



Clean water

Domestic use

Civil use



### PERFORMANCE RANGE

- Flow rate up to **140 l/min** (8.4 m<sup>3</sup>/h)
- Head up to **246 m**

### INSTALLATION AND USE

3-inch submersible pumps are designed to transfer clean water, making them perfect for household use, irrigation, and small community water systems.

### KEY FEATURES

The increased efficiency of 3SR pumps not only saves electricity but also offers economic advantages. Their small size and light build allow for easy installation in wells 3 inches wide or more.

With a blend of hydraulic parts and a high-efficiency motor, 3SR pumps excel in the 3-inch category, capable of handling water with up to **150 g/m<sup>3</sup>** of sand.

### ELECTRIC MOTOR

- **Rewindable** motor in oil bath (non-toxic food-safe oil) 2-pole, 60 Hz
- Voltage:
  - single-phase 220 V
  - three-phase 220 V or 380 V
- Continuous running duty **S1**
- Insulation: Class F
- Protection rating: IP 68
- Shaft and sleeve: **AISI 304** stainless steel
- Flange coupling dimensions to NEMA standard
- Connector with power cable from:
  - **1.5 m** for power up to 0.75 kW
  - **2.0 m** for power ratings from 1.1 kW

### APPLICATION LIMITS

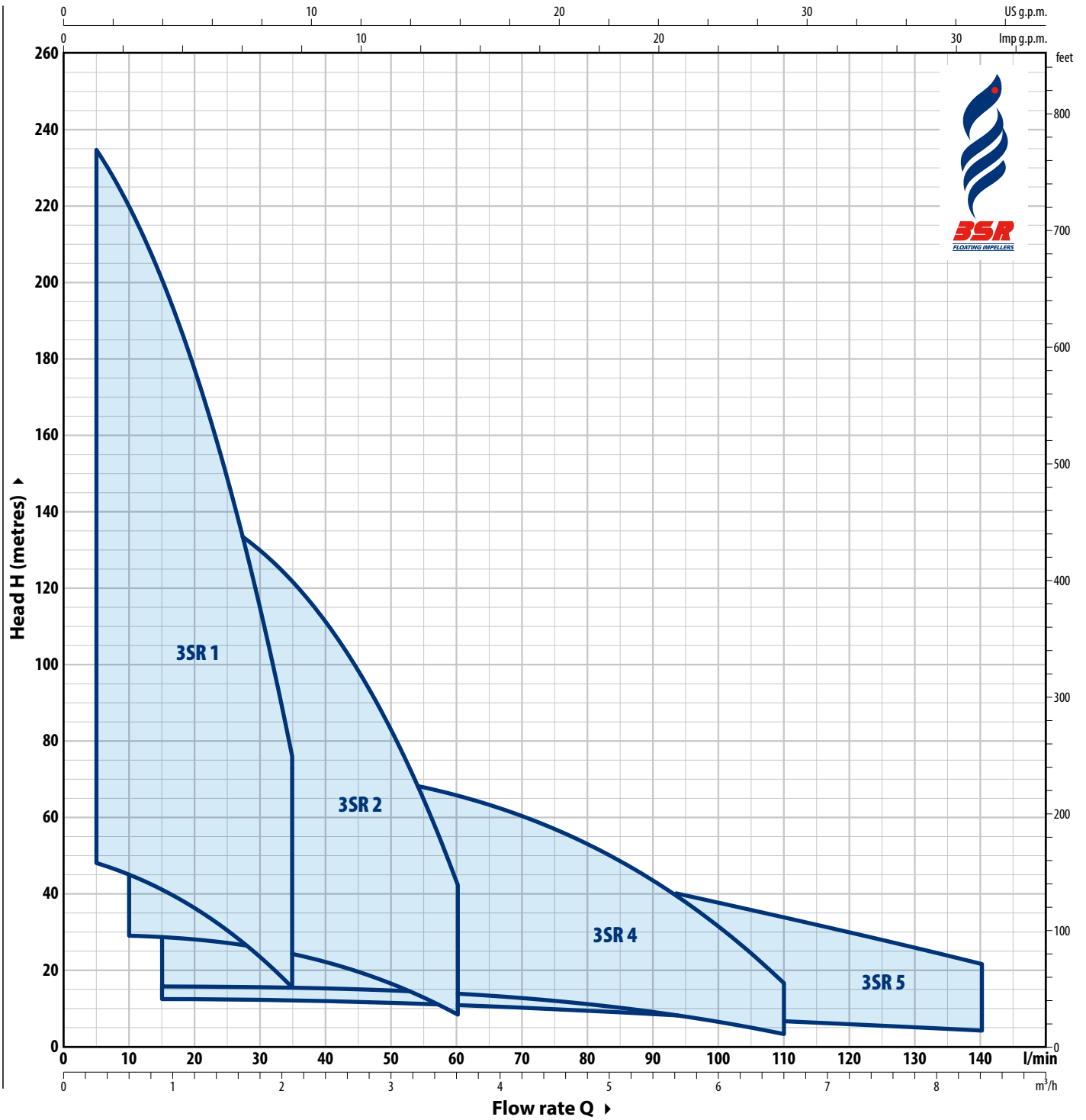
- Liquid temperature up to **+40 °C**
- Maximum sand content **150 g/m<sup>3</sup>**
- Capable of operating at depths of up to **70 metres** below water level (with an appropriately sized power cable)
- Vertical operation
- Starts per hour: **20** at regular intervals
- Minimum motor cooling flow **8 cm/s**

