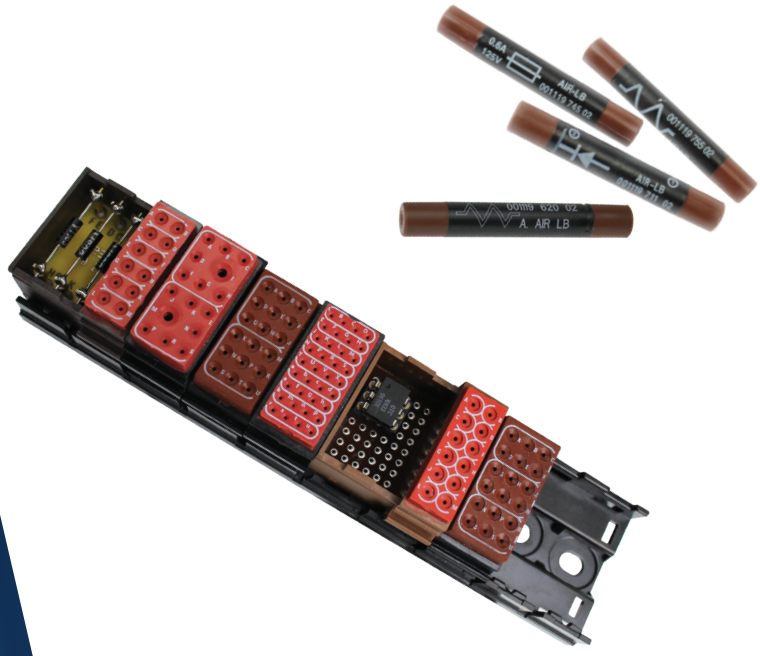
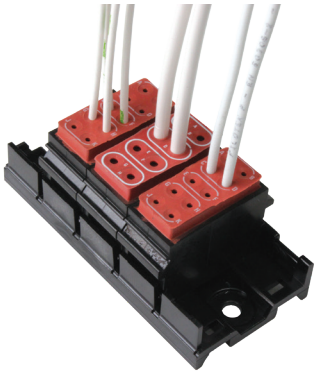
Amphenol Air LB

Your Satisfaction. Everyday. Everywhere.

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NF/UTE C93-462

1750 DISTRIBUTION MODULES

1750 Standard, 1765 Component Carrier & 1119 Splices

Brochure 11/26 - V6.0

2 rue Clément ADER, Zac de Wé - 08110 CARIGNAN - FRANCE
Customers Service - Tel : +33 (0)3 24 22 32 66 - customer-service@amphenol-airlb.fr

1750 & 1765 SERIES - PRESENTATION

Shunted Distribution Modules, individually Removable on rail, for a Sealed connection and a High Wiring Density.

UP TO 36 CTS SIZE 22 PER MODULE

They are easily mounted on Rails thanks to a Locking Spring Mechanism, for a Quick and Easy installation and maintenance: no special tool or end stop required.
Rails are available in Metallic or Composite versions.

METALLIC RAIL = ROBUST

COMPOSITE RAIL = LIGHTWEIGHT

Amphenol Air LB design a Broad Range of sealed 1750 modules (pitch of 14mm) and 1765 component carrier modules (pitch of 28mm). They are fitted with pin crimp contacts.

More information in our Quick Junction Modules catalogue.

APPLICATIONS FIELD

Commercial Aerospace, CSS and IFE
Commercial and Mil Avionics

MODULES QUALIFICATION AND STANDARDS

NF/UTE C93-462 qualified
Compliant with ROHS & REACH spec.

INSERT ARRANGEMENTS

Mixed modules
Grounding modules
With inserted diodes
With components soldered on PCB or Pads
With studs

PIN CRIMP CONTACTS

Qualified EN3155-016 & NF L 53-105 standards
Sizes available: 22, 20, 16, 12 and 10
From 26 to 8 AWG
Cable cross section: from 0,15 to 8,98 mm²



1765 component carrier modules



1750 modules

MAIN TECHNICAL FEATURES

MATERIAL

Module : Thermoplastic
Grommet : Silicon elastomer
Contact : Copper alloy with Gold on nickel plating

ELECTRICAL

Withstanding voltage : 1500 V RMS 50 Hz
Insulation resistance : ≥ to 5000 MΩ

	# 22	# 20	# 16	# 12	# 10
Max. contact resistance (mΩ)	5	4	3	2	/
Max. current rating (A)	5	7,5	13	23	33 or 46

FLUIDS RESISTANCE

Modules conform to UTE C93-462 standard

MECHANICAL

Shocks : 100g during 6 ms
Vibrations : Modules : Sinusoidal frequency from 10 to 2000 Hz, acceleration 10g, 12 cycles discontinuity ≤1µs
Comp. Carrier : MIL-STD-810 D method 514-3 cat. 6
Endurance : Modules : 10 complete mounting/unmounting cycles of contacts into the cavity

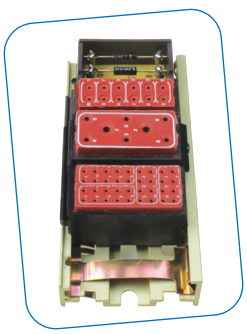
ENVIRONMENTAL

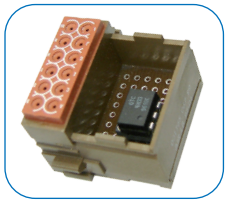
Operating temperature : -55° to +175°C *(component not included)*
Endurance : 1000h to 175°C
Damp heat : 21j as per NFC20-703
Salt spray : 96 hours

SEALING

IP66 / IP68 and IP69K with appropriate cable diameter





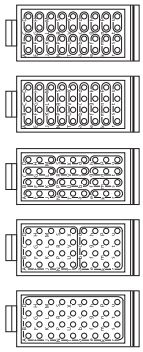


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CONTACT LAYOUTS & RAILS

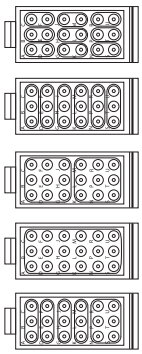
STANDARD MODULES

Layouts for 36 cts size 22



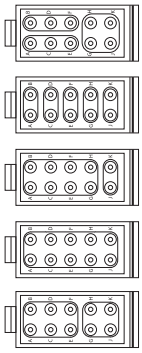
001755 101 02
001755 102 02
001755 104 02
001755 105 02
001755 106 02

Layouts for 18 cts size 20



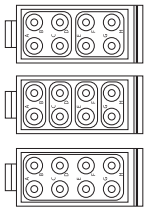
001755 201 02
001755 202 02
001755 203 02
001755 205 02
001755 211 02

Layouts for 10 cts size 16



001755 301 02
001755 302 02
001755 303 02
001755 305 02
001755 306 02

Layouts for 08 cts size 12

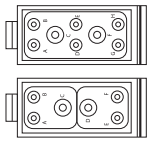


001755 401 02
001755 402 02
001755 403 02

OTHER LAYOUTS AVAILABLE

Please consult our Quick Junction Modules Catalogue

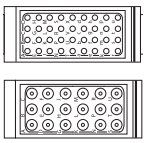
MIXED STANDARD MODULES



8 contacts: 2 cts #12 + 6 cts #16
001755 501 02

6 contacts: 2 x (1ct #12 + 2cts #16)
001755 504 02

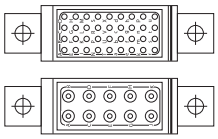
GROUNDING MODULES ON METALLIC RAIL



36 contacts #22
001758 120 02

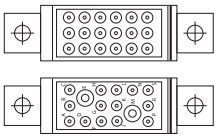
18 contacts #20
001758 220 02

GROUNDING MODULES WITH INDIVIDUAL MOUNTING BRACKETS



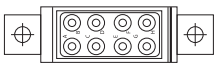
36 contacts #22
001758 101 02

10 contacts #16
001758 301 02



18 contacts size 20
001758 201 02

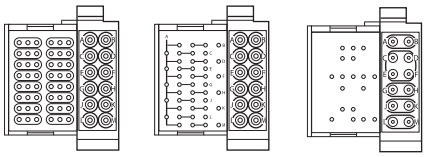
02cts # 12 + 14cts #20
001758 501 02



08 contacts #12
001758 401 02

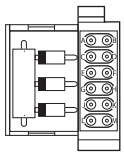
COMPONENT CARRIER MODULES

Layouts for component carrier shells



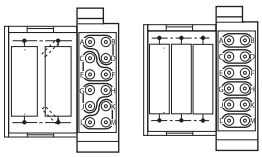
001765 204 02 001765 205 02 001765 207 02

Layouts for Resistor + Diode



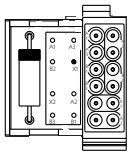
001765 012 99

Layouts for Resistor



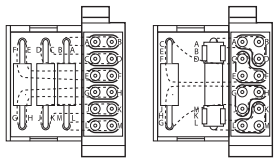
001765 016 99 001765 017 99

Layouts for Diode + Relay



001765 019 99

Layouts for Fuse



001765 201 02 001765 206 02

NON ROHS METALLIC RAIL

P/N: **001751 1** ****

Nb of modules: **01** - **02** - **03** - ...

Anodization: **00**
Cadmium bichromate plating: **07**

(for Grounding modules on metallic rail)

ROHS METALLIC RAIL

P/N: **3177 01** ** **000 RAI**

Nb of modules: **01** - **02** - **03** - ...

1 to 2 modules: **nothing**
3 to 10 modules and more..: **RAI**

COMPOSITE RAIL

P/N: **001751 6** ** **00**

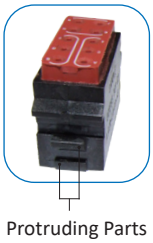
Nb of modules: **01** - **02** - **03** - ...

