



RECOMMENDATIONS FOR THE USE OF AXIAL FAN MODULES WITH BRUSH MOTORS

In order to maximise product life, the power supply to the fan module should be rectified and stabilized with residual RIPPLE values of less than 1% (Max). Higher RIPPLE values will considerably reduce motor lifetime and affect its regular functionality. For applications with higher values, please contact us.

For applications in which the fan module is mounted horizontally, we recommend to use a fan blade with drain holes to allow water drainage (available on request).

For minimum protection of the fan module, please use a suitable external fuse for every fan to interrupt power supply. This is a protection for the wire harness and for a blocked fan module.

For fan modules without speed control, we have at disposal motors with thermal fuses in the brush-card.

We recommend to use electronic controls to increase the fan module protection level. Please, note that the electronic controls must be adapted to our products.

For fan modules used with an electronic speed control (linear, PWM or any other external speed control), please, ensure that the external power supply is cut off in case of any overload conditions such as soft stall (partial blockage), blockage and over temperature.

For fan modules with open motors, it is the customer's responsibility to verify the environmental conditions for the proper use of the fan module.

It is the customer's responsibility to adequately protect the system and the axial fan against overload conditions or accidental rotor blockage. SPAL does not accept any responsibility from direct damage or consequential damage caused by the improper usage or by not adequately protecting the system as indicated above.

It is the customer's responsibility to verify that the selected product and/or the one we suggest from our catalogue suits the technical requirements and working conditions according to customer's application. We are pleased to assist you in finding the most suitable solutions for your application.

For any product update, please refer to our website.

SAFETY WARNINGS:

We highly recommend not to use our fan modules in flammable and combustible environments.

Improper handling and wrong usage of the fan modules may cause injuries.

对于装有有刷电机的轴流式风机的使用建议

为了最大限度地提高产品的使用寿命，风机的电源供应应当整流和稳定，使纹波电压残值小于1%。更高的纹波值将大大缩减电机的寿命，并影响其正常功能。针对纹波值较高的具体应用，请与我们联系。

对于水平式安装风机的应用而言，我们推荐使用装有排水孔的风扇叶片，以实现排水（资料承索即寄）。

为了达到风机的最低保护水平，请为每台风机配备一个合适的外部保险丝，以便切断电源。这是针对线束和风机锁死的保护。

对于无速度控制的风机而言，我们可以提供在印刷电路板中装有热熔断路器的处理方式

我们推荐使用电子控制，以增强风扇的保护水平。请注意，电子控制必须与我们的产品相契合。

对于采用电子速度控制的风机而言（线性、PWM或任何其他外部速度控制），请务必确保外部电源在过载条件下被切断，例如软堵转（部分锁死）、锁死和过热。

对于装有开放式电机的风机而言，客户应当负责确认风机正常使用的环境条件。

客户应当负责采取足够的措施保护系统和轴流式风机超负荷运转或意外堵转的情况。对于如上所示的不正确使用或没有足够的系统保护措施而造成的直接或间接损失，斯佩尔公司不承担任何责任。

客户应当负责确认所选产品和/或我们在目录中推荐的产品符合在客户应用中的技术要求和条件。我们乐于协助您寻找最合适于您的应用解决方案。

请访问我们的网站，了解所有的最新产品信息。

安全警示:

我们强烈建议您不要在易燃、可燃的环境下使用风机。

风机的不当操作和错误使用均可能造成各类伤害。