

PRODUCT INFORMATION

SYSTEM 3000

A complete system for capacitive coupled voltage indication in high- and medium voltage system (HR-SYSTEM).

- Gives a better view and control in power grids.
- Meets the demands for increased automation in power grids.
- All products in System 3000 are RoHS complaint.
- All products designed in accordance with IEC61243-5.
- **IVIP3000/3x1**
The IVIP3000/3x1 capacitive coupled voltage present indicator has pr. phase individual galvanic insulated digital output signal for use with signal amplifier VPAM3000/3x1.
- **VPAM3000/3x1.**
Signal amplifier with galvanic insulated output for automatic change over logic. Signal for external use is also available.
For further details – See page 5

Table of content:

Page 1:	Short introduction of System 3000 – IVIP3000/3x1 and VPAM3000/3x1.
Page 2:	IVIP3000/3x1. Capacitive coupled 3-phase voltage present indicator with pr. phase individual digital output for remote indication of voltage present.
Page 2:	VPAM3000/3x1 Signal amplifier with digital output.
Page 3:	Logic diagram
Page 4:	Typical RMU with System 3000 Voltage Detection System
Page 5:	Circuit diagram IVIP3000/3x1 and VPAM3000/3x1
Page 6:	VPAM3000/3x1 signal amplifier selectable time delay table and digital output signals.
Page 7:	Picture of IVIP3000/3x1 and VPAM3000/3x1.
Page 8:	IVIP3000/3x1 fixing and cut-out details.
Page 8:	VPAM3000/3x1 fixing and cut-out details.

Note: **The configuration sample given below is done with IVIP3000/3x1 and VPAM3000/3x1.**
Alternatively IVIP3000/3 with VP3000/3 can replace IVIP3000/3x1 and VPAM3000/3x1.

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IVIP3000/3x1 PART OF SYSTEM 3000

Capacitive coupled 3-phase voltage present indicator with pr. phase digital output.



IVIP3000/3x1

- IVIP3000/3x1 voltage indicator for HR-system (90V).
- Long life low energy LED indicator for voltage present / voltage absent.
- No external matching capacitor needed (Integrated part of IVIP3000/3x1).
- Integrated over voltage and transient voltage protection.
- Pr. phase galvanic insulated digital output for use with VPAM3000/3x1.

VPAM3000/3x1 is a signal amplifier designed for amplifying the digital output signal from IVIP3000/3x1

