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General properties of coefficients , and ; 2.5. Electrical dynamic equations; 2.6. Expression of electromechanical variables; 2.7. Expression of torque; 2.8. Writing of equations in terms of co-energy; 2.9. Application to control; 2.10. Conclusion; 2.11. Appendix 1: value of coefficients , and ; 2.12. Appendix 2: derivatives of coefficients , and ; 2.13. Appendix 3: simplifications for small ; 2.14. Appendix 4: List of the main symbols used in Chapters 1 and 2; 2.15. Bibliography

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Sommario/riassunto

Classical synchronous motors are the most effective device to drive industrial production systems and robots with precision and rapidity. However, numerous applications require efficient controls in non-conventional situations. Firstly, this is the case with synchronous motors supplied by thyristor line-commutated inverters, or with synchronous motors with faults on one or several phases. Secondly, many drive systems use non-conventional motors such as polyphase (more than three phases) synchronous motors, synchronous motors with double excitation, permanent magnet linear synchron