### AVAILABLE UPON REQUEST

- ✘ **10, 20, 30 or 40 metres** long power cable
- ✘ Different voltage or frequency

**PERFORMANCE RANGE**

**60 Hz**



**PATENTS:**

- Patent No. EP3123031, EP2419642

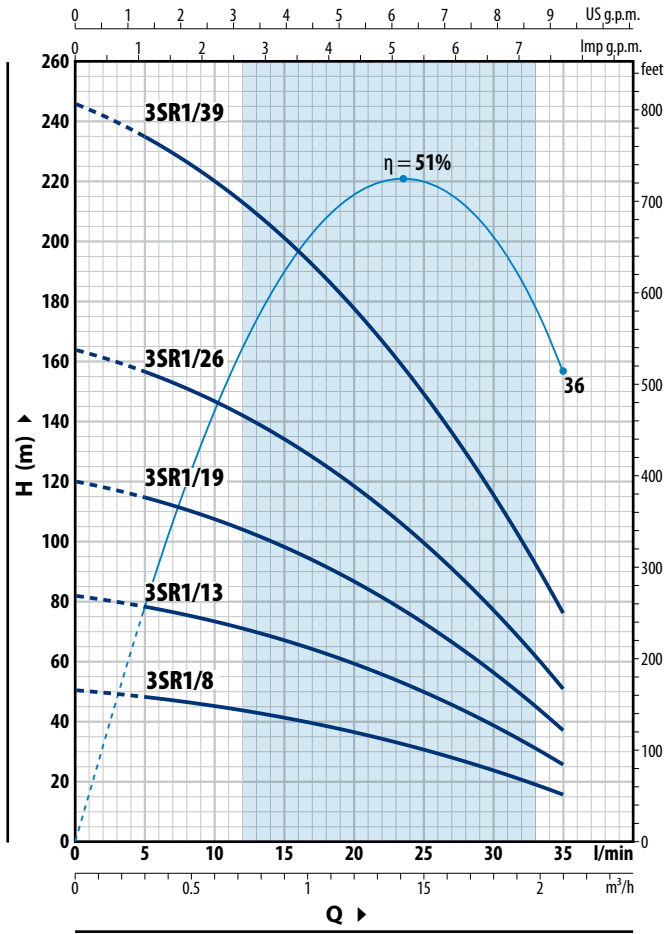


# 3SR 3" submersible pumps

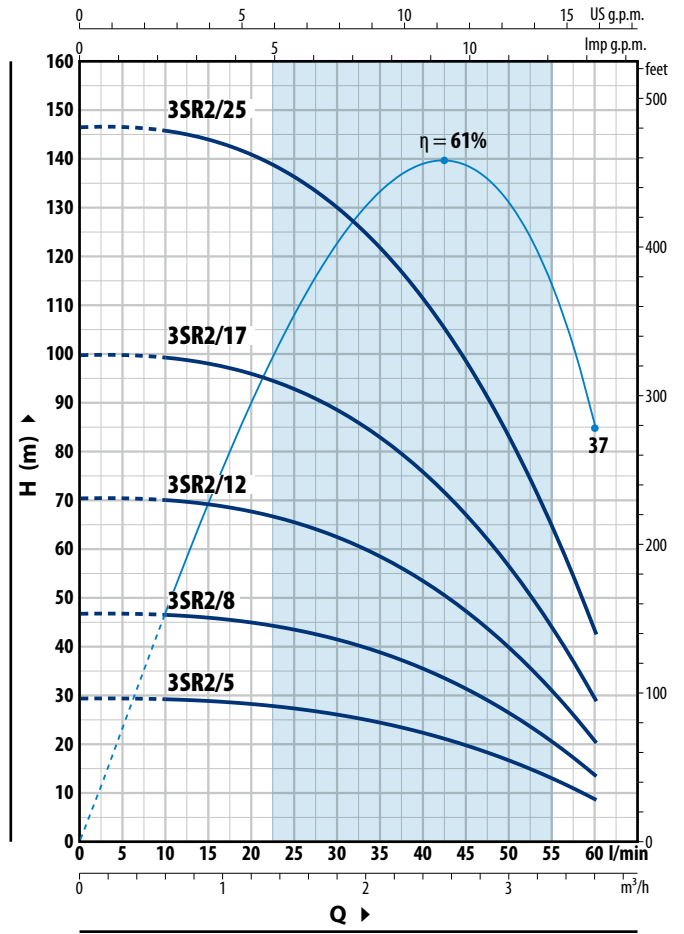
## CURVES AND PERFORMANCE DATA

60 Hz

### 3SR 1



### 3SR 2



### 3SR 1

TYPE		POWER (P <sub>2</sub> )		Q	H metres							
Single-phase	Three-phase	kW	HP		m³/h	0	0.3	0.6	0.9	1.2	1.5	1.8
3SRm 1/8	3SR 1/8	0.25	0.33	l/min	0	5	10	15	20	25	30	35
3SRm 1/13	3SR 1/13	0.37	0.50		50.5	48	45	41.5	36.5	30.5	23.7	15.5
3SRm 1/19	3SR1/19	0.55	0.75		82	78	73	67	59	49.5	38.5	25.5
3SRm 1/26	3SR 1/26	0.75	1		120	114	107	98	87	73	56.5	37
3SRm 1/39	3SR 1/39	1.1	1.5		164	157	147	134	118	99	77	51
					246	235	220	201	178	149	116	76

### 3SR 2

TYPE		POWER (P <sub>2</sub> )		Q	H metres							
Single-phase	Three-phase	kW	HP		m³/h	0	0.6	0.9	1.2	1.8	2.4	3
3SRm 2/5	3SR 2/5	0.25	0.33	l/min	0	10	15	20	30	40	50	60
3SRm 2/8	3SR 2/8	0.37	0.50		29.5	29	29	28	26	22.2	16.5	8.5
3SRm 2/12	3SR 2/12	0.55	0.75		47	46.5	46	45	41.5	35.5	26.4	13.5
3SRm 2/17	3SR 2/17	0.75	1		70	70	69	67.5	62.5	53.5	39.5	20.5
3SRm 2/25	3SR 2/25	1.1	1.5		100	99	98	96	88	76	56	29
					147	146	144	141	130	111	83	42.5

