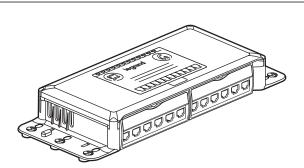


# 87045 LIMOGES Cedex

Cat. no(s).: 335 41/42/44/45/46

Telephone: (+33) 05 55 06 87 87 - Fax: (+33) 05 55 06 88 88

# Area distribution boxes with connectors



CONTENTS	Page
General characteristics	
Real life scenarios	
5. Installation	2
7. Connection	3
Standards and approvals	

# 1. GENERAL CHARACTERISTICS

Boxes distribute low currents in an area equipped with 1 to 12 RJ 45 sockets.

They centralise connections to ensure flexibility and that the installation is up to date.

The boxes connect to the patch panel or enclosure by a maximum of 6 or 12 links.

Area boxes can be installed in technical flooring or in false ceilings.

Area boxes are offered in Cat. 5e and Cat. 6 and should be selected according to the size of the network.

Additional sockets can be connected quickly by adding a mixed cord (RJ 45-stripped) between the box and the RJ 45 socket, or by adding an RJ 45 only cord for an even quicker solution.

	Designation	UTP	FTP	STP	Weight (g)
	Area distribution box UTP Cat. 5e	335 41			520
	Area distribution box Cat. 5e FTP		335 42		
i decord from the second	Area distribution box UTP Cat. 6	335 44			520
	Area distribution box FTP Cat. 6		335 45		520
	Area distribution box STP Cat. 6			335 46	760

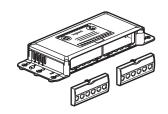
# 2. PRESENTATION

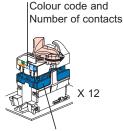
# 335 41/42/44/45/46:

Identification number			
	Cat. 5		
UTP	SB01	SB51	
FTP	SB02	SB52	
STP		SB53	

# 2. PRESENTATION (continued)

335 44/45/46:

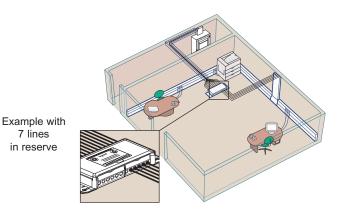




Colour code category: Cat.5 grey Cat.6 blue

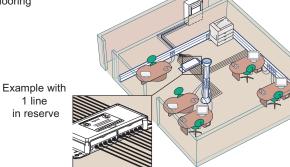
# 3. REAL LIFE SCENARIOS

On false ceilings



In technical flooring

1 line



Technical data sheet: F00971EN/00 Updated on: Created on: 19/06/2009

#### Cat. no(s).: 335 41/42/44/45/46

#### 4. TECHNICAL FEATURES

#### 4.1 Characteristics of the materials

Resistance to chemical age	ents Polypropylene	ABS	SBS
Acetone	+ (100%)	+	
Acetic acid	+ (50%)	+ (10%)	+ (10%
Hydrochloric acid	+ (36%)	+ (10%)	+ (10%
Citric acid (10%)	+	+	+
Hydrofluoric acid (4%)	+	+	+
Lactic acid	+ (90%)	+ (10%)	+ (90%
Nitric acid (10%)	+	+	+
Phosphoric acid (85%)	+	+	(+)
Sulphuric acid (25%)	+	+	+
Tannic acid			
ethyl alcohol	+	(+)	+
Methyl alcohol	+	(+)	+
Ammonia	+	+	+
Barium chloride	+	+	+
Benzene (-	+) (+)		
Lime chloride	+		
Seawater	+	+	+
Oil, grease	+	+	+
Milk	+	+	+
Fuel oil			
Petroleum, petrol	+	(+)	+
Sodium chloride (20%)	+	+	+
Caustic soda (40%).	+	+	+
Styrene monomer			
Sugar			
Trichloroethylene	-	-	-
Toluene	(+)	-	-
Urine			
Wine	+	+	+
Liquid chlorine	(+)		
Aniline	+	-	+
Bleach	(+)	+	(+)
+ Resistance	- Instability	(+) Limited	resistance

These indications are given for information only; they do not represent any undertaking on our part.

