



# INSTRUCTIONS

GEK-27890  
INSERT BOOKLET GEH-1753

## TIME OVERCURRENT RELAYS

TYPES

IAC70A

IAC70B

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**POWER SYSTEMS MANAGEMENT DEPARTMENT**

**GENERAL  ELECTRIC**

GEK-27890

NOTES

TIME OVERCURRENT RELAYS  
TYPE IAC

INTRODUCTION

These instructions are a supplement to instruction book GEH-1753 which is included in this book. The combination of the two forms instructions for the Type IAC70A and IAC70B relays.

The Type IAC70A and IAC70B relays are similar to the Type IAC52A and IAC52B relays respectively except that some of the parts of the latter have been altered to give the former very long time operating characteristics. Time-current curves are shown in Figure 1.

APPLICATION

The long time curve relays are used primarily for motor protection against overloads. The application requires coordination to insure against false tripping on motor starting currents and still provide adequate protection against motor overloads. The usual setting for pick up is 125 to 150 percent of the motor rating

When an instantaneous overcurrent unit is also used, its pickup must be higher than the maximum momentary motor inrush current with an adequate margin such as 50% or more.

RATINGS

The tap values and coil ratings for these relays are given in the following table.

TABLE I

RELAY RANGE	CONTINUOUS CURRENT * (AMPS)	SHORT-TIME CURRENT (1 SEC.) (AMPERES)	TAP VALUES (AMPS)
0.6/1.2	3	75	0.6, 0.7, 0.8, 0.9, 1.0, 1.1, 1.2
1.5/3	5	215	1.5, 1.7, 1.9, 2.1, 2.4, 2.7, 3.0
2.5/5	5	260	2.5, 2.8, 3.1, 3.5, 4.0, 4.5, 5.0
4/8	10	390	4.0, 4.5, 5.0, 5.6, 6.3, 7.1, 8.0

\* Continuous rating of relays having instantaneous units is the value shown in this column or 1.5 times the minimum setting of the instantaneous unit, whichever is the lower of the two values.

INSTALLATION

The outline and panel drilling dimensions and internal connections for the IAC70A are the same as the IAC52A, while those of the IAC70B are identical with the IAC52B.

*These instructions do not purport to cover all details or variations in equipment nor to provide for every possible contingency to be met in connection with installation, operation or maintenance. Should further information be desired or should particular problems arise which are not covered sufficiently for the purchaser's purposes, the matter should be referred to the General Electric Company.*

*To the extent required the products described herein meet applicable ANSI, IEEE and NEMA standards; but no such assurance is given with respect to local codes and ordinances because they vary greatly.*

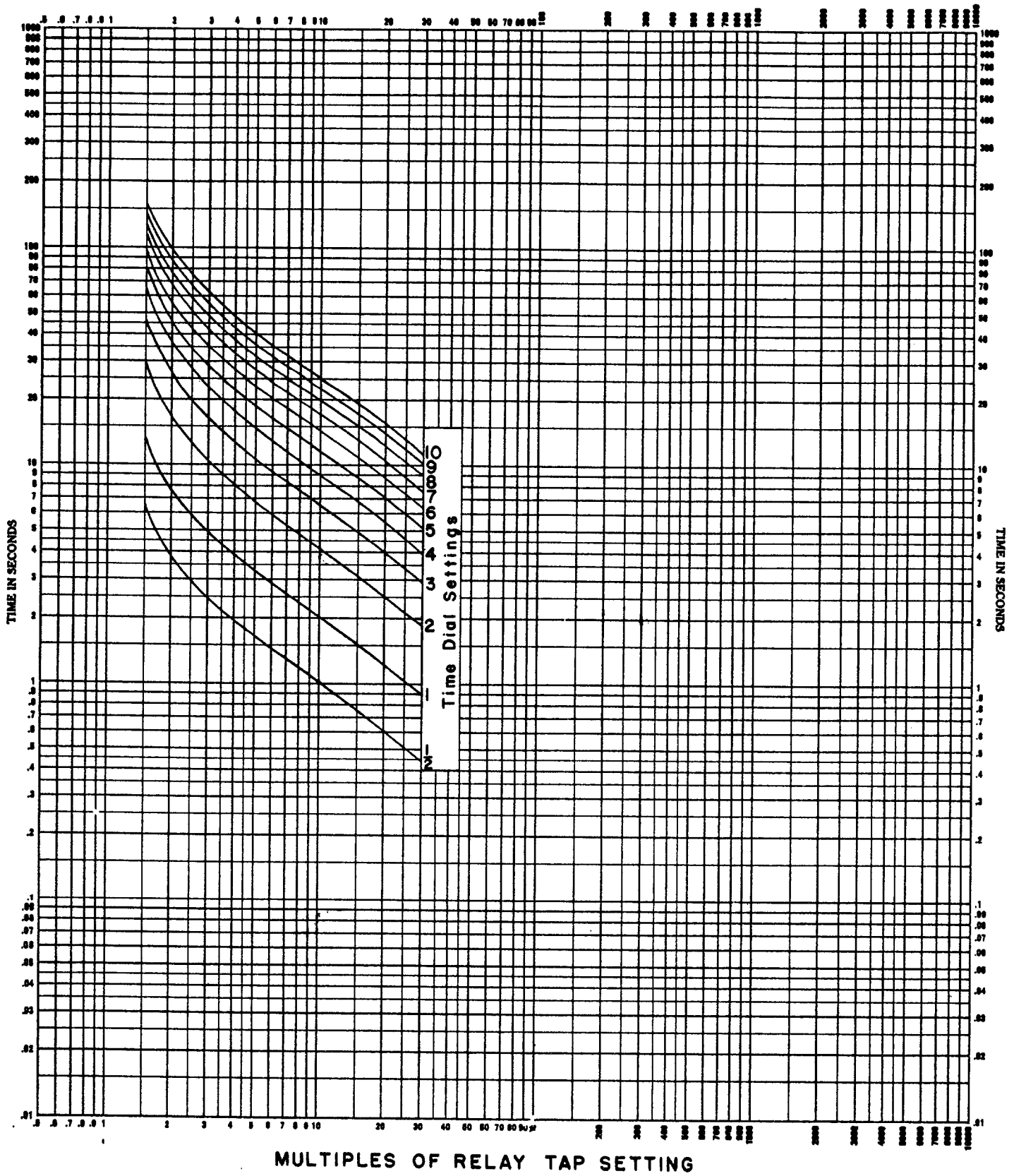


FIG. 1 (0888B0273-0) TIME CURRENT CHARACTERISTICS FOR IAC70A, IAC70B RELAYS