

Application Note
Substitute
Model ECO
Type
ERrr-(1950-3000)
&
ETrr-(1950-3000)
&
ER Master – Slave systems

General Information

- Replacing an ECO light curtain (ETxx-yyyy; ERxx-yyyy)
- For all resolutions and protective field heights from 1950 mm to 3000
- For the most Master / Slave systems series ECO
- Replacement for standard ER / ET with length 1950 – 3000mm:

MLC500Txx-yyyy + MLC520Rxx-yyyy
- Replacement with changing of the wiring!!
- !!! Mostly it is necessary to change the safety relay at the cabinet !!!



Note:

xx = resolution; yyy = protective field height

Change of the safety relay



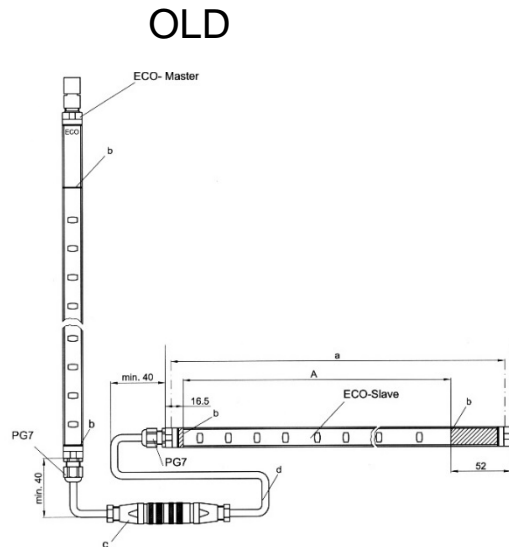
Installed safety relay	Replacement	hint
TNT 3x, all TNT without TNT3x + SMC3x	MSI-SR4B-01	RES connected to 0V;
MSI-TR*B-0x	MSI-SR4B-01	Res connected to 0V
MSI-m/R; MSI-s/R; MSI-i/R	Remain	Change wiring
MSI-mx*; MSI-sx*; MSI-ix*	Remain	Change wiring
TMC66, TNT3x + SMC3x	Application need to be clarified; contact support	Possible solution, e.g. MLC530Rxx-yyyy-SPG
Non Leuze safety relay	Application need to be clarified; contact support	
Safety PLC	Remain	Parameterization of PLC required
Others	Application need to be clarified; contact support	maybe no safety application

Note:

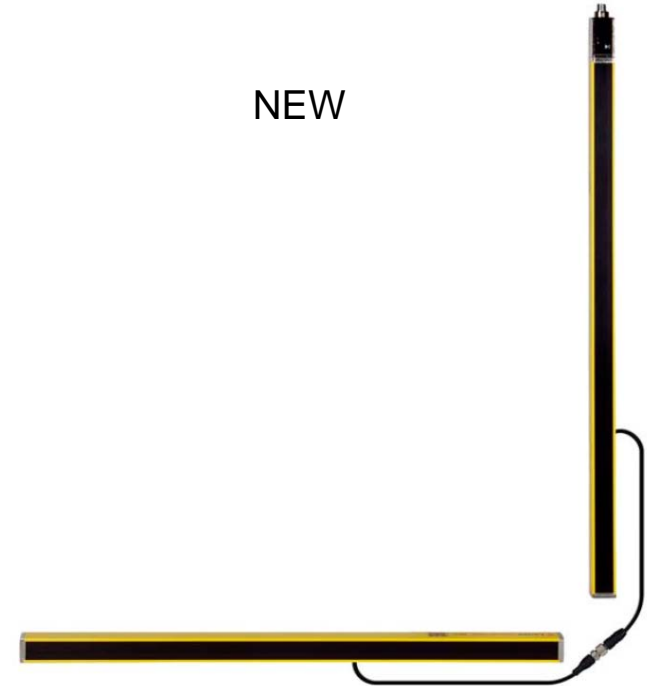
* = place-maker, for example MSI-mx/Rx
xx = resolution; yyy = protective field height

