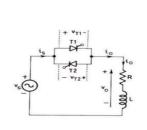
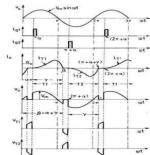
## **SOFT STARTER FOR PUMP**

## A.C. /A.C. CONTROLLER

**Applications:** MSPST series of low time soft starter Are available in more than 10 different models (1.0 -100 H.P. in single phase/three phase) including some tailor made models practically offering readymade soft starter solution for submersible pump with very high power factor/lower harmonic distortion with soft starting transient response and improved protection features. These controllers have better power factor, Soft starting provide better life to submersible pump with low rotor to stator shorting, lower transient loading on bearing and lesser sudden Jerks on plastic impellor.

**Operating Principle:** These soft starters are antiparallel SCR based line commutated converters and are available in single and three phases. After gradual firing in soft mode for few seconds, these operates in full firing mode in running, hence has low harmonic distortion and high power factor. On account of high reliability of devices soft starter are available upto 25 hp. in single/three phase.





Volta

**Benefits:** Lower harmonic distortion/higher efficiency. Lower imbalance loading on ball bearing during transient period, hence better life.

Soft starting leading to reduced rotor to stator short ckt,





MSPST-002

Technical specification of Soft Starter (1/3 phase):

up to 25 H.P.

				<u> </u>		
S.No.	Model	Power (H.P.)	Voltage	Ampere Single/three phase	Rate of starting current /sec adjustable	
01	MSPST-001	1.0	220	5.0	100% of f.l.c /5.0 sec	
02	MSPST-002	2.0	220	10.0	100% of f.l.c /5.0 sec	
03	MSPST-003	3.0	220	16.0	100% of f.l.c /5.0 sec	
04	MSPST-005	5.0	220/440	25.0/16.0	100% of f.l.c /5.0 sec	
05	MSPST-010	10.0	440	32.0	100% of f.l.c /5.0 sec	
06	MSPST-015	15.0	440	45.0	100% of f.l.c /5.0 sec	

## General Technical Specification of Submersible Pump:

Operating voltage: 110/220 volts A.C., 50 HZ

Output voltage: 0-220 volt A.C. /400 amps in ramp mode

Soft starting time: 1.0 to 5.0 sec

Voltage/current control accuracy 99.9% of set point

Resolution 0.1 volts/amps

Current/Voltage control hunting: negligible

Interface Signal 0.0-12.0 volts D.C. Power factor/harmonics 0.95(lagging)

Control: cascade feedback control with soft start with adjustable current limit.

Display: Voltage/current in 3 digit red glow LED display

## MOTORON SEMICONDUCTORS CORPORATION 11, Shri Nagar Colony, Shakti Nagar Extension, Delhi-110052

Tel: 011-23655454, 8800292956, motoron@hotmail.com

