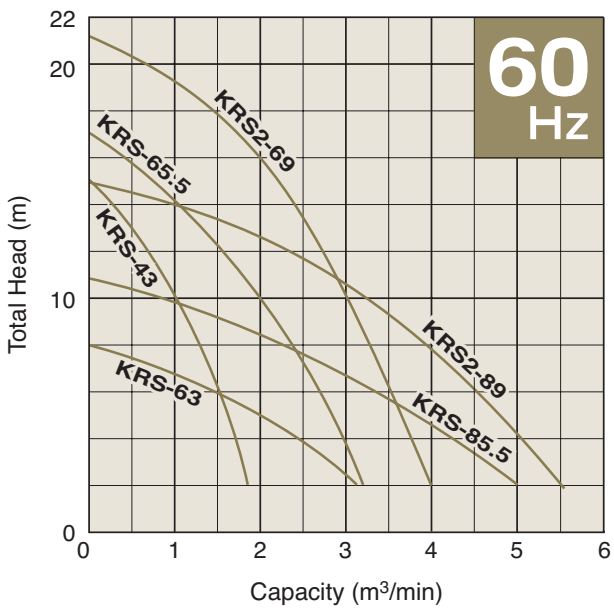
The KRS-series of energy-saving type is a submersible three-phase cast iron high volume heavy-duty drainage pump driven by a 4-pole motor. It consumes less energy than the standard KRS-series at lower head applications. The cast iron body, combined with the low speed motor, presents extra durability for use in the most demanding conditions. The top discharge, side flow design assures efficient motor cooling even when it operates with its motor exposed to air.

Selection Table

Model	Discharge Bore mm	Motor Output kW	Phase	Starting Method	Pole	Dry Weight kg
KRS-43	100	3	3-phase	Direct on Line	4	95
KRS-63	150	3	3-phase	Direct on Line	4	97
KRS-65.5	150	5.5	3-phase	Direct on Line	4	118
KRS2-69	150	9	3-phase	Direct on Line	4	155
KRS-85.5	200	5.5	3-phase	Direct on Line	4	126
KRS2-89	200	9	3-phase	Direct on Line	4	175

Performance Curves





SPECIFICATIONS	Model	KRS-43	KRS(E-Save)-series 3kW, 3-phase

Type of Pump
Submersible high volume drainage pump for construction and foundation works, floodwater drainage, etc.

Type of Fluid
Stormwater, groundwater, wash water, and sand-carrying water

Temperature: 0 to 40°C

Discharge Bore & Connection
100mm, Hose Coupling

Motor Output
3kW

Power Supply
Three-phase

Starting Method
Direct on Line (Star-Delta available on special request)

Motor
Continuous-duty rated, dry-type induction motor

Insulation Class: E
Degree of Protection: IP68

No. of Poles & Speed (Synchronous Speed)
4-pole, 1500/1800min^{-1} (50/60Hz)

Power Supply Voltages & Rated Currents

50Hz	60Hz
380V – 6.9A	220V – 11.6A
400V – 6.5A	380V – 6.7A
415V – 6.3A	440V – 5.8A

Power Cable
Sheath: Chloroprene rubber
Standard Length: 8m
200 to 600V supply:
1 x 4 x 2.0mm^2, O.D. 14.4mm

Dry Weight (excluding cable)
95kg

Impeller
Semi-open impeller made of ductile cast iron

Solids Passage
50Hz – ϕ12mm
60Hz – ϕ12mm

Cable Entry with Anti-Wicking Block
Watertight cable entry with strain-relief device. The anti-wicking block prevents water incursion due to capillary action should the power cable be damaged or the end submerged.

Bearing
Permanently lubricated, deep-groove, double-shielded C3 ball bearings

Shaft
420 stainless steel

Shaft Seal (Mechanical Seal)
Furnished with a double-face mechanical seal located in oil chamber. Both upper and lower seal faces always run in a clean environment.

Upper Seal Face: SiC + SiC
Lower Seal Face: SiC + SiC

Oil Seal (Lip Seal)
Used as a "Dust Seal", it protects the mechanical seal from abrasive particles.

OIL LIFTER
Equipped in oil chamber. It forcibly supplies lubricating oil to the mechanical seal and continues to supply the oil to the upper seal faces even if lubricant falls below the rated volume.

Type of Lubricating Oil & Volume
Turbine Oil (ISO VG32), 1440ml

Motor Protection Device
A circle thermal protector built in the motor housing. Directly cuts the motor circuit if excessive heat builds up or an overcurrent condition occurs in the motor.

