

LINECT-

**The light connection system
of the lighting industry**



1. Expectations of the lighting industry
2. The solution of the components manufacturer
3. The way to readiness for start of production and overview of the availability
4. Feedback from the market
5. Advantages of Linect – Statements of the lighting industry
 - Zumtobel
 - Trilux
 - Glamox
6. Discussion



Expectations of the lighting industry

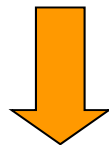
Savings of time and cost by ...

... the reduction of diversity of variants

... faster availability of lights in the market

... simplification of production flows and logistics

The idea: 1 luminaire for all kinds of installation



Order for the components manufacturer: product development



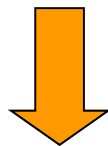
The solution of the components manufacturer

LINECT – THE LIGHT CONNECTION SYSTEM



The solution of the components manufacturer

- Universal Linect[®]-Interface: Standardization of the connection principle
- New Linect-Terminal Block (price-neutral with the parent variant)
- New Linect-Connector appropriate to available pluggable installation systems at the market



Presentation of the concept and of first products at the L&B 2010!



The way to readiness for start of production

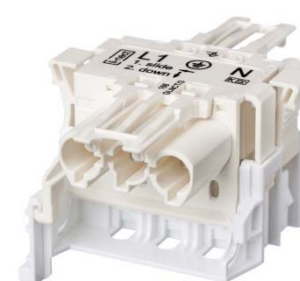
LINECT – THE LIGHT CONNECTION SYSTEM



The way to readiness for start of production

Components manufacturer:

- Product portfolios are completed
- Product availability is built up
- Minimum stock quantity is set up



Product availability

Available

as required

No. of poles Cod- ing	2-pole	3-pole	4-pole	5-pole
A	Mains L - N	Mains L - PE - N	Mains N - PE - 2/L - 1/L'	Mains N - PE - L1 - L2 - L3
B		Control System 1 - 2 - 3		Control System 1 - 2 - 3 - 4 - 5
I	DALI / dimm DA+ - DA-			Mains + DALI N - PE - L - DA- - DA+
L	Emergency power L' - N'			Mains power + Emerg. power N - PE - L - N' - L'
P		UPS L - PE - N		

The way to readiness for start of production

LINECT – THE LIGHT CONNECTION SYSTEM



The way to readiness for start of production

Lighting industry:

- Technical requirements for the production of Linect-luminaires are created
- Linect is partly integrated in serial production



Feedback from the market

Linect convinced!

Security through a technical perfected system

Installer:

- Short time of installation through pluggable electrical installation
- Avoidance of mistakes through mismatched and quality proved components
- High flexibility in exercises of service and care



BOSCH
Technik fürs Leben



Planer:

- Fast availability of luminaires
- Short time of installation through pluggable electrical installation
- Security for prospective change of use

LINECT MULTIPLUG
ZUMTOBEL LIGHTING



Manfred Petschulat

Product Management Director
Indoor Commercial



LINECT MULTIPLUG

WHY ZUMTOBEL LIGHTING SUPPORTS LINECT



ZUMTOBEL

- **Why use a standardized Connection System?**



the light connection system



LINECT MULTIPLUG PLUS VS MINUS



LINECT MULTIPLUG ADVANTAGES



ZVEI:



ZUMTOBEL

- **Luminaire Connectivity is no USP for Zumtobel as a lighting manufacturer**
- **Different connectivity requirements from customers result in complexity = cost**
- **A standardized connection system reduces complexity**



LINECT MULTIPLUG COMPLEXITY



ZVEI:



ZUMTOBEL

- Luminaire Connectivity is no USP for Zumtobel as a lighting manufacturer
- Different connectivity requirements from customers result in complexity = cost
- A standardized connection system reduces complexity



Leitg mit Stecker, Form R2 (DIN 49441)	Leitung mit Stecker T12	Leitung mit Stecker GST18/3	Leitungen mit Stecker + Buchse GST18/3	Leitung mit Stecker GST18/5	Leitungen mit Stecker + Buchse GST18/5
SR2	T12	W3	WB3	W5	WB5



LINECT MULTIPLUG COMPLEXITY



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the light connection system



LINECT MULTIPLUG COST FOR TERMINAL BLOCK



ZVEI:



ZUMTOBEL

- **Cost for Terminal block increases about factor**

~ 30 cent

Terminalblock
Punching
Stickers
Handling



Standard



the light connection system

LINECT MULTIPLUG MARKET PULL



ZVEI:



ZUMTOBEL

- No Market Pull yet



LINECT MULTIPLUG CONCLUSION

Linect is the new standardized connection system

Will only become standard if this system covers > 50% of Market and is supported by

- **Lighting Manufacturers**
- **Connectivity Industry**



=



the light connection system





Linect @ TRILUX

D. Pietz – Product Management TRILUX



TRILUX
NEUES LICHT.



