

# VHF Constant Impedance Combiner

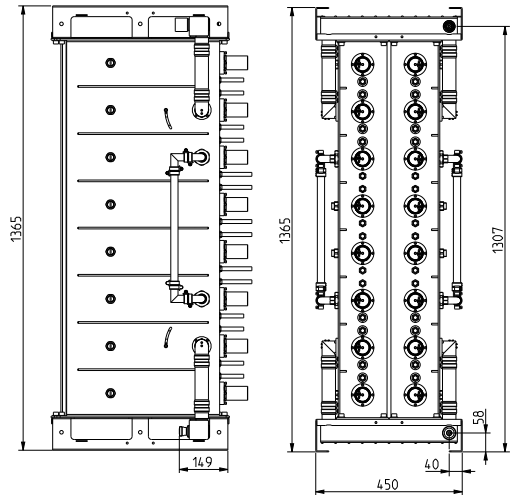
4 kW rms, 6 Pole, 2 external notches

Optional: 6 Poles, 1 Cross-coupling and 2 External notches



SPECIFICATIONS	STANDARD	OPTIONAL
FREQUENCY	170 - 240 MHz	
BANDWIDTH	6 - 8 MHz	
ORDER	6 Poles, 2 external notches	6 Poles, 1 cross-coupling, 2 external notches
ATV	Spurious suppress	
DVB	Critical mask	Non Critical mask
ATSC	Stringent mask	Non Stringent mask
ISDB	Critical mask	Non Critical mask
IMPEDANCE	50 Ohm	
NB RETURN LOSS (VSWR)	>26 dB (<1.11)	
WB RETURN LOSS (VSWR)	>30 dB (<1.07), 2 specified channels	
MAX OUTPUT POWER RATING*	10 kW rms	
NB INPUT CONNECTOR	1 5/8" unflange	7/8" unflange/flange, 7/16 f/m
WB INPUT CONNECTOR	1 5/8" unflange	7/8" unflange/flange, 7/16 f/m
OUTPUT CONNECTOR	1 5/8" unflange	7/8" unflange/flange, 7/16 f/m
TEMPERATURE STABILITY	< 3 kHz / °C	
MAX PRODUCT TEMPERATURE	70 °C	
ENVIROMENTAL CONDITION	-5 to 70 °C IP40	

DIMENSIONS AND WEIGHT	OPTIONAL
DIMENSIONS	560 - 700 x 450 x 1365 mm
L x W x H	(22 - 27.5 x 17.7 x 53.7 in)
WEIGHT	123 kg (271 lb)
FRAME	Stand alone 19" rack
COLOUR	Frosted black



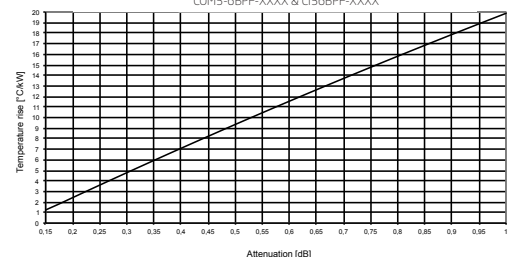
## ARTICLE: CI36C14A-2PAA 111

- CI** = Combiner type
- 3** = Frequency band
- 6** = Frequency band
- C** = Cavity based
- 14** = Cavity size
- A** = Version
- 2** = Number of cross coupling
- P** = Coating
- A** = Narrowband coupler
- A** = Wideband coupler
- 1** = Narrowband connection
- 1** = Wideband connection
- 1** = Output connection

## ARTICLE: COM3-6BPF-AP00

- COM** = Combiner type
- 3** = Frequency band
- 6** = Number of poles
- BPF** = Filter type
- A** = Version
- P** = Version
- 0** = Version
- 0** = Version

Temperature rise / Avg. attenuation  
COM3-6BPF-XXXX & CI36BPF-XXXX



TYPICAL DATA*	8 MHz DVB-T	7 MHz DVB-T	6 MHz ATSC
ARTICLE NO	COM3-6BPF-AP00	COM3-6BPF-AP00	CI36C14A-2PAA111
<b>NB INSERTION LOSS</b>			
Avg. signal bandwidth	<0.40 dB	<0.43 dB	<0.37 dB
Centre frequency	<0.30 dB	<0.33 dB	<0.32 dB
Signal band edge	± 3.8 MHz <1.80 dB ± 3.9 MHz >3.40 dB ± 4.2 MHz >12.0 dB ± 6.0 MHz >26.0 dB	± 3.33 MHz <2.10 dB ± 3.7 MHz >12 dB ± 5.25 MHz >28 dB ± 10.5 MHz >56 dB	± 2.69 MHz <0.60 dB ± 3.25 MHz >2.10 dB ± 3.5 MHz >20 dB ± 6.0 MHz >29 dB
<b>WB INSERTION LOSS</b>			
	± 24 MHz <0.10 dB ± 16 MHz <0.10 dB ± 8.0 MHz <0.20 dB	± 21 MHz <0.10 dB ± 14 MHz <0.10 dB ± 7.0 MHz <0.20 dB	± 18 MHz <0.10 dB ± 12 MHz <0.10 dB ± 6.0 MHz <0.20 dB
<b>ISOLATION</b>			
NARROWBAND - WIDEBAND	>36 dB	>36 dB	>36 dB
WIDEBAND - NARROWBAND @	± 4.2 MHz >36 dB ± 8.0 MHz >60 dB ± 16 MHz >70 dB ± 24 MHz >80 dB	± 3.7 MHz >36 dB ± 7.0 MHz >60 dB ± 14 MHz >70 dB ± 21 MHz >80 dB	± 3.31 MHz >36 dB ± 6.0 MHz >60 dB ± 12 MHz >70 dB ± 18 MHz >80 dB
NB GROUP DELAY VARIATION	<470 ns	<470 ns	<370 ns
NB MAX INPUT POWER RATING**	4 kW / 13 dB (crest factor)	4 kW / 13 dB (crest factor)	4 kW / 11 dB (crest factor)
TEMPERATURE RISE	<7.0 °C / 100 W	<7.5 °C / 100 W	<6.5 °C / 100 W
MASK COMPLIANT	Critical mask	Critical mask	Stringent mask

\* Data in table is typical data at 200 MHz. To fulfil mask transmitter shoulder level must be >36 dB. The combiner can be tuned for other specifications or bandwidth. Please contact us for a designed specification.  
\*\* Max power rating at <50 °C temprice at max frequency.