

SPR-H



Pump control

Field of application

- Water supply
- Cooling circuit
- Irrigation
- Industrial applications

Design

The pump is adjusted to the system perfectly with the SPR-H speed control. The pump control is available with the following types of control:

- constant pressure control
- temperature control
- level control
- vacuum control

The SPR-H speed control is delivered as an IP 54 steel enclosed control box.

The speed control is equipped with a clear text display, keyboard, main switch and motor protection. The system is parameterised in the factory. Fuses for each pump, manual-O-automatic switch for each pump PTC thermistor connection.

Type key

SPR-H-0220-3

SPRSPECK pump control
Hexternal control box
0220kW performance
3number of frequency converters

Special editions

- Remote adjustment
- Remote monitoring via GSM module
- Water meter
- Water level control/feed

Technical data

- Performance range: 0.75 kW - 45.00 kW
- Freely programmable pump control with keyboard and backlit clear text display
- Display for all operating messages, nominal values and commissioning values
- Four digital inputs for the start command, reset, manual operation, switching between nominal values, float switch etc.
- Speed control system for 1 to 6 pumps
- Triple password protection
- Connection for two 4-20 mA/0-10 V sensors
- Adjustable PI control for fast pressure control
- Adjustable zero volume switch-off system to switch the pump into "standby" mode
- Safe start function to fill pipework following a power cut
- Manual operation with adjustable constant speed for emergency supply if the sensors fail
- Guard for operation with submersible pumps
- Adjustable run time monitoring
- Adjustable leak monitoring
- Adjustable pressure reduction
- Adjustable electronic dry run protection
- Adjustable electronic pressure monitoring
- Sensor monitoring with emergency switch to constant speed
- Multi operation with base/peak load operation, automatic fault changeover and pump changeover function
- Adjustable type of sensor operation
- Adjustable test run
- Adjustable motor characteristics
- Real time clock with 16 fault logs with time stamp and operating hours meter
- Interface: RS 232 Slave/GSM2 and RS 485 ModBus Slave
- Large steel sheet control box IP54 (SPR-H)
- Temperature dependent fan control (depending on motor capacity) passive fan < 5.4 kW, active fan > 5.5 kW
- Lockable front switch, fuses
- Separate power pack with optional double power pack
- Low leakage current filter C1 installed
- PTC thermistor connection, as standard
- SD card for data collection, as standard

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Technical data

Type	Max. performance (kW) 3~ 400 V	Max. potential motor rated current (A)	Dimensions H x B x T	Approx. weight (kg)
For units with 1 pump				
SPR-H-0007-1	0.75	2.00	600 x 400 x 260	35.00
SPR-H-0015-1	1.50	4.00	600 x 400 x 260	35.00
SPR-H-0022-1	2.20	6.50	600 x 400 x 260	38.00
SPR-H-0030-1	3.00	7.00	600 x 400 x 260	39.00
SPR-H-0040-1	4.00	9.00	700 x 500 x 260	40.00
SPR-H-0055-1	5.50	12.00	700 x 500 x 260	55.00
SPR-H-0075-1	7.50	17.00	700 x 500 x 260	60.00
SPR-H-0110-1	11.00	23.00	800 x 600 x 300	65.00
SPR-H-0150-1	15.00	32.00	800 x 600 x 300	70.00
SPR-H-0185-1	18.50	38.00	1000 x 600 x 300	85.00
SPR-H-0220-1	22.00	44.00	1000 x 600 x 300	90.00
SPR-H-0300-1	30.00	60.00	1000 x 600 x 300	95.00
SPR-H-0370-1	37.00	75.00	1200 x 800 x 400	150.00
SPR-H-0450-1	45.00	90.00	1200 x 800 x 400	175.00
For units with 2 pumps				
SPR-H-0007-2	0.75	2.00	700 x 500 x 260	65.00
SPR-H-0015-2	1.50	4.00	700 x 500 x 260	66.00
SPR-H-0022-2	2.20	6.50	700 x 500 x 260	75.00
SPR-H-0030-2	3.00	7.00	700 x 500 x 260	79.00
SPR-H-0040-2	4.00	9.00	700 x 500 x 260	80.00
SPR-H-0055-2	5.50	12.00	700 x 500 x 260	95.00
SPR-H-0075-2	7.50	17.00	700 x 500 x 260	105.00
SPR-H-0110-2	11.00	23.00	800 x 800 x 300	110.00
SPR-H-0150-2	15.00	32.00	800 x 800 x 300	130.00
SPR-H-0185-2	18.50	38.00	1000 x 1000 x 300	160.00
SPR-H-0220-2	22.00	44.00	1000 x 1000 x 300	165.00
SPR-H-0300-2	30.00	60.00	1000 x 1000 x 300	170.00
SPR-H-0370-2	37.00	75.00	standing cabinet	280.00
SPR-H-0450-2	45.00	90.00	standing cabinet	330.00
For units with 3 pumps				
SPR-H-0007-3	0.75	2.00	700 x 500 x 260	94.00
SPR-H-0015-3	1.50	4.00	700 x 500 x 260	95.00
SPR-H-0022-3	2.20	6.50	700 x 500 x 260	98.00
SPR-H-0030-3	3.00	7.00	700 x 500 x 260	105.00
SPR-H-0040-3	4.00	9.00	800 x 600 x 300	110.00
SPR-H-0055-3	5.50	12.00	800 x 600 x 300	140.00
SPR-H-0075-3	7.50	17.00	800 x 600 x 300	160.00
SPR-H-0110-3	11.00	23.00	1000 x 1000 x 300	180.00
SPR-H-0150-3	15.00	32.00	1000 x 1000 x 300	235.00
SPR-H-0185-3	18.50	37.00	1200 x 1200 x 300	255.00
SPR-H-0220-3	22.00	44.00	1200 x 1200 x 300	290.00
SPR-H-0300-3	30.00	60.00	standing cabinet	310.00
SPR-H-0370-3	37.00	75.00	standing cabinet	445.00
SPR-H-0450-3	45.00	90.00	standing cabinet	520.00

