AMPHENOL

colinear, 3 dBd Base Station and Marine Antenna for the 450 MHz Band

DESCRIPTION

- CXL 70-3C/... is a 3 dBd, vertically polarized, omnidirectional base station and marine antenna, which covers the 340 – 470 MHz band in 4 models with up to 10 MHz overlap.
- The antenna is provided with our "C" universal fixation bracket made of epoxy-coated, seawater resistant aluminium. The accompanying U-bolts and fittings are made of stainless steel.
- CXL 70-3C/... can be mounted on 27 to 65 mm dia. mast tubes, and it is possible to lead the cable either along the inside or on the outside of the mast tube.
- The carefully designed radiating element is sealed in a high-quality, conical glass fibre tube with low wind-load, which will ensure performance undisturbed by corrosive environments.
- To substantially reduce noise caused by atmospherical discharges, all metal parts in the antenna are DC-grounded. Consequently, the antenna shows a DC-short across the coaxial cable.
- The exceptional mechanical capabilities of this antenna ensures long dependable service in all environments.



ORDERING

Туре	Product No.	Frequency
CXL 70-3C/s	100000113	380 - 410 MHz
CXL 70-3C/f	100000109	406 - 430 MHz
CXL 70-3C/I	100000112	420 - 450 MHz
CXL 70-3C/h	100000110	440 - 470 MHz
CXL 70-3C/ls	100000749	340 – 360 MHz

SPECIFICATIONS

Electrical	
Model	CXL 70-3C/
Frequency	30 MHz wide frequency segments within 380 - 470 MHz. See model survey.
Antenna Type	Collinear, broad-band
Max. Input Power	150 W
Polarisation	Vertical
Pattern Type	Omnidirectional
3 dB Beamwidth, E- Plane	30 °
3 dB Beamwidth, H- Plane	Omnidirectional
Impedance	50 Ω
Gain	3 dBd (5.2 dBi)
VSWR	< 1.5:1
Bandwidth	30 MHz
Antistatic Protection	All metal parts DC-grounded (Connector shows a DC-short)
HCM Code(s)	HCM000ND00, 015DE50

Mechanical			
Connection(s)	N(f)		
Materials	Shroud: Polyurethane-coated glass fibre Mounting bracket: Seawater resistant aluminium, epoxy-coated Clamps: Stainless steel		
Colour	White (RAL 9003)		
Wind Area	0.032 sq. m / 0.34 sq. ft		
Wind Load	40 N (160km/h)		
Dia. At Top End	16 mm / 0.63 in.		
Dia. At Bottom End	25 mm / 0.98 in.		
Height	1450 mm / 57.09 in.		
Weight	2.4 kg / 5.29 lb		
Mounting	On 27 - 65 mm dia. mast tube		
Environmental			
Operating Temperature Range		-30°C to +70°C	
Survival Wind Speed		200 km/h	
Ingress Protection		IP66	



DIAGRAM

TYPICAL GAIN AND SWR CURVES



MULTI-PURPOSE MOUNTING BRACKET





TYPICAL GAIN AND SWR CURVES



TYPICAL RADIATION PATTERN (H-PLANE)





TYPICAL RADIATION PATTERN (E-PLANE)



X