



Three-phase asynchronous motors

with slip-ring rotors for duty type S1
(continuous duty)

SENSE EXPERIENCE
EXPERIENCE VISION





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Drives for crushers, lifts and other applications

Powerful start-up

Slip-ring motors are still used in many branches of industry. It is their properties which are decisive in determining the efficiency of production. VEM three-phase motors with slip-ring rotor combine the general benefits of this drive solution with VEM's extraordinary manufacturing know-how. They

- › can be tailored precisely to customer applications thanks to their broad scope of adaptability
- › are especially designed for heavy starting
- › are based on unique technological competence and experience
- › have been proven in international use over several decades
- › are especially suitable where mains supplies are unstable
- › are available in two versions; the dimensions and frame sizes are based on IEC 72
- › generally provide level-N interference suppression according to DIN VDE 0875/DIN EN 55014

Design details

The SPER/S11R series are designed as classic IEC/DIN series, i.e. with mounting dimensions and performances in line with DIN 42679. The SPR/S10R series are conceived with more progressive performance assignments compared to the DIN standards, offering outputs up to two steps higher from the same frame size. The motors are equipped with radial fans in plastic or cast aluminium alloy, which cool the motor independently of the latter's direction of rotation (IC 411 to DIN EN 60034-6).

Upon request, the following motor protection variants are possible:

- › motor protection with PTC thermistor sensors in the stator winding
- › bi-metal temperature sensors as NC and NO contacts in the stator winding
- › resistance thermometer for winding or bearing temperature monitoring
- › space heater to prevent the formation of condensation inside the motor.

Series	SPER/S11R 132 – 315
Sizes	132 to 315
Power range	4 – 250 kW
Type of protection	IP 54 or IP 55 acc. to DIN EN 60034-5
Type of construction	IM B3, IM B35, IM B5 and derived types of construction acc. to DIN EN 60034-7
Duty type	Continuous duty S1
Type of cooling	IC 411 acc. to DIN EN 60034-6
Transnorm series	SPR 132 – 280



Three-phase asynchronous motors with slipping rotor for duty type S1 (continuous duty) are used in many branches of industry, for example in quarries and open-cast mines.

4-pole design 1500 rpm			6-pole design 1000 rpm		8-pole design 750 rpm	
P	DIN 42679	Progressive	DIN 42679	Progressive	DIN 42679	Progressive
[kW]						
2.2					SPER 132 M8	SPR 132 M8
3.0			SPER 132 M6	SPR 132 M6	SPER 132 MX8	SPR 132 MX8
4.0	SPER 132 M4	SPR 132 M4	SPER 132 MX6	SPR 132 MX6	SPER 160 M8	SPR 132 L8
5.5	SPER 132 MX4	SPR 132 MX4	SPER 160 M6	SPR 132 L6	SPER 160 L8	SPR 160 M8
7.5	SPER 160 M4	SPR 132 L4	SPER 160 L6	SPR 160 M6	SPER 180 L8	SPR 160 L8
11	SPER 160 L4	SPR 160 M4	SPER 180 L6	SPR 160 L6	SPER 200 L8	SPR 180 M8
15	SPER 180 L4	SPR 160 L4	SPER 200 L6	SPR 180 M6	SPER 225 M8	SPR 180 L8
18.5	SPER 200 L4	SPR 180 M4	SPER 225 M6	SPR 180 L6	SPER 225 MX8	SPR 200 M8
22	SPER 200 LX4	SPR 180 L4	SPER 225 MX6	SPR 200 M6	SPER 250 M8	SPR 225 M8
30	SPER 225 M4	SPR 200 M4	SPER 250 M6	SPR 225 M6	S11R 250 MX8	S10R 250 M8
37	SPER 250 M4	SPR 200 L4	S11R 250 MX6	S10R 250 M6	S11R 280 S8	S10R 250 L8
45	SPER 250 MX4	SPR 225 M4	S11R 280 S6	S10R 250 MX6	S11R 280 M8	S10R 280 M8
55	S11R 280 S4	S10R 250 M4	S11R 280 M6	S10R 280 M6	S11R 315 S8	S10R 280 L8
75	S11R 280 M4	S10R 250 L4	S11R 315 S6	S10R 280 L6	S11R 315 M8	
90	S11R 315 S4	S10R 280 M4	S11R 315 M6		S11R 315 MX8	
110	S11R 315 M4	S10R 280 L4	S11R 315 MX6		S11R 315 MY8	
132	S11R 315 MX4		S11R 315 MY6		S11R 315 LX8	
160	S11R 315 MY4		S11R 315 LX6			
200	S11R 315 LX4					
250	S11R 315 LY4					

10-pole design 600 rpm		
16.5	SPER 250 M10	SPR 225 M10
20	S11R 250 MX10	S10R 250 M10
27	S11R 280 S10	S10R 250 MX10
35	S11R 280 M10	S10R 250 L10
44	S11R 315 S10	S10R 280 L10
55	S11R 315 M10	S10R 280 LX10
70	S11R 315 MX10	
80	S11R 315 MY10	
90	S11R 315 LX10	

Please refer to our catalogues for technical details. The catalogues are available in printed or in digital version on CD-ROM. They are also available in the internet.



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