Troubleshooting LEDs

In addition to the diagnostics provided by the keypad, eight fault LEDs situated on the power control board provide an indication of the cause of a fault trip. The fault LEDs are visible when the bottom terminal cover is removed - refer to Figure 1.1. The table below indicates the function of the LEDs.

Fault	Illuminated LEDs								Action
Output overcurrent					❺				Ouput current greater than trip level - check ouput wiring and motor for insulation breakdown or short circuits either between phases or between phase and earth
M1 phase IGBT fault alarm	❶				❺				Excessive output current
M2 phase IGBT fault alarm		❷			❺				
M3 phase IGBT fault alarm			❸		❺				
DB unit IGBT fault alarm				❹	❺				Check wiring and verify value of brake resistor
M1 phase IGBT over-temperature	❶					❻			Maximum IGBT junction temperature exceeded Check operation of main cooling fan and supply Check that cooling path is free from obstruction Clean or replace cubicle inlet air filters
M2 phase IGBT over-temperature		❷				❻			
M3 phase IGBT over-temperature			❸			❻			
DB unit IGBT over-temperature				❹		❻			
Output current imbalance					❺	❻			Check wiring to motor and motor itself for earth faults
CAL board not fitted					❺	❻	❼	❽	Internal fault - consult supplier
Internal supply fail							❼	❽	Internal fault - consult supplier
FPGA not programmed	❶	❷	❸	❹	❺	❻	❼	❽	Internal fault - consult supplier