

PRODUCTS FOR AGRI SECTOR

Minilec offers a range of products for protection of water pumps used by farmers. These are primarily to monitor incoming 3-phase supply for Single Phasing, Reverse Phasing and unbalanced supply and stop the pump in case of any fault. Additional features in some models include low water level monitoring (for borewell pumps) and auto restarting.

The products are specifically produced for marketing and use in India only.



MODELS

VSP2, VSP3, VPGD1

**Autoswitch-2, Autoswitch-4
Autoswitch-5, Autoswitch-6**

FEATURES

- Monitor incoming 3-phase supply
- Models with pre-wired connections
- Easy to fit inside most motor starters
- Switch for Auto-Manual operations
- Switch provision either built-in or external
- Adjustable on time delay
- All protections in auto & manual modes
- Built-in timer for star-delta operation
- Low level monitoring of borewell pumps

PROTECTIONS / FUNCTIONS

- Single Phasing,
- Reverse Phasing,
- Unbalanced supply (dry running)
- low water level
- On Delay to avoid immediate re-starting of pumps during auto mode

PRODUCTS FOR AGRISector

VSP2



Smallest size of single phasing preventor
Single phasing, reverse phasing, unbalanced supply
Auto reset, 1 NO output contact
Suitable for any HP/kW rating moboblock pumps

VSP3



Single phasing, reverse phasing, unbalanced supply
Auto reset, 1 NO output contact
Suitable for any HP/kW rating moboblock pumps
Pre-wired terminals for easy connections

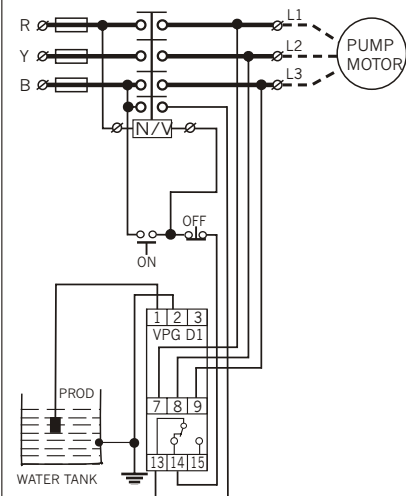
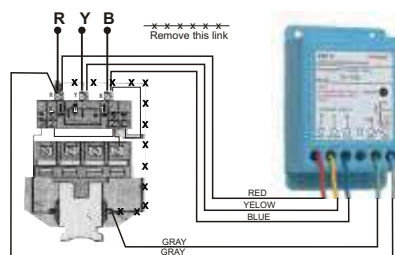
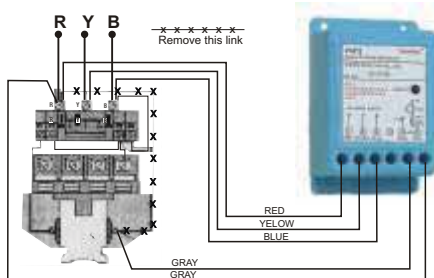
VPGD1



Single phasing, reverse phasing, unbalanced supply
Auto reset, 1 CO output contact
Suitable for any HP/kW rating submersible pumps
Low water level guard for dry running protection



Supply Voltage	415 VAC \pm 20%, 50 Hz \pm 3%	415V AC \pm 20%, 50 Hz \pm 3%	415VAC \pm 20%, 50 Hz \pm 3%
Output Relay Contact	1 NO	1 NO	1 CO
Output Contact Rating	5 Amp, 240 VAC (RESISTIVE)	5 Amp, 240 VAC (RESISTIVE)	5 Amp, 240 VAC (RESISTIVE)
Unbalance Trip Setting	40 V \pm 6 V	50 V \pm 10 VAC	40V \pm 6V
Trip Time Delay			
For unbalance	3.5 sec. \pm 1.5 sec.	3.5 sec. \pm 1.5 sec.	3.5 Sec \pm 1.5 Sec
For level sensing	N.A.	N.A.	3.5 Sec \pm 1.5 Sec
On Time Delay	N.A.	N.A.	N.A.
Star-Delta Changeover Time Delay	N.A.	N.A.	N.A.
Resetting	Auto Reset	Auto Reset	Auto Reset
Auto Switch	N. A.	N. A.	N. A.
Enclosure	HIP moulded, with Nylon connector strip	HIP moulded	ABS
Dimensions (mm)			
Overall (H x N x D)	103 x 66 x 43	103 x 66 x 43	76 x 30.5 x 117.5
Mounting	91 x 48	91 x 48	68 [center to center]
Mounting	Panel Mounting	Panel Mounting	Panel Mounting & 35mm Rail Mounting
Weight	260gms	250gms	300gms
Level sensor			
Quantity	—	—	1 NO. SS
Dimensions	—	—	24 [dia.] X 76 [L] 50
Operating Conditions			
Temperature	-5 °C TO + 60 °C	-5 °C TO + 60 °C	-5 °C TO + 60 °C
Humidity	Upto 95% Rh	Upto 95% Rh	Upto 95% Rh



