Decision-making aid for choosing a suitable electric motor

The performance profile of the application in question is known. The performance class and motor type have been pre-selected. It remains to be seen whether the motor complies with the relevant energy efficiency requirements and which solution would be best.

Does the destination country lay down rules about energy efficiency classes?

Yes

Do these rules apply to motors first placed on the market?

No

Does the motor fall within the scope of these rules in terms of key characteristics (e.g., motor performance, pole number and operating mode)?

No

Are there any exceptions applicable to the motor in question, e.g., regarding explosion-protected motors, ambient temperatures, brake motors and intermittent or short-time operation?

No

An energy-efficient motor may provide power reserves due to increased material use (thermal reserves under continuous load with increased starting and breakdown torques). Should this potential be used for increased safety or to cover rare peak loads?

Yes

Do any smaller, lower-performance motors have the required power reserves, and can they be fitted to the gearbox suitable for the application?

Yes

for the bigger motor, check:

Is the motor in question a satisfactory choice regarding the purchase price and its energy savings, weight, and dimensions?

No

To order the motor, please include standard technical data, the required energy efficiency class, and the country where it will be operated.

Yes

A motor without energy efficiency classification or with a low-level class is sufficient for this application type.

Should the motor comply with a higher efficiency class nonetheless, due to customer requests or in order to achieve image or cost benefits? (Energy savings can make up for the higher purchase price.)

Yes

No

review premise

No