



# CXL 450-3LW-SS-Ex

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

- 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 ATEX antenna for use in zone 2 in potentially explosive areas.

### **DESCRIPTION**

- Before installing the antenna, 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 a 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 collinear 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.

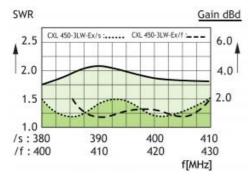




## ORDERING DESIGNATIONS

TYPE	FREQUENCY	PRODUCT NO.
CXL 450-3LW-SS-Ex/s	380 - 410 MHz	115000013
CXL 450-3LW-SS-Ex/f	406 - 430 MHz	115000014
CXL 450-3LW-SS-Ex/l	420 - 450 MHz	115000015
CXL 450-3LW-SS-Ex/h	440 - 470 MHz	115000016
ACCESSORIES		
ATEX grounding Kit		115000100

## TYPICAL GAIN AND SWR CURVES

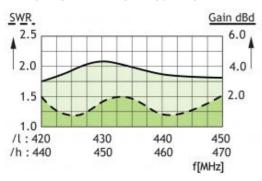


# CALCULATION OF MAX. ANTENNA INPUT POWER IN DIFFERENT ATEX GROUPS

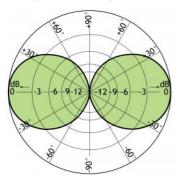
ATEX GROUP	MAX. EIRP POWER	ANTENNA GAIN	MAX INPUT POWER
IIA	37.7 dBm (6.0 W)	3 dBd / 5.15 dBi	32.6 dBm (1.8 W)
IIB	35.4 dBm (3.5 W)	3 dBd / 5.15 dBi	30.3 dBm (1.0 W)
IIC	33.0 dBm (2.0 W)	3 dBd / 5.15 dBi	27.8 dBm (0.6 W)

### MULTI-PURPOSE MOUNTING BRACKET

### TYPICAL GAIN AND SWR CURVES



## TYPICAL RADIATION PATTERN (E-PLANE)



## TYPICAL RADIATION PATTERN (H-PLANE)



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