



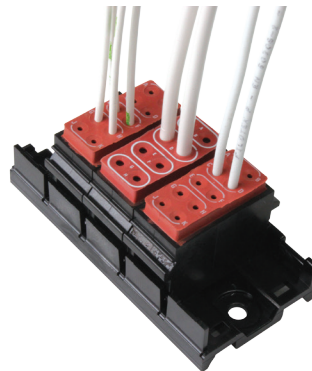
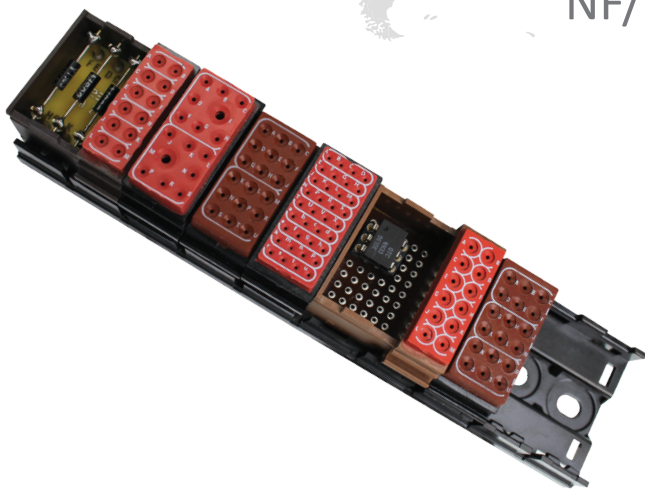
1750 Distribution Modules

1750 Standard, 1765 Component Carrier & 1119 Splices



Commercial Aerospace
Defence

NF/UTE C93-462



BROCHURE 01/18 - V4.0

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Amphenol Air LB
Your Satisfaction. Everyday. Everywhere.

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

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.

COMPOSITE RAIL = LIGHTWEIGHT

More information in our Quick Junction Modules catalogue.

APPLICATIONS FIELD

Commercial Aerospace, CSS and IFE
Commercial and Mil Avionics

MODULES QUALIFICATION AND STANDARDS

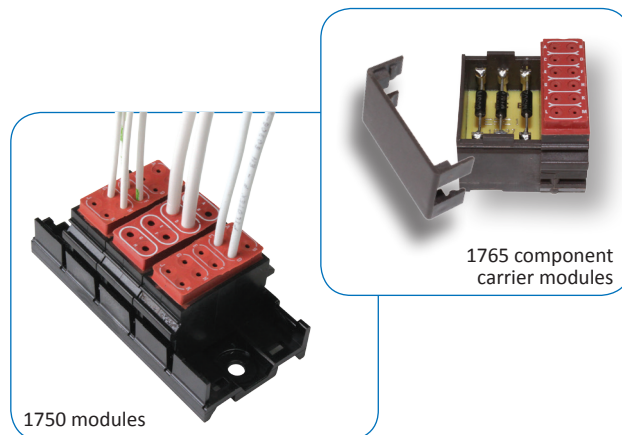
NF/UTE C93-462 qualified
Compliant with ROHS & REACH spec.

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



1750 modules

1765 component carrier 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 : $\geq$ to 5000 M Ω

	# 22	# 20	# 16	# 12	# 10
Max. contact resistance (m Ω)	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

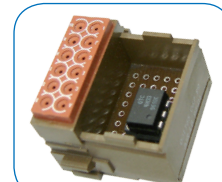
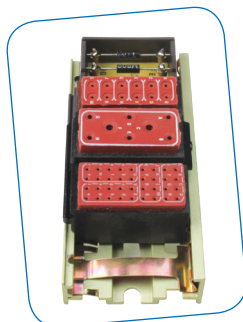
Shocks : 100g during 6 ms
Vibrations : Modules : Sinusoidal frequency from 10 to 2000 Hz, acceleration 10g, 12 cycles discontinuity $\leq 1\mu$ s
Comp. Carrier : MIL-STD-810 D method 514-3 cat. 6
Endurance : Modules : 10 complete mounting/unmounting cycles of contacts into the cavity

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

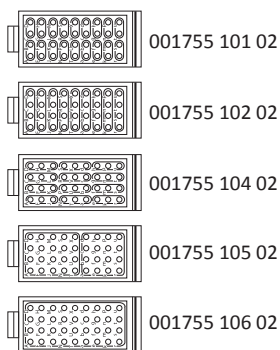
IP66 / IP68 and IP69K with appropriate cable diameter



