

ATEX certified, 3 dBd, Omnidirectional Base Station Antenna for the 380 - 470 MHz Band in Hazardous areas

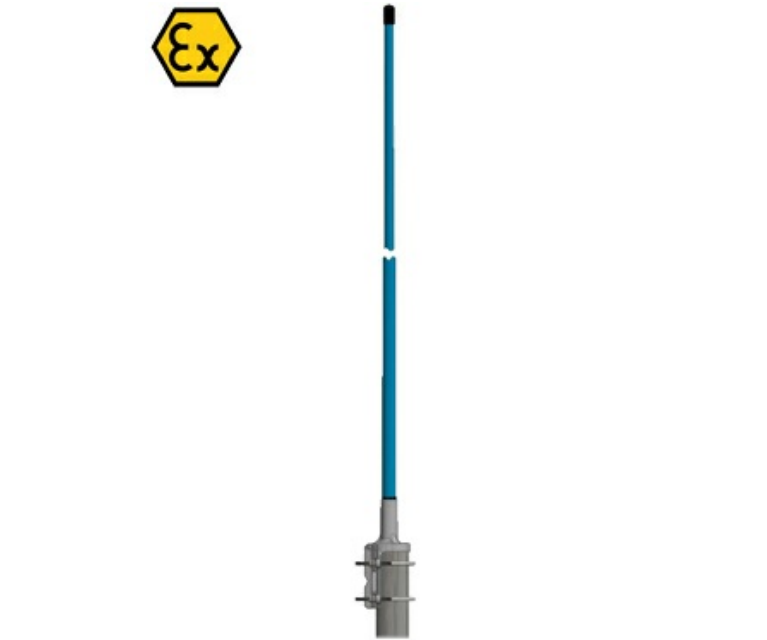
BESCHREIBUNG

- CXL 450-3LW-SS-Ex is a 3 dBd, vertically polarized, omnidirectional base station antenna which covers the 380 - 470 MHz band in four models with up to 10 MHz overlap.
- The antenna is specified as an ATEX antenna for use in zone 2 in potentially explosive areas.
- Before installing the antenna, please read the ATEX Product Manual carefully.
- The antenna is suitable for use in gas groups IIA, IIB and IIC in zone 2.
- It's only necessary to install an ATEX grounding Kit on the LW-SS-Ex bracket, when the point of installation has a different electrical potential than the system.
- The carefully designed colinear antenna radiating parts elements is made of brass tube and sealed in a high-quality conical glass fibre tube with low wind-load.
- The accompanying U-bolts and fittings are made of stainless steel.
- All metal parts in the antenna are DC-grounded. Consequently, the antenna shows a DC-short across the coaxial cable.

SPEZIFIKATIONEN

Elektrisch DE	
Modell	CXL 450-3LW-SS-Ex
Frequenz	30 MHz wide frequency segments within 380 - 470 MHz. See BESTELLUNG designations
Antennentyp	Coaxial dipole, broad-banded
Spezielle spez. Info	Max. HF Eingangsleistung (EIRP) in ATEX Umgebung *: Group IIA : 32.6 dBm (1.8 W) Group IIB : 30.3 dBm (1.0 W) Group IIC : 27.8 dBm (0.6 W)
Polarisation	Vertikal
Muster-Art	Omnidirektional
Öffnungswinkel 3 dB, vertikal	30 °
Öffnungswinkel 3 dB, horizontal	Omnidirektional
Impedanz	50 Ω
Gewinn	3 dBd (5.2 dBi)
VSWR	< 1.5:1
Bandbreite	30 MHz
Antistatischer Schutz	Alle Metallteile DC-geerdet (Stecker zeigt einen DC-Kurzschluss)
HCM-Code(s)	HCM000ND00, 040DE00

Mechanisch DE	
Verbindungsmoment	N(f) : 0.7 - 1.1 Nm
Materialien	Radome : Polyurethane-coated glass fibre Mounting bracket : Stainless acid-proof steel (AiSi 316L) U-bolt and fittings : Stainless steel (AiSi 316)
Installationsmoment	3 Nm
Farbe	Blau (RAL 5015)
Windbereich	0.029 sq. m
Windlast	33.6 N (160 km/h)
Dia. Am Oberen Ende	17 mm
Dia. Am Unteren Ende	23 mm
Höhe	ca. 1515 mm
Gewicht	ca. 1.55 kg
Montage	On 16 to 54 mm dia. mast tube
ATEX-Markierung	II 3G Ex nA IIC T6



