Lift Control Panels.

Lift Control Systems for the Industry.

Replacement Lit Control Panels & Drives for OEM Contractors.

Specialists in Replacement Equipment for all existing Lifts, Drives and experienced engineering to suit current manufacturers and redundant companies.

AM Lifts Ltd
Rayner House
23 Higher Hillgate
Stockport
Cheshire
SK1 3ER

Tel: 0161 480 9771
Fax: 0161 480 9881
Mob: 0755 337 4219
Email: Info@amlifts.co.uk
Web: www.amlifts.co.uk

AM Lifts Ltd - VVVF Control of Goods & Passenger Lifts.

To elaborate : - VVVF is an acronym for the term Variable Voltage, Variable Speed (VVVF) control of an AC 3 Phase Squirrel Cage Motor.

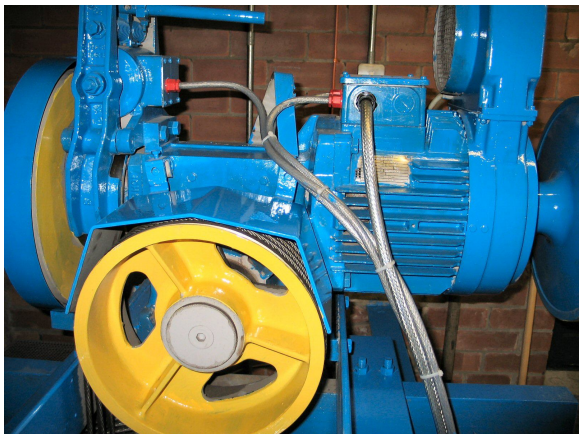
A Standard AC Motor rotates at a Speed determined by the Frequency of the Municipal Ac Supply (50/60 cycles per second)
The rotation determined by the No of Poles in the Motor and the number of Phase (+/-) cycles of the incoming supply
Variation in the speed of rotation being achieved by addition or reduction of the no. of poles within the motor.

However: -
With the development of high current transistors (I.G.B.T's) the above method of limited speed variation of Lifts using Squirrel cage motors has now been improved by electronic methods.

As previously outlined the rotation of the motor is dependent on supply polarity reversal. The approach with the new VVF electronic drives is to take the incoming 3 phase supply and convert it to a high current DC Supply.
This supply is, by means of transistor control, regulated with regard to voltage level and frequency using the new High Current I.G.B.T. transistors.

Frequency (Rotation Speed) variation is achieved throughout the mechanical range of the motor by variation of the artificially created polarity changes of the now DC supply (BUS) voltage which simulates the AC 3 Ph supply for which the original motor was designed mechanically.

To achieve complete Torque and Rotation control lift drives are somewhat complex due to overhauling loads in a down direction and high currents when hauling load.



Overhauling Loads: -
Represent a particular problem in Lifts and Cranes due to high regeneration currents when the motor is holding back a lowering (regenerating) load. Drives are specially designed to dissipate excess current by additional thyristors to external resistance banks. Requiring additional electronics within the drive unit.

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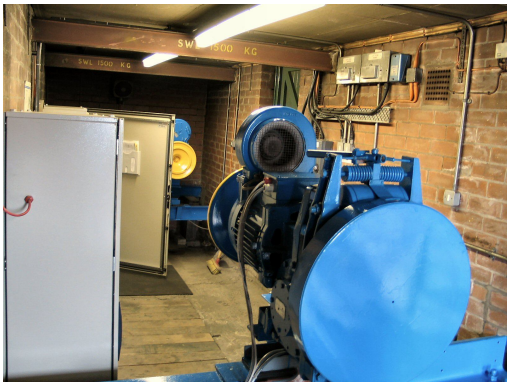


VVF ELECTRONIC DRIVES: -

All Elevator/Lift drives are specifically designed For use within the Industry due to the outlined strictures.

MCCS. Offer the choice of Japanese or American manufactured units due to forefront technology in these countries by domination of the Elevator Industry.

MCCS control gear is assembled in the UK. And on site Technicians are available for assistance at any time.

MCCS software engineers are UK based for modification or fault identification if required.

All components are proprietary are readily available should replacement parts be required from established sources IE- RS , Farnell etc.
All our control panels are assembled with 'Off the Shelf' components including items such as transformers etc.

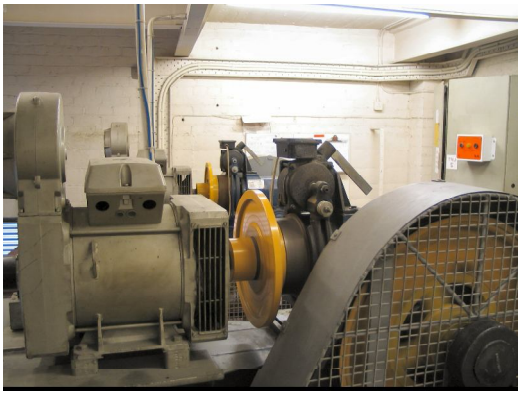
All Control Cabinets are to a minimum of IP 55 rating, totally enclosed , (Ventilated for VVF).

MCCS Logic Control is by MITSUBISHI programmed by our own software engineers, all programs being available for fault identification by PC (Laptop) .Visual MMI. Interface TFT panels are available at extra cost also network connection to remote PC (Extra) if required (Local Net).

All VVF Control is EMC certified if Installed as required., (SY Screened cabling etc.) .

All Site Documentation and Wiring diagrams are Laminated for longevity.

Please do not hesitate to contact us should further clarification assistance with a project be desired, we are pleased to be of service .



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