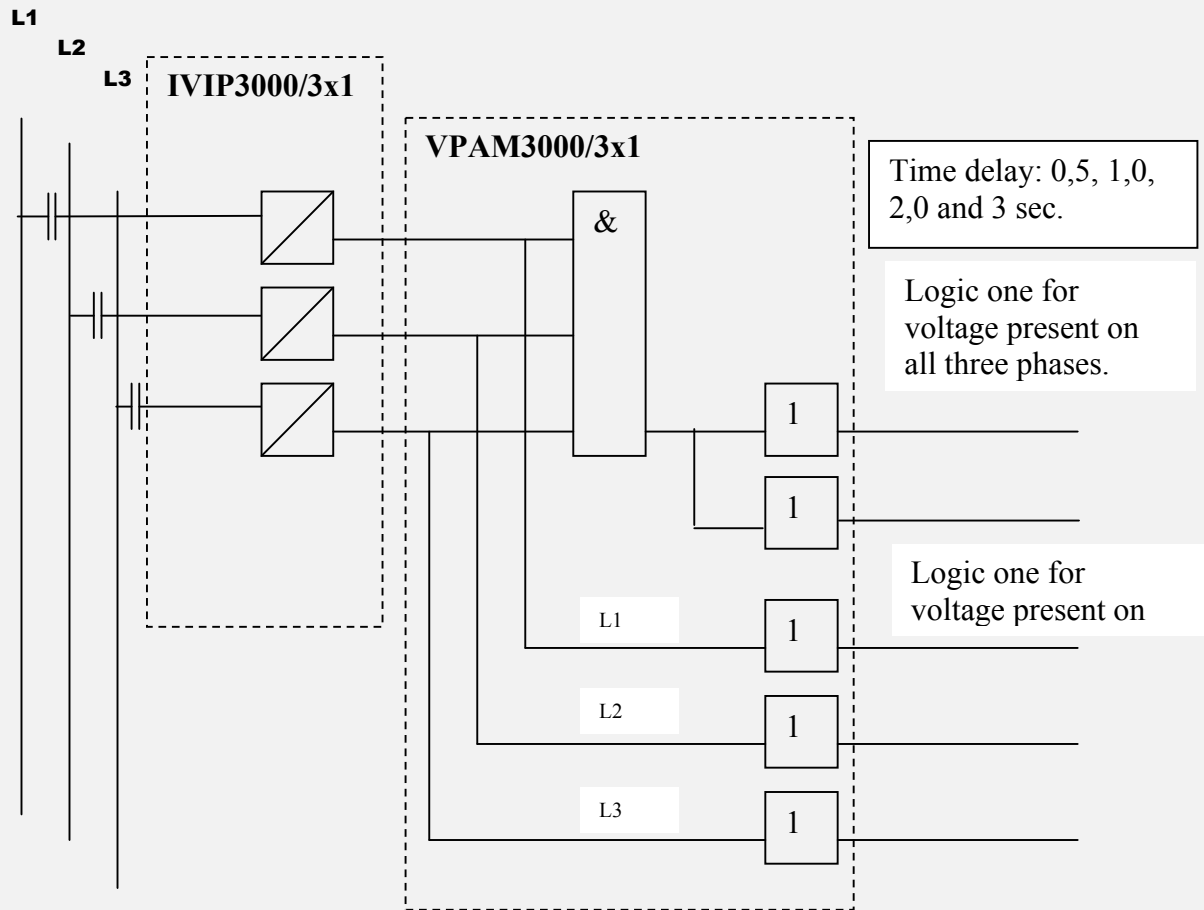
- Two of digital outputs indicating voltage present on all three phases. Both outputs are digital high when voltage is present on all three phases, and digital low if voltage is absent on one or more phases. Output can be set with various time delay.
- Has one digital output pr. phase. Output is digital high when voltage is present n at actual phase.



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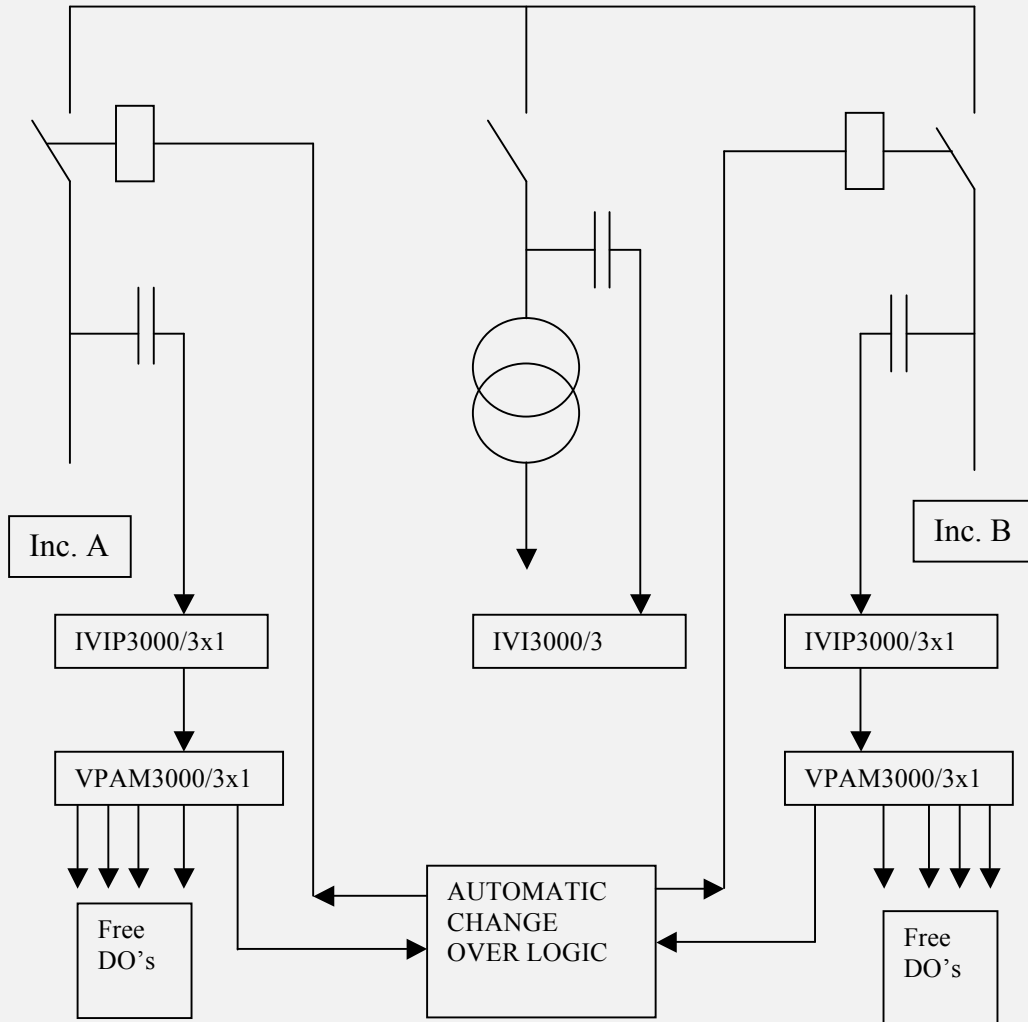
LOGIC DIAGRAM

