

calculated power prior to any other adjustment e.g. high ambient temperatures at Site.

Table 1-7: MCR Ratings

MCR RATINGS		
Application	Up to 75 kW drive	Above 75 kW drive
All pump motors (excluding positive displacement type)	10% above that required under all conditions of operation	
Positive displacement pumps and compressors	25% above max. duty requirements	
Aeration Cones	25% above power required for maximum immersion. This applies to all motor ratings.	
All other drives including screens comminutors detritors tank scrapers etc. and process plant	25% above normal duty requirements	10% above normal duty requirements

- H. Motors shall be capable of continuous operation under all duty conditions at:
- Maximum brake power absorbed by the driven load not less than that stated in Table 1-7 above.
 - Maximum rated torque without adverse affect or overheating.
- I. I. Where flywheels are fitted to the main pump set, the motors shall be capable of starting and driving the pumps under these conditions.
- J. Motor characteristics shall allow starting of the motor by employing variable frequency drive and/or electronic soft starters, ensuring compatibility at all points in the operating range and de-rated accordingly with particular attention being given to the following:-
- Heating carried by harmonics in the non-sinusoidal waveform produced by the inverter or soft starter.
 - Reduced cooling at low motor speeds due to the reduced effectiveness of the cooling fan.