

IP 20  

**TALEXengine COOL canopy & undershelf**  
TALEXengine COOL

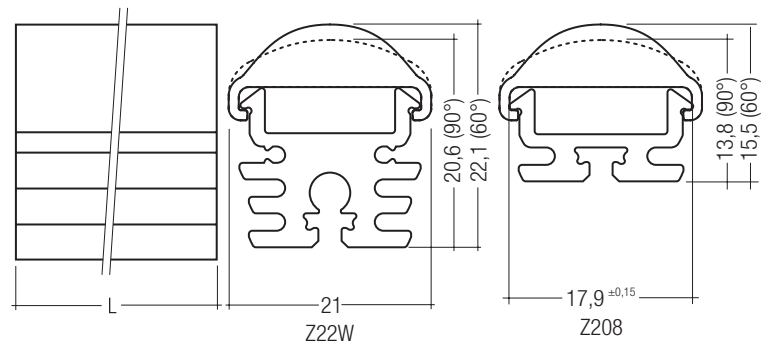
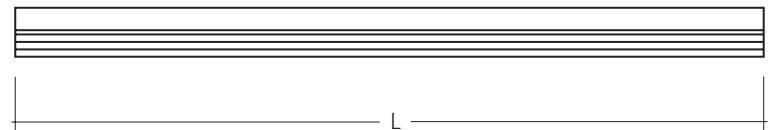
Quick Connection System  
Easy Clip System

### Product description

- Chillers in the food industry
- Available in different light colours
- Complete solution with standard cable
- Connecting cable: H03VVH, white, length: 1 m
- Cross-section of connecting cable: 2 x 0.75 mm<sup>2</sup>
- Available with Quick Connection System (QCS) for fast and flexible electric connection
- High efficiency thanks to directional lighting, integrated heat removal and highly efficient LEDs
- Optimum product illumination thanks to a combination of COB LEDs and optics
- Extremely slim solution supports perfect integration in chiller cabinets
- Safety extra low voltage (SELV)
- End caps made of aluminium or with QCS
- Cooling section made of anodised, extruded aluminium
- Simple installation with mounting bracket or mounting plate (optional)
- Linear lenses made of PMMA

### Technical data

Ambient temperature $t_a$	-30 ... +30 °C
Max. surface temperature on profile	60 °C
Type of protection	IP20
Protection class	III



### Ordering data

Position <sup>®</sup>	Length L	Colour	Type	Article number
<b>With end caps made of aluminium</b>				
Undershelf	1,200 mm	Neutral white	LED LE1200 5P130-2 NW 24V - 90° Z22W	89600906
Canopy	1,200 mm	Neutral white	LED LE1200 7P130-2 NW 24V - 60° Z22W	89600905
Undershelf	1,200 mm	Cool meat	LED LE1200 5P130-2 CM2 24V - 90° Z22W	89600828
Canopy	1,200 mm	Cool meat	LED LE1200 7P130-2 CM2 24V - 60° Z22W	89600827
Undershelf	1,200 mm	Cool meat +	LED LE1200 5P130-2 CM+ 24V - 90° Z22W	89601063
Canopy	1,200 mm	Cool meat +	LED LE1200 7P130-2 CM+ 24V - 60° Z22W	89601224
Undershelf	1,200 mm	Gold	LED LE1200 5P130-2 GOLD 24V - 90° Z22W	89750231
<b>With Quick Connection System</b>				
Undershelf	1,200 mm	Neutral white	LED LE1200 5P130-2 NW 24V - 90° Z208 QCS	89601235
Canopy	1,200 mm	Neutral white	LED LE1200 7P130-2 NW 24V - 60° Z208 QCS	89601232
Undershelf	1,200 mm	Cool meat	LED LE1200 5P130-2 CM2 24V - 90° Z208 QCS	89601236
Canopy	1,200 mm	Cool meat	LED LE1200 7P130-2 CM2 24V - 60° Z208 QCS	89601231
Undershelf	1,200 mm	Cool meat +	LED LE1200 5P130-2 CM+ 24V - 90° Z208 QCS	89601237
Canopy	1,200 mm	Cool meat +	LED LE1200 7P130-2 CM+ 24V - 60° Z208 QCS	89601234
Undershelf	1,200 mm	Gold	LED LE1200 5P130-2 GOLD 24V - 90° Z208 QCS	89601240

