

ELECTRONIC SOFT STARTER



MODEL: SS

Soft starter Kit is a simple, robust, user friendly solution for new installations and easy to retrofit into existing installations. Voltage control using thyristor provides soft starting and stopping of motor. There is very less power loss in the scheme, since thyristors are in circuit only during soft start and soft stop. Externally connected by pass contactor delivers power to the motor during running.

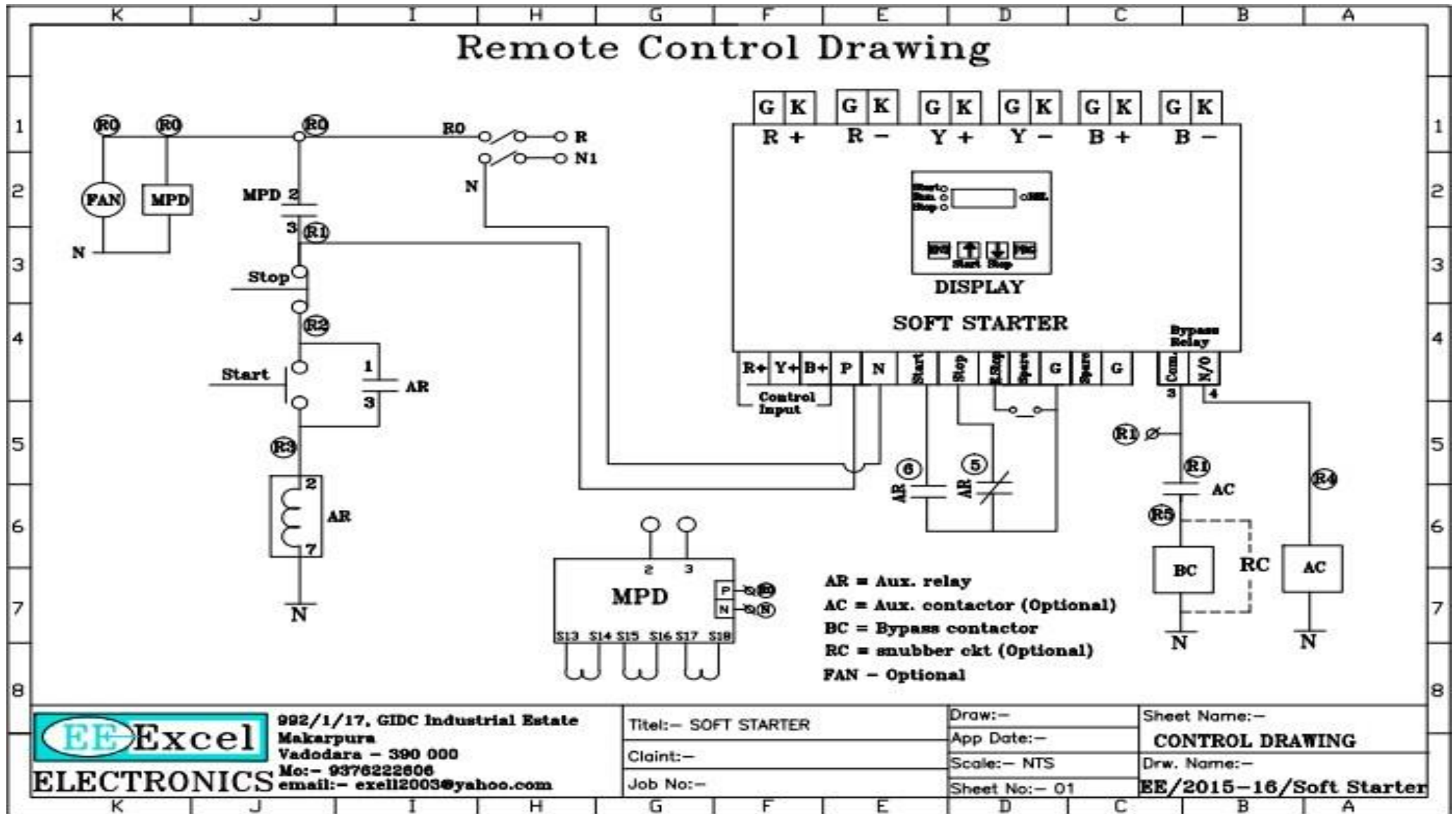
Features:

- Soft Start facility, with initial torque setting by minimum pedestal voltage, ramp time adjustable for setting ramping UP duration, adjustable from 1 to 180 secs.
- Soft stop facility, ramp down duration adjustable from 1 to 180 sec., suitable for mainly pump applications where soft stop prevents hammering of water.
- Can be integrated with advanced micro-controller-based Motor Protection Device for protection of motor for Overload, Unbalance, Single phasing, locked rotor, short circuit, earth fault. Alarms and Annunciation for all the faults, indication for motor running.
- Onboard push button for start and stop and remote operation
- In built bypass potential free contact of output relay for switching external bypass contactor.

SPECIFICATION

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|------------------------------|---|
| Rated Insulation Voltage | 600V |
| Rated Operating Voltage | 415/440V AC + 10%/ - 15%, 3 phase, 50 Hz |
| Rated control supply voltage | 230 V AC + 15%/ - 15%, 1 phase, 50 Hz |
| Recommended load | AC Motor, three phase, multiple motors or other loads are not recommended except under specific circumstances. |
| Overload capacity | 115% Continuous, 150% for 10 seconds and 200% for 5 seconds |
| Ambient Temperature | During Operation : -25 degC to +60 deg.C During Storage : -40 degC to +70 degC |
| Altitude of Installation | 1000 meters (Above 1000m derating has to be done) |
| Degree of protection | Main Circuit - IP00 Supply and Control Circuit – IP20 |
| Main Circuit | Provided with protection for external bypass contactor |
| Display parameters | LED Seven Segment Display with 4 keys keypad for setting |
| Main Settings | Ramp time during start – 1 to 180 sec Ramp time during stop – 1 to 180 sec Pedestal (Initial) voltage – 1 to 60% |
| Signal Relays | One C/O relay for bypass contactor |
| Control Circuit | Number of digital Inputs – 3 (Start, stop, emergency stop) |
| Protections | Internal protection for Over Temperature and transient voltage |
| Voltage rating of thyristors | 1400 to 1600 PIV |
| Types of cooling | Air-cooled below 250 hp, fan cooled for 250 hp and above. |
| Over temperature protection | Normally closed contact output, thermal switch provided for heat sink over temperature protection (external 2-way terminal provided). |
| SCR Protection | MOV transient voltage suppressors to absorb high energy voltage transients provided across the input supply points. RC snubber circuit is provided across the SCR to prevent misfiring due to rapid rise of voltage |

CONTROL WIRING DIAGRAM:



POWER WIRING DIAGRAM:

