

# FM Constant Impedance Combiner



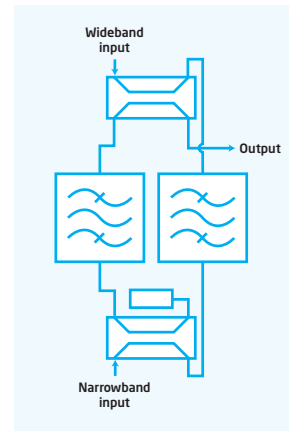
## 30 kW, 3 Pole

### PRODUCT FEATURES

- Flexible modular design
- Low insertion loss
- Retunable
- 700kHz channel spacing

### PRODUCT PROFILE

This balanced FM combiner employing broadband hybrids and FM tunable filters enable the combining of FM transmitters up to 30 kW with a total output power of up to 180 kW. If you have demands on low losses with close frequency allocation this is the right product.



Data in tables is typical. The combiner can be tuned for other specifications or bandwidths, please contact us for a specification designed for your requirements.

All average power values and technical data refer to an ambient temperature of +20-25 °C with normal air flow. The product will have a maximum surface temperature of +60 °C. Maximum power capacity may be lower depending on channel allocation.

ARTICLE	CI23C53A-00BB444	CI23C53B-00BB444	CI23C53A-00BC466	CI23C53B-00BC466
FREQUENCY	87 - 108 MHz	87 - 108 MHz	87 - 108 MHz	87 - 108 MHz
IMPEDANCE	50 Ohm	50 Ohm	50 Ohm	50 Ohm
<b>NARROWBAND INPUT</b>				
MAXIMUM INPUT POWER	25 kW	30 kW	25 kW	30 kW
INPUT VSWR	<1.07 (>30 dB)	<1.07 (>30 dB)	<1.07 (>30 dB)	<1.07 (>30 dB)
INPUT CONNECTOR	4 1/2" unflange	4 1/2" unflange	4 1/2" unflange	4 1/2" unflange
<b>INSERTION LOSS</b>				
Centre frequency	<0.35 dB	<0.35 dB	<0.35 dB	<0.35 dB
±100 kHz	<0.35 dB	<0.35 dB	<0.35 dB	<0.35 dB
<b>WIDEBAND INPUT</b>				
INPUT VSWR	<1.07 (>30 dB)	<1.07 (>30 dB)	<1.07 (>30 dB)	<1.07 (>30 dB)
INPUT CONNECTOR	4 1/2" unflange	4 1/2" unflange	6 1/8" unflange	6 1/8" unflange
<b>INSERTION LOSS</b>				
±0.8 MHz	<0.15 dB	<0.15 dB	<0.15 dB	<0.15 dB
±1.5 MHz	<0.10 dB	<0.10 dB	<0.10 dB	<0.10 dB
<b>ISOLATION AND CHANNEL SPACING</b>				
NARROWBAND - WIDEBAND	>36 dB	>36 dB	>36 dB	>36 dB
<b>WIDEBAND - NARROWBAND</b>				
±0.8 MHz from narrowband Cf	>50 dB	>50 dB	>50 dB	>50 dB
±1.5 MHz from narrowband Cf	>65 dB	>65 dB	>65 dB	>65 dB
<b>MIN CHANNEL SPACING</b>				
Lower spacing on request	0.8 MHz	0.8 MHz	0.8 MHz	0.8 MHz
<b>OUTPUT</b>				
MAXIMUM OUTPUT POWER	90 kW	90 kW	180 kW	180 kW
OUTPUT CONNECTOR	4 1/2" unflange	4 1/2" unflange	6 1/8" unflange	6 1/8" unflange
<b>DIMENSIONS AND WEIGHT</b>				
DIMENSIONS	1660 x 1011 x 1872 mm	1660 x 1011 x 1872 mm	2020 x 1100 x 1770 mm	2020 x 1100 x 1770 mm
L x W x H	(65.4 x 39.8 x 73.7 in)	(65.4 x 39.8 x 73.7 in)	(79.5 x 43.3 x 69.7 in)	(79.5 x 43.3 x 69.7 in)
WEIGHT	525 kg ( 1157 lb)	525 kg ( 1157 lb)	525 kg ( 1157 lb)	525 kg ( 1157 lb)
	Aluminum resonators	Silver plated resonators	Aluminum resonators	Silver plated resonators