Substitute model Eco to MLC

Mechanical adaption



NEW



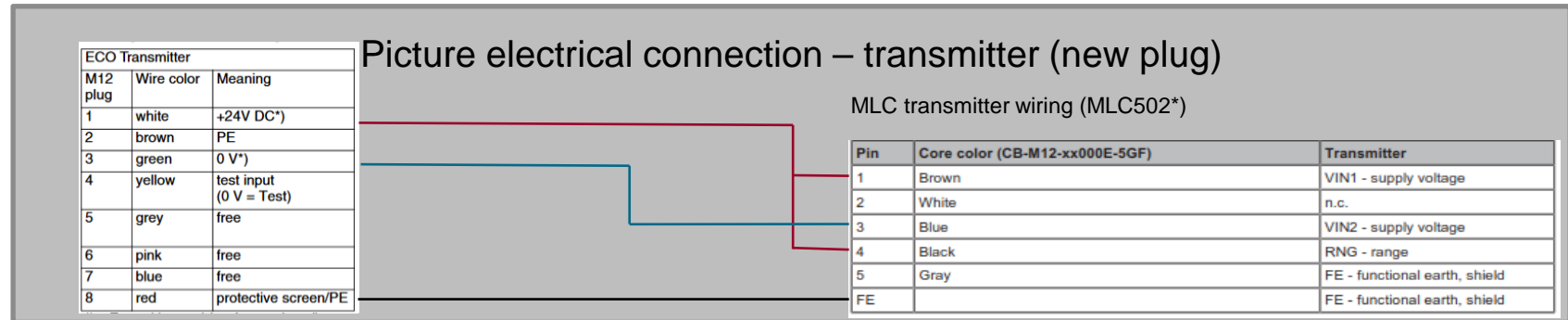
Note:

Since the MLC has a smaller usable alignment angle (one reason was a change in the standard 61496-2), an angular orientation of the MLC system is important. The following brackets are here recommended:

- BT-2SB10
- **BT-2HF warum BT -2HF über 1200mm Schutzfeldhöhe bzw. Hintertrittschutz nicht verwendbar**

Substitute model ER & ET with MLC520

Electrical connection transmitter



Substitute model ER & ET with MLC520

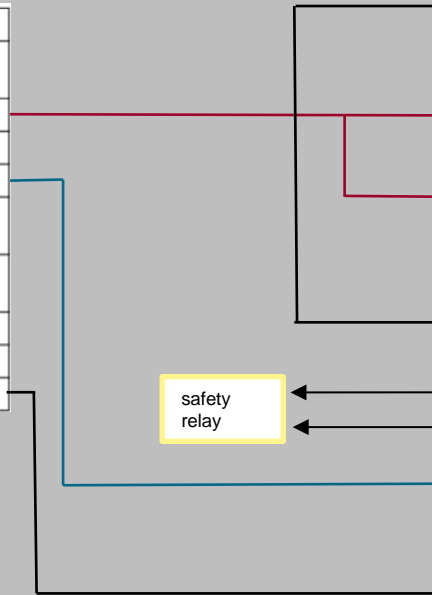
Electrical connection receiver



Picture electrical connection – receiver (new wiring)

MLC receiver wiring (MLC520*)

ECO Receiver		
M12 plug	Wire color	Meaning
1	white	+24V DC*)
2	brown	PE
3	green	0 V*)
4	yellow	OSSD switch output
5	grey	„weak signal“ „error“
6	pink	RS 485+
7	blue	RS 485-
8	red	protective screen/PE



Pin	Core color (CB-M12-xx000E-5GF)	Receiver
1	White	IO1 - control input reset button, signal output Start/restart NO to 24 V DC Output reset button lamp (inverted OSSD)
2	Brown	VIN1 - supply voltage 24 V DC for transmission channel C1 0 V for transmission channel C2
3	Green	IN3 - control-input contactor monitoring (EDM) 24 V DC: without EDM 0 V: with EDM and feedback circuit closed High-impedance: with EDM and feedback circuit open
4	Yellow	IN4 - control input for start/restart interlock (RES) 24 V DC: with RES Bridge to pin 1: without RES (note: signal output remains functional)
5	Gray	OSSD1 - safety-related switching output
6	Pink	OSSD2 - safety-related switching output
7	Blue	VIN2 - supply voltage 0 V: for transmission channel C1 24 V DC for transmission channel C2
8	Red	FE - functional earth, shield Wired in device interior on the housing
FE		FE - functional earth, shield

