

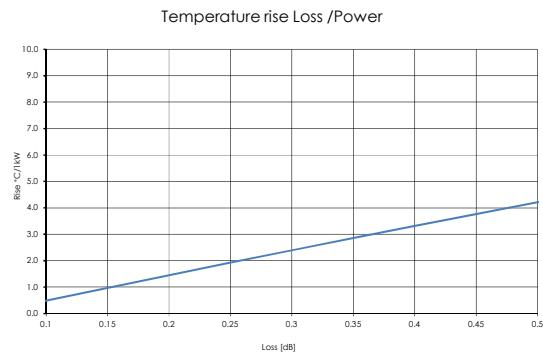
# FM Constant Impedance Combiner

64 kW, 2 Pole



SPECIFICATIONS	350 mm Series	Option
FREQUENCY	87 - 108 MHz	
STANDARD ORDER	2 Poles	with temperature compensation
APPLICATION	FM combining & Spurious suppress	
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	$\leq 3 \text{ kHz} / ^\circ\text{C}$ (without temp. comp.)	$\leq 0.5 \text{ kHz} / ^\circ\text{C}$ (with temp. comp.)
MAX PRODUCT TEMPERATURE	70 °C	
ENVIRONMENTAL CONDITION	0 to 70 °C IP40	

DIMENSIONS AND WEIGHT	
DIMENSIONS	1416 x 653 x 1175 mm
L x W x H	(55.7 x 25.7 x 46.3 in)
WEIGHT	110 kg (242.5 lb)
STANDARD FRAME	Stand alone
COLOUR	Black and aluminium



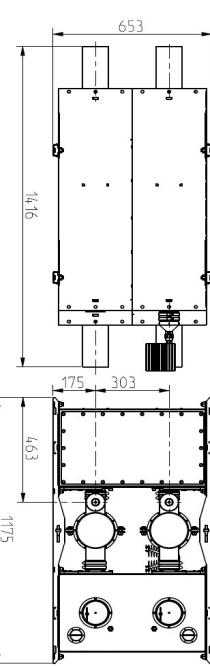
TYPICAL DATA*	STANDARD TUNED	SHARP TUNED
ARTICLE NO	CI22C35x-0PBBxxx	CI22C35x-0PBBxxx
NB INSERTION LOSS		
Centre frequency	<0.15 dB	<0.30 dB
Effective passband @ $\pm 200 \text{ KHz}$	<0.15 dB	<0.30 dB
$\pm 150 \text{ KHz}$	<0.15 dB	<0.50 dB
$\pm 200 \text{ KHz}$	<0.15 dB	<0.85 dB
$\pm 0.6 \text{ MHz}$	>0.5 dB	>11.0 dB
$\pm 1.0 \text{ MHz}$	>3.0 dB	>19.5 dB
$\pm 2.0 \text{ MHz}$	>12.0 dB	>31.0 dB
$\pm 2.5 \text{ MHz}$	>15.0 dB	>35.0 dB
NB GOUDELAY VARIATION		
(typical)	$\pm 150 \text{ KHz}$	<6 ns (5 ns)
	$\pm 200 \text{ KHz}$	<10 ns (8.5 ns)
WB INSERTION LOSS		
	$\pm 0.8 \text{ MHz}$	-
	$\pm 1.0 \text{ MHz}$	<0.20 dB
	$\pm 1.5 \text{ MHz}$	<0.15 dB
	$\pm 2.0 \text{ MHz}$	<0.08 dB
	$\pm 3.0 \text{ MHz}$	<0.07 dB
ISOLATION		
NARROWBAND - WIDEBAND	>36 dB	>36 dB
WIDEBAND - NARROWBAND @		
$\pm 1.0 \text{ MHz}$	>39 dB	>55 dB
$\pm 1.5 \text{ MHz}$	>43 dB	>62 dB
$\pm 3.0 \text{ MHz}$	>54 dB	>74 dB
NB MAX INPUT POWER RATING**	64 kW RMS	20 kW RMS



#### Article structure:

ARTICLE: CI22C35A-0PBB333

- CI = Combiner Type
- 2 = Frequency band
- 2 = Number of poles
- C = Cavity based
- 35 = Cavity size
- A = Version
- A = without temp. comp. B = with temp. comp.
- 0 = Number of cross coupling
- 0 = without
- P = Coating
- P = blackpainted
- B = Narrowband coupler
- B = 159mm
- B = Wideband coupler
- B = 159mm
- 3 = Narrowband connection
- 3 = 3 1/8" unflange
- 4 = 4 1/2" unflange
- 3 = Wideband connection
- 3 = 3 1/8" unflange
- 4 = 4 1/2" unflange
- 3 = Output connection
- 3 = 3 1/8" unflange
- 4 = 4 1/2" unflange



\* 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.