Cables anchored on support using Colring cable ties

Materials: polycarbonate cover (PC)

polypropylene base (PP) and metal part

Colour RAL 7035

# 4.2 Mechanical characteristics

Protection index: IP21

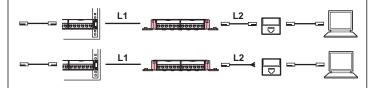
Protection index against mechanical impacts: IK07 Resistance of connector units on the box: 100 N

#### 5. INSTALLATION

The area distribution box associated with the copper or optical feedthrough sockets allows total flexibility: the connections close to the workstation are centralised. The copper or optical fibre coexist.

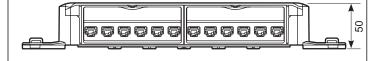
The maximum recommended lengths of links to ensure high performance of the systems with the use of RJ 45 sockets and copper feedthroughs and/or RJ 45 sockets.

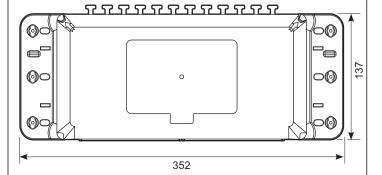
We recommend selecting the shortest wiring lengths for more flexibility in the cord length, should reconfiguration be necessary.



ISO/IEC 11801 Amendment 1	L1 (m)	L2 (m)	L1 (m) + L2 (m)
	≤ 75	8	≤ 83
Cat. 5e	≤ 65	15	≤ 80
	≤ 60	20	≤ 80
	≤ 70	8	≤ 78
Cat. 6	≤ 60	15	≤ 75
	≤ 55	20	≤ 75

# 6. OVERALL DIMENSIONS





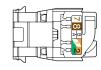
#### Cat. no(s).: 335 41/42/44/45/46

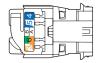
# 7. CONNECTION

#### 7.1 Standard RJ 45 connection









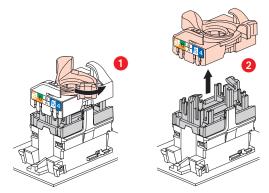
**EIA 568 A** 

Permitted conductors:

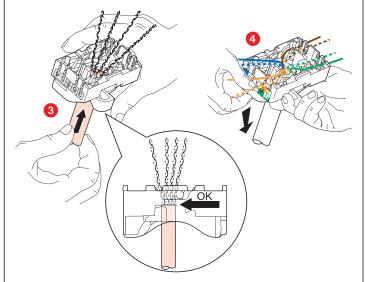
- Single-core: 0.5 to 0.65 mm, AWG 22 to 25
- Multicore: AWG 26
- Polyethylene conductor insulation: Ø max. on 1.58 mm insulation

Number of wires to be connected per connection: 1

RJ 45 connectors are equipped with a locking nut. They do not require a special tool and can be re-wired if a mistake is made.

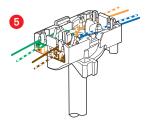


This system allows you to spread pairs with ease before fitting them onto the connector.



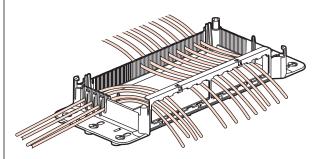
Spreading the cables allows you to ensure that a pair-breakage distance of 13 mm is kept between each pair.

Spreading pairs at 90° to the cable ensures the best possible performance.



# 7. CONNECTION (continued)

The metal part allows you to achieve a uniform grounding and ensure that connectors are properly held despite any faults in the floor or



# 8. STANDARDS AND APPROVALS

Connector tested and guaranteed under POE signal stress, standard EEE 802.3af and POE+, draft standard 802.3at, up to 2500 load connections/disconnections.

Tests are carried out with 2 simultaneous POE+ circuits for a minimum total power of 50W.

