



INSTRUCTIONS

GEK-86058
Insert Booklet GEK-49849

GROUND DIRECTIONAL OVERCURRENT RELAY

TYPE JBCG

MODEL 12JBCG99G(-)Y1A

INTRODUCTION

This instruction book, together with insert booklet GEK-49849, forms the instructions for the 12JBCG99G(-)Y1A relays.

DESCRIPTION

The 12JBCG99G(-)Y1A relay is similar to the 12JBCG51M(-)Y1A relay, except with units and ratings as follows:

RELAY MODEL	VOLTS	FREQ'CY	T/SI	INST (IOC) DIR CONTROLLED	INST (IOC) NON-DIR CONTRLD	TOC
12JBCG99G1Y1A	120	60	0.6/2 A	10-80 A	2-50 A	2-16 A

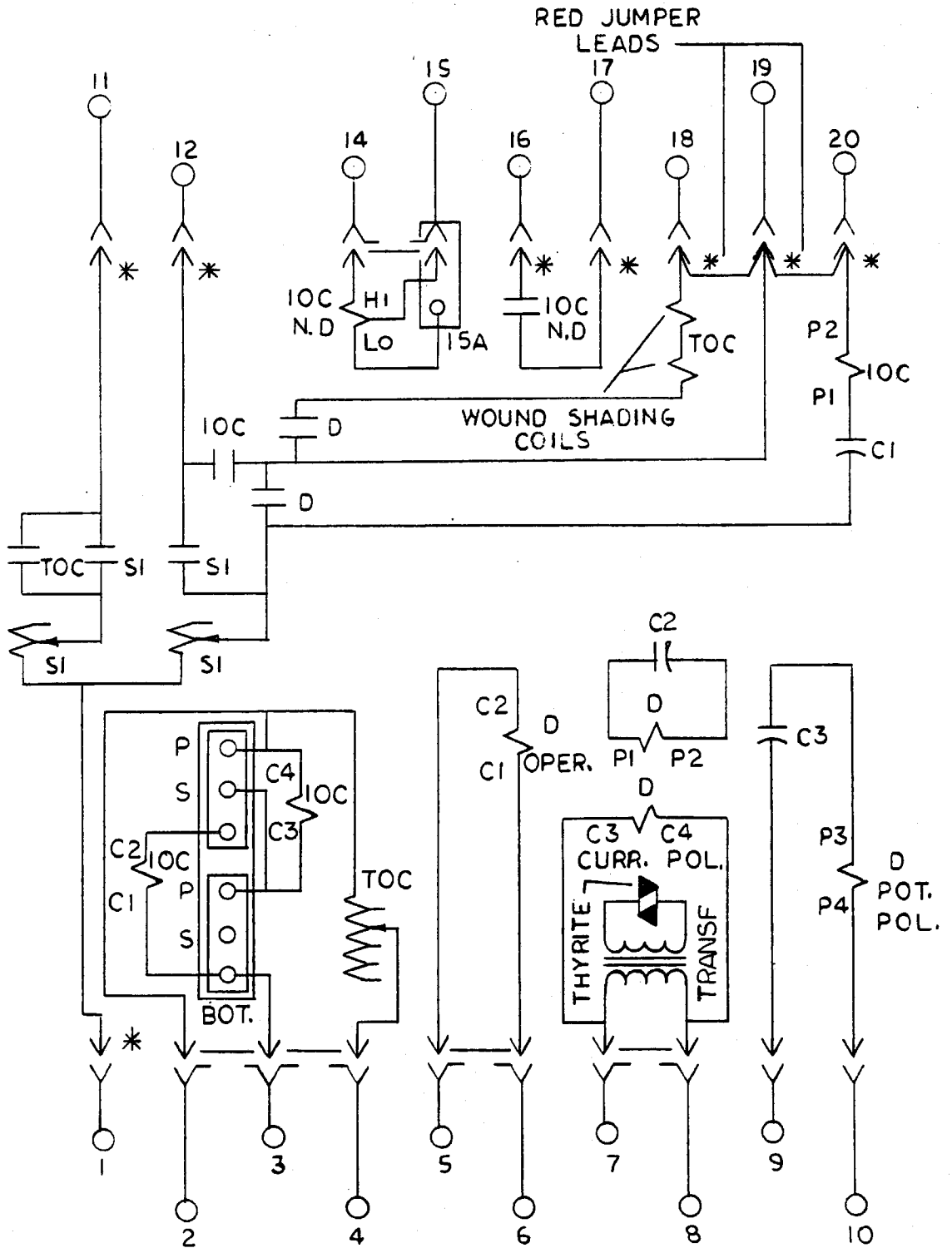
The instantaneous (IOC) directional controlled unit pickup setting is obtained in two steps with a multiplier tap next to the unit. With the tap in S (series) the pickup range is ten to 40 amperes, adjustable with the control spring. With the tap in P (parallel) the pickup range is 20 to 80 amperes, also adjustable with the control spring.

The instantaneous (IOC) non-directional controlled, has two pickup ranges obtained by using a tapped coil. With the beginning (B) and ending (E) leads connected to terminals 14 and 15, the unit is set for the lower pickup, two to ten (plus) amperes. Reverse the coil leads, tap (T) and ending (E) leads on terminals 15 and 15A to obtain the higher range of less than ten amperes up to 50 amperes. Besides the lead connections, the in between pickups of any one range are obtained by adjusting the core on the top of the unit.

Figure 1 (0257A6196-1) is the internal connection diagram for the 12JBCG99G(-)Y1A relay.

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.



IOC - INSTANT. OVERCURRENT UNIT (TOP)
 TOC - TIME OVERCURRENT UNIT (MID.)
 D - DIRECTIONAL UNIT (BOT.)
 SI - SEAL-IN UNIT
 IOC-ND - INSTANT. OVERCURRENT UNIT NON-DIRECT. (MID.)

* = SHORT FINGER

Figure 1 (0257A6196-1) Internal Connections Diagram for the 12JBCG99G(-)Y1A Relay