Packaging: 9 pieces/carton



Standards, page 2

Colour temperatures and tolerances, page 3

**Specific technical data**

Type	Beam angle	Typ. luminous flux <sup>②</sup>	Supply voltage DC <sup>③</sup>	Colour rendering index Ra/Rff <sup>④</sup>	Power <sup>⑤</sup>
<b>With end caps made of aluminium</b>					
LED LE1200 5P130-2 NW 24V - 90° Z22W	90°	440 lm	24 V	80	15 W
LED LE1200 7P130-2 NW 24V - 60° Z22W	60°	615 lm	24 V	80	21 W
LED LE1200 5P130-2 CM2 24V - 90° Z22W	90°	365 lm	24 V	80	15 W
LED LE1200 7P130-2 CM2 24V - 60° Z22W	60°	510 lm	24 V	80	21 W
LED LE1200 5P130-2 CM+ 24V - 90° Z22W	90°	300 lm	24 V	80	15 W
LED LE1200 7P130-2 CM+ 24V - 60° Z22W	60°	420 lm	24 V	80	21 W
LED LE1200 5P130-2 GOLD 24V - 90° Z22W	90°	250 lm	24 V	80	15 W
<b>With Quick Connection System</b>					
LED LE1200 5P130-2 NW 24V - 90° Z208 QCS	90°	440 lm	24 V	80	15 W
LED LE1200 7P130-2 NW 24V - 60° Z208 QCS	60°	615 lm	24 V	80	21 W
LED LE1200 5P130-2 CM2 24V - 90° Z208 QCS	90°	365 lm	24 V	80	15 W
LED LE1200 7P130-2 CM2 24V - 60° Z208 QCS	60°	510 lm	24 V	80	21 W
LED LE1200 5P130-2 CM+ 24V - 90° Z208 QCS	90°	300 lm	24 V	80	15 W
LED LE1200 7P130-2 CM+ 24V - 60° Z208 QCS	60°	420 lm	24 V	80	21 W
LED LE1200 5P130-2 GOLD 24V - 90° Z208 QCS	90°	250 lm	24 V	80	15 W

① Tolerance range for optical data: ±15 %.

② Luminous flux at Ta 0 °C.

③ Exceeding the max. operating voltage leads to an overload on the TALEX module. This may in turn result in a significant reduction in lifetime or even in destruction. Tolerance range for the supply voltage: +2 V / -0 V.

④ Rff (Cool meat): special colour rendering index for illuminating meat and meat products to DIN 10504.

⑤ Tolerance range for electrical data: ±15 %.

⑥ For a optimal illumination of goods use both the canopy and undershelf version.

**Accessories matrix – TALEXaccessory MOUNT**

Type	LED FIXING PLATE ECS 0°	LED FIXING PLATE ECS 15°	LED FIXING PLATE ECS 30°	LED FIXING PLATE ECS 45°	LED FIXING PLATE ECS 60°	Mounting bracket adjustable
Art. no.	88166859	88167372	88167373	88167374	88167375	24166024
Type	Assignable accessories					
With end caps made of aluminium	•	•	•	•	•	•
With Quick Connection System	•	•	•	•	•	

**Accessories matrix – TALEXaccessory CONNECT**

Type	Bridge QCS 30	Bridge QCS 50	Bridge QCS 100	Bridge QCS 250	Bridge QCS 400	Bridge QCS 800	Bridge QCS 1200	Bridge QCS 2000	Feeder QCS 500	Feeder QCS 1000	Feeder QCS 1500	Feeder QCS 2000
Art. no.	89601262	89601263	89601264	89601265	89601266	89601267	89601268	89601269	89601258	89601259	89601260	89601261
Type	Assignable accessories											
With end caps made of aluminium												
With Quick Connection System	•	•	•	•	•	•	•	•	•	•	•	•

**Converters matrix – TALEXengine COOL canopy & undershelf, constant voltage**

**REMOTE LCU**

Type	0025 K201 24VDC	0025 K210 24V one4all	0025 K211 24V DALI	LCU 035/24 E020 120-240V	LCU 060/24 E020 120-240V	LCU 100/24 E020 120-240V	LCU 150/24 E020 120-240V
Article number	86453418	86455937	86455066	24166320	24166324	24166328	24166333

