



Clean water

Domestic use

Civil use



### PERFORMANCE RANGE

- Flow rate up to **120 l/min** (7.2 m<sup>3</sup>/h)
- Head up to **267 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, 50 Hz
- Voltage:
  - single-phase 230 V
  - three-phase 400 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

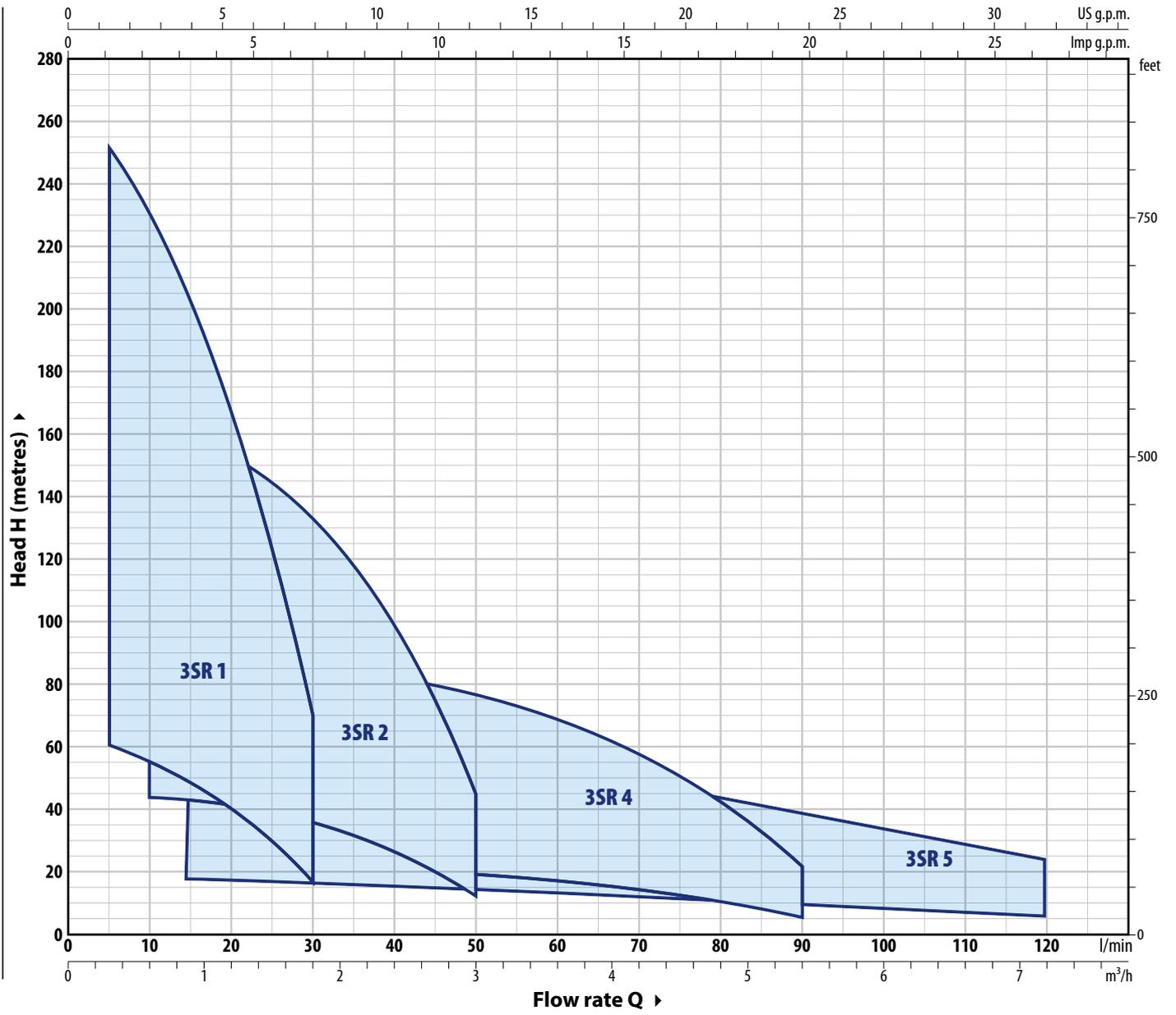
- Liquid temperature up to **+35 °C**
- Maximum sand content **150 g/m<sup>3</sup>**
- Capable of operating at depths of up to **100 metres** below water level (with an appropriately sized power cable)
- Vertical operation
- Starts per hour: **20** at regular intervals
- Minimum motor cooling flow **8 cm/s**

