Connection instructions for S-Force fans



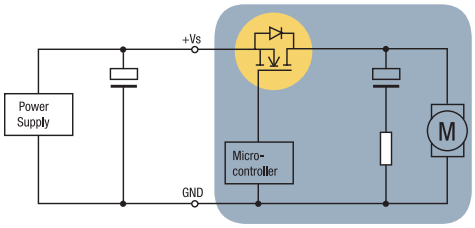
Special features of S-Force fans

The S-Force series is the most powerful product series. S-Force stands for the highest innovation in motor technology, fluid mechanics and electronics. The one-of-a-kind power density of the products requires special attention to the application at the customer's facility.

Service life

Due to the high currents in the fans, the load on the electrolyte capacitors is greater, which reduces the service life of the capacitor. As a larger or additional capacitor cannot be housed in the fan, the capacitor must be housed in the supply line.

If the power supply of the application has a corresponding capacitor, in some cases it may be possible to omit the external capacitor.



Recommended measure: additional external capacitor (must be installed as close to the fan as possible < 30 cm).

Fan	Capacitor required
S-Force axial	
8200 / 3200 JH3-JH4	no
4100 NH3 / NH4 / NH5 / NH6	no
4100 NH7 / NH8	yes
5300 / 5300 TD	no
6300 / 6300 TD / DV 6300	no
2200 FTD	no
S-Force centrifugal	
RET 97 TD	yes
RER 120 TD	yes
RER 133 TD	no
RER 160 NTDHH / RG 160 NTDHH	yes
REF 175 TD	no
RER 175 TD	no
RER 190 TD / RG 190 TD	no
RER 220 TD / RG 220 TD	no
RER 225 TDM / RG 225 TDM	no
RER 225 TD / RG 225 TD	no

Recommended capacitors

We recommend using the following capacitors from Rubycon:

24 VDC:

50 ZL 680 µF; 12.5 mm x 30 mm or

50 ZLH 680 µF 12.5 mm x 30 mm

48 VDC:

100 YXG 470 µF; 16 mm x 35.5 mm or

100 ZLH 470 µF 16 mm x 31.5 mm

Other capacitors with equal or greater capacitance and equal or lower serial resistance can also be used.

ebm-papst St. Georgen has the following capacitors in stock:

24 VDC: 1000 µF / 50 V, 16 mm x 25 mm

Art. no.: 992 0354 000 (LZ 354)

48 VDC: 680 µF / 100 V, 18 mm x 40 mm

Art. no.: 992 0355 000 (LZ 355)