IVIP3000/3X1 & VPAM3000/3X1

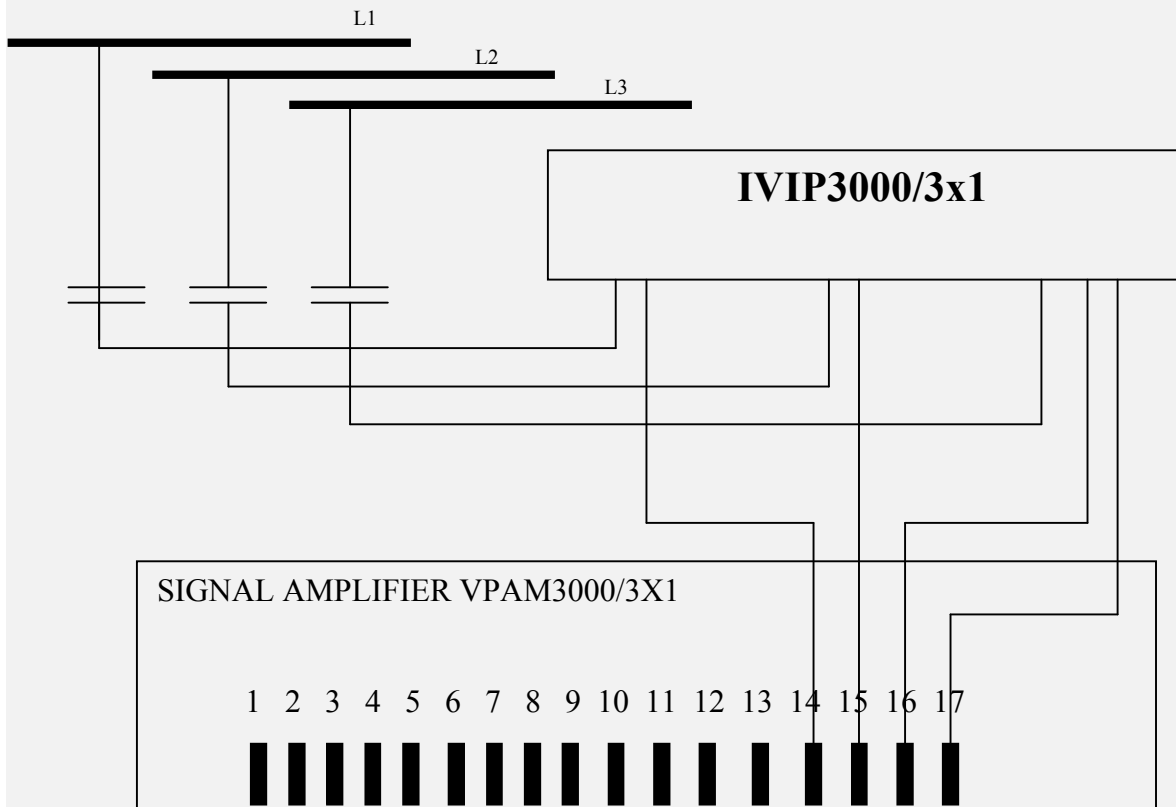


24VDC external supply voltage.
Utility power consumption - 10mA.

Typical RMU with System 3000 Voltage Detection System



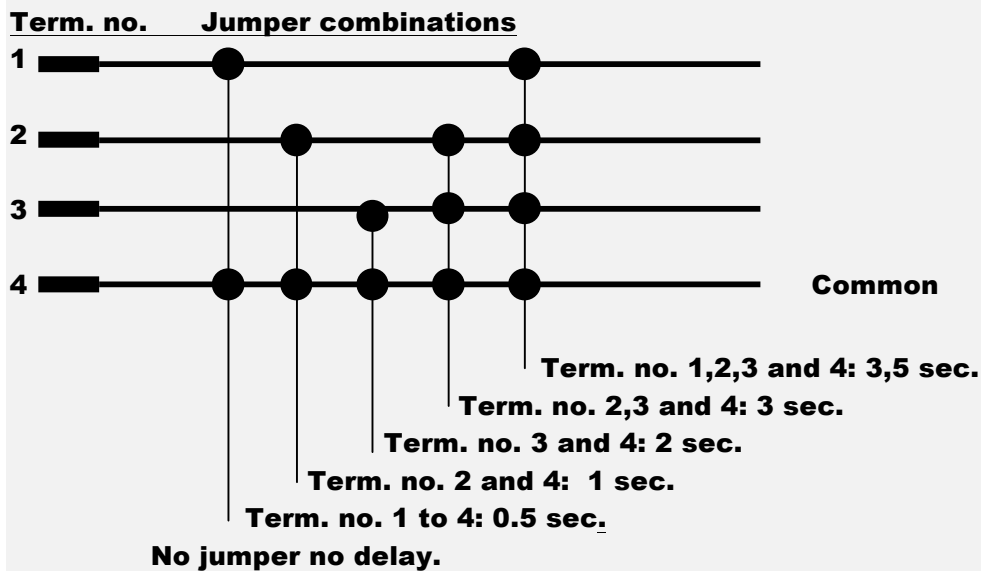
Circuit diagram. **IVIP3000/3x1 and VPAM3000/3x1.**



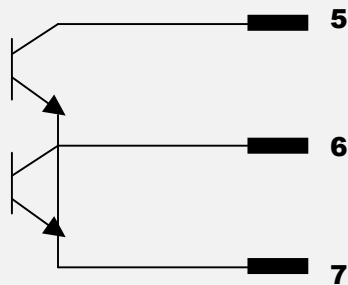
Connection table:

Term. no.	Signal description
1	Time delay
2	Time delay
3	Time delay
4	Time delay (common)
5	Voltage present all three phases
6	Voltage present all three phases
7	Voltage present common
8	Voltage present on L1
9	Voltage present on L2
10	Voltage present on L3
11	Common for signal on terminal 8,9 and 10
12	+24VDC supply
13	0VDC supply
14	Phase L1 from IVIP3000/3x1
15	Phase L2 from IVIP3000/3x1
16	Phase L3 from IVIP3000/3x1
17	Common for signal on terminal 14,15 and 16

