

## Chapter 2

### ROTARY INVERTER, TYPE 153A (ROTAX S3107/1)

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#### LEADING PARTICULARS

<b>Inverter, Type 153A</b> ... ..	Ref. No. 5UB/6730
<i>Input</i> ... ..	100 to 116V d.c., 14 amp.
<i>Output</i> ... ..	115V, 3-phase, a.c., 4.7 amp., 400 c/s
<i>Rating</i> ... ..	Continuous
<i>Speed</i> ... ..	8,000 r.p.m.
<i>Rotation (viewed from commutator end)</i> ...	Clockwise
<i>Maximum operational altitude</i> ... ..	50,000 ft. (fan and blast cooled)
<i>Operative temperature range</i> ... ..	-55 deg. C to +50 deg. C
<i>Output connection (4-pole Mk. 4 miniature plug)</i> ... ..	Ref. No. 10H/9560310
<i>Control panel interconnection (12-pole Mk. 4 miniature plug)</i> ... ..	Ref. No. 10H/9560150
<b>Brush grade—</b>	
<i>d.c. input</i> ... ..	F2C (Ref. No. 5UB/6729)
<i>a.c. output</i> ... ..	KC.CM6 (Ref. No. 5UB/6486)
<b>Brush spring pressure—</b>	
<i>d.c. input</i> ... ..	15.5 to 17 oz.
<i>a.c. output</i> ... ..	4 to 5 oz.
<b>Minimum brush length—</b>	
<i>d.c. input</i> ... ..	0.375 in.
<i>a.c. output</i> ... ..	0.375 in.
<b>Weight</b> ... ..	30 lb.

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<i>0.8 lagging power factor, frequency 400 cycles per second</i>	
<i>Rating</i> ... ..	continuous
<i>Speed</i> ... ..	8,000 r.p.m.
<i>Rotation (viewed from commutator end)</i> ...	clockwise
<i>Maximum operational altitude</i> ... ..	50,000 ft. (fan and blast cooling)
<i>Operative temperature range</i> ... ..	-55 to +50 deg. C.
<b>Electrical connections</b>	
<i>Input</i> ... ..	2 split terminals
<i>Output (3-pole miniature Mk. 4 plug)</i> ...	Ref. No. 10H/9560060

