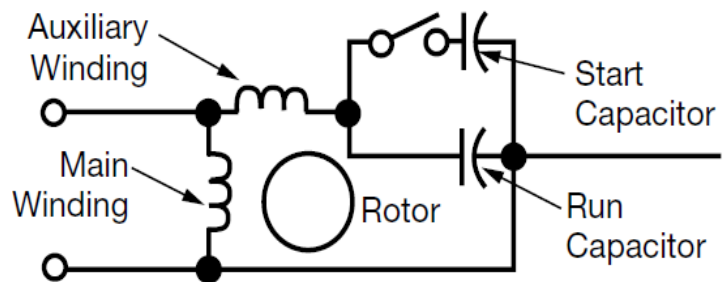# What's unique with HDMS

No start capacitor
for starting CSCR motors

There are different categories of single phase motors namely:

- Permanent Split Capacitor (PSC)
- Capacitor Start Induction Run (CSIR)
- Capacitor Start Capacitor Run (CSCR)

PSC motors make use of only one capacitor that acts as both the run as well as the start capacitor. Typically used in low starting torque applications.

CSCR motor topology

On the other hand, **CSCR** and CSIR motors, as the name implies, require an additional start capacitor to achieve the necessary starting torque required to rotate the motor. CSCR & CSIR motors are used in high starting torque applications such as compressors and submersible pumps.

Well…this is about to change with HDMS!

HDMS utilises a **revolutionary control algorithm** that can start **CSCR motors without start capacitor**. HDMS achieves this without drawing additional current from the mains. This ensures better starts in applications supplied by weak grids or generator sets.