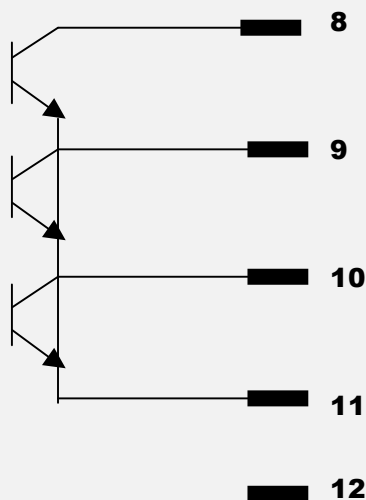
VPAM3000/3x1 Signal amplifier selectable time delay table.



VPAM3000/3x1 Signal amplifier digital output.



Signal logic high when voltage present in all three phases.
 This signals can be set with selectable time delay.

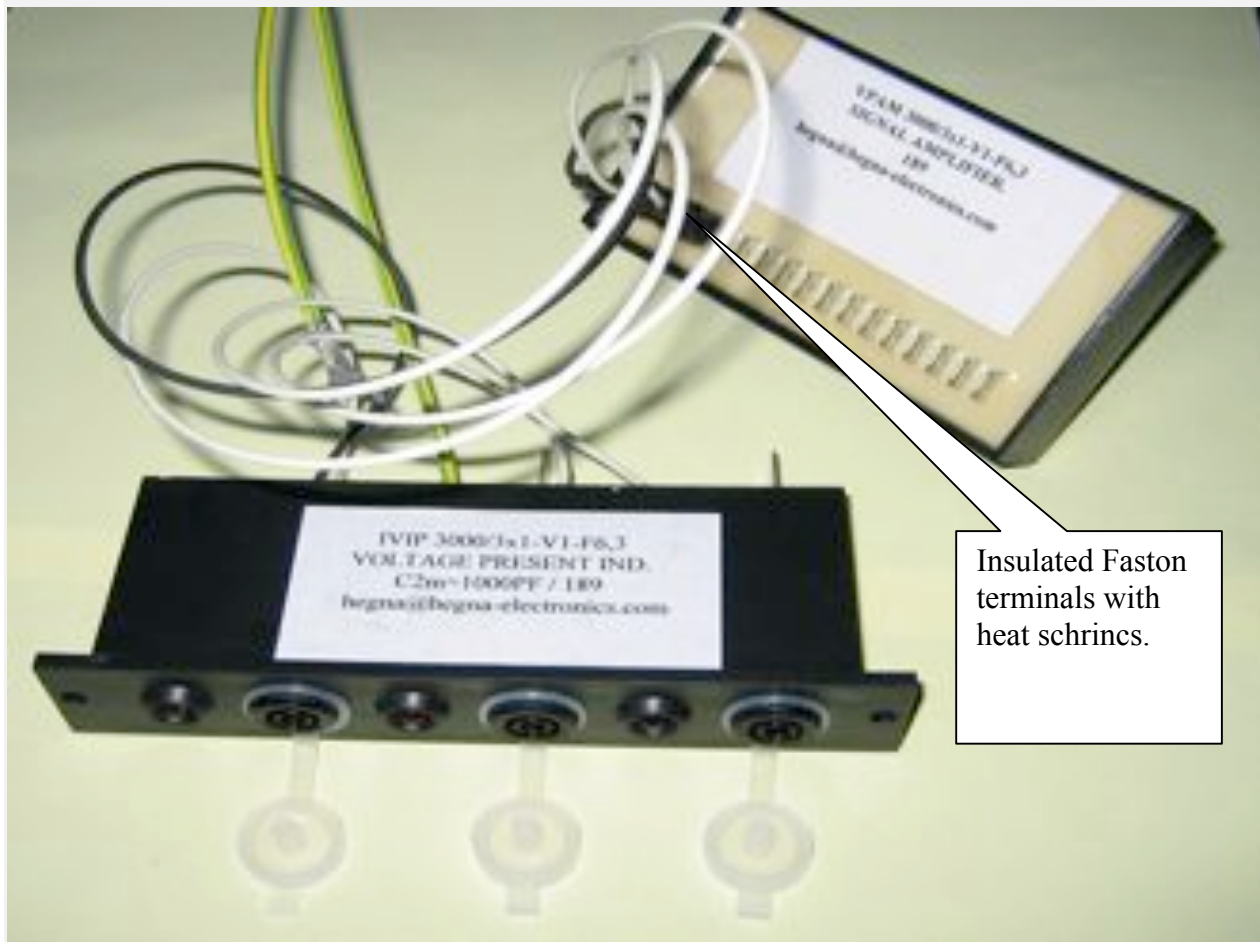


Individual signal pr. phase. Logic high when voltage present on phase.
 No selectable time delay

Terminal 12: 24VDC Supply

Terminal 13: 0 VDC Supply

IVIP3000/3X1 and VPAM3000/3X1

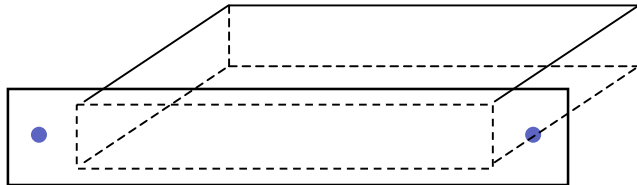


Insulated Faston terminals with heat schrincs.

Fixing and cut out detail for – IVIP3000/3x1 / IVIP3000/3 /IVI3000/3.

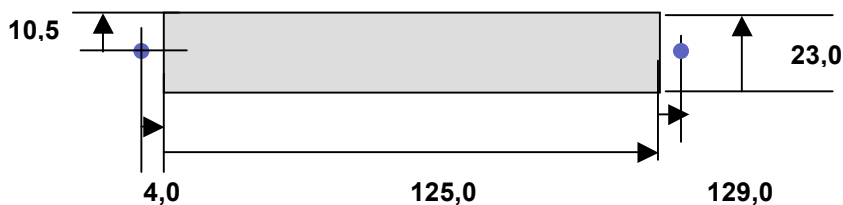
■ Weight: 0,2 kg. Fixing: 2 off M3 screws

Dimensions:



- With 138 mm
 - Height 26,3mm
 - Dept 44mm
- $\varnothing=3,4$

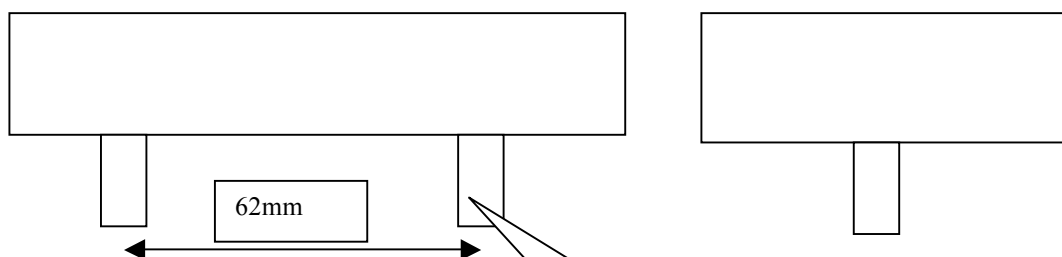
Cut-out:



Fixing detail for – VPAM3000/3x1.

■ Weight: 0,15 kg. Fixing: 2 off M6mm screws

Dimensions:



- With 100 mm
- Height 28mm
- Dept 60mm

Two of M6 x 22mm
Nylon bolt.