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Order information

Type	Article no.
For units with 1 pump	
SPR-H-0007-1	560.6100.740
SPR-H-0015-1	560.6101.541
SPR-H-0022-1	560.6102.240
SPR-H-0030-1	560.6103.040
SPR-H-0040-1	560.6104.040
SPR-H-0055-1	560.6105.540
SPR-H-0075-1	560.6107.540
SPR-H-0110-1	560.6111.040
SPR-H-0150-1	560.6115.040
SPR-H-0185-1	560.6118.540
SPR-H-0220-1	560.6122.040
SPR-H-0300-1	560.6130.040
SPR-H-0370-1	560.6137.040
SPR-H-0450-1	560.6145.040
For units with 2 pumps	
SPR-H-0007-2	560.6200.740
SPR-H-0015-2	560.6201.540
SPR-H-0022-2	560.6202.240
SPR-H-0030-2	560.6203.040
SPR-H-0040-2	560.6204.040
SPR-H-0055-2	560.6205.540
SPR-H-0075-2	560.6207.540
SPR-H-0110-2	560.6211.040
SPR-H-0150-2	560.6215.040
SPR-H-0185-2	560.6218.540
SPR-H-0220-2	560.6222.040
SPR-H-0300-2	560.6230.040
SPR-H-0370-2	560.6237.040
SPR-H-0450-2	560.6245.040
For units with 3 pumps	
SPR-H-0007-3	560.6300.740
SPR-H-0015-3	560.6301.540
SPR-H-0022-3	560.6302.240
SPR-H-0030-3	560.6303.040
SPR-H-0040-3	560.6304.040
SPR-H-0055-3	560.6305.540
SPR-H-0075-3	560.6307.541
SPR-H-0110-3	560.6311.040
SPR-H-0150-3	560.6315.040
SPR-H-0185-3	560.6318.540
SPR-H-0220-3	560.6322.040
SPR-H-0300-3	560.6330.040
SPR-H-0370-3	560.6337.040
SPR-H-0450-3	560.6345.040



Accessories

Type	Article no.	Approx. weight (kg)
Pressure sensor 0 - 10 bar, G ¼, 4-20 mA	500.8500.015	0.20
Pressure sensor 0 - 16 bar, G ¼, 4-20 mA	500.8500.016	0.20
Pressure sensor 0 - 25 bar, G ¼, 4-20 mA	500.8500.025	0.20
Pressure sensor 0 - 40 bar, G ¼, 4-20 mA	500.8500.019	0.20
Vacuum sensor -1 - 0 bar, G ¼, 0-10 V	391.8380.168	0.20
Temperature sensor -50 - +150 °C, 4 - 20 mA	500.8500.017	0.20
Sensor cable 2 m, with plug	500.8500.102	0.10
Sensor cable 5 m, with plug	500.8500.105	0.30
Sensor cable 10 m, with plug	500.8500.110	0.50
Sensor cable 30 m, with plug	500.8500.130	1.30
Submersible pressure sensor 0 - 0.4 bar, 4 - 20 mA, 15 m cable	500.8500.029	1.00
Submersible pressure sensor 0 - 0.4 bar, 4 - 20 mA, 30 m cable	500.8500.028	1.80
Supplements		
Sine wave filter up to 1.50 kW, 4 A, per pump	560.6902.015	
Sine wave filter up to 4.00 kW, 10 A, per pump	560.6902.040	
Sine wave filter up to 7.50 kW, 17 A, per pump	560.6902.075	
Sine wave filter up to 11.00 kW, 23,50 A, per pump	560.6902.110	
Sine wave filter up to 15.00 kW, 32 A, per pump	560.6902.150	
Sine wave filter up to 18.50 kW, 37 A, per pump	560.6902.185	
Sine wave filter up to 22.00 kW, 48 A, per pump	560.6902.220	
Sine wave filter up to 30.00 kW, 61 A, per pump	560.6902.300	
Sine wave filter up to 37.00 kW, 72 A, per pump	560.6902.370	
Sine wave filter up to 45.00 kW, 90 A, per pump	560.6902.450	
Integrated GSM modem (terminal/antenne/3.5 m cable)	560.6901.000	
Lamp display per function	560.6901.001	
Control box lighting/socket	560.6901.002	
2/4 nominal value selection switch per control	560.6901.003	
Built in potentiometer IP 66 to set the speed	560.6901.004	
Relay 24 V AC per irrigation control device	560.6901.005	
Control box heating 10/20 W, 230 V	560.6901.006	
Active fan per control 1.5 - 5.4 kW (from 5.5 kW series)	569.9900.011	
Emergency stop button 16 - 125 A per control	560.6901.007	
Ground fault circuit interrupter 40/0,3 type B, selective	560.6901.008	
Ground fault circuit interrupter 63/0,3 type B, selective	560.6901.009	
Feed function via submerged pressure transmitter	560.6901.010	
Electrode relay for dry running protection, via electrodes	560.6901.011	
Actual pressure module/signal converter 230 V	560.6901.012	
Overvoltage/lightning protection module	560.6901.013	
Air conditioner heating + cooling	560.6901.014	
Feed function via floating toggle switch	560.6901.015	
Commissioning (net)	INBK02	