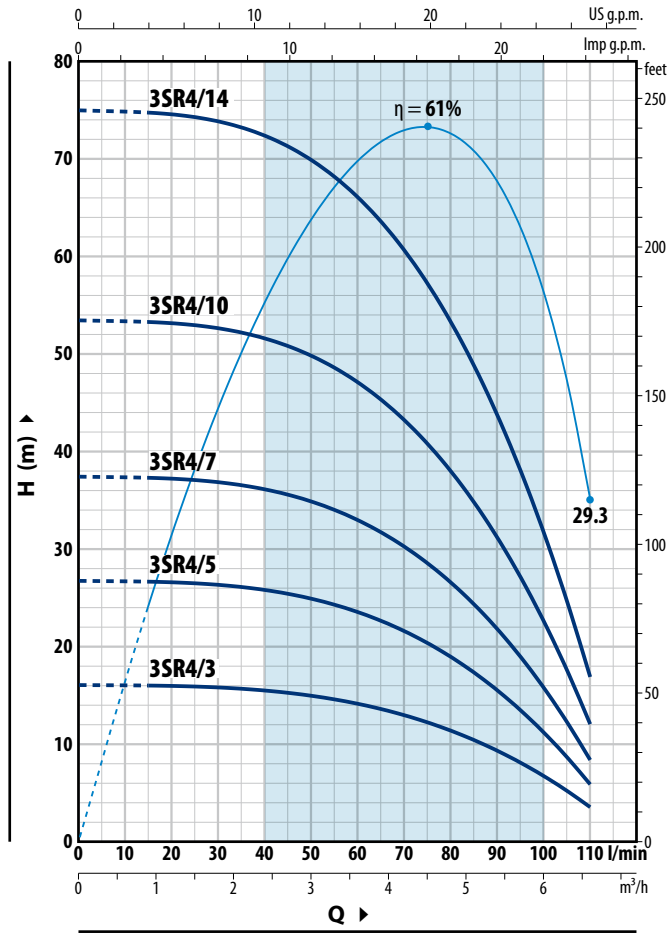
Q = Flow rate H = Total manometric head

Performance curves comply with EN ISO 9906 Grade 3B tolerance limits.

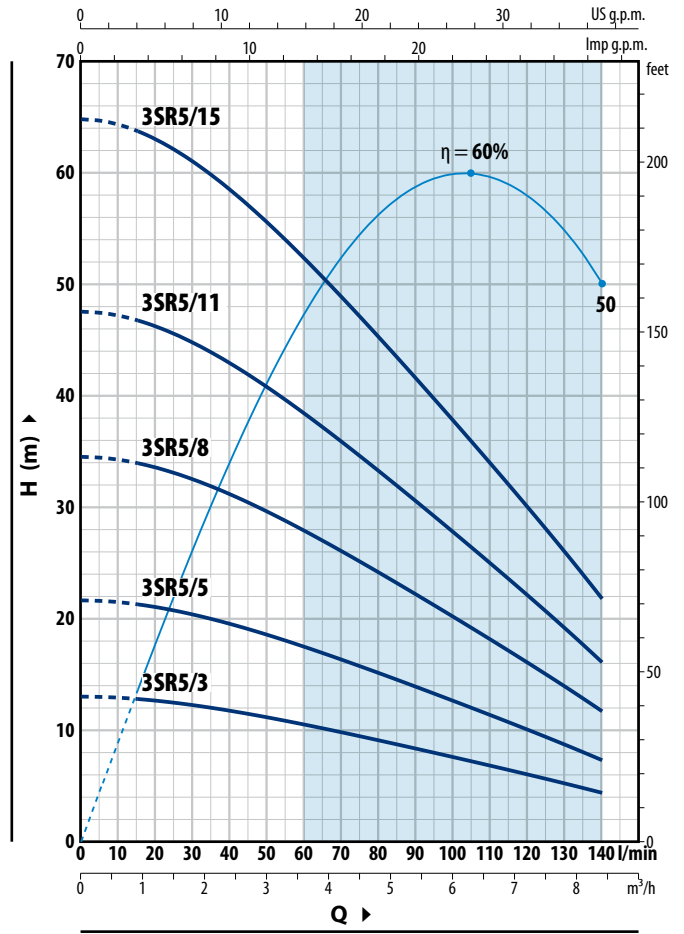
## CURVES AND PERFORMANCE DATA

60 Hz

### 3SR 4



### 3SR 5



### 3SR 4

TYPE		POWER (P <sub>2</sub> )		Q	Flow rate (m³/h)							
Single-phase	Three-phase	kW	HP		0	0.9	1.8	2.4	3	4.2	5.4	6.6
3SRm 4/3	3SR 4/3	0.25	0.33	H metres	16	16	15.8	15.5	14.9	13	9.4	3.5
3SRm 4/5	3SR 4/5	0.37	0.50		26.5	26.5	26.3	25.8	24.9	21.6	15.6	6
3SRm 4/7	3SR 4/7	0.55	0.75		37.5	37.5	37	36	35	30.5	21.8	8.5
3SRm 4/10	3SR 4/10	0.75	1		53.5	53.5	52.5	51.5	50	43	31	12
3SRm 4/14	3SR 4/14	1.1	1.5		75	75	74	72	70	60.5	43.5	17

