	DECLARATION OF DESIGN AND PERFORMANCE	Reference DDP SIM X 0000 XXX
	<i>SIM modules serie 2 for crimped electric contacts</i>	Page 1 / 4

- Name and address of supplier: Amphenol Air LB
2, rue Clément Ader
ZAC de WE
08 110 CARIGNAN France

- Description of product: SIM modules serie 2 shells for crimped electric contacts.

- Part number:

SIM sealed module 30 contacts size 23: SIM E 3023 X X X;
SIM non sealed module 30 contacts size 23: SIM M 3023 X X X;

SIM sealed module 20 contacts size 22: SIM E 2022 X X X;
SIM non sealed module 20 contacts size 22: SIM M 2022 X X X;

SIM sealed module 12 contacts size 20: SIM E 1220 X X X;
SIM non sealed module 12 contacts size 20: SIM M 1220 X X X;

SIM sealed module 8 contacts size 16: SIM E 0816 X X X;
SIM non sealed module 8 contacts size 16: SIM M 0816 X X X;

SIM sealed module 4 contacts size 12: SIM E 0412 X X X;
SIM non sealed module 4 contacts size 12: SIM M 0412 X X X;

SIM sealed module 1 contact size 08: SIM E 0108 X X X;
SIM non sealed module 1 contact size 08: SIM M 0108 X X X;
SIM sealed module 1 contact size 08 with anti rotate on polarizer side for quadrax contact:
SIM E 0118 X X X;
SIM non sealed module 1 contact size 08 with anti rotate on polarizer side for quadrax contact:
SIM M 0118 X X X;
SIM sealed module 1 contact size 08 with anti rotate on polarizer opposite side for quadrax contact:
SIM E 0128 X X X;
SIM non sealed module 1 contact size 08 with anti rotate on polarizer opposite side for quadrax contact:
SIM M 0128 X X X;

SIM sealed module 12 contacts size 20: SIM E 0912 X X X;
SIM non sealed module 12 contacts size 20: SIM M 0912 X X X;


SIM sealed module 5 contacts size 22 + 6 contacts size 16: SIM E 9901 X X X;
SIM non sealed module 5 contacts size 22 + 6 contacts size 16: SIM M 9901 X X X;

SIM sealed module 6 contacts size 22 + 3 contacts size 20: SIM E 0936 X X X;
SIM non sealed module 6 contacts size 22 + 3 contacts size 20: SIM M .0936 X X X;

SIM sealed module 8 contacts size 20 + 2 contacts size 16: SIM E 0910 X X X;
SIM non sealed module 8 contacts size 20 + 2 contacts size 16: SIM M 0910 X X X;

SIM sealed module 6 contacts size 16 + 2 contacts size 20 + 8 contacts size 26: SIM E 1602 X X X;
SIM non sealed module 6 contacts size 16 + 2 contacts size 20 + 8 contacts size 26: SIM M 1602 X X X;

SIM sealed blank module: SIM E L 0000 PN;
SIM non sealed blank module: SIM M L 0000 PN.

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- **Specification number:** NF EN 4165-001

- **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 4165-001

- **Inspection and maintenance instruction reference:** As specified in Amphenol Air LB quality manual

- **Qualification test report reference:** QTR 17-013 issue ø / 14-007 issue ø / QTR 13-012 issue ø /
CRE 08-016 issue.ø / CRE 02-547 issue ø / CRE 02-541 issue.ø.

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

Mechanical performances		
Description	Data	Units
Insert retention in housing (minimum)	25.4	daN
Contact retention in insert (minimum)	1.8 for size 26 4.4 for size 23 & 22 6.7 for size 20 11.0 for size 16; 12 & 08	daN
Mechanical endurance	500	Cycles
Vibrations (type)	Sinusoidal + random (1602 layout) Random (others)	Not applicable
Vibrations (maximum frequency)	3000 (1602 layout) 2000 (others)	Hz
Vibrations (amplitude)	20 (1602 layout) 22.6 (others)	g
Vibrations (duration)	12 (1602 layout) 24 (others)	hours
Shocks (type)	Sinusoidal	Not applicable
Shocks (amplitude)	100	g
Shocks (duration)	6	ms
Resonant frequency minimum	128	Hz
Static loads (minimum)	Not concerned	daN

Climatic performances		
Description	Data	Units
Maximum temperature of use	175	°C
Minimum temperature of use	-55	°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	121.0 (1602 layout) 11.0 (others)	mb
Air leakage	4	cm ³ /hour
Immersion at low air pressure	121.0 (1602 layout) 11.0 (others)	mb
IP indice	Not concerned	Not applicable

Electrical performances		
Description	Data	Units
Insulation resistance	5000	MΩ
Voltage proof test	1000 for size 26 1500 for size 23 1800 for other size	V
Maximum intensity	3 for size 26 5.0 for size 23 & 22 7.5 for size 20 13.0 for size 16 15.0 for size 16 (1602 layout) 26.0 for size 12 80.0 for size 08	A
Contact resistance	Not concerned	mΩ
Shell electrical continuity	Not concerned	mΩ

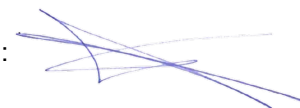
Optical performances		
Description	Data	Units
Insertion loss	Not concerned	dB
Return loss	Not concerned	dB

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

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

Date : 09/20/2019

Sign :



Company : Amphenol Air LB

Position held : Engineering Manager

Name : Jerome CHEVALIER

Date : 09/30/2019

Sign :



Company : Amphenol Air LB

Position held : Quality Manager

Name : Vincent BEYRIES