**Assignable converters**

Type	Article number	Number of engines													
		Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.		
<b>With end caps made of aluminium</b>															
LED LE1200 5P130-2 NW 24V - 90° Z22W	89600906	1	1	1	1	1	1	1	2	1	4	1	6	2	10
LED LE1200 7P130-2 NW 24V - 60° Z22W	89600905	1	1	1	1	1	1	1	1	1	2	1	4	1	5
LED LE1200 5P130-2 CM2 24V - 90° Z22W	89600828	1	1	1	1	1	1	1	2	1	4	1	6	2	10
LED LE1200 7P130-2 CM2 24V - 60° Z22W	89600827	1	1	1	1	1	1	1	1	1	2	1	4	1	5
LED LE1200 5P130-2 CM+ 24V - 90° Z22W	89601063	1	1	1	1	1	1	1	2	1	4	1	6	2	10
LED LE1200 7P130-2 CM+ 24V - 60° Z22W	89601224	1	1	1	1	1	1	1	1	1	2	1	4	1	5
LED LE1200 5P130-2 GOLD 24V - 90° Z22W	89750231	1	1	1	1	1	1	1	2	1	4	1	6	2	10
<b>With Quick Connection System</b>															
LED LE1200 5P130-2 NW 24V - 90° Z208 QCS	89601235	1	1	1	1	1	1	1	2	1	4	1	6	2	10
LED LE1200 7P130-2 NW 24V - 60° Z208 QCS	89601232	1	1	1	1	1	1	1	1	1	2	1	4	1	5
LED LE1200 5P130-2 CM2 24V - 90° Z208 QCS	89601236	1	1	1	1	1	1	1	2	1	4	1	6	2	10
LED LE1200 7P130-2 CM2 24V - 60° Z208 QCS	89601231	1	1	1	1	1	1	1	1	1	2	1	4	1	5
LED LE1200 5P130-2 CM+ 24V - 90° Z208 QCS	89601237	1	1	1	1	1	1	1	2	1	4	1	6	2	10
LED LE1200 7P130-2 CM+ 24V - 60° Z208 QCS	89601234	1	1	1	1	1	1	1	1	1	2	1	4	1	5
LED LE1200 5P130-2 GOLD 24V - 90° Z208 QCS	89601240	1	1	1	1	1	1	1	2	1	4	1	6	2	10

**Converters matrix – TALEXengine COOL canopy & undershelf, constant voltage**

**IN-BUILT LCU**

Type	LCU 060/24 D10 120-240V	LCU 100/24 D10 120-240V	LCU 150/24 D10 120-240V
Article number	22185184	22185185	22185186

**Assignable converters**

Type	Article number	Number of engines					
		Min.	Max.	Min.	Max.	Min.	Max.
<b>With end caps made of aluminium</b>							
LED LE1200 5P130-2 NW 24V - 90° Z22W	89600906	1	4	1	6	2	10
LED LE1200 7P130-2 NW 24V - 60° Z22W	89600905	1	2	1	4	1	5
LED LE1200 5P130-2 CM2 24V - 90° Z22W	89600828	1	4	1	6	2	10
LED LE1200 7P130-2 CM2 24V - 60° Z22W	89600827	1	2	1	4	1	5
LED LE1200 5P130-2 CM+ 24V - 90° Z22W	89601063	1	4	1	6	2	10
LED LE1200 7P130-2 CM+ 24V - 60° Z22W	89601224	1	2	1	4	1	5
LED LE1200 5P130-2 GOLD 24V - 90° Z22W	89750231	1	4	1	6	2	10
<b>With Quick Connection System</b>							
LED LE1200 5P130-2 NW 24V - 90° Z208 QCS	89601235	1	4	1	6	2	10
LED LE1200 7P130-2 NW 24V - 60° Z208 QCS	89601232	1	2	1	4	1	5
LED LE1200 5P130-2 CM2 24V - 90° Z208 QCS	89601236	1	4	1	6	2	10
LED LE1200 7P130-2 CM2 24V - 60° Z208 QCS	89601231	1	2	1	4	1	5
LED LE1200 5P130-2 CM+ 24V - 90° Z208 QCS	89601237	1	4	1	6	2	10
LED LE1200 7P130-2 CM+ 24V - 60° Z208 QCS	89601234	1	2	1	4	1	5
LED LE1200 5P130-2 GOLD 24V - 90° Z208 QCS	89601240	1	4	1	6	2	10

**Standards**

- EN 60598-1
- EN 60598-2-1
- EN 62031
- EN 62471

The product meets the “independent LED module“ classification according to EN 62031.

**Note**

- Reversing the polarity may damage TALEXengine COOL
- There is no provision for chaining multiple TALEXengine COOL units
- The converter must be switched off before connecting the TALEXengine COOL. Otherwise the TALEXengine COOL can be damaged.

