

ABSTRACT**CONVERTER CIRCUIT FOR A POLYPHASE SWITCHED INDUCTIVE LOAD**

5 A converter circuit for an inductive load, such as the
phase windings of a switched reluctance motor, uses only
n-switches for n-phases. In a four phase machine, each
of three of the phases is serially connected with a
switch across one voltage source. The remaining phase is
10 serially connected with a switch across another voltage
source which receives the inductive energy returned by
the other three phases. This returned energy is used to
energise the fourth phase. A generator converter is also
disclosed in which the energy in the fourth phase is used
15 to provide the excitation for the other three phases.

Fig.4