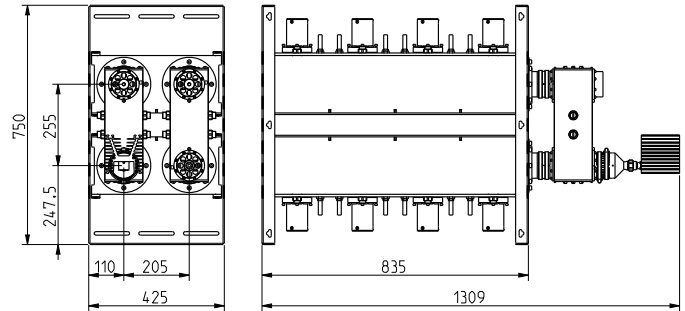


# UHF Constant Impedance Combiner

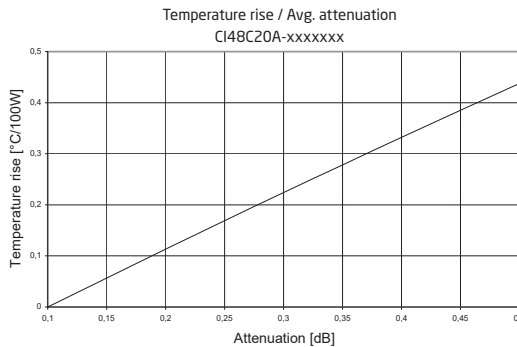
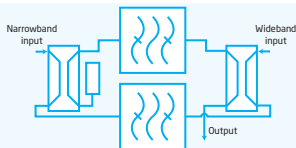
## 7.2 kW rms, 8 Pole, Compact



SPECIFICATIONS	200 mm Compact Series
FREQUENCY	470 - 862 MHz
BANDWIDTH	6 - 8 MHz
STANDARD ORDER	8 Poles single cross coupling
OPTIONAL ORDER	8 Poles with or without double cross coupling
APPLICATION	Adjacent Ch combining
ATV	Spurious supress
DVB	Critical mask
ATSC	Stringent mask
ISDB	Critical mask
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



DIMENSIONS AND WEIGHT	
DIMENSIONS	1309 x 425 x 750 mm
L x W x H	(51.5 x 16.7 x 29.5 in)
WEIGHT	125 kg (275.6 lb)
STANDARD FRAME	Stand alone / 19"
COLOUR	Black and aluminium



### Article structure: ARTICLE: C148C20A-1PJK3WW

- CI** = Combiner Type
- 4** = Frequency band
- 8** = Number of poles
- C** = Cavity based
- 20** = Cavity size
- A** = Version
- 1** = Number of cross coupling
- 0 = without, 1 = single, 2 = double
- P** = 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

TYPICAL DATA*	8 MHz DVB-T/2	6 MHz ISDB-T	6 MHz ATSC
ARTICLE NO	C148C20A-1Pxxxxx	C148C20A-1Pxxxxx	C148C20A-1Pxxxxx
<b>NB INSERTION LOSS</b>			
Avg. signal bandwidth	<0.57 dB	<0.76 dB	<0.60 dB
Centre frequency	<0.45 dB	<0.60 dB	<0.54 dB
Signal band edge	± 3.88 MHz <1.6 dB (3,8 MHz 1,25 dB) ± 4.2 MHz >15 dB ± 6.0 MHz >26 dB ± 12.0 MHz >51 dB	± 2.79 MHz <1.56 dB ± 3.15 MHz >15.10 dB ± 4.5 MHz >31.10 dB ± 9.0 MHz >61.10 dB	± 2.69 MHz <0.74 dB ± 3.5 MHz >1.50 dB ± 6.0 MHz >29.10 dB ± 9.0 MHz >63.10 dB
<b>WB INSERTION LOSS</b>			
	± 24 MHz <0.10 dB ± 16 MHz <0.10 dB ± 8.0 MHz <0.20 dB	± 18 MHz <0.10 dB ± 12 MHz <0.10 dB ± 6 MHz <0.20 dB	± 18 MHz <0.10 dB ± 12 MHz <0.10 dB ± 6 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 >80 dB ± 16 MHz >115 dB ± 24 MHz >135 dB	± 3.21 MHz >36 dB ± 6 MHz >80 dB ± 12 MHz >115 dB ± 18 MHz >135 dB	± 3.31 MHz >36 dB ± 6 MHz >75 dB ± 12 MHz >110 dB ± 18 MHz >130 dB
NB GROUP DELAY VARIATION	<600 ns (450 ns)	<500 ns	<110 ns
NB MAX INPUT POWER RATING**	7.2 kW / 13 dB (crest factor)	5.6 kW / 13 dB (crest factor)	7.4 kW / 11 dB (crest factor)
TEMPERATURE RISE	<0.5 °C / 100 W	<0.7 °C / 100 W	<0.5 °C / 100 W
MASK COMPLIANT	Critical mask	Critical mask	Stringent mask

\* Data in table is typical data at 666 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.