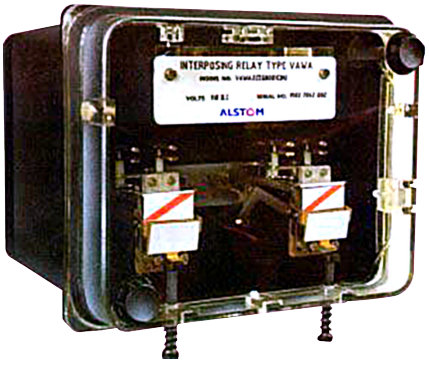
VAWA

Interposing Relay



VAWA relay is used for remote control of switchgear and associated equipment via long private pilot wires. The relay does not operate on induced AC voltages and its high pick up current enables it to be used with anti-corrosion negative potential biasing devices.

Features

- Immune to operation on induced ac voltages.
- Simple and robust construction.
- Heavy duty contacts when required.

General description

Type VAWA relay is basically an attracted armature relay of simple and robust construction. It is fitted with a tubular copper slug in the coil assembly which prevents its operation on induced ac voltages in long private pilot wires. Its high pickup current enables it to be used with anti-corrosion negative potential biasing devices.

Coil rating

50 volts dc standard.

24V, 30V, 110V, 220V dc coils are also available

.

The relays operate satisfactorily between 80% and 120% of rated voltage.

Operating current

Not less than 25 milliamps.

Resetting current

Not less than 15 milliamps.

Pilot resistance

The maximum pilot loop resistance allowable for relay operation at 44V is 200 ohms.

AC rejection voltage

The relay will not operate with 110 volts 50 Hz applied to its coil.

Operating times

The operating time of the relay varies with applied voltage and pilot resistance. For 50V coil with 200 ohms pilot resistance.

Minimum: 30 ms with 56V dc applied.
Maximum: 110 ms with 44V dc applied.

Operating time for four contact arrangement can increase by upto 25 ms.

Burdens

On request, the relay can be fitted with a hand reset mechanical operation indicator.

Insulation

The relay will withstand 2.5 kV ac r.m.s. 50 Hz for one second between all circuits and the case. It will also withstand 1.25 kV ac r.m.s. 50 Hz for one second between mating contacts in open position.

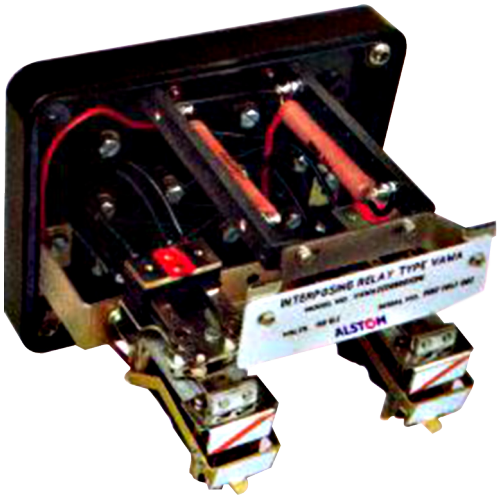
Customer Benefits

- Simple and robust construction
- Does not operate for induced ac voltages

Contacts

Two pairs, self reset, `make. contacts are fitted as standard.
Alternatively VAWA relay can be supplied having contact arrangements as follows:

Standard contacts		Heavy duty contacts	
Normally open	Normally closed	Normally open	Normally closed
4	-	-	-
3	1	-	-
2	2	-	-
-	-	2	-
-	2	2	-
1	1	2	-
2	-	-	2



VAWA relay with cover removed

Contact ratings

Contact type		Make and carry continuously	Make and carry for 3 seconds	Break
Standard	AC	1250VA with maxima of 5A and 660V	7500VA with maxima of 30A and 660V	1250VA with maxima of 5A and 660V
	DC	1250W with maxima of 5A and 660V	7500VA with maxima of 30A and 660V	100W(resistive) 50W(inductive) with maxima of 5A and 660V
Heavy duty magnetic blowout	DC	2500W with maxima of 10A and 660V	7500VA with maxima of 30A and 660V	3250W maximum

Dimensions and weights

Case size	Maximum number of unit per case	Maximun Number of terminals		Maximum overall dimensions			Approximate gross weight Kg
		Single Kg ended	Double ended	Height mm	Width mm	Depth* mm	
1/4N	1	10		118	105	115	2.0
1/2N Hor	2	12		124	153	130	3.0
1D Vert	3		20	233	170	203	7.0

*Add 76 mm for maximum length of terminal studs, alternatively, 29 mm for terminal screws.
The approximate gross weights given above are inclusive of cartons, mounting appendages and terminal details.
The relays comply fully with the requirements of IS 3231-1965 and are suitable for use in tropical environments.