LINECT MULTIPLUG AURISTA NEW DEVELOPMENT



Focus: **Customer benefit and product differentiation**



Sub-targets:



Reduce complexity

Minimise administration effort

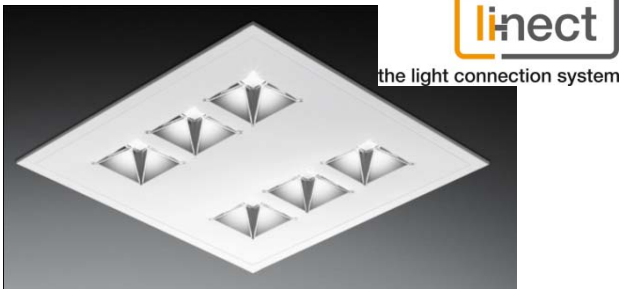
Simple for customers



LINECT MULTIPLUG AURISTA NEW DEVELOPMENT



> 200 TK numbers



Reduction of TK numbers 60 %



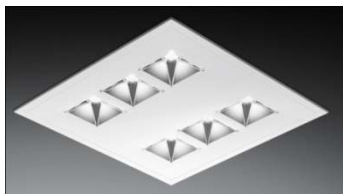
LINECT MULTIPLUG AURISTA CUSTOMER PROCESS



Until now: decision for connection was needed before



1. decision



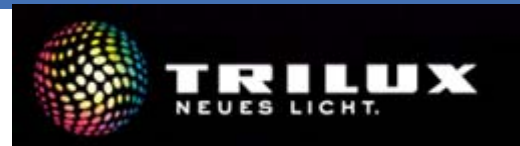
2. decision



3. decision



LINECT MULTIPLUG AURISTA CUSTOMER PROCESS



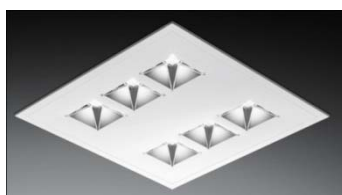
LINECT MULTIPLUG AURISTA CUSTOMER PROCESS



Linect: decision for connection afterwards and can be changed at any time



1. decision



LINECT MULTIPLUG LINECT ADVANTAGES

ZVEI:



- **Less costs and less complexity for everyone!**
- **Maximum flexibility at all times**
- **Simplified planning everywhere**
- **Always quick and safe**
- **Selection freedom: uncomplicated**



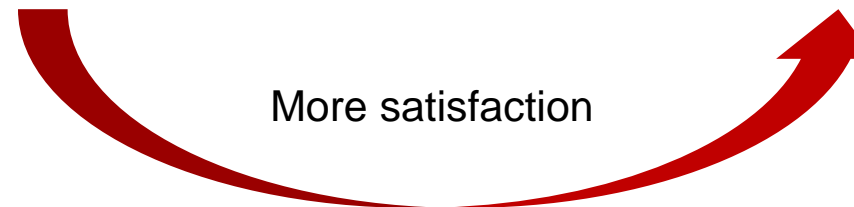
LINECT MULTIPLUG LINECT GOES STANDARD

ZVEI:



the light connection system

- Less mistakes
- Less effort
- Less incompatibility
- Less inflexibility
- ...
- ...



More satisfaction



LINECT MULTIPLUG

ZVEI:



the light connection system

Knut S. Rusten - Marketing and Development director



A high quality universal wiring system that makes installation simple on site

- **Plug and play:** Luminaires with Linect connectors are very quick to install
- **The connection can be installed or removed just as quickly.** Defective lights can be hot swapped.
- **Luminaires fitted with Linect® terminals can also be wired conventionally without having to use the built-in plug system.**



A high quality universal system from which specifiers can benefit in many ways

- **Component compatibility raises the level of freedom of planning and design success and certainty. The installation system is totally independent of the luminaires that are selected.**
- **This simplifies all phases in a project.**
- **With Linect luminaires, the wiring installation cost can be made supplier independent – for both conventional wiring and connection**



LINECT MULTIPLUG GENERAL RECESSED SOLUTIONS

ZVEI:



C10



C20



C20-RL



C30



Minerva



Modul
Modul LED



Sports hall, industry and architectural lighting solutions

C51



A51



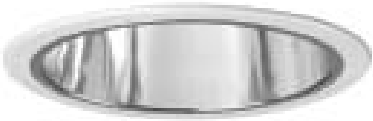
C61





Also available with our wide range of downlights

D20



Travel

D20 LED





Thank you for your attention!

