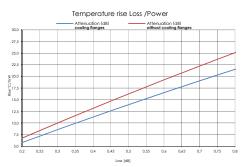
## **FM Constant Impedance Combiner**

## 7 kW, 2 Pole, Compact



SPECIFICATIONS	110 mm Series	Option
FREQUENCY	87 - 108 MHz	
STANDARD ORDER	2 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 278 x 1124 mm		
$L \times W \times H$	(18.7 x 11 x 44.3 in)		
WEIGHT	43 kg (94.8 lb)		
STANDARD FRAME	Stand alone		
COLOUR Black and aluminium			



TYPICAL DATA*		STANDARD TUNED	SHARP TUNED
ARTICLE NO		CI22x11xxxA-EExxx	CI22x11xxxA-EExxx
NB INSERTION LOSS			
Centre frequency		<0.30 dB	<0.75 dB
Effective passband @ ± 200 KHz		<0.30 dB	<0.75 dB
	$\pm~150~\text{KHz}$	<0.30 dB	<1.00 dB
	± 200 KHz	<0.30 dB	<1.40 dB
	$\pm$ 0.6 MHz	>0.6 dB	>11.0 dB
	$\pm$ 1.0 MHz	>3.0 dB	>19.0 dB
	$\pm~2.0~MHz$	>12.0 dB	>31.0 dB
	$\pm~2.5~\text{MHz}$	>15.5 dB	>35.0 dB
NB GOUPDELAY VARIATION			
(typical)	± 150 KHz	<6 ns (5 ns)	<105 ns (100 ns)
	± 200 KHz	<10 ns (8 ns)	<135 ns (130 ns)
WB INSERTION LOSS			
	$\pm~0.8~MHz$	-	<0.30 dB
	$\pm$ 1.0 MHz	-	<0.20 dB
	$\pm$ 1.5 MHz	<1.00 dB	<0.10 dB
	$\pm~2.0~MHz$	<0.40 dB	<0.07 dB
	± 3.0 MHz	<0.13 dB	<0.06 dB
ISOLATION			
NARROWBAND - WIDEBAND		>36 dB	>36 dB
WIDEBAND - NARROWBAND @			
	$\pm$ 1.0 MHz	>39 dB	>55 dB
	$\pm$ 1.5 MHz	>43 dB	>62 dB
	$\pm$ 3.0 MHz	>54 dB	>74 dB
NB MAX INPUT POWER RATING**		7.0 kW RMS	2.6 kW RMS
		(6 kW without heat sink	(2 kW without heat sink



## Article structure: ARTICLE: C22C11P0AA-EE111

Combiner Type

Frequency band Number of poles

With/ without temp.comp.

C = without temp. comp.

K = with temp. comp.

11 Cavity size

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

Number of cross coupling

Frame

A = Standard frame, 0 = Without frame

Version

Ε Narrowband coupler E = 60mm U-shape

Wideband coupler

E = 60mm U-shape

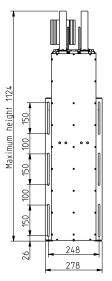
Narrowband connection

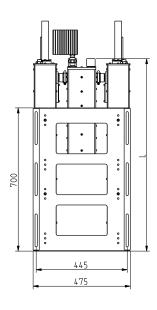
Wideband connection

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





<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.

<sup>\*\*</sup> 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.