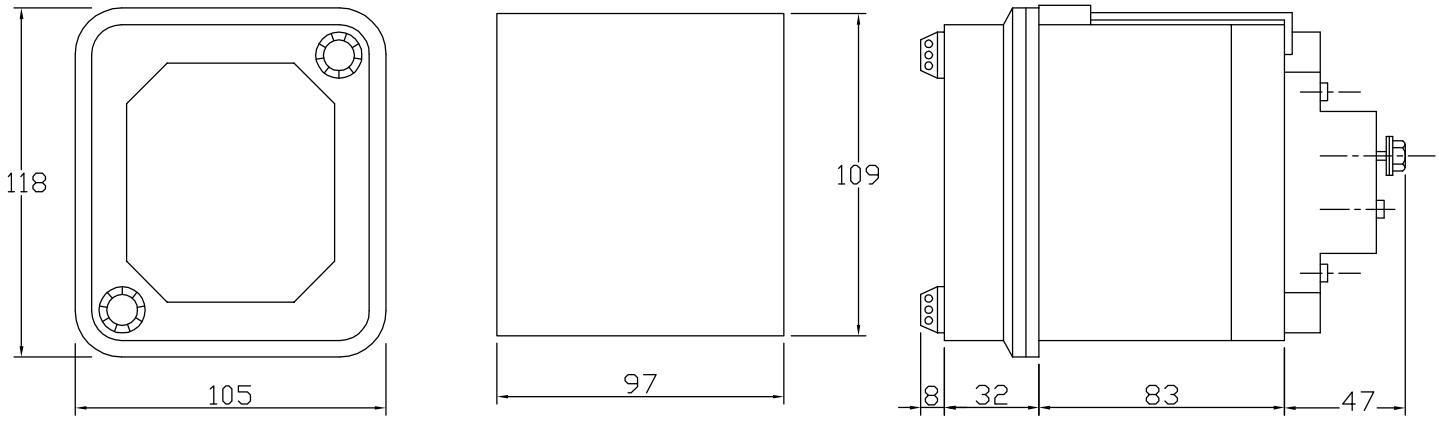


Figure 1 : Case and panel cut-out dimensions for case 1/4N (all dimensions in mm)

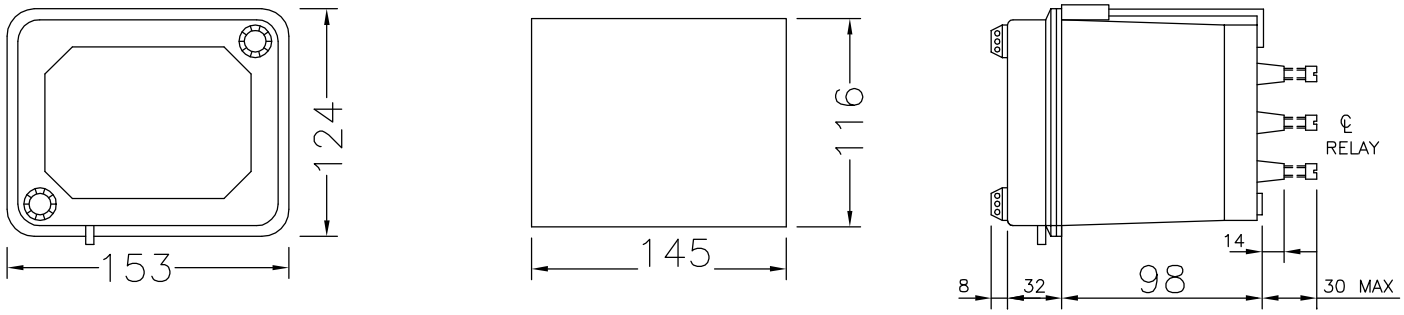


Figure 2 : Case and panel cut-out dimensions for case 1/2N (all dimensions in mm)

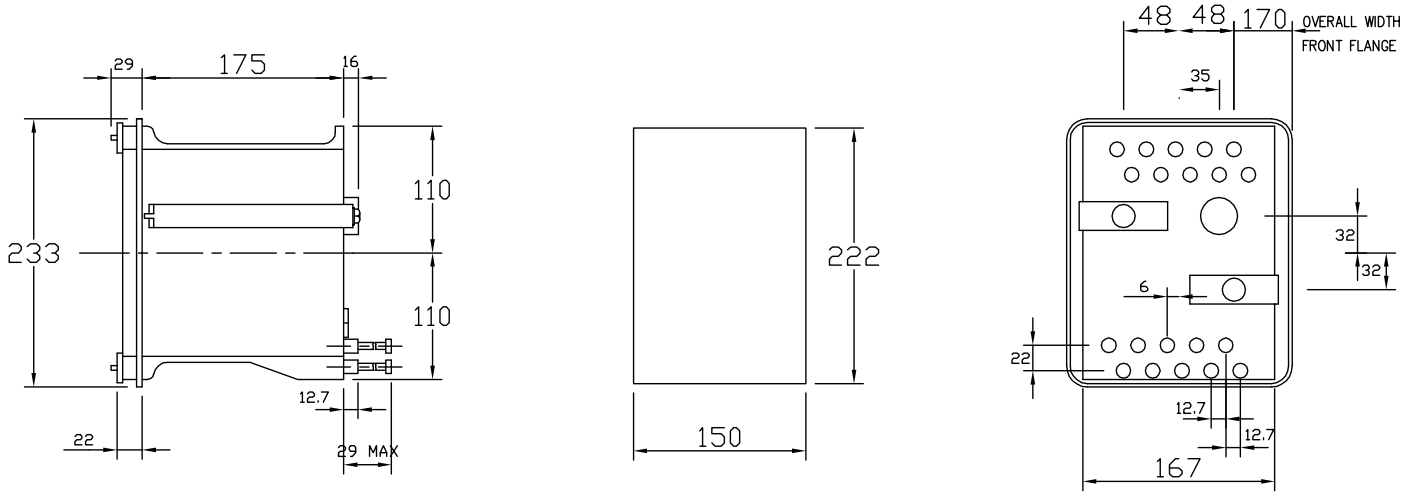


Figure 3 : Case and panel cut-out dimensions for case 1D (all dimensions in mm)

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