## **FM Constant Impedance Combiner**

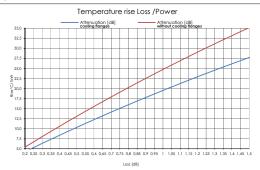
## 6 kW, 3 Pole, Compact



SPECIFICATIONS	110 mm Series	Option
FREQUENCY	87 - 108 MHz	
STANDARD ORDER	3 Poles with heat sink	with temperature compensation, without heat sink
APPLICATION	FM combining & Spurious supress	
IMPEDANCE	50 Ohm	
NB RETURN LOSS (VSWR)	>30 dB (1.07)	
WB RETURN LOSS (VSWR)	>30 dB (1.07)	
MAX OUTPUT POWER RATING**	15 kW rms (1 5/8" output)	
NB INPUT CONNECTOR	1 5/8" unflange	N female/ male, 7/16 female/ male
		7/8" unflange/ flange, 1 5/8" flange
WB INPUT CONNECTOR	1 5/8" unflange	N female/ male, 7/16 female/ male
		7/8" unflange/ flange, 1 5/8" flange
OUTPUT CONNECTOR	1 5/8" unflange	N female/ male, 7/16 female/ male
		7/8" unflange/ flange, 1 5/8" flange
TEMPERATURE STABILITY	≤ 3 kHz / °C	≤ 0.5 kHz / °C
	(without temp. comp.)	(with temp. comp.)
MAX PRODUCT TEMPERATURE	70 °C	
ENVIROMENTAL CONDITION	0 to 70 °C IP40	

DIMENSIONS AND WEIGHT			
DIMENSIONS	475 x 384 x 1124 mm		
LxWxH	(18.7 x 15.1 x 44.3 in)		
WEIGHT	50 kg (110.2 lb)		
STANDARD FRAME	Stand alone		
COLOUR	Black and aluminium		

NB MAX INPUT POWER RATING\*\*



TYPICAL DATA*		STANDARD TUNED	SHARP TUNED	
ARTICLE NO		CI23x11xxxA-EExxx	CI23x11xxxA-EExxx	
NB INSERTION LOSS		'	'	-
Centre frequency		<0.45 dB	<1.25 dB	
Effective passband @ ± 200 KH	z	<0.45 dB	<1.25 dB	
	± 150 KHz	<0.45 dB	<1.45 dB	
	± 200 KHz	<0.45 dB	<1.95 dB	
	$\pm$ 0.6 MHz	>0.7 dB	>20.0 dB	
	$\pm$ 1.0 MHz	>6.0 dB	>33.0 dB	
	$\pm~2.0~MHz$	>22.0 dB	>50.0 dB	
	± 2.5 MHz	>28.0 dB	>55.0 dB	_ T
NB GOUPDELAY VARIATION				
(typical)	± 150 KHz	<6 ns (5 ns)	<215 ns (210 ns)	
	± 200 KHz	<10 ns (8 ns)	<385 ns (380 ns)	
WB INSERTION LOSS				_
	$\pm$ 0.4 MHz	-	<1.05 dB	1124
	± 0.6 MHz	-	<0.35 dB	Ħ.
	± 0.8 MHz	•	<0.20 dB	Maximum height 1124
	± 1.0 MHz	•	<0.15 dB	Ę (
	± 1.5 MHz	<0.35 dB	<0.10 dB	ij
	± 2.0 MHz	<0.15 dB	<0.10 dB	Σ Š
	± 3.0 MHz	<0.10 dB	<0.10 dB	_   `
ISOLATION				
NARROWBAND - WIDEBAND		>36 dB	>36 dB	
WIDEBAND - NARROWBAND @				į
	$\pm$ 1.0 MHz	>42 dB	>69 dB	<u> </u>
	± 1.5 MHz	>51 dB	>79 dB	ò
	$\pm$ 3.0 MHz	>69 dB	>96 dB	



## **Article structure:** ARTICLE: C23C11P0AA-EE111

Combiner Type Frequency band

Number of poles

With/ without temp.comp. C = without temp. comp. K = with temp. comp.

Cavity size

Grade
P = black painted
C = black painted with cooling flanges

Number of cross coupling

Frame

A = Standard frame, 0 = Without frame

Version

Narrowband coupler E = 60mm U-shape

Wideband coupler

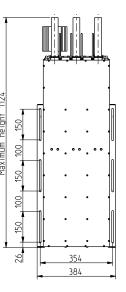
E = 60mm U-shape

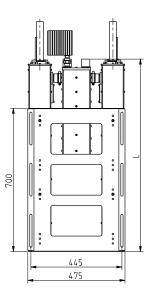
Narrowband connection

Wideband connection

= Output connection C= N female, D= N male A= 7/16 female, B= 7/16 male

7= 7/8" unflange, J= 7/8" flange 1= 1 5/8" unflange, E= 1 5/8" flange





2.0 kW RMS

(1.7 kW without heat sink)

6.0 kW RMS

<sup>(5</sup> kW without heat sink)

<sup>\*</sup> Data in table is typical data. at 100 MHz.The combiner can be tuned for other specifications or bandwidth. Please contact us for a designed specification.

\*\* All average power values and technical data refer to an ambient temperature of +20 °C with normal airflow. The product can have a maximum surface temperature of +70 °C. Maximum power capacity may be lower depending on channel allocation. Data are subjected to change without prior notice.