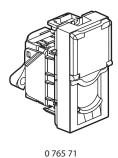
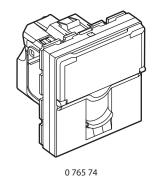


# Mosaic™

# LCS<sup>2</sup> Cat. 6A UTP RJ 45 socket

Cat. No(s): 0 765 09/26/27/71/74/90 0 794 71/74





# 1. USE

Cat. 6<sub>A</sub> RJ 45 terminal socket for high speed connection to a network.

Enables data transmission at 10 Gbit/s.

Socket is used with U/UTP cables.

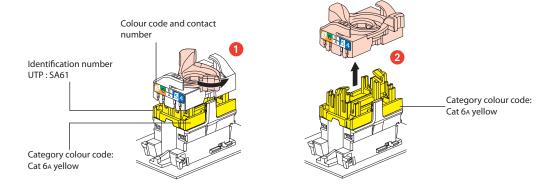
The mechanism can be flush-mounted or surface-mounted in 40 mm depth box min.

To be equipped with frame and plates. Fixing with clips.

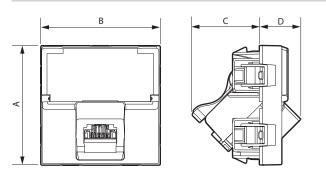
## 2. RANGE

Description	White	Aluminium
Cat. 6A UTP RJ 45 - Metal shielding - 1 module	0 765 71	0 794 71
Cat. 6A UTP RJ 45 - Metal shielding - 1 module - with green shutter	0 765 26	-
Cat. 6A UTP RJ 45 - Metal shielding - 1 module - with orange shutter	0 765 27	-
Cat. 6A UTP RJ 45 - Metal shielding - 2 modules	0 765 74	0 794 74
Cat. 6A UTP RJ 45 - Metal shielding - with controlied access - 2 modules Supplied with 2 keys for 5 sockets - with red shutter	0 765 90	-
Cat. 6A UTP RJ 45 - Metal shielding - with controlied access - 2 modules Supplied with 2 keys for 5 sockets	0 765 09	-

## Presentation



## 3. DIMENSIONS (mm)



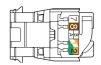
References	Α	В	С	D
0 765 26/27/71 - 0 794 71	45	22.5	24	11
0 765 74 - 0 794 74	45	45	24	11
0 765 90	45	45	24	10
0 765 09	45	45	25.5	15.5

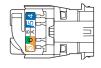
# 4. CONNECTION

Accepts the following cable connectors: RJ 11 (4 contacts), RJ 12 (6 contacts), RJ 45 (9 contacts).

Double colour code T568A and T568B on terminals: STP 9 contacts 360° screen



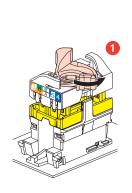




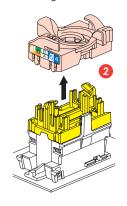
Conductors supported:

- Solid/Stranded : 0.4 to 0.65 mm, AWG 26 to 22
- Polyethylene conductor insulation: Ø 0.85 to 1.7 mm on insulation

RJ 45 connectors are equipped with a locking nut that does not require the use of a specific tool and which enables re-cabling in the event of error.

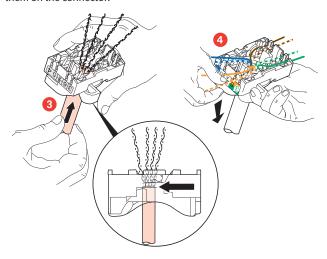


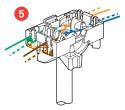
Technical data sheet: F01436EN/02



# **4. CONNECTION** (continued)

This system allows the wire pairs to be spread easily before mounting them on the connector.



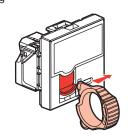


Spreading cables ensures that each pair is separated by the specified 13 mm.

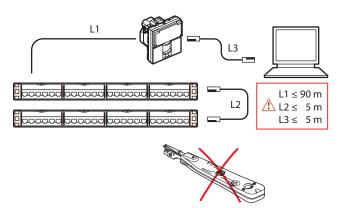
Spreading pairs by  $90^{\circ}$  in relation to the cable ensures optimum performance.

# **5. OPERATION**

0 765 90 unlocking



Installation



## **6. TECHNICAL CHARACTERISTICS**

## ■ 6.1 Mechanical characteristics

Impact resistance: IK 03

IK 04 for 1 module

Penetration against solid bodies and liquids: IP 20

Max. number of connections and disconnections: 5 without refreshing the wiring.

Endurance: 2500 movements (plug insertion/withdrawal).

## ■ 6.2 Material characteristics

Contacts: Gold/nickel, minimum thickness of gold > 0.8 µm

Metal parts: Bronze, nickel, platinum, gold

For STP products the body and the spreader are made of metal alloy with a copper-nickel coating.

Base: PC

Cover plate: PC

Halogen-free

**UV-resistant** 

Self-extinguishing:

 $850^{\circ}\text{C/30}$  s for insulating components holding live parts in place  $650^{\circ}\text{C/30}$  s for other insulating components

## ■ 6.3 Electrical characteristics

Breakdown voltage  $\geq 1000 \text{ V}$ 

Contact resistance  $\leq 20 \text{ m}\Omega$ 

Insulation resistance  $\geq 500 \text{ m}\Omega$  at 100 Vdc

Tested and independently certified to comply with IEC 60512-99-001 and IEC 60512-99-002 for PoE support up to 90 W (Type 4).