Optional Accessory

Male Threaded Coupling

Special Specifications

High Temperature Liquids Version (60·80°C)

SPECIFICATIONS	Model	KRS-63	KRS(E-Save)-series 3kW, 3-phase

Type of Pump
Submersible high volume drainage pump for construction and foundation works, floodwater drainage, etc.

Type of Fluid
Stormwater, groundwater, wash water, and sand-carrying water

Temperature: 0 to 40°C

Discharge Bore & Connection
150mm, Hose Coupling

Motor Output
3kW

Power Supply
Three-phase

Starting Method
Direct on Line (Star-Delta available on special request)

Motor
Continuous-duty rated, dry-type induction motor

Insulation Class: E
Degree of Protection: IP68

No. of Poles & Speed (Synchronous Speed)
4-pole, 1500/1800min^{-1} (50/60Hz)

Power Supply Voltages & Rated Currents

50Hz	60Hz
380V – 6.9A	220V – 11.6A
400V – 6.5A	380V – 6.7A
415V – 6.3A	440V – 5.8A

Power Cable
Sheath: Chloroprene rubber
Standard Length: 8m
200 to 600V supply:
1 x 4 x 2.0mm^2, O.D. 14.4mm

Dry Weight (excluding cable)
97kg

Impeller
Closed impeller made of ductile cast iron

Solids Passage
50Hz – ϕ15mm
60Hz – ϕ15mm

Cable Entry with Anti-Wicking Block
Watertight cable entry with strain-relief device. The anti-wicking block prevents water incursion due to capillary action should the power cable be damaged or the end submerged.

Bearing
Permanently lubricated, deep-groove, double-shielded C3 ball bearings

Shaft
420 stainless steel

Shaft Seal (Mechanical Seal)
Furnished with a double-face mechanical seal located in oil chamber. Both upper and lower seal faces always run in a clean environment.

Upper Seal Face: SiC + SiC
Lower Seal Face: SiC + SiC

Oil Seal (Lip Seal)
Used as a "Dust Seal", it protects the mechanical seal from abrasive particles.

OIL LIFTER
Equipped in oil chamber. It forcibly supplies lubricating oil to the mechanical seal and continues to supply the oil to the upper seal faces even if lubricant falls below the rated volume.

Type of Lubricating Oil & Volume
Turbine Oil (ISO VG32), 1440ml

Motor Protection Device
A circle thermal protector built in the motor housing. Directly cuts the motor circuit if excessive heat builds up or an overcurrent condition occurs in the motor.

Optional Accessory

Male Threaded Coupling

Special Specifications

High Temperature Liquids Version (60·80°C)

SPECIFICATIONS	Model	KRS-65.5	KRS(E-Save)-series 5.5kW, 3-phase

Type of Pump
Submersible high volume drainage pump for construction and foundation works, floodwater drainage, etc.

Type of Fluid
Stormwater, groundwater, wash water, and sand-carrying water

Temperature: 0 to 40°C

Discharge Bore & Connection
150mm, Hose Coupling

Motor Output
5.5kW

Power Supply
Three-phase

Starting Method
Direct on Line (Star-Delta available on special request)

Motor
Continuous-duty rated, dry-type induction motor

Insulation Class: E
Degree of Protection: IP68

No. of Poles & Speed (Synchronous Speed)
4-pole, 1500/1800min^{-1} (50/60Hz)

Power Supply Voltages & Rated Currents

50Hz	60Hz
380V – 12.8A	220V – 20.0A
400V – 12.1A	380V – 12.1A
415V – 11.7A	440V – 10.3A

Power Cable
Sheath: Chloroprene rubber
Standard Length: 8m
200 to 600V supply:
1 x 4 x 3.5mm^2, O.D. 16.8mm

Dry Weight (excluding cable)
118kg

Impeller
Semi-open impeller made of ductile cast iron

Solids Passage
50Hz – ϕ20mm
60Hz – ϕ20mm

Cable Entry with Anti-Wicking Block
Watertight cable entry with strain-relief device. The anti-wicking block prevents water incursion due to capillary action should the power cable be damaged or the end submerged.

Bearing
Permanently lubricated, deep-groove, double-shielded C3 ball bearings

Shaft
420 stainless steel

Shaft Seal (Mechanical Seal)
Furnished with a double-face mechanical seal located in oil chamber. Both upper and lower seal faces always run in a clean environment.

Upper Seal Face: SiC + SiC
Lower Seal Face: SiC + SiC

Oil Seal (Lip Seal)
Used as a "Dust Seal", it protects the mechanical seal from abrasive particles.

OIL LIFTER
Equipped in oil chamber. It forcibly supplies lubricating oil to the mechanical seal and continues to supply the oil to the upper seal faces even if lubricant falls below the rated volume.

