# TRAFFIC LIGHT Quadro LED-TL



Bright LED signal lights for traffic light applications, e.g. for

- traffic routing in non-public areas
- conveyor and storage systems
- crane safety (see also 'Regulations and standards for crane applications')
- container handling systems
- Extraordinary housing protection (IP 66, IK08 and UV-protected PC housing) and innovative LED technology provide for very bright signals, long service lives and reliable operation.
- Mounted using external lugs or internal holes that do not impair the IP protection; mounting can be performed in any direction.
- Preassembled as traffic light and ready to connect.
- Adjustable steady light or flashing light function provides indication of special operating conditions, e.g. on cranes or machines
- Also available as non-preassembled version (Quadro-LED-HI).









adiustable





protection impact-proof system housing

operating temperature

warranty

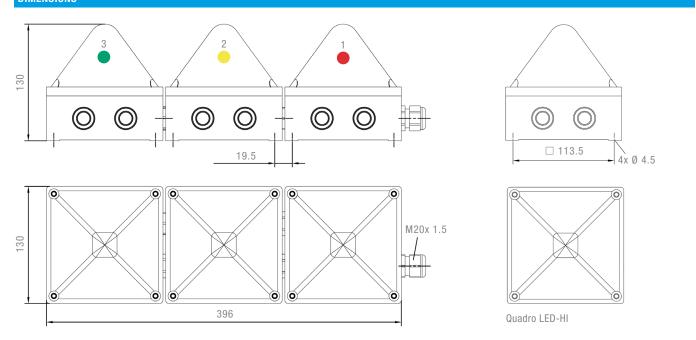
PRODUCT		Quadro LED-TL		
DATA				
Rated voltage		115/230 V	24 V	
		AC 50   60 Hz / DC	DC	
Operating range		90-253 V	11-60 V	
Current consumption (@ 1 Hz flash, ● ● ●)¹		45 / 55 / 55 mA @ 230 V AC	165 / 165 / 165 mA @ 24 V DC	
Operating mode		continuous light   blinking light 1 / 2 Hz   flashing light 0.1 / 0.5 / 0.75 / 1 / 2 Hz		
Control of operating mode		internally	internally / externally	
Light source		4 high output LED per single unit		
Light intensity (DIN 5037) <sup>2</sup>		75 cd (reducible) per single unit		
Max. viewing distance		201 m		
Operating temperature		−40 °C +55 °C		
Storage temperature		−40 °C +70 °C		
Relative humidity		100 %		
Protection system (EN 60529)		IP 66		
Service life of the light source		≥50,000 hrs		
Material -	lens	polycarbonate (PC)		
materiai -	housing	polycarbonate (PC), grey RAL 7035		
Cable entry		M20/M32 sideways, other imprints prepared		
Connecting terminal		cage clamp 0.08–2.5 mm² (in the red light)		
Mounting		external lugs or internal holes		
Weight		3x 500 g		

<sup>&</sup>lt;sup>1</sup>Other colors and operating modes, see manual

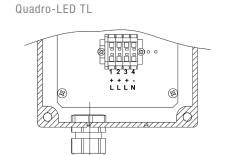
<sup>&</sup>lt;sup>2</sup> with a clear lens

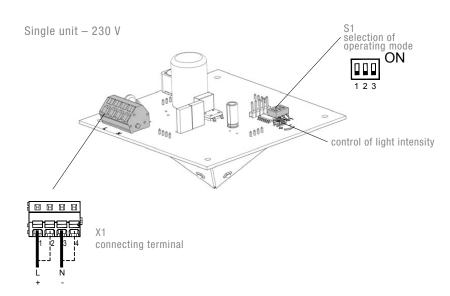


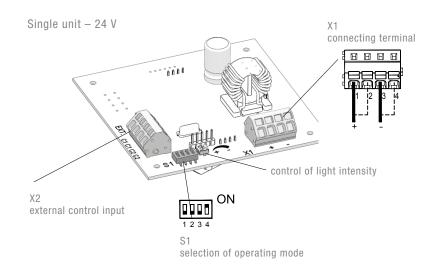
## DIMENSIONS



### **CONNECTION DIAGRAMS**







ARTICLE NO.	Quadro LED-TL	
LENS COLOUR	115/230 V AC	24 V DC
	21106640008	21106630008

Article numbers for other combinations on request.

For single units please use the Quadro LED-HI

ARTICLE NO.	Quadro-LED-HI	
LENS COLOUR	230 V AC	24 V DC
	21108643000	21108633000
	21108644000	21108634000
	21108645000	21108635000

Article numbers for other colours on request.

#### **OPTIONS/ACCESSORIES**



Article no. 28112000003

Regulations and standards for crane applications					
DIN-EN 13000:2004-09 Cranes – truck-mounted cranes	Visual warning to the driver (EN 842) in the case of	<ul> <li>approaching the load capacity (at 90–98.5 % of the permissible load capacity)</li> <li>triggering of the overload safety system</li> <li>overriding of the overload safety system</li> </ul>			
DIN-EN 14439:2006 Safety – rotating tower cranes	Visual warning by the crane driver (EN 457) to persons in the vicinity in the case of	<ul> <li>remote control – green, continuous light</li> <li>anti-collision – white, blinking light</li> <li>rotating (in some cases when required by local authorities) – green, blinking light</li> </ul>			
	Visual warning to the driver (EN 842) in the case of	<ul> <li>approaching the load capacity (at 90–95 % of the permissible load capacity) – yellow, continuous light</li> <li>wind warning and alarm – yellow, blinking light and red, blinking light</li> </ul>			

### **CONFORMITY TO STANDARDS**

The visual characteristics of LED lights conform to the European standard DIN EN 842; "Machine safety - visual alarm signals".

Requirements contained in the DIN EN 981 standard; "Machine safety – system of acoustic and visual alarm and information signals", can be fulfilled. The colours "red" for the emergency signal and "yellow" for the warning signal conform to the requirements of IEC 73 / DIN EN 60073 / VDE 0199; "Coding of display devices and control elements using colours and supplementary means".

References to visual alarm devices can be found in the following standards:

EN 60825-1 Radiation safety of laser devices, identical to IEC 825 and DIN-VDE 0837

DIN EN 54 Fire alarm systems

DIN 54113-2 Radiation protection regulations for the technical operation of X-ray equipment up to 500 kV