

Continental Type 420C 500 KW Transmitter Capacitor Replacement Guide

The Continental Type 419G/420C Transmitters are versatile, state-of-the-art, high efficiency 300 kW / 500 kW shortwave transmitters capable of being operated in standard amplitude modulation, controlled carrier-level modulation or single side band service. The 419G/420C employs the highly reliable RF sections of its predecessors.



Introduction:

EWTN International Shortwave Broadcaster was tired of premature failures and water leaks of the factory installed capacitors. EWTN asked Comet to initiate a study to identify replacement capacitors for their four Continental Type 420C Transmitters.

Scope:

It was critical to EWTN to minimize changes required to their transmitters.

Application:

EWTN has converted two transmitters and continues to exchange capacitors as they fail. Continental has verified these replacement types and is using these capacitors in all new production.

Responsibilities:

Since differences can occur over time in specific installations, it is always recommended to verify replacements in your application.

Recommended Capacitors:

- CF5C-260E/70
- CV3C-25E/60
- CV4W-1600F/60
- CV4W-2050E/50
- CV3W-650R/50
- CV3W-1600E/40
- CF2C-12G/35
- CF3C-18E/50

Similar Transmitters:

These capacitors are also applicable to Continental Type 420B and 419G transmitters. Please check with Comet or Continental if you have any questions.

Continental Type 420C Transmitter

Manufacturer Description	Qty	Original Capacitor	Replacement Capacitor	Additional part or changes required
Coupling	1	CGF1-260-0050	CF5C-260E/70	None
Neutralization	1	CTV4-18-0060	CV3C-25E/60	Slotting mounting holes required to accommodate slightly smaller bolt circle.
PA Primary Tune	1	CWV1-1600-0060	CV4W-1600F/60	Continental Installation Kit #175967 and new capacitor pan (drawing available)
PA Secondary Tune	1	CWV4-2050-50	CV4W-2050E/50	None
T-Network	1	CWV2-650-0255	CV3W-650R/50	No Fixed-end cooling required
Balun	2	CWv2-1600-0040	CV3W-1600E/40	No Fixed-end cooling required
Input Coil Shunt	2	CKT-12-0035	CF2C-12G/35	None
Output Coil Shunt	2	CFHD-18-50D1782	CF3C-18E/50	None