Type of Lubricating Oil & Volume
Turbine Oil (ISO VG32), 1960ml

Motor Protection Device
A circle thermal protector built in the motor housing. Directly cuts the motor circuit if excessive heat builds up or an overcurrent condition occurs in the motor

Optional Accessory

Male Threaded Coupling

Special Specifications

High Temperature Liquids Version (60·80°C)

SPECIFICATIONS	Model	KRS2-69	KRS(E-Save)-series 9kW, 3-phase

Type of Pump
Submersible high volume drainage pump for construction and foundation works, floodwater drainage, etc.

Type of Fluid
Stormwater, groundwater, wash water, and sand-carrying water

Temperature: 0 to 40°C

Discharge Bore & Connection
150mm, Hose Coupling

Motor Output
9kW

Power Supply
Three-phase

Starting Method
Direct on Line (Star-Delta available on special request)

Motor
Continuous-duty rated, dry-type induction motor

Insulation Class: B
Degree of Protection: IP68

No. of Poles & Speed (Synchronous Speed)
4-pole, 1500/1800min^{-1} (50/60Hz)

Power Supply Voltages & Rated Currents

50Hz	60Hz
380V – 20.0A	220V – 33.0A
400V – 19.0A	380V – 19.1A
415V – 19.0A	440V – 16.5A

Power Cable
Sheath: Chloroprene rubber
Standard Length: 8m
200 to 600V supply:
1 x 4 x 5.5mm^2, O.D. 19.8mm

Dry Weight (excluding cable)
155kg

Impeller
Semi-open impeller made of ductile cast iron

Solids Passage
50Hz – ϕ20mm
60Hz – ϕ20mm

Cable Entry with Anti-Wicking Block
Watertight cable entry with strain-relief device. The anti-wicking block prevents water incursion due to capillary action should the power cable be damaged or the end submerged.

Bearing
Permanently lubricated, deep-groove, double-shielded C3 ball bearings

Shaft
420 stainless steel

Shaft Seal (Mechanical Seal)
Furnished with a double-face mechanical seal located in oil chamber. Both upper and lower seal faces always run in a clean environment.

Upper Seal Face: SiC + SiC
Lower Seal Face: SiC + SiC

Oil Seal (Lip Seal)
Used as a "Dust Seal", it protects the mechanical seal from abrasive particles.

OIL LIFTER
Equipped in oil chamber. It forcibly supplies lubricating oil to the mechanical seal and continues to supply the oil to the upper seal faces even if lubricant falls below the rated volume.

Type of Lubricating Oil & Volume
Turbine Oil (ISO VG32), 2300ml

Motor Protection Device
A circle thermal protector built in the motor housing. Directly cuts the motor circuit if excessive heat builds up or an overcurrent condition occurs in the motor.

Optional Accessory

Male Threaded Coupling

Special Specifications

High Temperature Liquids Version (60·80°C)

SPECIFICATIONS	Model	KRS-85.5	KRS(E-Save)-series
			5.5kW, 3-phase

Type of Pump
Submersible high volume drainage pump for construction and foundation works, floodwater drainage, etc.

Type of Fluid
Stormwater, groundwater, wash water, and sand-carrying water

Temperature: 0 to 40°C

Discharge Bore & Connection
200mm, Hose Coupling

Motor Output
5.5kW

Power Supply
Three-phase

Starting Method
Direct on Line (Star-Delta available on special request)

Motor
Continuous-duty rated, dry-type induction motor

Insulation Class: E
Degree of Protection: IP68

No. of Poles & Speed (Synchronous Speed)
4-pole, 1500/1800min^{-1} (50/60Hz)

Power Supply Voltages & Rated Currents

50Hz	60Hz
380V – 12.8A	220V – 20.0A
400V – 12.1A	380V – 12.1A
415V – 11.7A	440V – 10.3A

Power Cable
Sheath: Chloroprene rubber
Standard Length: 8m
200 to 600V supply:
1 x 4 x 3.5mm^2, O.D. 16.8mm

Dry Weight (excluding cable)
126kg

Impeller
Closed impeller made of ductile cast iron

Solids Passage
50Hz – ϕ20mm
60Hz – ϕ20mm

Cable Entry with Anti-Wicking Block
Watertight cable entry with strain-relief device. The anti-wicking block prevents water incursion due to capillary action should the power cable be damaged or the end submerged.

Bearing
Permanently lubricated, deep-groove, double-shielded C3 ball bearings

Shaft
420 stainless steel

Shaft Seal (Mechanical Seal)
Furnished with a double-face mechanical seal located in oil chamber. Both upper and lower seal faces always run in a clean environment.

