

Linear

LINI-R XL R207

Fixture Guide

KKDÖ



Indoor | Recessed | Dynamic output up to 594lm/m (181lm/ft)

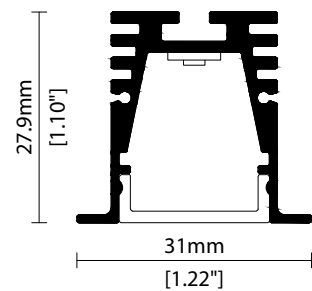


Key applications

- ✓ Architectural detail
- ✓ Ceiling
- ✓ Direct lighting
- ✓ Downlighting
- ✓ Interior
- ✓ Special effect

Key features

- ✓ Custom lengths
- ✓ Constant Voltage (CV)
- ✓ Diffusion: homogenous
- ✓ Direct view
- ✓ Extensive CCT range
- ✓ IP40 dry area
- ✓ IP44 moisture resistant
- ✓ LEDmix dynamic white



Warm-dim

Output Luminance %

min DIM1 Input Level max

— CH1 (Warmer)
— CH2 (Cooler)

LEDmix R207

CCT Selection 1 CCT Selection 2

LEDmix R209

CCT Selection 1 CCT Selection 2

LEDmix **warm dim** (Dynamic white) is a pre-programmed dimming curve setting enabling two different colour temperatures (CCTs) to blend harmoniously to achieve a warming lighting effect when dimmed.

KKDC LEDmix strips allow two separate CCT selections to be specified within the same PCB strip.

Use the table opposite to help determine which 2 CCT selections you require according to your preferred cool to warm dimming range.

**Note: The blended CCT is approx. 'cool-end' result at 100% brightness based on using the KKDC LED CCT specification.*

| CCT Selection 1 | CCT Selection 2 | |
|-----------------|---|---|
| | Blended CCT* | PCB CCT |
| 1900K~ | 2000K 2100K 2200K 2300K 2500K 2600K 2700K 3000K 3500K | 2100K PCB 2300K PCB 2500K PCB 2700K PCB 3000K PCB 3200K PCB 3500K PCB 4000K PCB 5000K PCB |
| 2100K~ | 2200K 2300K 2400K 2600K 2700K 2800K 3000K 3600K | 2300K PCB 2500K PCB 2700K PCB 3000K PCB 3200K PCB 3500K PCB 4000K PCB 5000K PCB |
| 2300K~ | 2400K 2500K 2700K 2800K 2900K 3100K 3700K | 2500K PCB 2700K PCB 3000K PCB 3200K PCB 3500K PCB 4000K PCB 5000K PCB |
| 2500K~ | 2600K 2800K 2800K 3000K 3200K 3800K | 2700K PCB 3000K PCB 3200K PCB 3500K PCB 4000K PCB 5000K PCB |
| 2700K~ | 2900K 3000K 3100K 3400K 3900K | 3000K PCB 3200K PCB 3500K PCB 4000K PCB 5000K PCB |
| 3000K~ | 3100K 3300K 3500K 4000K | 3200K PCB 3500K PCB 4000K PCB 5000K PCB |
| 3200K~ | 3300K 3600K 4100K | 3500K PCB 4000K PCB 5000K PCB |
| 3500K~ | 3700K 4300K | 4000K PCB 5000K PCB |
| 4000K~ | 5100K | 5000K PCB |

Tuneable white

Channel Mix Ratio %

min DIM1 Input Level max

— CH1 (Warmer)
— CH2 (Cooler)

LEDmix R207

CCT Selection 1 CCT Selection 2

LEDmix R209

CCT Selection 1 CCT Selection 2

LEDmix **tunable white** enables two different LED colour temperatures (CCTs) to be specified within the same LEDmix strip.

