

	DECLARATION OF DESIGN AND PERFORMANCE	Reference DDP SIM XO XXXX XX
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- **Name and address of supplier:** Amphenol Air LB
2, rue Clément Ader
ZAC de WE
08 110 CARIGNAN France
- **Description of product:** SIM modules for optical connections.
- **Part number:**
SIM male module for LUXCIS or AMPHELUX contact ref: SIM XO 06LU PX;
SIM female module for LUXCIS or AMPHELUX contact ref: SIM XO 06LU SX;

SIM male module for ELIO contact ref: SIM XO 04EL PX;
SIM female module for ELIO contact ref: SIM XO 04EL SX;

SIM male module for MPO contact ref: SIM EO MPO PX;
SIM female module for MPO contact ref: SIM EO MPO SX.
- **Specification number:** EN 4830 (Luxcis / Amphelux contact) ;
EN 4701 (ELIO contact) ;
IEC 61754-7 (MPO contact).
- **Overall dimensions, interfaces, connections (electrical, hydraulic, etc.), installation information in drawing:**
According to SIM connectors catalogue
- **Compliance statement related to the specification (including any limitations on use):**
The qualification is equivalent to EN 4830 (Luxcis / Amphelux contact);
EN 4701 (ELIO contact) ;
IEC 61754-5 (MPO contact).
- **Inspection and maintenance instruction reference:** As specified in Amphenol Air LB quality manual
- **Qualification test report reference:** QTR 10-014 issue ø (Luxcis or Amphelux contact);
QTR 11-035 issue ø (Elio contact);
QTR 14-039 issue ø (MPO contact).

See following table for the main performances:

Constitution	
Shell material	Thermoplastic
Shell plating material	Not concerned
Insulation material	Silicone
Contact material	Not concerned
Contact plating material	Not concerned

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Mechanical performances		
Description	Data	Units
Insert retention in housing (minimum)	254	daN
Contact retention in insert (minimum)	11.1	daN
Mechanical endurance	500	Cycles
Vibrations (type)	Random (All contacts) Sinusoidal (ELIO contacts)	Not applicable
Vibrations (maximum frequency)	2000 (Random for all contacts) 3000 (Sinusoidal for ELIO contacts)	Hz
Vibrations (amplitude)	22.6 (LUXCIS, AMPHELUX and MPO contacts) 16.1 (Random for ELIO contacts) 20 (Sinusoidal for ELIO contacts)	g
Vibrations (duration)	24 (LUXCIS, AMPHELUX and MPO contacts) 3 (Random for ELIO contacts) 12 (Sinusoidal for ELIO contacts)	hours
Shocks (type)	Sinusoidal	Not applicable
Shocks (amplitude)	100 (ELIO contacts) 30 (LUXCIS, AMPHELUX & MPO contacts)	g
Shocks (duration)	6 (ELIO contacts) 3 (LUXCIS, AMPHELUX & MPO contacts)	ms
Resonant frequency minimum	Not concerned	Hz
Static loads (minimum)	100	daN

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Climatic performances		
Description	Data	Units
Maximum temperature of use	125	°C
Minimum temperature of use	-65 (LUXCIS, AMPHELUX & ELIO contacts) -55 (MPO)	°C
Salt mist resistance	500	hours
Resistance to fluids	Fuel / Mineral and synthetic hydraulic fluid / Mineral and synthetic lubricant / Cleaning products / De icing fluid / Cooling fluid	Not applicable
Interfacial sealing	Not concerned	mb
Air leakage	4	cm ³ /hour
Immersion at low air pressure	20 (LUXCIS, AMPHELUX & ELIO contacts only)	mb
IP indice	Not concerned	Not applicable

Electrical performances		
Description	Data	Units
Insulation resistance	Not concerned	MΩ
Voltage proof test	Not concerned	V
Maximum intensity	Not concerned	A
Contact resistance	Not concerned	mΩ
Shell electrical continuity	Not concerned	mΩ

Optical performances		
Description	Data	Units
Insertion loss	Initially: 0.3 (LUXCIS, AMPHELUX & ELIO) 0.2 (MPO) After test: 0.7	dB
Return loss	20	dB

Fire behaviour	
In compliance with standard	ABD 0031 / EN 2591-317

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I hereby declare on behalf of the supplier that the information contained in this declaration of design and performance (DDP) is correct.

PO : FV

Date : 07/31/2024

Sign :



Company : Amphenol Air LB

Position held : Engineering Manager

Name : Jerome CHEVALIER

Date : 07/31/2024

Sign :



Company : Amphenol Air LB

Position held : Quality Director

Name : Vincent BEYRIES