Upper Seal Face: SiC + SiC
Lower Seal Face: SiC + SiC

Oil Seal (Lip Seal)
Used as a "Dust Seal", it protects the mechanical seal from abrasive particles.

OIL LIFTER
Equipped in oil chamber. It forcibly supplies lubricating oil to the mechanical seal and continues to supply the oil to the upper seal faces even if lubricant falls below the rated volume.

Type of Lubricating Oil & Volume
Turbine Oil (ISO VG32), 1960ml

Motor Protection Device
A circle thermal protector built in the motor housing. Directly cuts the motor circuit if excessive heat builds up or an overcurrent condition occurs in the motor.

Optional Accessory

Male Threaded Coupling

Special Specifications

High Temperature Liquids Version (60·80°C)

SPECIFICATIONS	Model	KRS2-89	KRS(E-Save)-series 9kW, 3-phase

Type of Pump
Submersible high volume drainage pump for construction and foundation works, floodwater drainage, etc.

Type of Fluid
Stormwater, groundwater, wash water, and sand-carrying water

Temperature: 0 to 40°C

Discharge Bore & Connection
200mm, Hose Coupling

Motor Output
9kW

Power Supply
Three-phase

Starting Method
Direct on Line (Star-Delta available on special request)

Motor
Continuous-duty rated, dry-type induction motor

Insulation Class: B
Degree of Protection: IP68

No. of Poles & Speed (Synchronous Speed)
4-pole, 1500/1800min^{-1} (50/60Hz)

Power Supply Voltages & Rated Currents

50Hz	60Hz
380V – 20.0A	220V – 33.0A
400V – 19.0A	380V – 19.1A
415V – 19.0A	440V – 16.5A

Power Cable
Sheath: Chloroprene rubber
Standard Length: 8m
200 to 600V supply:
1 x 4 x 5.5mm^2, O.D. 19.8mm

Dry Weight (excluding cable)
175kg

Impeller
Semi-open impeller made of ductile cast iron

Solids Passage
50Hz – ϕ30mm
60Hz – ϕ30mm

Cable Entry with Anti-Wicking Block
Watertight cable entry with strain-relief device. The anti-wicking block prevents water incursion due to capillary action should the power cable be damaged or the end submerged.

Bearing
Permanently lubricated, deep-groove, double-shielded C3 ball bearings

Shaft
420 stainless steel

Shaft Seal (Mechanical Seal)
Furnished with a double-face mechanical seal located in oil chamber. Both upper and lower seal faces always run in a clean environment.

Upper Seal Face: SiC + SiC
Lower Seal Face: SiC + SiC

Oil Seal (Lip Seal)
Used as a "Dust Seal", it protects the mechanical seal from abrasive particles.

OIL LIFTER
Equipped in oil chamber. It forcibly supplies lubricating oil to the mechanical seal and continues to supply the oil to the upper seal faces even if lubricant falls below the rated volume.

Type of Lubricating Oil & Volume
Turbine Oil (ISO VG32), 2300ml

Motor Protection Device
A circle thermal protector built in the motor housing. Directly cuts the motor circuit if excessive heat builds up or an overcurrent condition occurs in the motor.

Optional Accessory

Male Threaded Coupling

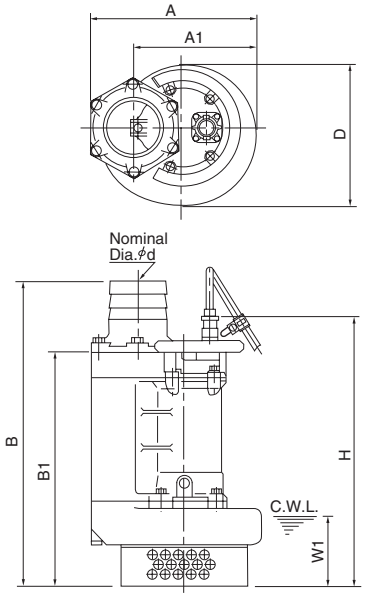
Special Specifications

High Temperature Liquids Version (60·80°C)

DIMENSIONS | Model KRS-43 to KRS2-89

KRS(E-Save)-series
100 - 200mm

C. W. L.: Continuous Running Water Level



Unit: mm

Model	d	A	A1	B	B1	D	H	W1
KRS-43	100	378	288	723	561	347	622	170
KRS-63	150	384	294	866	686	365	747	300
KRS-65.5	150	425	305	790	608	370	669	190
KRS2-69	150	490	372	812	630	424	742	200
KRS-85.5	200	446	326	941	710	413	771	295
KRS2-89	200	473	355	933	701	408	913	300