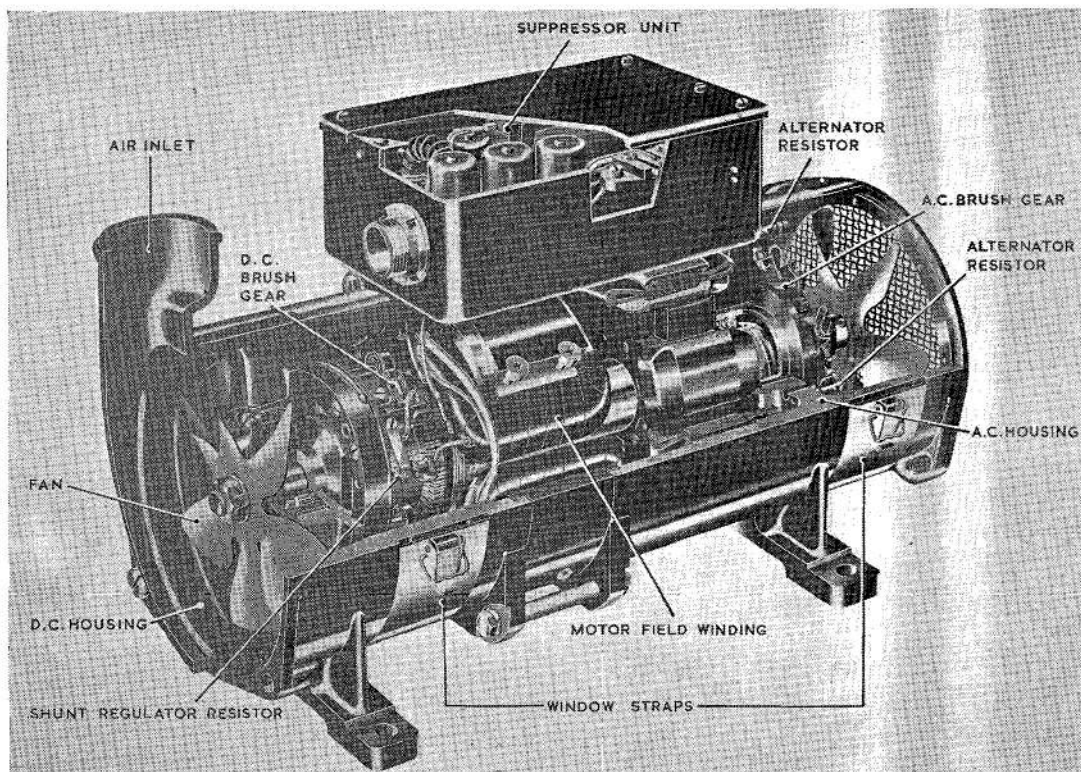


Fig. 1. Part sectioned Type 153 inverter

**Introduction**

1. The Type 153 inverter is used in conjunction with the control panel, Type 19, or with panels Type 19 and 25, to provide

Sect. 8, Chap. 2, App. I. The Type 153 inverter (fig. 1) follows the same general construction but has two shunt field ballast resistors mounted on the brush-gear and four rotor

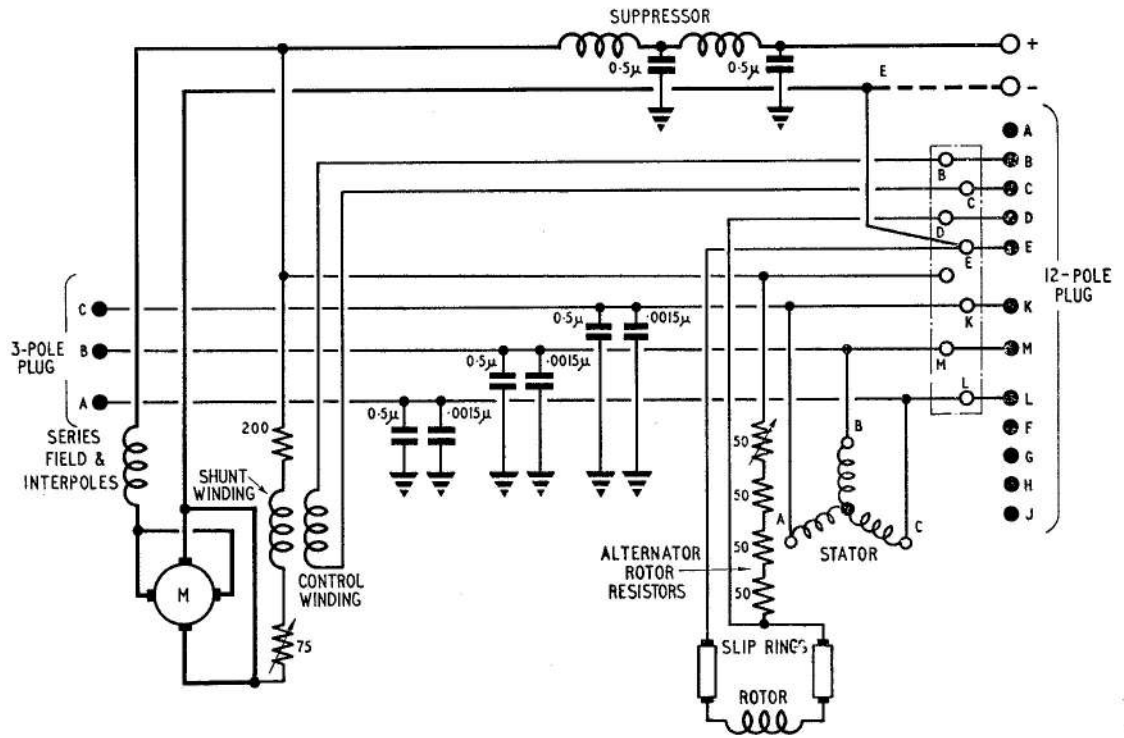


Fig. 2. Diagram of internal connections

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