

SoftHard Automation Pvt. Ltd., Pune

SoftHard is introducing world's advanced microcomputer technology based "**Vardaan**" **Motor pump Protector Starter with inbuilt Autoswitch** which immediately detects the fault and trip (off) the motor on various current & voltage faults. Thus Vardaan motor pump starter protecting motor from burning, and that's why it is not only starter but motor protector starter which also show causes of faults on digital display to take corrective actions and there is no need to buy extra autoswitch:-

Reason behind to introduce **SoftHard's Vardaan starter** is emerge by study of problems being faced in agricultural field in detail, especially related to motor burning, frequent load shading, number of failure (minimum 2-3) starter & autoswitch within a year cause of they based on worse technology. This kind of starters & autoswitch available in the market reasons we found the causes behind their failure as follows:-

1. Currently used motor pump starter only provide function to start/stop the motor
2. Few starters protect motor from overload current fault, which is also based on 18th century old bimetallic technology i.e. (OLD TECHNOLOGY) which provides protection by melting bimetal. ISI standard also consider 20% of errors in bimetal overload relay against overload protection. This way is not possible to provide real time protection due to environment ambience of different seasons.
3. Also Existing starters cannot provide real time protection to the motor against overload, dry run, Phase failure / loss, Phase to phase voltage unbalance, wrong phase sequence, low voltage, etc due to based on old & worse technology.

Benefits and advantages of SoftHard's Vardaan Motor Protector Pump Starter for agriculture sector

1. **Protect motor from burning**
2. **Once motor burns & rewind lead to HIGH POWER CONSUMPTION, generates heat and develop a tendency to get motor burn & rewind again and again**
3. **Saving Cost of rewinding & cost of additional 15-20% electricity bill due to excess power consumption than before burning of motor.**
4. **By burnt motors opportunity to lose higher production of crop & even possibility to loss whole crop. Also adds cost of down time, physical & mental exertion.**
5. **AVOIDING MOTOR BURNTOUT is therefore more important. This is only possible by Vardaan starter's real time protection with high reliability & accuracy.**
6. **Eliminates the need for separate DOL starter, auto switch, voltmeter and ammeter.**

Direct-on-Line Starters (Motor Rating AC-3 Duty, 415V, 50Hz, 3-Ph)

Vardaan Samay EC T & Vardaan EC



Model / Features	Vardaan Samay EC T	Vardaan EC
Features		
Inbuilt Auto switch	YES	YES
Digital Ammeter	YES	YES
Digital Volt meter	YES	YES
Fault annunciation on Digital display	YES	YES
Available up to 10 HP Dol Motor Pump	YES	YES
Water distribution timer up to 16 hours (900 mints)	YES	NO
No hunting as in other starter	YES	YES
Heavy relay 22 amps	YES	YES
Electronic power overload relay & contactor	YES	YES
Easy to installation	YES	YES
Widest working voltage range from 180 to 500 volts	YES	YES
Microcomputer based technology with high reliability, accuracy and long life	YES	YES
Protections		
Electronic overload	YES	YES
Phase failure / loss of current & Voltage (Single Phase Preventer)	YES	YES
Current transformer sensing dry run / No load current	YES	YES
Phase reversal / wrong phase sequence from supply side	YES	YES
Low Voltage	YES	YES
Phase to phase voltage unbalance	YES	YES
Settable Parameters		
Overload is site selectable from 20 to 50 % of set current	YES	YES
Dry run setting from 75 to 95 % in increment of 1 % amps	YES	YES
Pump current setting is easy, accurate, with digital display	YES	YES
Monitoring		
Calibrated Digital Voltmeter with 100 to 500 volt ± 2 volt. Accuracy	YES	YES
Calibrated Digital Ammeter 1 to 26 amps ± 0.2 amps Accuracy	YES	YES
Auto scrolling Ammeter for R, Y, B, phases	YES	YES
Auto scrolling Voltmeter for RY, YB, BR, phases	YES	YES
Digital display for Fault annunciation cause of tripping	YES	YES
In built memory to show last setting value	YES	YES
On site AUTO FAULT DETECT (AFT) for AC voltage	YES	YES
Timer		
Water distribution timer countdown timer on digital display	YES	NO
Cyclic timer for how many hours motor will operating & after how many hours motor will start.	YES	NO
Starting 1 mint time delay to filter power on spikes and surges	YES	YES
Auto start delay timer for one minute on power failure	YES	YES
Auto reset & auto start of motor on fault of SPP, low voltage, phase to phase voltage unbalance from supply side	YES	YES
Auto reset & auto start of motor on fault of overload fault after 10 mints	YES	YES
Manual reset on fault of dry run & Phase reversal	YES	YES
Enclosures & Mountings		
Weight		
Compact, vermin proof, rust proof, Shock proof plastic enclosure box (ABS)	YES	YES
Mounting : wall/plate	YES	YES

Providing robust embedded automation solutions across the industry over a decade.....

Direct-on-Line Starters (Motor Rating AC-3 Duty, 415V, 50Hz, 3-Ph)

Vardaan TUA & WOD

Model / Features	Vardaan TUA	Vardaan WOD
Features		
Inbuilt Auto switch	YES	YES
Available up to 10 HP Dol Motor Pump	YES	YES
No hunting as in other starter	YES	YES
Heavy relay 22 amps	YES	YES
Electronic power overload relay & contactor	YES	YES
Fault annunciation by LED indication	YES	NO
Easy to installation	YES	YES
Widest working voltage range from 180 to 500 volts	YES	YES
Microcomputer based technology with high reliability, accuracy and long life	YES	YES
Protections		
Electronic overload	YES	YES
Phase failure / loss of current & Voltage (Single Phase Preventer)	YES	YES
Current transformer sensing dry run / No load current	YES	NO
Phase to phase voltage unbalance	YES	YES
Settable Parameters		
Overload is site selectable from 20 to 50 % of set current	YES	YES
Dry run setting from 75 to 95 % in increment of 1 % amps	YES	YES
Pump current setting is easy, accurate, with digital display	YES	YES
Timer		
Starting 1 mint time delay to filter power on spikes and surges	YES	YES
Auto start delay timer for one minute on power failure	YES	YES
Auto reset & auto start delay timer for one minute on fault of SPP, phase to phase voltage unbalance from supply side	YES	YES
Auto reset & auto start of motor on fault of overload fault after 10 mints	YES	YES
Manual reset on fault of dry run	YES	NO
Enclosures & Mountings		
Weight		
Compact, vermin proof, rust proof, Shock proof plastic enclosure box (ABS)	YES	YES
Mounting : wall/plate	YES	YES



Authorised Dealer

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