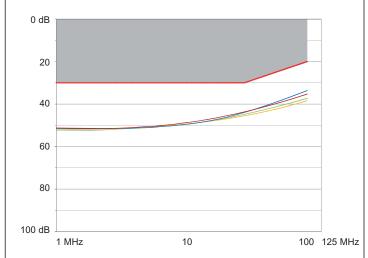
RoHS compliant



# Cat. no(s).: 335 41/42/44/45/46

# 9. PERFORMANCE

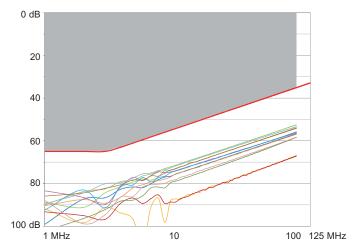
# 9.1 Performance of components (RJ 45 connectors Cat. 5e) Return loss



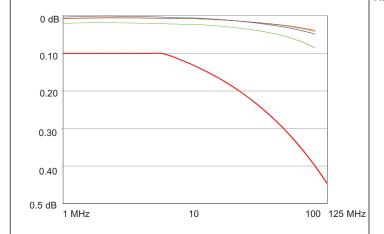
# 9. PERFORMANCE (continued)

# 9.1 Performance of components (RJ 45 connectors Cat. 5e) (continued)

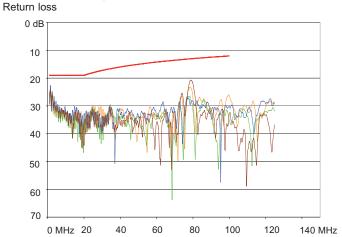
FEXT (Far end Crosstalk Attenuation)



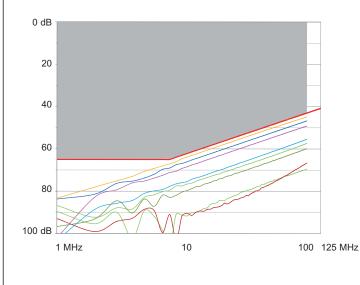
#### Attenuation



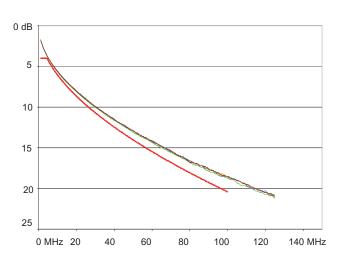
9.2 Performance of permanent link with F/UTP cable



# NEXT (Near end Crosstalk Attenuation)



Attenuation



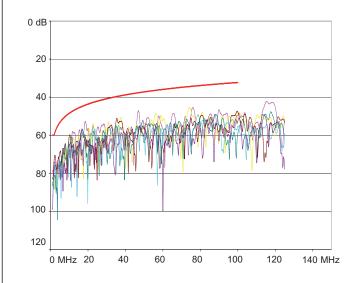
Technical data sheet: F00971EN/00

Updated on:

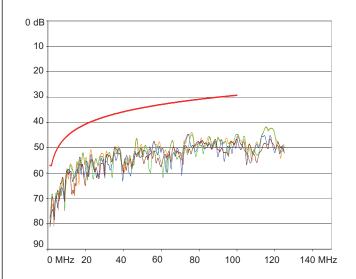
# Cat. no(s).: 335 41/42/44/45/46

# 9. PERFORMANCE (continued)

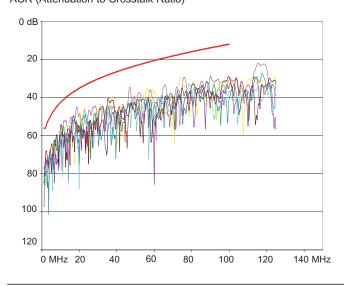
9.2 Performance of permanent link with F/UTP cable (continued) NEXT (Near end Crosstalk Attenuation)



PS NEXT (Power Sum NEXT)

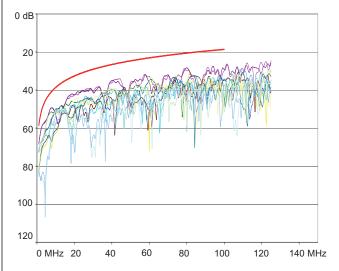


ACR (Attenuation to Crosstalk Ratio)



#### 9. PERFORMANCE (continued)

9.2 Performance of permanent link with F/UTP cable (continued) ELFEXT (Equal Level Far End Crosstalk Attenuation)



Technical data sheet: F00971EN/00

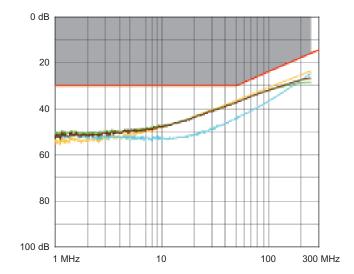
Updated on:

# Cat. no(s).: 335 41/42/44/45/46

# 9. PERFORMANCE

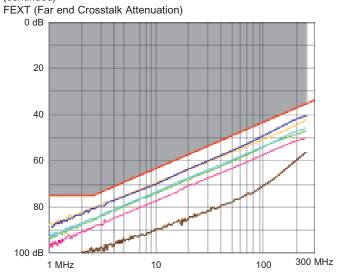
Attenuation

# 9.3 Performance of components (RJ 45 connectors Cat. 6) Return loss

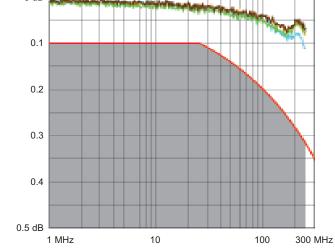


# 9. PERFORMANCE (continued)

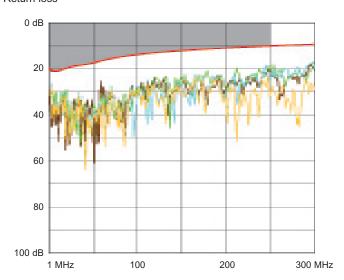
# 9.3 Performance of components (RJ 45 connectors Cat. 6) (continued)



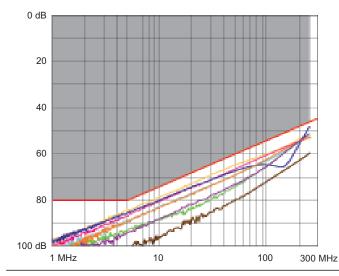




9.4 Performance of permanent link with F/UTP cable Return loss



# NEXT (Near end Crosstalk Attenuation)



Attenuation 0 dB 20 40 80 100 dB 300 MHz 200

Technical data sheet: F00971EN/00

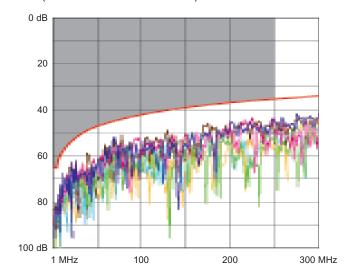
Updated on:

**la** legrand Created on: 19/06/2009

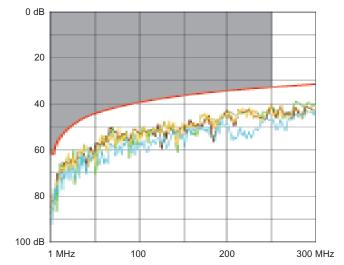
# Cat. no(s).: 335 41/42/44/45/46

# 9. PERFORMANCE (continued)

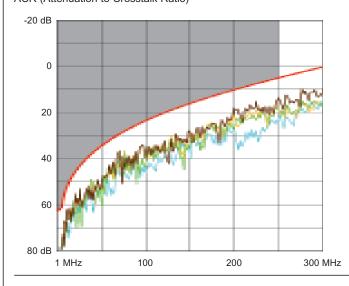
9.4 Performance of permanent link with F/UTP cable (continued) NEXT (Near end Crosstalk Attenuation)



# PS NEXT (Power Sum NEXT)

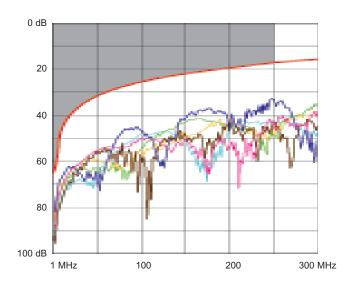


ACR (Attenuation to Crosstalk Ratio)

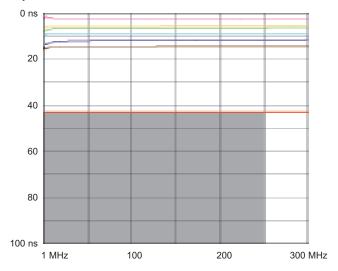


# 9. PERFORMANCE (continued)

9.4 Performance of permanent link with F/UTP cable (continued) ELFEXT (Equal Level End Crosstalk Attenuation)



Delay skew



Technical data sheet: F00971EN/00 Updated on:

