CXL 900-1LW-SS-Ex

ATEX certified, 0 dBd, Omnidirectional Base Station Antenna for the 824 - 960 MHz Band in Hazardous areas

- CXL 900-1LW-SS-Ex is a 0 dBd, vertically polarized, omnidirectional base station Antenna which covers the 824 - 960 MHz band in two models.
- The antenna is specified as an ATEX antenna for use in zone 2 in potentially explosive areas.

DESCRIPTION

- 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 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

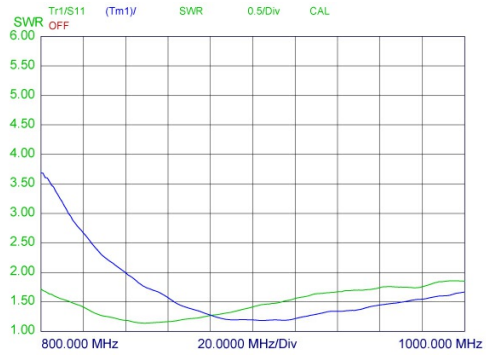
TYPE	FREQUENCY	PRODUCT NO.
CXL 900-1LW-SS-Ex/l	824 - 894 MHz	115000032
CXL 900-1LW-SS-Ex/h	870 - 960 MHz	115000033
ACCESSORIES		
ATEX grounding kit		115000100

MECHANICAL	
CONNECTOR TIGHTENING TORQUE	N-female 0.7 - 1.1 Nm
WIND SURFACE	0.009 m² / 0.097 ft²
WIND LOAD	9.5 N @ 160 km/h / 99.42 mph.
MAX. WIND SPEED	200 km/h / 124.27 mph.
COLOUR	Blue (RAL 5015)
MATERIALS	Radome: Polyurethane-coated glass fibre Mounting bracket: Stainless acid-proof steel (AISI 316L) U-bolt and fittings: Stainless steel (AISI 316L)
TOTAL HEIGHT	Approx. 0.53 m / 20.87 in.
WEIGHT	Approx. 0.9 kg / 1.98 lb.
DIA. IN TOP END	25.5 mm / 1.004 in.
MOUNTINGTIGHTENING TORQUE	On 16 to 54 mm / 0.63 x 2.13 in. dia. mast tube 3 Nm
ATEX MARKING	II 3G Ex nA IIC T6
ENVIRONMENTAL	
TEMP. RANGE	-30° C → +60° C
IP RATING	IP 66

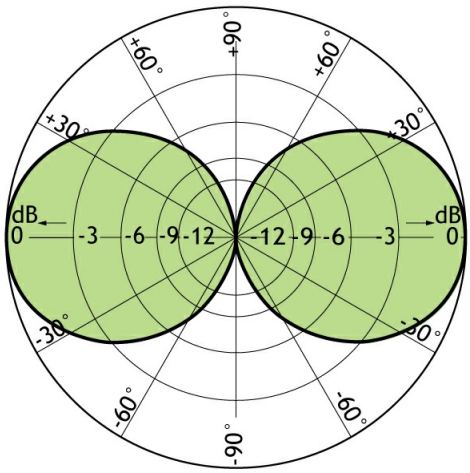
SPECIFICATIONS

ELECTRICAL	
MODEL	CXL 900-1LW-SS-Ex
ANTENNA TYPE	½ λ coaxial dipol, broad-banded
FREQUENCY	Models within 824 - 960 MHz. See ordering designations
IMPEDANCE	Nom. 50 Ω
RADIATION	Omnidirectional
POLARIZATION	Vertical
GAIN	2 dBi 0 dBd
BANDWIDTH	70 - 90 MHz depending on model
SWR	≤ 1.5
MAX. RF INPUT POWER DUE TO MAX. EIRP IN ATEX ENVIRONMENT *	
Group II A	35.6 dBm (3.6 W)
Group II B	33.3 dBm (2.1 W)
Group II C	30.8 dBm (1.2 W)
ANTISTATIC PROTECTION	All metal parts DC-grounded (Connector shows a DC-short)
HCM CODE	HCM000ND00, 040DE00

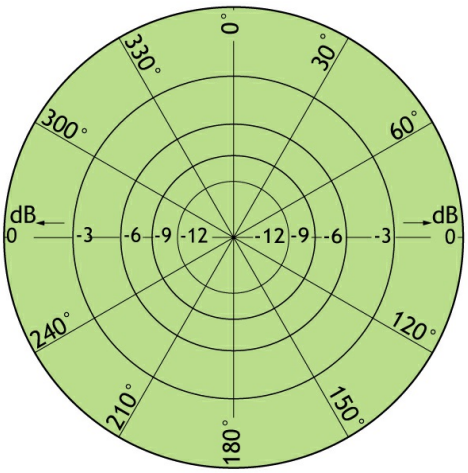
TYPICAL SWR CURVE



TYPICAL RADIATION PATTERN (E-PLANE)



TYPICAL RADIATION PATTERN (H-PLANE)



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)	0 dBd / 2.15 dBi	35.6 dBm (3.6 W)
IIB	35.4 dBm (3.5 W)	0 dBd / 2.15 dBi	33.3 dBm (2.1 W)
IIC	33.0 dBm (2.0 W)	0 dBd / 2.15 dBi	30.8 dBm (1.2 W)

MULTI-PURPOSE MOUNTING BRACKET