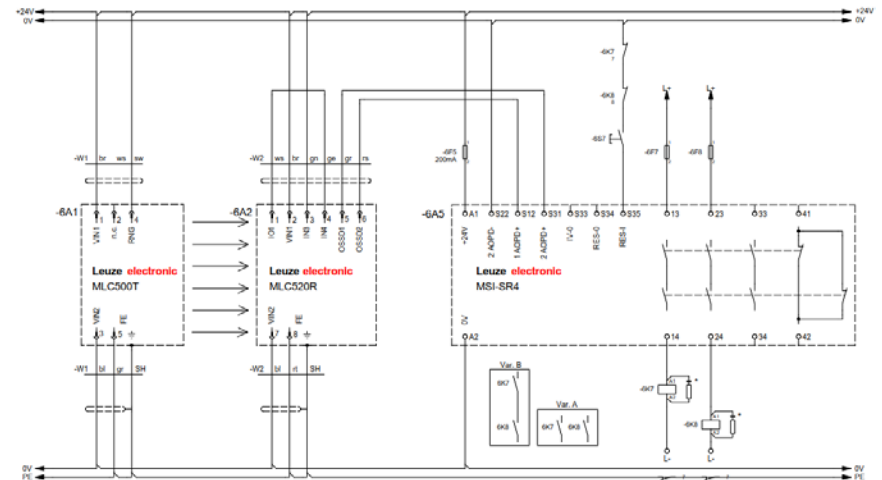
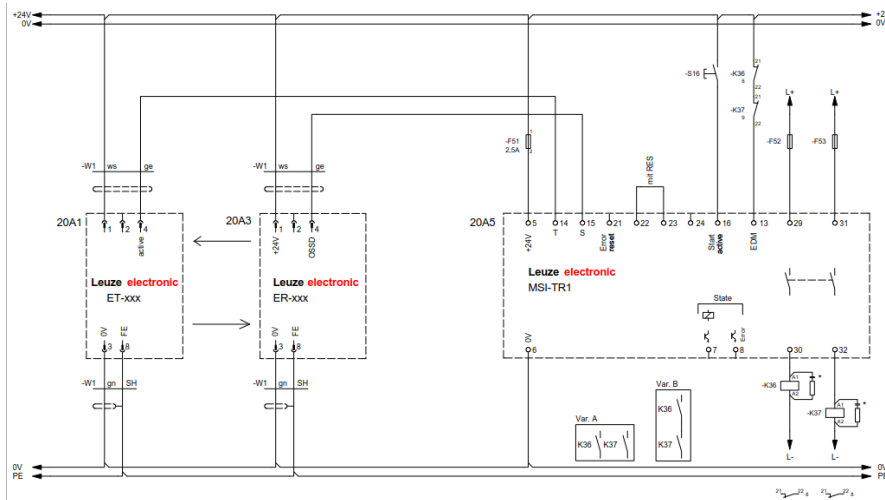
Substitute model Eco to MLC

Wiring example

OLD



NEW



Note:

Old products: ETxx-yyyy + ERxx-yyyy + MSI-TR1 (Pin compatible with TNT 35)

New products: MLC500Txx-yyyy + MLC520xx-yyyy + MSI-SR4B-01 + new cable or new M12 – 5 pin female plug for MLC500

Attention

Note:

Please pay attention to the following points:

- Only Receiver MLC520 + Transmitter MLC500 together should be replaced
- no serial interface
- no weak signal
- bigger housing of MLC5xx
- different response time
- Different safety relay or different safety relay wiring / configuration

Any questions!?



Technical Hotline +49 7021 573 -110

E-Mail: service.protect@leuze.com

Did you know...

...WE KEEP YOU SUPPLIED WORLDWIDE

On-Site service, repairs and device replacement service

- FAST ASSISTANCE DURING START-UP
- FAST HELP WORLDWIDE
- IN THE CASE OF EMERGENCY WE ARE AVAILABLE AROUND THE CLOCK



For emergencies, the Leuze electronic On-Call Service is available to you around the clock at **+49 7021 573 – 0**.

SMART
SENSOR
BUSINESS

Headquarters
Leuze electronic GmbH + Co. KG
In der Braike 1, 73277 Owen, Germany
www.leuze.com

 **Leuze electronic**

the **sensor** people