	DECLARATION OF DESIGN AND PERFORMANCE	Reference DDP SIM XXK 0000 XXX
	<i>SIM modules serie 2 & 3 with crimp contacts for long fuel immersion</i>	Page 1 / 4

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

- Description of product: SIM modules serie 2 & 3 shells with crimp contacts for long fuel immersion.

- Part number:

SIM sealed module serie 2 with 20 contacts size 22: SIM EK 2022 X X X;
SIM non sealed module serie 2 with 20 contacts size 22: SIM MK 2022 X X X;
SIM sealed module serie 3 with 20 contacts size 22: SIM 3EK 2022 X X X;
SIM non sealed module serie 3 with 20 contacts size 22: SIM 3MK 2022 X X X;

SIM sealed module serie 2 with 12 contacts size 20: SIM EK 1220 X X X;
SIM non sealed module serie 2 with 12 contacts size 20: SIM MK 1220 X X X;
SIM sealed module serie 3 with 12 contacts size 20: SIM 3EK 1220 X X X;
SIM non sealed module serie 3 with 12 contacts size 20: SIM 3MK 1220 X X X;

SIM sealed module serie 2 with 8 contacts size 16: SIM EK 0816 X X X;
SIM non sealed module serie 2 with 8 contacts size 16: SIM MK 0816 X X X;
SIM sealed module serie 3 with 8 contacts size 16: SIM 3EK 0816 X X X;
SIM non sealed module serie 3 with 8 contacts size 16: SIM 3MK 0816 X X X;

SIM grounding sealed male module serie 2 with 8 contacts size 16: SIM EGK 0816 P X X;
SIM grounding non sealed male module serie 2 with 8 contacts size 16: SIM MGK 0816 P X X;


SIM sealed module serie 2 with 4 contacts size 12: SIM EK 0412 X X X;
SIM non sealed module serie 2 with 4 contacts size 12: SIM MK 0412 X X X;
SIM sealed module serie 3 with 4 contacts size 12: SIM 3EK 0412 X X X;
SIM non sealed module serie 3 with 4 contacts size 12: SIM 3MK 0412 X X X;

SIM grounding sealed male module serie 2 with 4 contacts size 12: SIM EGK 0412 P X X;
SIM grounding non sealed male module serie 2 with 4 contacts size 12: SIM MGK 0412 P X X;

SIM sealed module serie 2 with 1 contact size 08: SIM EK 0108 X X X;
SIM non sealed module serie 2 with 1 contact size 08: SIM MK 0108 X X X;
SIM sealed module serie 3 with 1 contact size 08: SIM 3EK 0108 X X X;
SIM non sealed module serie 3 with 1 contact size 08: SIM 3MK 0108 X X X;

SIM sealed module serie 2 with 1 contact size 08 with anti rotate on polarizer side for quadrax contact:
SIM EK 0118 X X X;
SIM non sealed module serie 2 with 1 contact size 08 with anti rotate on polarizer side for quadrax contact:
SIM MK 0118 X X X;
SIM sealed module serie 3 with 1 contact size 08 with anti rotate on polarizer side for quadrax contact:
SIM 3EK 0118 X X X;
SIM non sealed module serie 3 with 1 contact size 08 with anti rotate on polarizer side for quadrax contact:
SIM 3MK 0118 X X X;

SIM grounding sealed male module serie 2 with 1 contact size 08 with anti rotate on polarizer side for quadrax contact: SIM EGK 0118 P X X;
SIM grounding non sealed male module serie 2 with 1 contact size 08 with anti rotate on polarizer side for quadrax contact: SIM MGK 0118 P X X;

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SIM sealed module serie 2 with 1 contact size 08 with anti rotate on polarizer opposite side for quadrax contact: SIM EK 0128 X X X;
SIM non sealed module serie 2 with 1 contact size 08 with anti rotate on polarizer opposite side for quadrax contact: SIM MK 0128 X X X;
SIM sealed module serie 3 with 1 contact size 08 with anti rotate on polarizer opposite side for quadrax contact: SIM 3EK 0128 X X X;
SIM non sealed module serie 3 with 1 contact size 08 with anti rotate on polarizer opposite side for quadrax contact: SIM 3MK 0128 X X X;

SIM grounding sealed male module serie 2 with 1 contact size 08 with anti rotate on polarizer opposite side for quadrax contact: SIM EGK 0128 P X X;
SIM grounding non sealed male module serie 2 with 1 contact size 08 with anti rotate on polarizer opposite side for quadrax contact: SIM MGK 0128 P X X;

SIM sealed blank module serie 2: SIM ELK 0000 P N;
SIM non sealed blank module serie 2: SIM MLK 0000 P N.

- **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 14-007 issue ø / 13-008 issue ø
CRE 03-001 issue ø / PVE 12-092 issue.ø.

See following table for the main performances:

Constitution	
Shell material	Thermoplastic
Shell plating material	Not concerned
Insulation material	Silicone
Contact material	Copper alloy (only for male grounding module)
Contact plating material	Nickel (only for male grounding module)

Mechanical performances		
Description	Data	Units
Insert retention in housing (minimum)	25.4	daN
Contact retention in insert (minimum)	4.4 for size 22 6.7 for size 20 11.0 for size 16; 12 & 08	daN
Mechanical endurance	500	Cycles
Vibrations (type)	Random	Not applicable
Vibrations (maximum frequency)	2000	Hz
Vibrations (amplitude)	22.6	g
Vibrations (duration)	24	hours
Shocks (type)	Sinusoidal	Not applicable
Shocks (amplitude)	100	g
Shocks (duration)	6	ms
Resonant frequency minimum	Not concerned	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	Not applicable
Interfacial sealing	11.0	mb
Air leakage	4	cm ³ /hour
Immersion at low air pressure	11.0	mb
IP indice	Not concerned	Not applicable

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Electrical performances		
Description	Data	Units
Insulation resistance	5000 (grounding module not concerned)	MΩ
Voltage proof test	1800 (grounding module not concerned)	V
Maximum intensity	5.0 for size 22 7.5 for size 20 13.0 for size 16 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

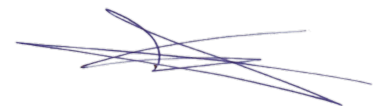
Fire behaviour	
In compliance with standard	EN 2591-317

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

Date: February 1st, 2021

Sign:

Company: Amphenol Air LB



Position held: Engineering Manager

Name: Jerome CHEVALIER

Date: February 1st, 2021

Sign:

Company: Amphenol Air LB



Position held: Quality Director

Name: Vincent BEYRIES