### AVAILABLE UPON REQUEST

- ✘ **10, 20, 30 or 40 metres** long power cable
- ✘ Different voltage requirements 60 Hz frequency

**PERFORMANCE RANGE**

**50 Hz**



**PATENTS:**

- Patent No. EP3123031, EP2419642

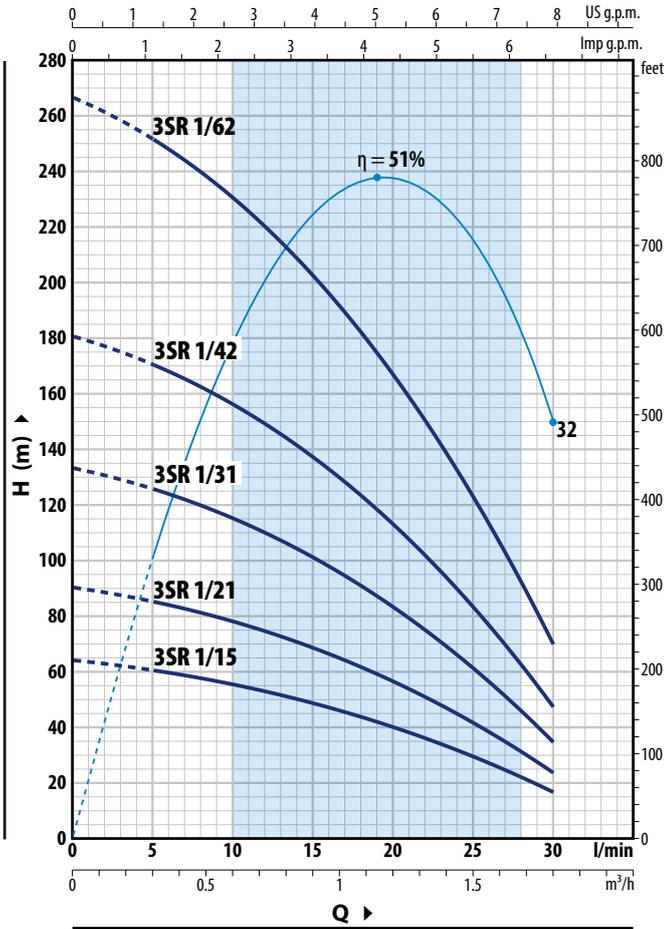


# 3SR 3" submersible pumps

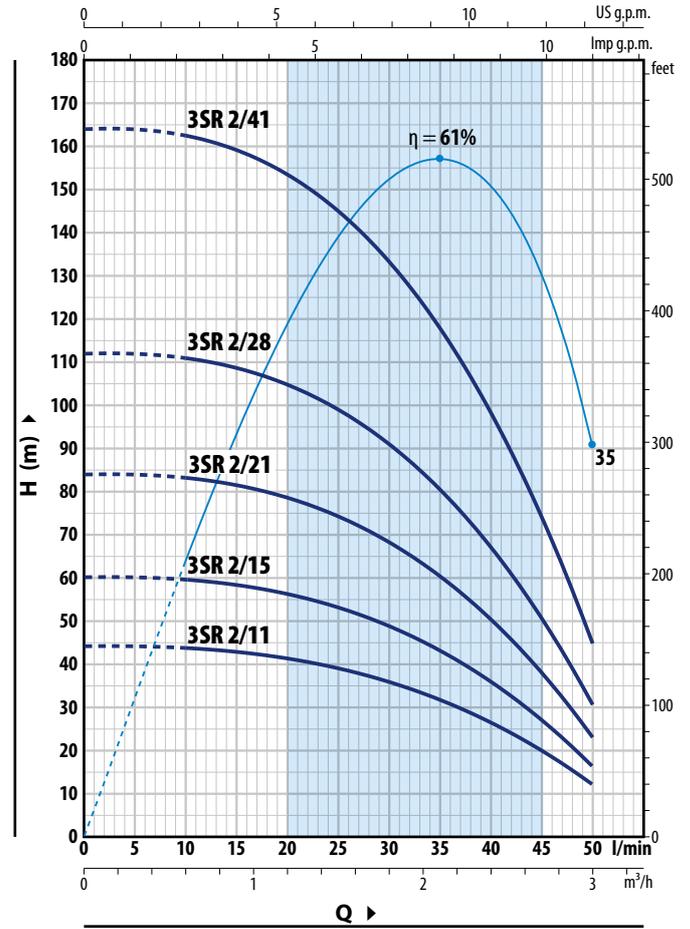
## CURVES AND PERFORMANCE DATA

50 Hz

### 3SR 1



### 3SR 2



### 3SR 1

MODEL		POWER (P <sub>2</sub> )		Q	Flow rate (m³/h)						
Single-phase	Three-phase	kW	HP		0	0.3	0.6	0.9	1.2	1.5	1.8
3SRm 1/15	3SR 1/15	0.25	0.33	H m	0	5	10	15	20	25	30
3SRm 1/21	3SR 1/21	0.37	0.50		64.5	61	56	49	40.5	30	17
3SRm 1/31	3SR 1/31	0.55	0.75		90	85	78	68.5	56.5	41.5	24
3SRm 1/42	3SR 1/42	0.75	1		133	126	115	101	83	61.5	35
3SRm 1/62	3SR 1/62	1.1	1.5		181	170	156	137	113	83	47.5
					267	252	230	203	167	123	70

### 3SR 2

MODEL		POWER (P <sub>2</sub> )		Q	Flow rate (m³/h)								
Single-phase	Three-phase	kW	HP		0	0.6	0.9	1.2	1.5	1.8	2.1	2.4	3
3SRm 2/11	3SR2/11	0.25	0.33	H m	0	10	15	20	25	30	35	40	50
3SRm 2/15	3SR2/15	0.37	0.50		44	43.5	42.5	41	39	35.5	31.5	26.3	12
3SRm 2/21	3SR2/21	0.55	0.75		60	59.5	58	56	53	48.5	43	36	16.5
3SRm 2/28	3SR2/28	0.75	1		84	83	81	79	74	68	60.5	50.5	23
3SRm 2/41	3SR2/41	1.1	1.5		112	111	109	105	99	91	80	67	30.5
					164	162	159	153	145	133	118	98	45

