



QFE/XFE Slip Ring Motor Control

1. The dotted line indicates the extent of the supplied equipment. This example depicts the QFE+ version and the Modbus Communication options.
2. Main contactor, bypass contactor, resistor shorting contactor and control relay are all supplied by the customer. K1 AC3 rated line contactor K2 Control relay with 2 separate normally open contacts K3 Soft Starter bypass contactor rated for full load motor current K4 Resistor shorting contactor
3. Slip-ring induction motors ALWAYS need some resistance in the rotor circuit to ensure that sufficient rotational torque is generated to overcome any alignment torque, which is present at start-up. The resistance can be safely shorted out in the normal fashion with a contactor controlled by one of the programmable relays set as top-of-ramp contacts.
4. Thermal/Electronic overload to be supplied by the customer. Electronic overloads must be of a type suitable for use with phase angle control equipment.
5. Semiconductor fuses are an option. Details of suitable fuses are included in the Basic Guide.

