## **FM Constant Impedance Combiner**

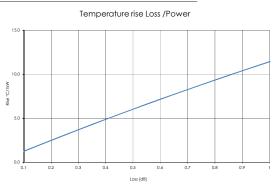
## 20 kW, 3 Pole



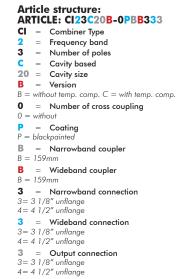
SPECIFICATIONS	200 mm Series	Option	
FREQUENCY	87 - 108 MHz		
STANDARD ORDER	3 Poles with temperature compensation		
APPLICATION	FM combining & Spurious supress		
IMPEDANCE	50 Ohm		
NB RETURN LOSS (VSWR)	>30 dB (1.07)		
WB RETURN LOSS (VSWR)	>30 dB (1.07)		
MAX OUTPUT POWER RATING**	49 kW rms (3 1/8" output), 80 kW rms (4 1/2" output)		
NB INPUT CONNECTOR	3 1/8" unflange	4 1/2" unflange	
WB INPUT CONNECTOR	3 1/8" unflange	4 1/2" unflange	
OUTPUT CONNECTOR	3 1/8" unflange	4 1/2" unflange	
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		

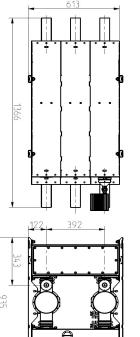


DIMENSIONS AND WEIGHT			
DIMENSIONS	1366 x 613 x 935 mm		
LxWxH	(53.8 x 24.1 x 36.8 in)		
WEIGHT	115 kg (253.5 lb)		
STANDARD FRAME	Stand alone		
COLOUR	Black and aluminium		



TYPICAL DATA*		STANDARD TUNED	SHARP TUNED
ARTICLE NO		CI23C20x-0PBBxxx	CI23C20x-0PBBxxx
NB INSERTION LOSS			
Centre frequency		<0.25 dB	<0.65 dB
Effective passband @ ± 200 KHz		<0.25 dB	<0.65 dB
	$\pm$ 150 KHz	<0.25 dB	<0.80 dB
	$\pm~200~\text{KHz}$	<0.25 dB	<1.20 dB
	$\pm$ 0.6 MHz	>0.6 dB	>20.0 dB
	$\pm$ 1.0 MHz	>6.0 dB	>34.0 dB
	$\pm~2.0~MHz$	>22.0 dB	>50.0 dB
	$\pm~2.5~\text{MHz}$	>28.0 dB	>55.0 dB
NB GOUPDELAY VARIATION			
(typical)	$\pm~150~\text{KHz}$	<6 ns (5 ns)	<230 ns (225 ns)
	$\pm~200~\text{KHz}$	<10 ns (8 ns)	<435 ns (430 ns)
WB INSERTION LOSS			
	$\pm$ 0.8 MHz	-	<0.12 dB
	$\pm$ 1.0 MHz	-	<0.09 dB
	$\pm$ 1.5 MHz	<0.23 dB	<0.07 dB
	$\pm~2.0~MHz$	<0.10 dB	<0.06 dB
	± 3.0 MHz	<0.07 dB	<0.06 dB
ISOLATION			
NARROWBAND - WIDEBAND		>36 dB	>36 dB
WIDEBAND - NARROWBAND @			
	$\pm~1.0~MHz$	>42 dB	>70 dB
	$\pm$ 1.5 MHz	>51 dB	>80 dB
	$\pm$ 3.0 MHz	>68 dB	>96 dB
NB MAX INPUT POWER RATING**		20 KW RMS	7 kW RMS





<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.