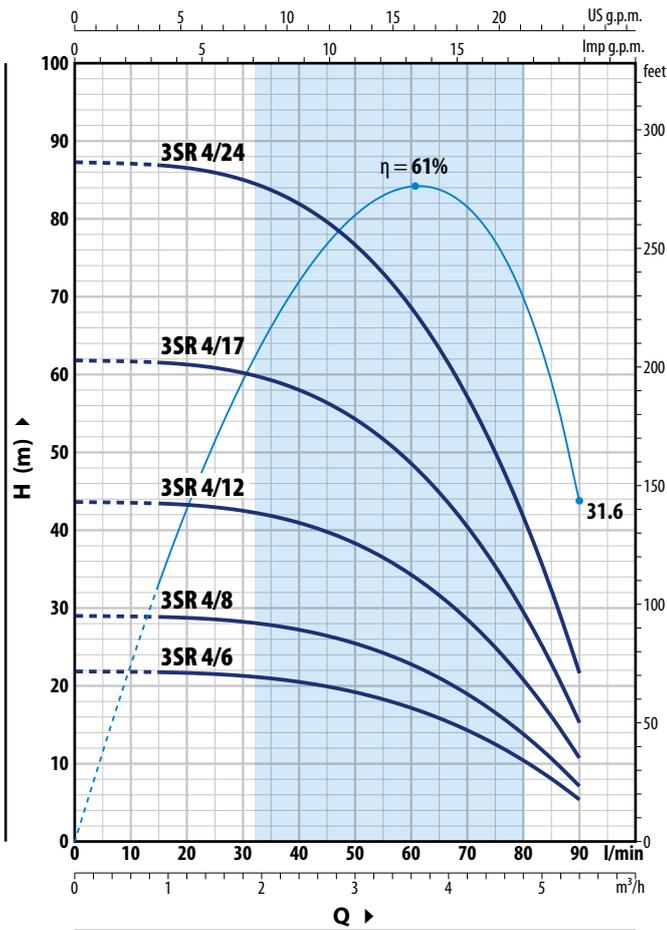
Q = Flow rate H = Total manometric head

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

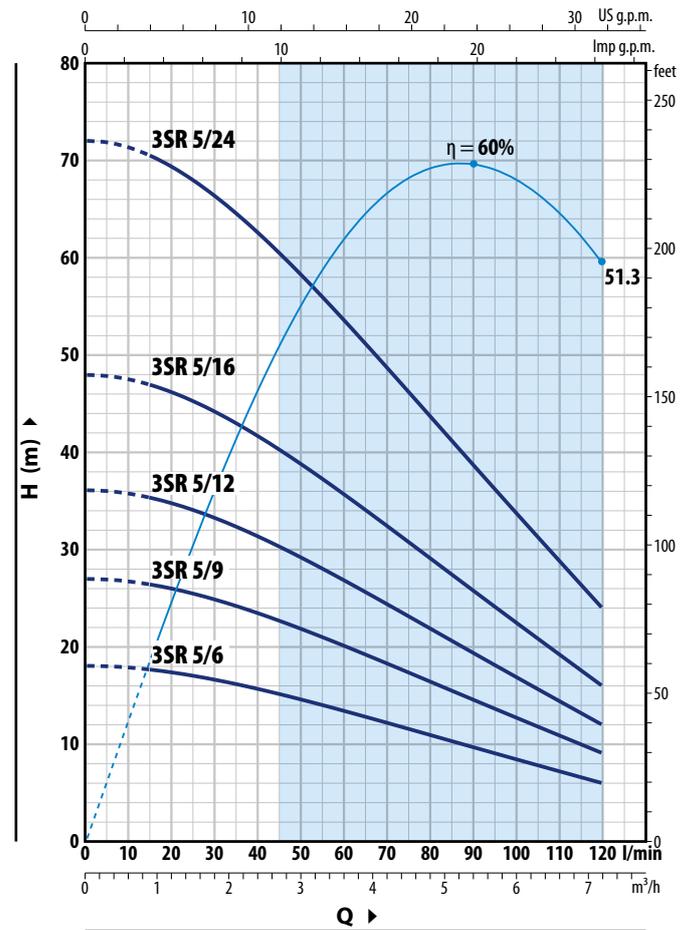
## CURVES AND PERFORMANCE DATA

50 Hz

### 3SR 4



### 3SR 5



### 3SR 4

MODEL		POWER (P <sub>2</sub> )		Q	Flow rate (m³/h)									
Single-phase	Three-phase	kW	HP		0	0.9	1.2	1.8	2.4	3	3.6	4.2	4.8	5.4
3SRm 4/6	3SR 4/6	0.25	0.33	H m	0	15	20	30	40	50	60	70	80	90
3SRm 4/8	3SR 4/8	0.37	0.50		22	22	21.7	21.3	20.5	19.2	17.2	14.3	10.4	5.5
3SRm 4/12	3SR 4/12	0.55	0.75		29	29	29	28.5	27.5	25.6	22.9	19.1	13.9	7
3SRm 4/17	3SR 4/17	0.75	1		43.5	43.5	43.5	42.5	41	38.5	34.5	28.5	20.9	11
3SRm 4/24	3SR 4/24	1.1	1.5		62	61.5	61.5	60.5	58	54.5	48.5	40.5	29.5	15.5
					87	87	87	85	82	77	68.5	57	41.5	21.5

