

SINGLE-PHASE INDUCTION MOTORS ADAPTED TO VOLTAGE SPEED CONTROL

Type: SSh(R) series

Output: from 0,04kW to 1,5kW

Number of poles: 2, 4, 6, 8

Frame size: from 56 to 90

Rated voltage: 230V

Frequency: 50Hz

Colour: RAL 5010

Insulation class: F

Degree of protection: IP 54 (as option IP 55, IP 56, IP 66)

Duty: continuous duty S1

Application:

Single-speed induction motors adapted to voltage speed control are used in fan systems.

Single-phase induction motors of the **SSh series** are designed to drive machines with a fan load characteristic $T_{load} = f(n^2)$, where the increase in the motor load is dependent on the square of the motor speed increase.

Such machines include, e.g. radial fans, axial fans.

The prerequisite for the correct adjustment of the rotational speed of the motors within the range from the minimum speed (n_{min}) to the rated speed (n_n) of the fan is the correct selection of the motor power to the fan.

A fan that is too small does not load the motor properly, and as a result the correct speed control can be impossible.

The advantage of these motors is the linear (proportional) dependence of the input power of the motor on the motor rotational speed $P_1 = f(n)$.

This means that the motor is characterized by a low power consumption at a low fan speed.