## ■ 6.4 Climate characteristics

Storage temperature: -  $10^{\circ}$ C to +  $70^{\circ}$ C Operating temperature: -  $10^{\circ}$ C to +  $60^{\circ}$ C

## 7. CLEANING

Clean the surface with a cloth.

Do not use acetone, tar-removing cleaning agents or trichloroethylene. \\

Resistant to the following products: hexane (NF C 61-314), methylated spirit, soapy water, diluted ammonia, bleach diluted to 10%, window-cleaning products, pre-impregnated wipes.

**Caution:** Always test before using other special cleaning products.

## 8. STANDARDS AND APPROVALS

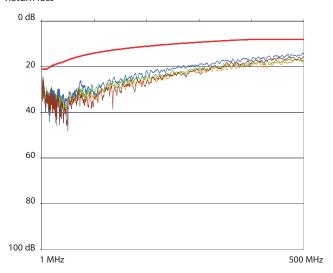
Conform to standards ISO/IEC 11801 Ed. 3.0, amendment 2, EN 50173-1 and TIA/EIA 568 C.

Connectors are compliant to requirements for the following remote powering applications:

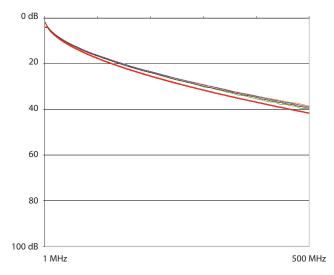
IEEE 802.3af , IEEE 802.3at , IEEE 802.3bt : "Power over Ethernet", Types 1 to 4, up to 90 W.

## 9. PERFORMANCE

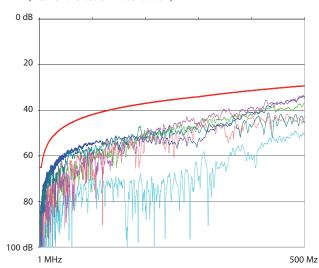
# ■ 9.1 Performance of permanent link with cat. 6A U/UTP cable Return loss



#### Attenuation

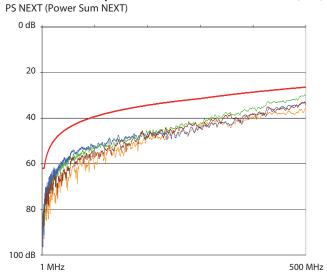


# NEXT (Near end Crosstalk Attenuation)

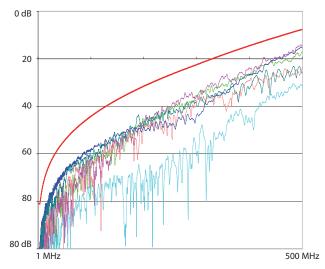


# 9. PERFORMANCE (cont.)

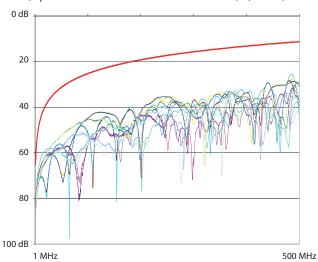
# ■ 9.1 Performance of permanent link with cat. 6A U/UTP cable (cont.)



## ACR-N (Attenuation to Crosstalk Ratio Near End)

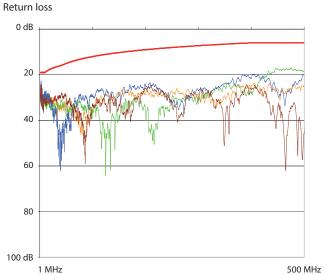


## ACR-F (Equal Level End Crosstalk Attenuation Far End) - (ELFEXT)

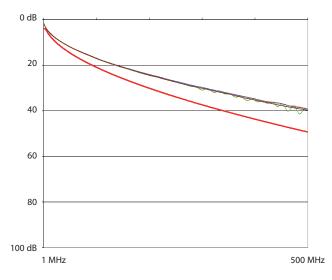


# 9. PERFORMANCE (cont.)

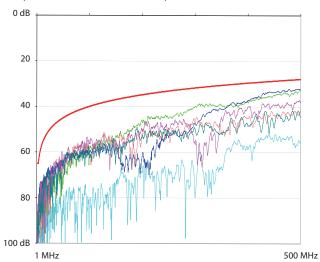
# ■ 9.2 Performance channel



## Attenuation



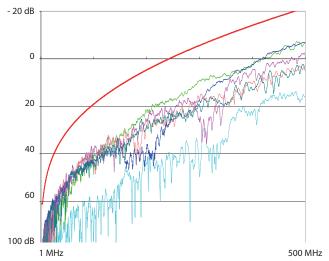
## **NEXT (Near and Crosstalk Attenuation)**



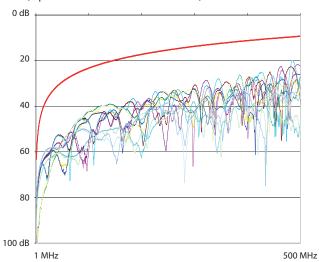
# 9. PERFORMANCE (cont.) 9.2 Performance channel (cont.) PS NEXT (Power Sum Next)) 0 dB 20 40 80 100 dB

## ACR-N (Attenuation to Crosstalk Ratio)

1 MHz



## ACR-F (Equal Level End Crosstalk Attenuation)



Created: 15/11/2011 La legrand

500 MHz