### 3SR5

MODEL		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	7.2
3SRm 5/6	3SR 5/6	0.25	0.33	H m	0	15	30	40	50	60	70	80	100	120
3SRm 5/9	3SR 5/9	0.37	0.5		18	17.5	16.6	15.6	14.5	13.4	12.2	10.9	8.4	6
3SRm 5/12	3SR 5/12	0.55	0.75		27	26.5	24.8	23.4	21.8	20.1	18.2	16.4	12.7	9
3SRm 5/16	3SR 5/16	0.75	1		36	35	33	31	29	26.8	24.3	21.8	16.9	12
3SRm 5/24	3SR 5/24	1.1	1.5		48	47	44	41.5	39	35.5	32.5	29	22.5	16
					72	70	66.5	62.5	58	53.5	48.5	43.5	34	24

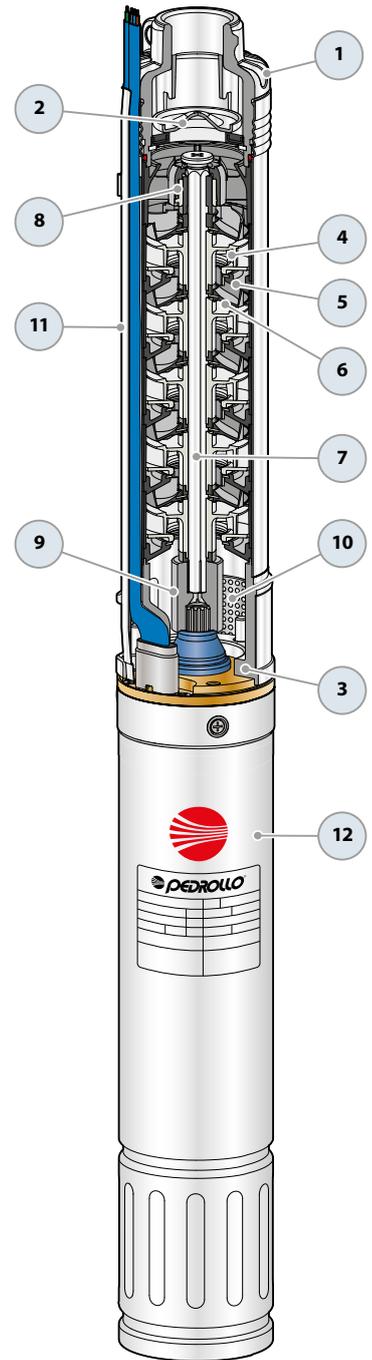
Q = Flow rate H = Total manometric head

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

# 3SR 3" submersible pumps

## MATERIALS AND COMPONENTS

<b>1 Delivery port</b>	Micro-cast <b>AISI 304</b> stainless steel with thread according to ISO 228/1
<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 - 230 V

MODEL	Power nominal P <sub>2</sub>		Axial Load N	Capacitor (VL=450V) μF	ABSORPTION
	kW	HP			
<b>230 V / 50 Hz</b>					
3SRm 1/15	0.25	0.33	800	12.5	3.2 A
3SRm 1/21	0.37	0.50		12.5	3.4 A
3SRm 1/31	0.55	0.75		16	4.5 A
3SRm 1/42	0.75	1		20	6.0 A
3SRm 1/62	1.1	1.5		30	8.0 A
3SRm 2/11	0.25	0.33	800	12.5	3.2 A
3SRm 2/15	0.37	0.50		12.5	3.4 A
3SRm 2/21	0.55	0.75		16	4.5 A
3SRm 2/28	0.75	1		20	6.0 A
3SRm 2/41	1.1	1.5		30	8.0 A
3SRm 4/6	0.25	0.33	800	12.5	3.2 A
3SRm 4/8	0.37	0.50		12.5	3.4 A
3SRm 4/12	0.55	0.75		16	4.5 A
3SRm 4/17	0.75	1		20	6.0 A
3SRm 4/24	1.1	1.5		30	8.0 A
3SRm 5/6	0.25	0.33	800	12.5	3.2 A
3SRm 5/9	0.37	0.5		12.5	3.4 A
3SRm 5/12	0.55	0.75		16	4.5 A
3SRm 5/16	0.75	1		20	6.0 A
3SRm 5/24	1.1	1.5		30	8.0 A