Each CCT selection can then be independently controlled (via your dimming control system) to adjust the warm & cool light output (CCT selections) and thus tailor a blended light colour of your choosing.

| CCT Selection 1 | CCT Selection 2 |
|-----------------|---|
| 1900K~ | 2100K 2300K 2500K 2700K 3000K 3200K 3500K 4000K 5000K |
| 2100K~ | 2300K 2500K 2700K 3000K 3200K 3500K 4000K 5000K |
| 2300K~ | 2500K 2700K 3000K 3200K 3500K 4000K 5000K |
| 2500K~ | 2700K 3000K 3200K 3500K 4000K 5000K |
| 2700K~ | 3000K 3200K 3500K 4000K 5000K |
| 3000K~ | 3200K 3500K 4000K 5000K |
| 3200K~ | 3500K 4000K 5000K |
| 3500K~ | 4000K 5000K |
| 4000K~ | 5000K |

Linear

LINI-R XL R207

Specification sheet



| | |
|-----------------------|--|
| Dimensions | H27.9/W31/L99-2016mm (H1.1/W1.22/L3.89-79.37in) (excluding spring clips) |
| PCB Cut-point | 83.3mm increment/2000mm max (3.28in increment/78.74in max) |
| LED Pitch | 13.9mm-144LED/m (0.55in - 44LED/ft) |
| Chip | s-line k-line |
| Cover/Optics | Diffused (110°) |
| CCT | s-line: 1900K/2100K/2300K/2500K/2700K/3000K/3500K/4000K/5000K k-line: 1900K/2100K/2300K/2500K/2700K/3000K/3500K/4000K/5000K |
| LED binning | s-line: 2-step MacAdam ellipse k-line: 3-step MacAdam ellipse |
| CRI | ≥94 |
| Lifetime | 50,000 hours @ 25°C (50,000 hours @ 77°F) |
| Operating temp | T _a = -25 to 50°C (T _c max = 59°C) T _a = -13 to 122°F (T _c max = 138°F) |
| IP Rating | IP40/IP44 |
| Finish | Silver anodised |
| Mounting | Recessed mounting via spring clip |
| Power feed | Hardwire tails or male/female connectors |
| Control | 0-10V/1-10V/DMX/DALI |



LED Grading Key

Exclusive Grade

| | |
|------------------|-----------------------|
| s-line* | *KKDC tuned CCT range |
| 2-step CCT range | |

Base Grade

| | |
|---------------|---|
| k-line | 3-step commercial range Energy Star CCTs |
|---------------|---|

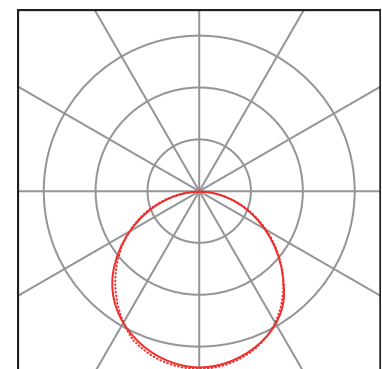
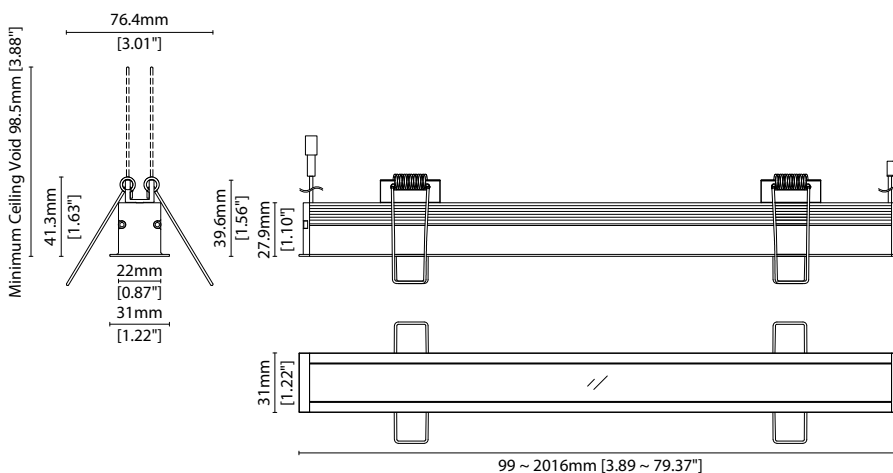
| | | |
|--------------------------|-----------------------|-----------------------|
| Power consumption | Supply voltage | Supply current |
| 16W/m (4.88W/ft) | 24V DC | 0.67A/m (0.20A/ft) |

Performance Data (2100K+5000K)

| | | | | | | | | | | | | | | |
|---------------|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|
| | R1 | R2 | R3 | R4 | R5 | R6 | R7 | R8 | R9 | R10 | R11 | R12 | R13 | R14 |
| k-line | 96 | 96 | 97 | 98 | 96 | 92 | 94 | 96 | 95 | 93 | 96 | 78 | 95 | 99 |

Diffused Cover

| | | | | | | | | | | | | CRI | R9 | Rf | Rg |
|---------------|--------------------|--|--|--|--|--|--|--|--|--|--|------------|-----------|-----------|-----------|
| s-line | 594lm/m (181lm/ft) | | | | | | | | | | | 97 | 96 | - | - |
| | 37.1lm/W | | | | | | | | | | | | | | |
| k-line | 560lm/m (171lm/ft) | | | | | | | | | | | 96 | 95 | - | - |
| | 35lm/W | | | | | | | | | | | | | | |



— C0 / C180 cd / 1000 lm - - - C90 / C270

Data derived from independent UKAS/IESNA LM-79-08 accredited testing of production samples.

See KKDC website for product document updates.

www.kkdc.lighting

LINIRXR207S-03.05EN-20251105

LINE-R XL R207

Code Table



FIXTURE

| Model | Finish | Cover | Grade ¹ | LED | Colour (CCT) | Length Availability ² | IP | Cable Length | Power Feed ³ | Input | | | | | | | | | | |
|-----------|-----------------------|----------------|--------------------|----------------------------------|--------------|----------------------------------|-------|--------------|-----------------------------------|--|------|----|------------------|------|-----------------------|-------------------|--------|------------------------------------|------|--|
| LINE-R XL | RX Silver Anodised | SA Diffused | C | s ⁴ k ⁴ | R207 | R207 | 1900K | 19 | m | 99.3-2016mm 83.3mm increments | IP40 | 40 | 300mm/ 11.81" | 0300 | Single no sheath tail | S00X | DC 24V | g | | |
| | | | | | | 2100K | 21 | | | | | | | IP44 | 44 | | | Double no sheath tail | D00X | |
| | | | | | | 2300K | 23 | i | 3.91-79.37in 3.28in increments | | | | | | | 1000mm/ 39.37" | 1000 | Single no sheath IP20 connector | S20X | |
| | | | | | | 2500K | 25 | | | | | | | | | | | Double no sheath IP20 connector | D20X | |
| | | | | | | 2700K | 27 | | | (Specify length code OR total run length) | | | | | | | | | | |
| | | | | | | 3000K | 30 | | | | | | | | | | | | | |
| | | | | | | 3500K | 35 | | | | | | | | | | | | | |
| | | | | | | 4000K | 40 | | | | | | | | | | | | | |
| | | | | | | 5000K | 50 | | | | | | | | | | | | | |

¹ Refer to **LED Grading Key** on **Specification sheet** page

² Refer to **Length Availability List** or enter total run length instead of length code

³ Refer to **Power Feed Options** on **Options** pages

⁴ LEDmix requires two colour temperature choices

Code Example:

| | | | | | | | | | | | | | | | | | | | | | |
|-----------|---|-----------------|---|----------|---|---|---|------|---|-------------|---|-------|-----|------|----|--------------|------|-----------------------|------|--------|---|
| RX | - | SA | - | C | - | s | - | R207 | - | 2150 | - | m | 516 | - | 40 | - | 0300 | - | D00X | - | g |
| LINE-R XL | | Silver Anodised | | Diffused | | | | R207 | | 2100K+5000K | | 516mm | | IP40 | | 300mm/11.81" | | Double no sheath tail | | DC 24V | |

ACCESSORIES

Connection Accessories

| | |
|---------|--|
| KKCN-18 | 4 PIN LEDmix male & female 50mm/1.97" pair |
| KKCN-19 | 4 PIN LEDmix male & female 300mm/11.81" pair |
| KKCN-24 | 4 PIN LEDmix 300mm/11.81" extension lead |

PSU/Driver

0-10V/1-10V/DALI/DMX

* Refer to **Driver/PSU Options** page for details or provide requirement and KKDC to offer the suitable option

* Refer to **Power feed** on **Accessories** pages

LED ENGINE VARIANTS (LED STRIP TYPE)

| Colour | LED | Lumen/m | Lumen/ft | W/m | W/ft | Spec Doc | Length | Increment |
|------------------------|------|---|--|------|-------|----------------|---------------------------|------------------|
| Single CCT | R007 | 265 | 81 | 7 | 2.13 | LINE-R XL R007 | 99-2016mm (3.89-79.37in) | 41.7mm (1.64in) |
| | R014 | 534 | 163 | 14 | 4.27 | LINE-R XL R014 | 99-2016mm (3.89-79.37in) | 41.7mm (1.64in) |
| | R020 | 731 | 223 | 20 | 6.10 | LINE-R XL R020 | 99-2016mm (3.89-79.37in) | 41.7mm (1.64in) |
| | A040 | 2000 | 610 | 40 | 12.19 | LINE-R XL A040 | 93-1516mm (3.66-59.68in) | 38.46mm (1.51in) |
| Warm Dim/Dynamic White | R207 | 594 | 181 | 16 | 4.88 | LINE-R XL R207 | 99-2016mm (3.89-79.37in) | 83.3mm (3.28in) |
| RGB | 501 | Red: 61 Green: 132 Blue: 22 RGB: 192 | Red: 19 Green: 40 Blue: 7 RGB: 59 | 15.6 | 4.75 | LINE-R XL RGB | 99-2016mm (3.89-79.37in) | 83.3mm (3.28in) |
| RGBW | R201 | 441 | 134 | 20 | 6.10 | LINE-R XL RGBW | 141-2016mm (5.55-79.37in) | 62.5mm (2.46in) |

* Performance data: s-line, 2100K + 5000K, diffused cover

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Length Availability List

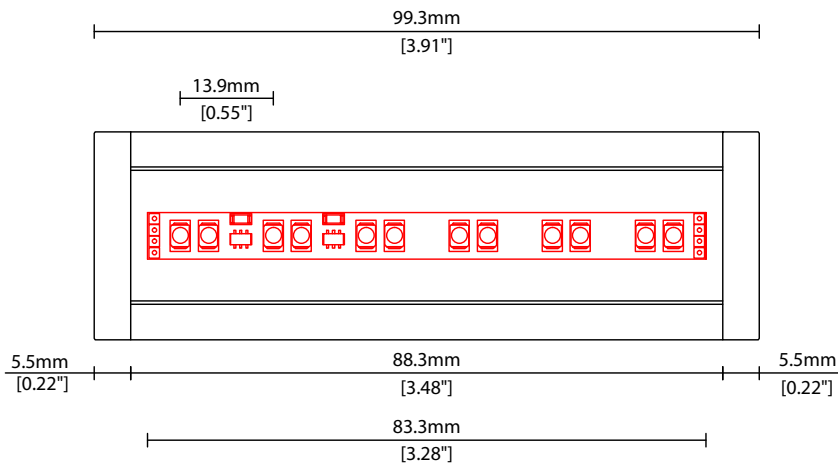


| Length Code | | Fixture Length ¹ | | LED Strip ² | | End Cap Dimension ³ | | Wattage (W) | Output (lm) |
|-------------|--------------|-----------------------------|--------------|------------------------|--------------|--------------------------------|--------------|-------------|-------------------|
| Metric | Imperial(US) | Metric | Imperial(US) | Metric | Imperial(US) | Metric | Imperial(US) | | 3000K (Test Data) |
| m0099 | i0004 | 99mm | 3.91in | 83mm | 3.28in | 11mm | 0.43in | 1.67 | 58 |
| m0183 | i0007 | 183mm | 7.19in | 167mm | 6.56in | 11mm | 0.43in | 3.33 | 117 |
| m0266 | i0010 | 266mm | 10.47in | 250mm | 9.84in | 11mm | 0.43in | 5.00 | 175 |
| m0349 | i0014 | 349mm | 13.75in | 333mm | 13.12in | 11mm | 0.43in | 6.67 | 233 |
| m0433 | i0017 | 433mm | 17.03in | 417mm | 16.40in | 11mm | 0.43in | 8.33 | 292 |
| m0516 | i0020 | 516mm | 20.31in | 500mm | 19.69in | 11mm | 0.43in | 10.00 | 350 |
| m0599 | i0024 | 599mm | 23.60in | 583mm | 22.97in | 11mm | 0.43in | 11.67 | 408 |
| m0683 | i0027 | 683mm | 26.88in | 667mm | 26.25in | 11mm | 0.43in | 13.33 | 467 |
| m0766 | i0030 | 766mm | 30.16in | 750mm | 29.53in | 11mm | 0.43in | 15.00 | 525 |
| m0849 | i0033 | 849mm | 33.44in | 833mm | 32.81in | 11mm | 0.43in | 16.67 | 583 |
| m0933 | i0037 | 933mm | 36.72in | 917mm | 36.09in | 11mm | 0.43in | 18.33 | 642 |
| m1016 | i0040 | 1016mm | 40.00in | 1000mm | 39.37in | 11mm | 0.43in | 20.00 | 700 |
| m1099 | i0043 | 1099mm | 43.28in | 1083mm | 42.65in | 11mm | 0.43in | 21.67 | 758 |
| m1183 | i0047 | 1183mm | 46.56in | 1167mm | 45.93in | 11mm | 0.43in | 23.33 | 817 |
| m1266 | i0050 | 1266mm | 49.84in | 1250mm | 49.21in | 11mm | 0.43in | 25.00 | 875 |
| m1349 | i0053 | 1349mm | 53.12in | 1333mm | 52.49in | 11mm | 0.43in | 26.67 | 933 |
| m1433 | i0056 | 1433mm | 56.40in | 1417mm | 55.77in | 11mm | 0.43in | 28.33 | 992 |
| m1516 | i0060 | 1516mm | 59.69in | 1500mm | 59.06in | 11mm | 0.43in | 30.00 | 1050 |
| m1599 | i0063 | 1599mm | 62.97in | 1583mm | 62.34in | 11mm | 0.43in | 31.67 | 1108 |
| m1683 | i0066 | 1683mm | 66.25in | 1667mm | 65.62in | 11mm | 0.43in | 33.33 | 1167 |
| m1766 | i0070 | 1766mm | 69.53in | 1750mm | 68.90in | 11mm | 0.43in | 35.00 | 1225 |
| m1849 | i0073 | 1849mm | 72.81in | 1833mm | 72.18in | 11mm | 0.43in | 36.67 | 1283 |
| m1933 | i0076 | 1933mm | 76.09in | 1917mm | 75.46in | 11mm | 0.43in | 20.00 | 700 |
| m2016 | i0079 | 2016mm | 79.37in | 2000mm | 78.74in | 11mm | 0.43in | 40.00 | 1400 |

¹ Actual total overall length of light fixture (LED strip + end caps + void/wire hole)

² Actual length of PCB strip

³ Actual length of 2x end caps





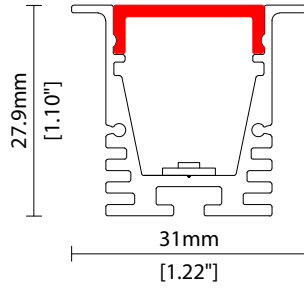
LINI-R XL R207

Options



COVER/LENS OPTIONS

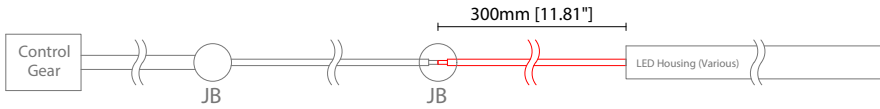
* Options are an integral part of the fixture ordering codes. Please refer to **Code Table** pages.



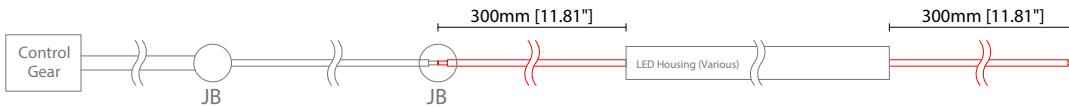
C Diffused cover
W31/H27.9mm (W1.22/H1.10")

POWER FEED OPTIONS

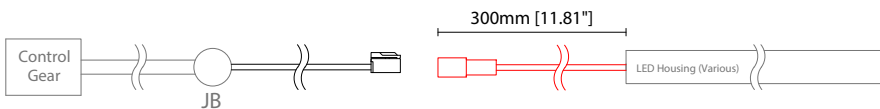
0300 S00X 300mm (11.81") Single no sheath tail



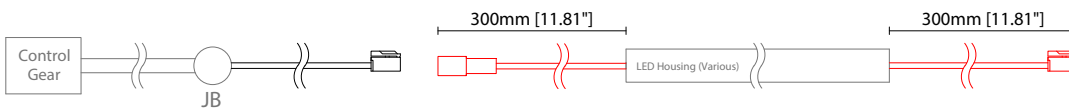
0300 D00X 300mm (11.81") Double no sheath tail



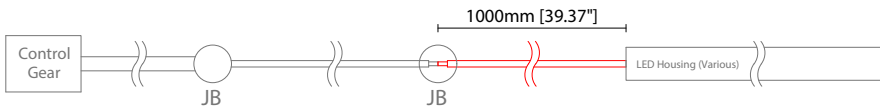
0300 S20X 300mm (11.81") Single no sheath IP20 connector



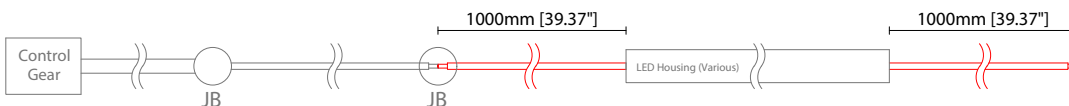
0300 D20X 300mm (11.81") Double no sheath IP20 connector



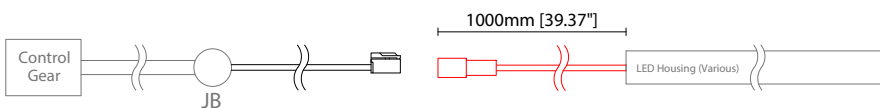
1000 S00X 1000mm (39.37") Single no sheath tail



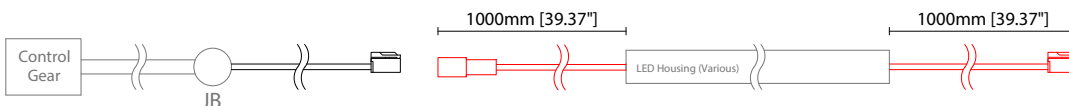
1000 D00X 1000mm (39.37") Double no sheath tail



1000 S20X 1000mm (39.37") Single no sheath IP20 connector



1000 D20X 1000mm (39.37") Double no sheath IP20 connector

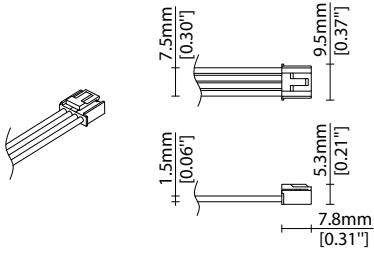


Key

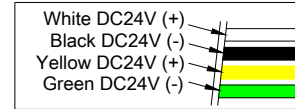
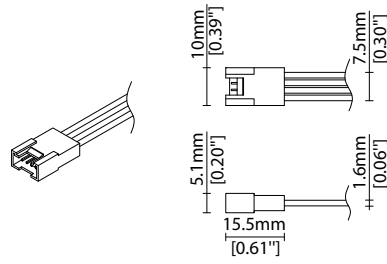
Control Gear Power supply, sub-controllers & control systems
 JB Junction box / cable connection

POWER FEED OPTIONS (CONTINUED)

4 Pin LEDmix Female Connector

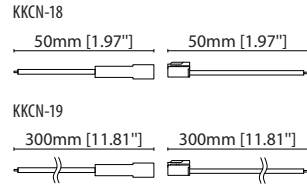
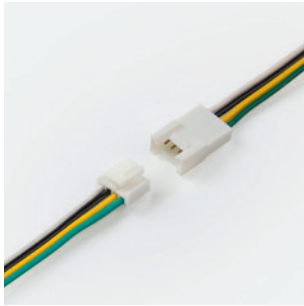


4 Pin LEDmix Male Connector

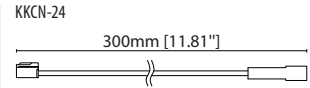


POWER FEED

Note: Accessories are to be ordered separately with corresponding code shown below.



KKCN-18 50mm (1.97in) pair
KKCN-19 300mm (11.81in) pair
4 PIN LEDmix male + female
connector set



KKCN-24
4 PIN LEDmix 300mm (11.81in)
extension lead

KKDC CONTROL



IP20
Plastic housing
L170/W59/H29mm
(L6.69/W2.32/H1.14in)

KKDM-06 1-10V
visDIM dimmable sub-controller
(4 x 8A max @ 12-36V)



IP20
Plastic housing
L170/W53.4/H28mm
(L6.69/W2.10/H1.10in)

KKSC-05 DMX
visDIM dimmable sub-controller
(4 x 5A max @ 12-36V)



IP20
Plastic housing
L170/W59/H29mm
(L6.69/W2.32/H1.14in)

KKDL-02 DALI
visDIM dimmable sub-controller
(4 x 8A max @ 12-36V)



IP20
Plastic housing
L166/W53.4/H23mm
(L6.54/W2.10/H0.91in)

KKDL-03 DALI
visDIM dimmable sub-controller
(4 x 5A max @ 12-36V)



IP20
Plastic housing
L170/W53.4/H28mm
(L6.69/W2.10/H1.10in)

KKDL-04 DALI-2
visDIM dimmable sub-controller
(4 x 5A max @ 12-36V)

AVAILABLE PSU OPTIONS

| Control Mode | PSU (Order Code) | Input Voltage AC | Output Voltage DC | Rated Output Current | Rated Power | Dim % | IP Rating |
|---------------|------------------|------------------|-------------------|----------------------|-------------|-------------------|-----------|
| Switched | CEN-60-24 | 90-295V | 24V | 2.5A | 60W | - | IP67 |
| | HLG-60H-24 | 90-305V | 24V | 2.5A | 60W | - | IP67 |
| | HLG-100H-24 | 90-305V | 24V | 4.0A | 100W | - | IP67 |
| | HLG-150H-24 | 90-305V | 24V | 6.3A | 150W | - | IP67 |
| | HLG-240H-24 | 90-305V | 24V | 10A | 240W | - | IP67 |
| 0-10V (1-10V) | PWM-40-24 | 90-305V | 24V | 1.67A | 40W | 100-0.15 (100-10) | IP67 |
| | PWM-60-24 | 90-305V | 24V | 2.5A | 60W | 100-0.15 (100-10) | IP67 |
| | PWM-90-24 | 90-305V | 24V | 3.67A | 90W | 100-0.15 (100-10) | IP67 |
| | PWM-120-24 | 90-305V | 24V | 5.0A | 120W | 100-0.15 (100-10) | IP67 |
| DALI | LIN100A1 | 120-277V | 24V | 1A per channel | 100W | 100-0.1 | IP66/IP40 |
| DMX RGB | LIN100A1 | 120-277V | 24V | 1.33A per channel | 100W | 100-0.1 | IP66/IP40 |
| DMX RGBW | LIN100A1 | 120-277A | 24V | 1A per channel | 100W | 100-0.1 | IP66/IP40 |

Flicker Free Options - Combination of PSU+ sub-controller

| Control Mode | PSU (Order Code) | Sub-controller (Order Code) | Input Voltage AC | Output Voltage DC | Rated Output Current | Rated Power | Dim % | IP Rating PSU/ Sub-controller |
|----------------|------------------|-----------------------------|------------------|-------------------|----------------------|-------------|---------|-------------------------------|
| 0-10V or 1-10V | CEN-60-24 | KKDM-06 | 90-295V | 24V | 2.5A | 60W | 100-0.9 | IP67/IP20 |
| | HLG-60H-24 | KKDM-06 | 90-295V | 24V | 2.5A | 60W | 100-0.9 | IP67/IP20 |
| | HLG-100H-24 | KKDM-06 | 90-295V | 24V | 4.0A | 100W | 100-0.9 | IP67/IP20 |
| | HLG-150H-24 | KKDM-06 | 90-295V | 24V | 6.3A | 150W | 100-0.9 | IP67/IP20 |
| | HLG-240H-24 | KKDM-06 | 90-295V | 24V | 10.0A | 240W | 100-0.9 | IP67/IP20 |
| DALI | CEN-60-24 | KKDL-02/03/04/visDIM PRO 30 | 90-295V | 24V | 2.5A | 60W | 100-0.1 | IP67/IP20 |
| | HLG-60H-24 | KKDL-02/03/04/visDIM PRO 30 | 90-305V | 24V | 2.5A | 60W | 100-0.1 | IP67/IP20 |
| | HLG-100H-24 | KKDL-02/03/04/visDIM PRO 30 | 90-305V | 24V | 4.0A | 100W | 100-0.1 | IP67/IP20 |
| | HLG-150H-24 | KKDL-02/03/04/visDIM PRO 30 | 90-305V | 24V | 6.3A | 150W | 100-0.1 | IP67/IP20 |
| | HLG-240H-24 | KKDL-02/03/04/visDIM PRO 30 | 90-305V | 24V | 10.0A | 240W | 100-0.1 | IP67/IP20 |
| DMX RGB | CEN-60-24 | KKSC-05 | 90-295V | 24V | 2.5A | 60W | 100-0.9 | IP67/IP20 |
| | HLG-60H-24 | KKSC-05 | 90-305V | 24V | 2.5A | 60W | 100-0.9 | IP67/IP20 |
| | HLG-100H-24 | KKSC-05 | 90-305V | 24V | 4A | 100W | 100-0.9 | IP67/IP20 |
| | HLG-150H-24 | KKSC-05 | 90-305V | 24V | 6.3A | 150W | 100-0.9 | IP67/IP20 |
| | HLG-240H-24 | KKSC-05 | 90-305V | 24V | 10.0A | 240W | 100-0.9 | IP67/IP20 |

¹ The items shown above cover the most frequently used specification but does not exhaust the possible options

² PSU and/or driver can be chosen from the table, or KKDC may recommend the best option upon receipt of the controls requirement and installation environment

³ Electrical shop drawing will include detailed information of PSU and relevant control drivers

⁴ Cut sheets are available on the controls section of www.kkdc.lighting or upon request