CONTROL BOXES MODELS RB310 AND RB311

SOME 12-VOLT UNITS HAVING SPECIAL VOLTAGE SETTINGS

Part No.	Associated Generator	Voltage Setting (volts)	Setting Speed (r.p.m.)	Current Setting (amp.)	Setting Speed (r.p.m.)	V.R. Core Gap (in.)	C.R. Core Gap (in.)	V.R. Bi-metal Thickness (in.)
37298 (37204)* 37313 (37203)*	C39PVR–2	15.4–15.7†	3000	24 ±1	4000	0.018	0.018	0.012
37305 (37295)* 37306 (37275)* 37320 37323	C45PV–5 (uprated)	14.2–14.8	3000	30 ±1½	4000	0.021	0.021	0.010
37195	C47	14.8–15.1	1500	30 ±1½	4000	0.021	0.021	0.010
37208	C47	14.5–14.8†	1500	30 ±1½	4000	0.021	0.021	0.012
37308 (37226)* 37310 (37255)*	C47	14.2–14.8	1500	30 ±1½	4000	0.021	0.021	0.010
37277	C48	14.8–15.1	1500	34 ±1½	4000	0.021	0.021	0.010
37285	C48	14.5–14.8†	1500	34 ±1½	4000	0.021	0.021	0.012
37301 (37288)* 37341	C48	14.2–14.8	1500	34 ±1½	4000	0.021	0.021	0.010
37343	G5–12	14.9–15.5†	2000	24½ ±½	3000	0.026	0.026	0.012

*Where a second Part No. (in brackets) is given, this indicates an earlier unit having identical electrical characteristics as the unit preceding it in the table but which had a symmetrically flanged, reversible cover secured with a pair of pointed 2BA screws. Present covers are secured with two short self-tapping screws, asymmetrically disposed to give non-reversibility.

Please see overleaf for second footnote (†), *etc.*

†These settings apply only when the ambient temperature, and that of the voltage regulator shunt winding, is at approximately 20°C. (68°F.). The voltage regulator in the units concerned is temperature compensated with 0.012" thick bi-metal giving a drooping voltage-temperature characteristic. Therefore, when checking or setting at temperatures other than 20°C., the settings given in the table must be corrected as follows :—

For every 10°C. (18°F.) **above** 20°C., **subtract** 0.2-volt.

For every 10°C. **below** 20°C., **add** 0.2-volt.

Note : Voltage regulators fitted with bi-metal springs of 0.010" thickness have a level voltage-temperature characteristic. As indicated in the footnote on page 3 of Section F–4 Issue 2, this means that no correction has to be made to the voltage specified when making or checking settings at temperatures other than 20°C.

IDENTIFICATION OF BI-METAL SPRINGS

Hitherto, bi-metal springs of 0.012" thickness were bright and unplated while 0.010" springs were copper plated. Springs of both thicknesses are now bright and unplated. The two can be distinguished by reference to a radiused projection, about $\frac{1}{16}$" in length, situated below one of the two rivets by which the springs are secured to the armature. When viewed from the bobbin side, the projection is below the right-hand rivet of 0.012" springs and below the left-hand rivet of 0.010" springs.

It should be noted, however, that bright unplated springs of 0.012" thickness were fitted in 1959–60 which did not carry the distinguishing projection.