Umwelt	
Betriebstemperaturbereich	-30 °C to +60 °C
Max. Windgeschwindigkeit	200 km/h
IP Schutzklasse	IP66

BESTELLUNG

Modell	Produkt Nr	Frequenz
CXL 450-3LW-SS-Ex/s	115000013	380 - 410 MHz
CXL 450-3LW-SS-Ex/f	115000014	406 - 430 MHz
CXL 450-3LW-SS-Ex/l	115000015	420 - 450 MHz
CXL 450-3LW-SS-Ex/h	115000016	440 - 470 MHz

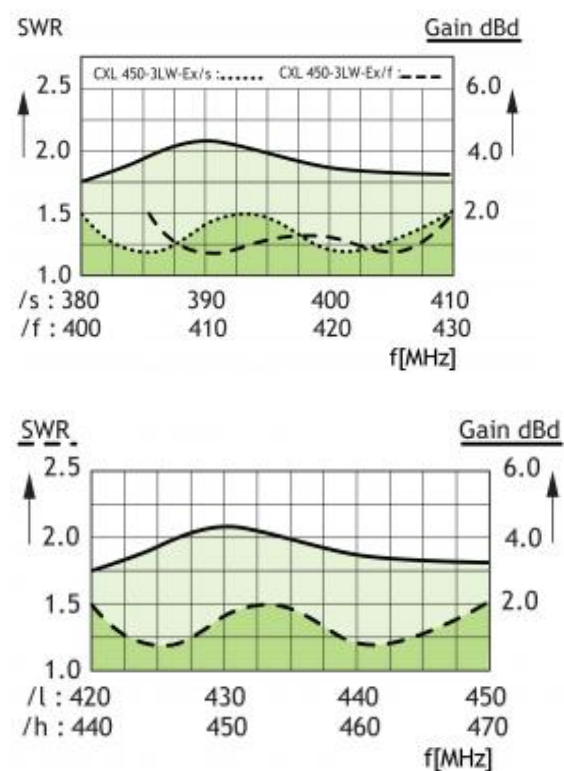
Zubehör		
ATEX grounding Kit	115000100	

CALCULATION OF MAX. ANTENNA INPUT POWER IN DIFFERENT ATEX GROUPS

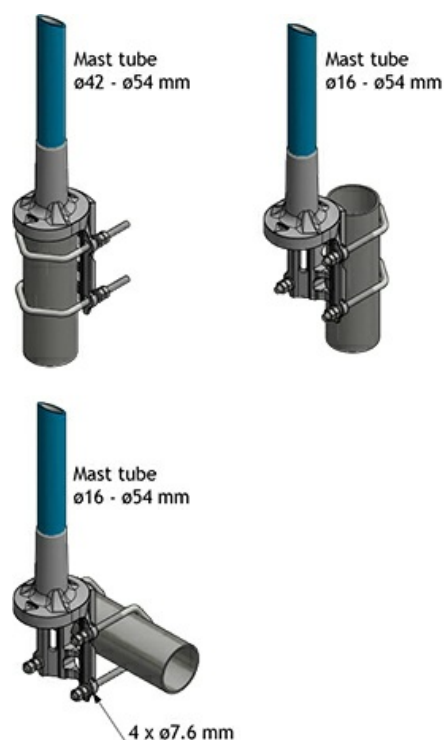
ATEX GROUP	MAX. EIRP POWER	ANTENNA GAIN	MAX INPUT POWER
IIA	37.7 dBm (6.0 W)	3 dBd / 5.15 dBi	32.6 dBm (1.8 W)
IIB	35.4 dBm (3.5 W)	3 dBd / 5.15 dBi	30.3 dBm (1.0 W)
IIC	33.0 dBm (2.0 W)	3 dBd / 5.15 dBi	27.8 dBm (0.6 W)

*See the ATEX Product Manual (safety and mounting instructions) and related EU DECLARATION OF CONFORMITY ATEX Directive 2014/34/EU.

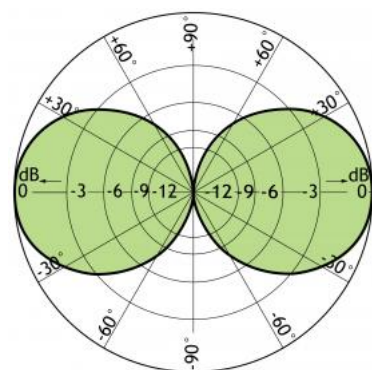
TYPICAL GAIN AND VSWR CURVES



MOUNTING DETAILS



TYPICAL RADIATION PATTERN (E-PLANE)



TYPICAL RADIATION PATTERN (H-PLANE)

