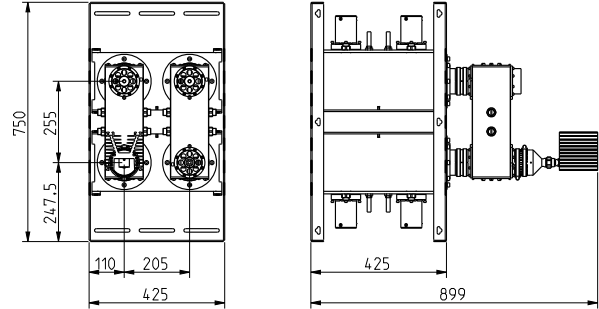


# UHF Constant Impedance Combiner

10 kW rms, 4 Pole, Lowloss, Compact



SPECIFICATIONS	200 mm Compact Series
FREQUENCY	470 - 862 MHz
BANDWIDTH	6 - 8 MHz
STANDARD ORDER	4 Poles
OPTIONAL ORDER	4 Poles with cross coupling
APPLICATION	One guard Ch combining
ATV	Spurious suppress
DVB	Spurious suppress
ATSC	Non Stringent mask
ISDB	Spurious suppress
IMPEDANCE	50 Ohm
NB RETURN LOSS (VSWR)	>26 dB (<1.11)
WB RETURN LOSS (VSWR)	>26 dB (<1.11), UHF band >30 dB (<1.07), 2 specified channels
MAX OUTPUT POWER RATING**	36 kW rms NAX120 (coupler type K) 30 kW rms 4 1/2" (coupler type K) 15 kW rms 3 1/8" (coupler type J)
NB INPUT CONNECTOR	3 1/8" unflange (coupler type J)
NB OPTIONAL INPUT CONNECTOR	1 5/8" unflange
WB STANDARD INPUT CONNECTOR	NAX120
WB OPTIONAL INPUT CONNECTORS	3 1/8" unflange, 4 1/2" unflange
STANDARD OUTPUT CONNECTOR	NAX120
OPTIONAL OUTPUT CONNECTORS	3 1/8" unflange, 4 1/2" unflange
TEMPERATURE STABILITY	< 2 kHz / °C
MAX PRODUCT TEMPERATURE	70 °C
ENVIROMENTAL CONDITION	-5 to 70 °C IP40

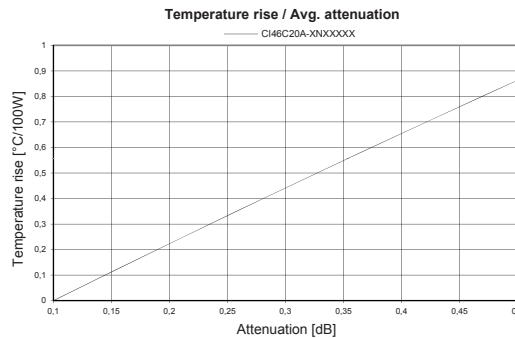
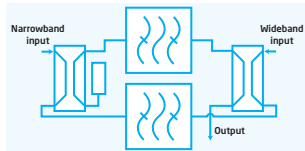


**Article structure:**  
**ARTICLE: CI44C20A-0NJK3WW**

- CI** = Combiner Type
- 4** = Frequency band
- 4** = Number of poles
- C** = Cavity based
- 20** = Cavity size
- A** = Version
  
- 0** = Number of cross coupling  
0 = without, 1 = single
- N** = Coating  
0 = without, P = painted, N = painted & silver plated
- J** = Narrowband coupler  
G = 54mm, J = 110mm, K = 130mm
- K** = Wideband coupler  
G = 54mm, J = 110mm, K = 130mm
- 3** = Narrowband connection  
1 = 1 5/8" unflange, 3 = 3 1/8" unflange
- W** = Wideband connection  
3 = 3 1/8" unflange, P = 4 1/2" unflange, W = Nax 120 unflange male
- W** = Output connection  
3 = 3 1/8" unflange, P = 4 1/2" unflange, W = Nax 120 unflange male

**DIMENSIONS AND WEIGHT**

DIMENSIONS	899 x 425 x 750 mm
L x W x H	(35 x 16.7 x 29.5 in)
WEIGHT	70 kg (154.3 lb)
STANDARD FRAME	Stand alone / 19"
COLOUR	Black and aluminium



TYPICAL DATA*	8 MHz DVB-T/2	6 MHz ISDB-T	6 MHz ATSC
ARTICLE NO	CI44C20A-0Nxxxxx	CI44C20A-0Nxxxxx	CI44C20A-0Nxxxxx
<b>NB INSERTION LOSS</b>			
Avg. signal bandwidth	<0.23 dB	<0.26 dB	<0.25 dB
Centre frequency	<0.22 dB	<0.26 dB	<0.24 dB
Signal band edge	± 3.88 MHz <0.25 dB (3,8 MHz 0,24 dB) ± 4.2 MHz >0.29 dB ± 6.0 MHz >3.50 dB ± 12.0 MHz >28.00 dB	± 2.79 MHz <0.29 dB ± 3.15 MHz >0.33 dB ± 4.5 MHz >3.50 dB ± 9.0 MHz >28.00 dB	± 2.69 MHz <0.26 dB ± 3.5 MHz >0.27 dB ± 6.0 MHz >6.00 dB ± 9.0 MHz >24.00 dB
<b>WB INSERTION LOSS</b>			
	± 24 MHz <0.10 dB ± 16 MHz <0.10 dB ± 8.0 MHz <0.40 dB	± 18 MHz <0.10 dB ± 12 MHz <0.10 dB ± 6 MHz <0.45 dB	± 18 MHz <0.10 dB ± 12 MHz <0.10 dB ± 6 MHz <0.70 dB
<b>ISOLATION</b>			
NARROWBAND - WIDEBAND	>36 dB	>36 dB	>36 dB
WIDEBAND - NARROWBAND @	± 4.2 MHz >36 dB ± 8.0 MHz >45 dB ± 16 MHz >70 dB ± 24 MHz >85 dB	± 3.21 MHz >36 dB ± 6 MHz >45 dB ± 12 MHz >70 dB ± 18 MHz >85 dB	± 3.31 MHz >36 dB ± 6 MHz >40 dB ± 12 MHz >65 dB ± 18 MHz >80 dB
NB GROUP DELAY VARIATION	<25 ns	<30 ns	<15 ns
NB MAX INPUT POWER RATING**	10 kW / 13 dB (crest factor)	10 kW / 13 dB (crest factor)	14 kW / 11 dB (crest factor)
TEMPERATURE RISE	<0.3 °C / 100 W	<0.4 °C / 100 W	<0.3 °C / 100 W
MASK COMPLIANT	Spurious suppress	Spurious suppress	Non stringent mask

\* Data in table is typical data at 665 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. Data are subjected to change without prior notice.