



# RELAY IDENTIFICATION

All GEC Measurements relays bear an identification or model number and a serial number which must be quoted with all relative after-sales correspondence.

The model number of standard relays is contrived as follows:

**Example CMM42PF3A5**

C M M 4 2 P F 3 A 5

a b c d e f g h j

**a. OPERATING QUANTITY**

- A Phase angle comparison
- B Balanced current
- C Current
- D Differential
- E Direction
- F Frequency
- G Gauss
- I Directional current
- K Rate of rise of current
- M Manual
- O Oil pressure
- P Polyphase volt-amperes
- R Reactive volt-amperes
- S Slip frequency
- T Temperature
- V Voltage
- W Power
- X Reactance
- Y Admittance
- Z Impedance

**b. BASIC MOVEMENT**

- A Attracted armature
- B Buchholz
- C Induction cup
- D Induction disc
- G Galvanometer
- I Transactor
- J Mixed types
- M Sensitive balanced armature
- P Plug
- R Rectifier
- S Synchronous motor
- T Static circuit
- W Weight or gravity

**c. INDICATION OF APPLICATION**

- A Auxiliary
- B Testing
- C Carrier or counting
- CB Capacitor bank
- D Directional
- E Earth
- EF Earth fault
- F Flag or indicator
- G General or generator
- GF Generator field
- H Harmonic restraint
- I Interlocked or industrial
- IG General or generator (instantaneous)
- J Tripping
- JE or JX Tripping (Elec-reset)
- JH or JY Tripping (Hand-reset)
- JA, JS or JZ Tripping (Self-reset)
- JB Control (Tripping)
- K Check alarm
- L Load limiting
- M Motor or semaphore
- N Negative phase sequence
- O Out-of-step
- P Potential or fuse failure
- Q Alarm
- R Reclosing
- S Synchronising
- T Transformer or timer
- U Definite time
- V Voltage control
- W Pilot wire
- WA Interposing auxiliary
- WJ Intertripping
- X Supervisory
- Y Flashback or backfire
- Z Special application
- ZS Zero phase sequence

**d. NUMBER OF UNITS**

The first number indicates the number of relay units, excluding seal in and reinforcing auxiliary units.

For example, the CMM42 relay consists of a thermal overcurrent unit, an instantaneous overcurrent unit, an earth fault unit and an instantaneous unbalance unit.

A triple pole overcurrent relay has the number 3.

#### e. CHARACTERISTIC

The second number indicates the particular characteristic of one of a group of relays. For example CMM41 and CMM42 relays are of the same type and composition but differ in their time delay characteristics.

#### f. CASE SIZE

A	Size 1 drawout single ended	10 terminals
B	Size 1 drawout double ended	20 terminals
C	Size 2 drawout single ended	10 terminals
D	Size 2 drawout double ended	20 terminals
E	Size 3 drawout single ended	10 terminals
F	Size 3 drawout double ended	20 terminals
L	Size ½ non-drawout (type VAK relay)	12 terminals
N	Size ½ drawout single ended	10 terminals
P	Size 1½ drawout single ended	10 terminals
R	Size 1½ drawout double ended	20 terminals
S	Size 1½ drawout double ended	40 terminals
T	Size 4½ drawout single ended	30 terminals
U	Handle-lock plug-in	
Y	Size ¼ moulded non-drawout	10 terminals
Z	Size ½ moulded non-drawout	12 terminals

#### g. CASE MOUNTING

F	Flush vertical	P	Projecting vertical
G	Flush horizontal	R	Projecting horizontal

#### h. IDENTIFICATION

This may be one or more numbers or letters and enables our engineers to identify rating, contact arrangement etc.

#### j. SUFFIX

Some relay types, for example auto reclose relays (VAR82A, VAR82B etc.), vary only in detail and are identified by a suffix letter.

Where applicable this identification is given on the data sheet. Otherwise the last letter must be regarded as part of the identification **h** above.

Where the last digit is a number 5 or 6, this indicates a relay specifically for use on a 50 or 60 Hz supply, respectively.

#### DISTANCE PROTECTION SCHEMES

An exception to the rule are distance schemes, which have a group of prefix letters to identify type, measurement etc.

Mho or reactance measurement is indicated by the initial letter 'M' or 'R' respectively and, where two initial letters are used, the first refers to phase faults and the second to earth faults. For switched schemes the initial letter is preceded by 'S' or 'SS'. The digit denotes the number of time distance steps and the final letter 'V' or 'T' indicates that the scheme is electromagnetic or static in operation, respectively. For example, MR3V indicates a three-step electromagnetic distance scheme with three mho type measuring units for phase faults and three reactance type measuring units for earth fault.

#### SPECIAL

Instead of a type number (CMM42), special relays are prefixed by the letters SPEC, followed by one or more numbers or a combination of numbers and letters. This number can only be interpreted by our engineers.

Our policy is one of continuous product development and the right is reserved to supply equipment which may vary slightly from that described.

**GEC Measurements**

The General Electric Company Limited of England

St. Leonards Works Stafford ST17 4LX England

Telephone: 0785 3251 Telex: 36240 Cables: Measurements Stafford Telex