Auto switch - 2



Single phasing, reverse phasing, unbalanced supply
Auto reset, 1 NO output contact
On time delay upto 1 Minute (fixed) Auto-Manual switch built-in. Suitable for any HP/kW rating pumps. Pre-wired terminals for easy connections

415 VAC ± 20%, 50 Hz ± 3%
1 NO
5 Amp, 240 VAC (RESISTIVE)
50 V ± 10 VAC
4 Sec ± 2 Sec
N.A.
45 Sec ± 15 Sec
N.A.
Auto Reset
Present
Housing: HIP / Mounting Clamp: Nylon 6
102 x 35 x 81
90 mm Centre to Centre
Panel Mounting
300gms
—
—
-5 °C TO + 60 °C
Upto 95% Rh

Auto switch - 4



Single phasing, reverse phasing, unbalanced supply
Auto reset, 1 NO output contact
On time delay 1 to 10 Minutes (Adjustable) Auto-Manual switch built-in on front. Suitable for any HP/kW rating pumps. Pre-wired terminals for easy connections

415 VAC.(± 20%), 50 Hz ± 3%
1 NO
5 Amp, 240 VAC (RESISTIVE)
50 V ± 10 VAC
4 sec ± 2 sec
N.A.
1 to 10 min
N.A.
Auto Reset
Present
Housing: HIP / Mounting Clamp: Nylon 6
102 X 35 X 81 mm
90 mm Centre to Centre
Panel Mounting
300gms
—
—
-5 °C TO + 60 °C
Upto 95% Rh

Auto switch - 5



Single phasing, reverse phasing, unbalanced supply
Auto reset, 1 NO output contact,
On time delay 1 to 10 Minutes (Adjustable), Provision for connecting Auto-Manual switch externally, Suitable for any HP/kW rating pumps, Pre-wired terminals for easy connections

200 - 450 VAC, 50 Hz ± 3%
1 NO
5 Amp, 240 VAC (RESISTIVE)
50 V ± 10 VAC
4 Sec ± 2 Sec
N.A.
1 to 10 min
N.A.
Auto Reset
To be connected externally
Housing: HIP / Mounting Clamp: Nylon 6
102 X 35 X 81 mm
90 mm Centre to Centre
Panel Mounting
300gms
—
—
-5 °C TO + 60 °C
Upto 95% Rh

Auto switch - 6



Single phasing, reverse phasing, unbalanced supply
Auto reset, 1 NO output contact,
On time delay 2 to 3 Minutes (fixed), Star Delta Changeover Timer, Auto-Manual switch built-in on front, Suitable for any HP/kW rating pumps, Pre-wired terminals for easy connections

415VAC ± 20%, 50 Hz ± 3%
1 NO + 1 NO
5 Amp, 240 VAC (RESISTIVE)
50V ± 10V
3.5 Sec ± 1.5 Sec
N.A.
2 to 3 minutes [In auto mode]
5 to 7 Sec.
Auto Reset
Present
Housing: HIP / Mounting Clamp: Nylon 6
102 x 35 x 81
90 mm Centre to Centre
Panel Mounting
300gms (Approx.)
—
—
-5 °C TO + 60 °C
Upto 95% Rh