### 3SR5

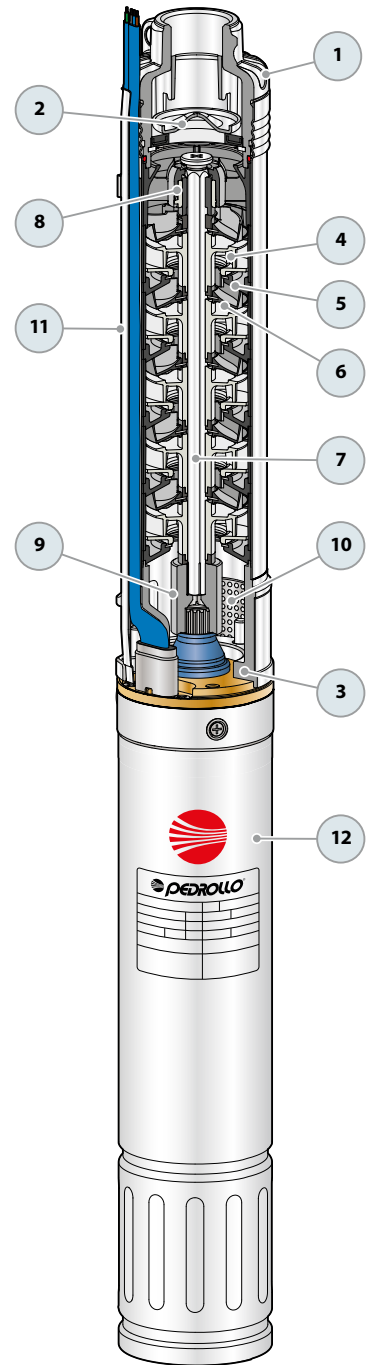
TYPE		POWER (P <sub>2</sub> )		Q	Flow rate (m³/h)									
Single-phase	Three-phase	kW	HP		0	0.9	1.8	2.4	3	3.6	4.2	4.8	6	8.4
3SRm 5/3	3SR 5/3	0.25	0.33	H metres	13	13	12.2	11.7	11.1	10.5	9.8	9.1	7.6	4.5
3SRm 5/5	3SR 5/5	0.37	0.50		21.5	21.5	20.3	19.5	18.5	17.4	16.3	15.1	12.6	7.5
3SRm 5/8	3SR 5/8	0.55	0.75		34.5	34	32.5	31	29.5	28	26.1	24.1	20.2	11.5
3SRm 5/11	3SR 5/11	0.75	1		47.5	47	45	43	41	38.5	36	33	27.5	16
3SRm 5/15	3SR 5/15	1.1	1.5		65	64	61	58.5	55.5	52.5	49	45.5	38	22

Q = Flow rate H = Total manometric head

Performance curves comply with EN ISO 9906 Grade 3B tolerance limits.

## MATERIALS AND COMPONENTS

<b>1 Delivery port</b>	Micro-cast <b>AISI 304</b> stainless steel with thread according to ANSI/ASME B1.20.1
<b>2 Check valve</b>	Stainless steel <b>AISI 304</b>
<b>3 Motor bracket</b>	<b>AISI 304</b> micro-cast stainless steel, sized to NEMA standards
<b>4 Impellers</b>	Delrin® for 3SR 1-2-4 Noryl™ for 3SR 5
<b>5 Diffusers</b>	Noryl™ - <b>AISI 304</b> stainless steel
<b>6 Diffuser cover</b>	Noryl™ - <b>AISI 304</b> stainless steel for 3SR 1-2-4 Noryl™ for 3SR 5
<b>7 Pump shaft</b>	Stainless steel <b>AISI 304</b>
<b>8 Pump bearings</b>	Made of <b>AISI 316L</b> stainless steel coated with chromium oxide, for greater durability even in the presence of sand.
<b>9 Tow coupling</b>	Stainless steel <b>AISI 316L</b>
<b>10 Filter</b>	Stainless steel <b>AISI 304</b>
<b>11 Cable sheath</b>	Stainless steel <b>AISI 304</b>
<b>12 Motor 3"</b>	Rewindable oil-submerged motor



## ABSORPTION

### Single-phase versions - 220 V - 60 Hz

TYPE	Power nominal P <sub>2</sub>		Axial Load N	Capacitor (VL=450V) µF	Absorption
	kW	HP			
3SRm 1/8	0.25	0.33	800	12.5	2.9 A
3SRm 1/13	0.37	0.50		12.5	3.4 A
3SRm 1/19	0.55	0.75		16	4.4 A
3SRm 1/26	0.75	1		20	6.0 A
3SRm 1/39	1.1	1.5		30	8.0 A
3SRm 2/5	0.25	0.33	800	12.5	2.9 A
3SRm 2/8	0.37	0.50		12.5	3.4 A
3SRm 2/12	0.55	0.75		16	4.4 A
3SRm 2/17	0.75	1		20	6.0 A
3SRm 2/25	1.1	1.5		30	8.0 A
3SRm 4/3	0.25	0.33	800	12.5	2.9 A
3SRm 4/5	0.37	0.50		12.5	3.4 A
3SRm 4/7	0.55	0.75		16	4.4 A
3SRm 4/10	0.75	1		20	6.0 A
3SRm 4/14	1.1	1.5		30	8.0 A
3SRm 5/3	0.25	0.33	800	12.5	2.9 A
3SRm 5/5	0.37	0.5		12.5	3.4 A
3SRm 5/8	0.55	0.75		16	4.4 A
3SRm 5/11	0.75	1		20	6.0 A
3SRm 5/15	1.1	1.5		30	8.0 A