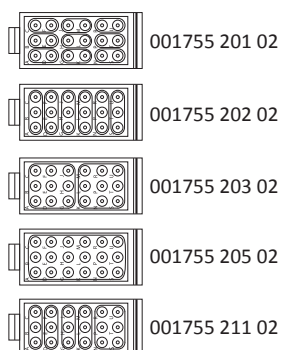
CONTACT LAYOUTS & RAILS

STANDARD MODULES

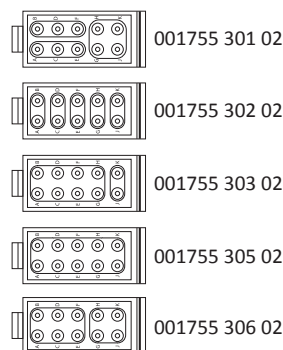
Layouts for 36 cts size 22



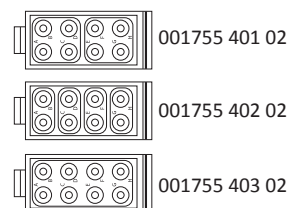
Layouts for 18 cts size 20



Layouts for 10 cts size 16



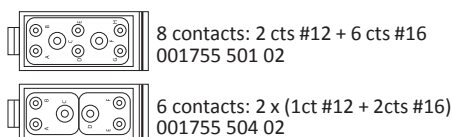
Layouts for 08 cts size 12



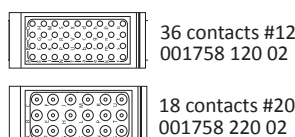
OTHER LAYOUTS AVAILABLE

Please consult our
Quick Junction Modules
Catalogue

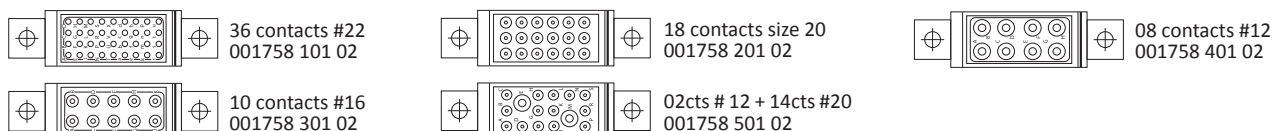
MIXED STANDARD MODULES



GROUNDING MODULES ON METALLIC RAIL

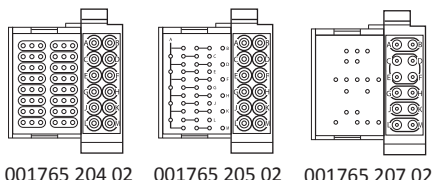


GROUNDING MODULES WITH INDIVIDUAL MOUNTING BRACKETS

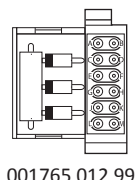


COMPONENT CARRIER MODULES

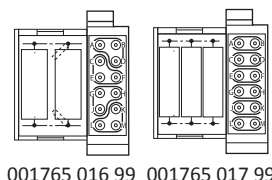
Layouts for component carrier shells



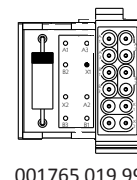
Layouts for Resistor + Diode



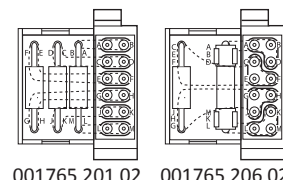
Layouts for Resistor



Layouts for Diode + Relay



Layouts for Fuse



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

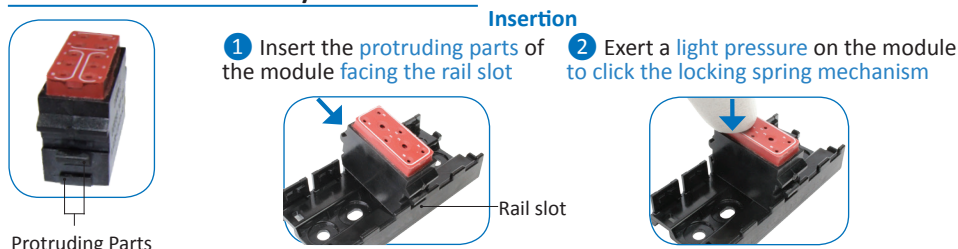
P/N: 3177 01** 000 RAI
Nb of modules: 01 - 02 - 03 - ...
1 to 2 modules: nothing
3 to 10 modules and more...: RAI

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



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.

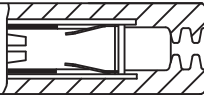
They are fitted with male crimp contacts, at each extremity of the splice, and comply with NF L53-105, NAS 1749 and EN 3155-016 standards.

FOR COPPER OR ALUMINUM CABLE CONTACTS

COMPONENTS AS DIODES, FUSES OR RESISTORS

SIZES 22, 20 & 16

AIR LB REF. 00111



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

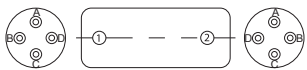
ELECTRICAL

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

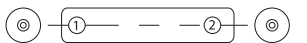
	# 22	# 20	# 16
Max. contact resistance (mΩ)	5	4	3
Max. current rating (A)	5	7,5	13

MAIN CONTACT LAYOUTS

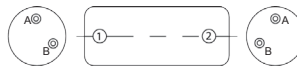
SPLICES FOR COPPER CABLE CONTACTS



Contacts size 22 / 22
001119 108 02



Contacts size 20 / 20
001119 201 02



Contacts size 16 / 16
001119 302 02

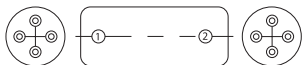


Contacts size 16 / 20
001119 501 02

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

Size	Pin contact		Cable			Crimping		Insertion - Extraction	
	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