### Three-phase versions - 400 V

MODEL	Power nominal P <sub>2</sub>		Axial Load N	ABSORPTION
	kW	HP		
<b>400 V / 50 Hz</b>				
3SR 1/15	0.25	0.33	800	1.4 A
3SR 1/21	0.37	0.50		1.5 A
3SR 1/31	0.55	0.75		1.9 A
3SR 1/42	0.75	1		2.6 A
3SR 1/62	1.1	1.5		3.5 A
3SR2/11	0.25	0.33	800	1.4 A
3SR2/15	0.37	0.50		1.5 A
3SR2/21	0.55	0.75		1.9 A
3SR2/28	0.75	1		2.6 A
3SR2/41	1.1	1.5		3.5 A
3SR 4/6	0.25	0.33	800	1.4 A
3SR 4/8	0.37	0.50		1.5 A
3SR 4/12	0.55	0.75		1.9 A
3SR 4/17	0.75	1		2.6 A
3SR 4/24	1.1	1.5		3.5 A
3SR 5/6	0.25	0.33	800	1.4 A
3SR 5/9	0.37	0.5		1.5 A
3SR 5/12	0.55	0.75		1.9 A
3SR 5/16	0.75	1		2.6 A
3SR 5/24	1.1	1.5		3.5 A

## DIMENSIONS AND WEIGHT

MODEL	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>
3SRm 1/15	1"	76	434	388	822	10.1
3SRm 1/21			547	388	935	10.7
3SRm 1/31			735	408	1143	12.3
3SRm 1/42			973	448	1421	14.7
3SRm 1/62			1380	488	1868	17.9
3SRm 2/11	1"	76	399	388	787	10.0
3SRm 2/15			489	388	877	10.5
3SRm 2/21			625	408	1033	11.8
3SRm 2/28			812	448	1260	13.9
3SRm 2/41			1135	488	1623	16.7
3SRm 4/6	1"	76	342	388	730	9.5
3SRm 4/8			406	388	794	9.8
3SRm 4/12			533	408	941	11.0
3SRm 4/17			693	448	1141	12.9
3SRm 4/24			946	488	1434	15.3
3SRm 5/6	1"	76	449	388	837	9.9
3SRm 5/9			599	388	987	10.7
3SRm 5/12			750	408	1158	12.1
3SRm 5/16			951	448	1399	14.4
3SRm 5/24			1352	488	1840	17.6
<b>Three-ph.</b>	<b>DN</b>	<b>Ø</b>	<b>h1</b>	<b>h2</b>	<b>h3</b>	<b>3~</b>
3SR 1/15	1"	76	434	368	802	9.7
3SR 1/21			547	368	915	10.2
3SR 1/31			735	388	1123	11.7
3SR 1/42			973	408	1381	13.6
3SR 1/62			1380	448	1828	16.8
3SR2/11	1"	76	399	368	767	9.6
3SR2/15			489	368	857	10.0
3SR2/21			625	388	1013	11.2
3SR2/28			812	408	1220	12.9
3SR2/41			1135	448	1583	15.6
3SR 4/6	1"	76	342	368	710	9.1
3SR 4/8			406	368	774	9.4
3SR 4/12			533	388	921	10.5
3SR 4/17			693	408	1101	11.9
3SR 4/24			946	448	1394	14.2
3SR 5/6	1"	76	449	368	817	9.5
3SR 5/9			599	368	967	10.3
3SR 5/12			750	388	1138	11.6
3SR 5/16			951	408	1359	13.4
3SR 5/24			1352	448	1800	16.5