### Three-phase versions 220 V or 380 V - 60Hz

TYPE	Power nominal P <sub>2</sub>		Axial Load N	Absorption	
	kW	HP		220 V	380 V
3SR 1/8	0.25	0.33	800	2.6 A	1.5 A
3SR 1/13	0.37	0.50		2.6 A	1.5 A
3SR 1/19	0.55	0.75		3.3 A	1.9 A
3SR 1/26	0.75	1		5.2 A	3.0 A
3SR 1/39	1.1	1.5		5.9 A	3.4 A
3SR 2/5	0.25	0.33	800	2.6 A	1.5 A
3SR 2/8	0.37	0.50		2.6 A	1.5 A
3SR 2/12	0.55	0.75		3.3 A	1.9 A
3SR 2/17	0.75	1		5.2 A	3.0 A
3SR 2/25	1.1	1.5		5.9 A	3.4 A
3SR 4/3	0.25	0.33	800	2.6 A	1.5 A
3SR 4/5	0.37	0.50		2.6 A	1.5 A
3SR 4/7	0.55	0.75		3.3 A	1.9 A
3SR 4/10	0.75	1		5.2 A	3.0 A
3SR 4/14	1.1	1.5		5.9 A	3.4 A
3SR5/3	0.25	0.33	800	2.6 A	1.5 A
3SR5/5	0.37	0.5		2.6 A	1.5 A
3SR5/8	0.55	0.75		3.3 A	1.9 A
3SR5/11	0.75	1		5.2 A	3.0 A
3SR5/15	1.1	1.5		5.9 A	3.4 A

## DIMENSIONS AND WEIGHT

TYPE	PORT	Ø	DIMENSIONS mm			kg
			h1	h2	h3	
<b>Single-ph.</b>	<b>DN</b>	<b>Ø</b>	<b>h1</b>	<b>h2</b>	<b>h3</b>	<b>1~</b>
3SRm1/8	1" NPT	76	302	388	690	9.5
3SRm1/13			396	388	784	10.0
3SRm1/19			510	408	917	11.2
3SRm1/26			642	448	1089	13.1
3SRm1/39			916	488	1404	15.7
3SRm2/5			264	388	652	9.3
3SRm2/8			332	388	719	9.7
3SRm2/12			422	408	830	10.8
3SRm2/17			535	448	982	12.5
3SRm2/25			715	488	1203	14.6
3SRm4/3			247	388	634	9.2
3SRm4/5			311	388	698	9.5
3SRm4/7			374	408	782	10.4
3SRm4/10			470	448	918	12.0
3SRm4/14			598	488	1085	13.8
3SRm5/3			299	388	686	9.2
3SRm5/5			399	388	786	9.7
3SRm5/8	550	408	957	11.1		
3SRm5/11	700	448	1148	13.1		
3SRm5/15	901	488	1389	15.3		
<b>Three-ph.</b>	<b>DN</b>	<b>Ø</b>	<b>h1</b>	<b>h2</b>	<b>h3</b>	<b>3~</b>
3SR1/8	1" NPT	76	302	368	670	9.1
3SR1/13			396	368	764	9.6
3SR1/19			510	388	897	10.6
3SR1/26			642	408	1049	12.0
3SR1/39			916	448	1364	14.6
3SR2/5			264	368	632	8.9
3SR2/8			332	368	699	9.2
3SR2/12			422	388	810	10.2
3SR2/17			535	408	942	11.5
3SR2/25			715	448	1163	13.5
3SR4/3			247	368	614	8.7
3SR4/5			311	368	678	9.0
3SR4/7			374	388	762	9.8
3SR4/10			470	408	878	11.0
3SR4/14			598	448	1045	12.7
3SR5/3			299	368	666	8.8
3SR5/5			399	368	766	9.2
3SR5/8	550	388	937	10.5		
3SR5/11	700	408	1108	12.1		
3SR5/15	901	448	1349	14.2		

