CZECH TECHNICAL UNIVERSITY IN PRAGUE

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Title

Subtitle

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P_{n} ASM

2 Design

The Permanent Magnet assisted synchronous reluctance motor (PMSynRelM) is widely used for it's significant advantages of small size, low loss, high efficiency, better performance than plain synchronous reluctance motors SynRelM and wide constant power to speed range. [], [**huynh-design-and-analysis-of-perm-as-synch-rel-m**

2.1 Stator

There are many possiblities on how to connect the stator winding. Research has been carried out for standard Delta or Start winding, but to increase the torque for same stator current the combined Start-Delta winding was proposed. The first research has been caried out for standard SynRelM in [**ibrahim-an-improved-torque-densit** and then extended to PMSynRelM prototypes in [**ibrahim-permanent-magnet-assisted-synchronous-reluctance-motor-en** The main idea of the hybrid Delta-Star connection is to split the standard phase wiring into two parts. The one part is for the Delta connection, the other for Star connection. Then the coils of wiring are connnected to series.

Conclusion

Appendix A: List of symbols and abbreviations

A.1 List of abbreviations

ASM	Asynchronní Motor
PMSynRelM	Permanent Magnet Assisted Synchronous Reluctance Motor
SynRelM	Synchronous Reluctance Motor

A.2 List of symbols

P_n (W) jmenovitý výkon