SIZE ON RAIL :

- Module: pitch of 14 mm
- Component Carrier Module: pitch of 28 mm

INSTALLATION

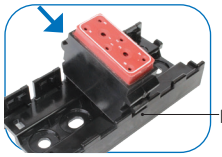
MODULES INSERTION / EXTRACTION



Protruding Parts

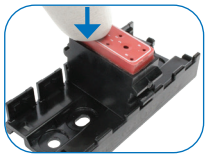
Insertion

1 Insert the protruding parts of the module facing the rail slot



Rail slot

2 Exert a light pressure on the module to click the locking spring mechanism



Extraction

1 Exert a light pressure with a screwdriver between the protruding part and the module until the release of the module



Rail tong

1119 SPLICES - PRESENTATION

Sealed, available in Standard version or with Integrated Components, 1119 Splices consist of female contacts, inside a thermosetting resin and fluorinated silicon elastomer sleeve.

They are fitted with male crimp contacts, at each extremity of the splice, and comply with NF L53-105, NAS 1749 and EN 3155-016 standards.

For Copper or Aluminum Cable Contacts

Components as Diodes, Fuses or Resistors

Sizes 22, 20 & 16



Splice for Copper cable contacts





Splice for Aluminum cable contacts



Splice with Components

MAIN TECHNICAL FEATURES

MATERIAL

Splice : Thermoplastic and Silicon elastomer
Contact : Copper alloy with Gold on nickel plating

ENVIRONMENTAL

Operating temperature : -55° to +175° C
(component not included)

MECHANICAL

Endurance : 10 complete mounting/unmounting cycles of contacts into the cavity

Contact Retention :

	# 22	# 20	# 16
Contact retention (daN)	5,4	9	11,4

ELECTRICAL

Withstanding voltage : 1500 V RMS 50 Hz
Insulation resistance : ≥ to 5000 MΩ

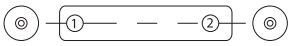
	# 22	# 20	# 16
Max. contact resistance (mΩ)	5	4	3
Max. current rating (A)	5	7,5	13

MAIN CONTACT LAYOUTS

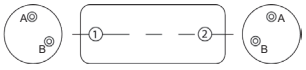
SPLICES FOR COPPER CABLE CONTACTS



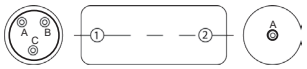
Contacts size 22 / 22
001119 108 02



Contacts size 20 / 20
001119 201 02



Contacts size 16 / 16
001119 302 02

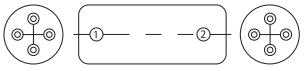


Contacts size 16 / 20
001119 501 02

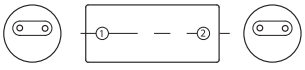
Other Layouts Available

Please consult our Quick Junction Modules Catalogue

SPLICES FOR ALUMINUM CABLE CONTACTS



Contacts size 22 / 22
001119 168 02



Contacts size 20 / 20
001119 252 02

SPLICES WITH COMPONENTS

Inserted Diode	Inserted Fuse	Inserted Resistor
VRM: 1000V / Io: 1A to 75° 001119 711 02	VRM: 125V / Io: 0,6A 001119 745 02	SFR25 / 620Ω 0,5W +/-5% 001119 732 02
VRM: 111V / Io: 8,4A 001119 788 02	VRM: 125V / Io: 3A 001119 810 02	5,6KΩ 0,5W +/-1% 001119 782 02

MODULES & SPLICES: CONTACTS & TOOLS

Pin contact			Cable			Crimping		Insertion - Extraction	
Size	Standard	P/N	Section mm²	AWG	Ø/seath (mm)	Tool	Locator	Plastic Tool	Standard
22	EN3155-016M2222 NF L 53105/1 NSA 937910EA2200	001104 100 02	0,15 - 0,40	22 - 24 26	0,74 - 1,37	M22520/2-01	AIR LB K 673	001112 100 25	MIL I 81969/14-01
20	EN3155-016M2018 NF L 53105/2 NSA 937910EA2000	001104 200 02	0,25 - 1,00	18 - 20 22 - 24	0,95 - 2,10	M22520/1-01 M22520/2-01 M22520/7-01	M22520/1-02 M22520/2-02 M22520/7-02	001112 200 25	MIL I 81969/14-11 NAS 1664-20 NF L 54131/20
16	EN3155-016M1616 NF L 53105/3 NSA 937910EA1600	001104 300 02	0,60 - 1,20	16 - 18 20	1,34 - 2,62	M22520/1-01 M22520/7-01	M22520/1-02 M22520/7-03	001112 300 25	MIL I 81969/14-03 NAS 1664-16 NF L 54131/16
12	EN3155-016M1212 NF L 53105/4 NSA 937910 EA 1200	001104 400 02	2,00 - 3,00	12 - 14	2,20 - 4,01	M22520/1-01	M22520/1-02	001112 400 25	MIL I 81969/14-04 NAS 1664-12 NF L 54131/12
10	-	001104 620 02	5,15 - 8,98	8 - 10	4,00 - 5,50	M 300 BT	TP 986	001112 600 25	MIL I 81969/14-05

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