**Cable length**

In view of the voltage drop along the cable, a voltage of at least 24 V must be applied to TALEXengine COOL in order to achieve the rated luminous flux.

**Maximum cable length for operation with TALEX converter**

Type	0.75 mm <sup>2</sup>	1.0 mm <sup>2</sup>	1.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>
24 V	7 m	9 m	14 m	24 m

**Electrical properties**

- Supplied with cable H03VVH cross-section 2 x 0.75 mm<sup>2</sup>, white, length 1 m
- Identification of polarity: + red / – black

**Choice of control gear/protection functions**

The control gear protects the TALEX modules against overvoltage, over-current, overloads and short-circuits. The control gear must comply with the relevant standards governing safe operation. The necessary level of protection is ensured by using TALEX converters from Tridonic. If other control gear is used, it must provide the following protection:

- SELV
- Short-circuit protection
- Overload protection
- Overtemperature protection

**Thermal behaviour**

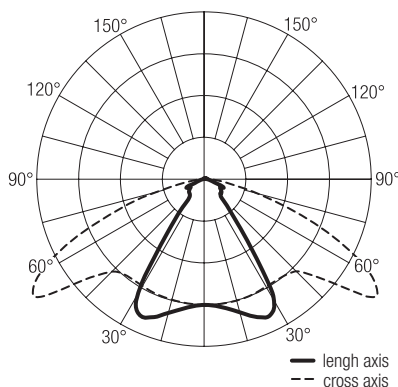
operation temperature (operation, no defects)	ta	-30 ... +30 °C
storage temperature	ts	-30 ... +60 °C
max. temperature cooling profile ①②	tc	-30 ... +65 °C

- ① The values apply to operation at 100 % output, natural convection
- ② If the maximum temperature limits are exceeded, the life of the module will be greatly reduced or the module may be destroyed.

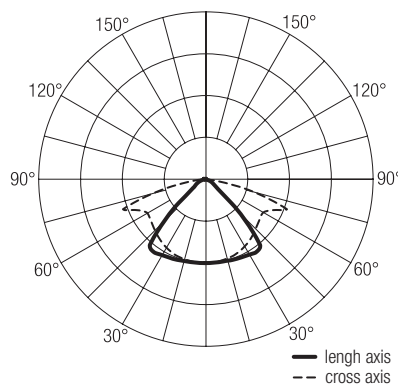
The tc point temperature on the profile of TALEXengine COOL should be measured in the thermally stable state and under operating conditions by means of a temperature sensor or temperature-sensitive sticker (available for example from [www.conrad.com](http://www.conrad.com), [www.rs-components.com](http://www.rs-components.com)) as per EN60598-1. The entire profile can be used as the tc point.

**Optical properties**

**Light distribution 60°**



**Light distribution 90°**



Coordinates and tolerances according to CIE 1964

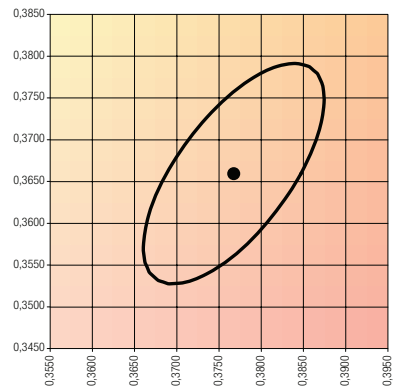
CIE coordinates:

Neutral white

	x0	y0
Centre	0.3770	0.3660

MacAdam Ellipse: 5SDCM

Neutral white



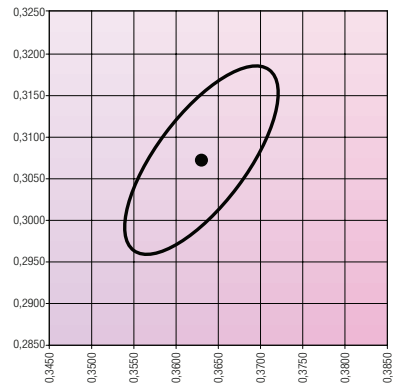
CIE coordinates

Cool meat

	x0	y0
Centre	0.3630	0.3070

MacAdam Ellipse: 5SDCM

Cool meat



CIE coordinates

Cool meat +

	x0	y0
Centre	0.3827	0.2960

MacAdam Ellipse: 5SDCM

Cool meat +

