

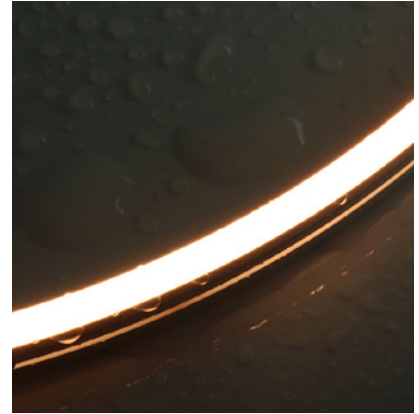


# Groove FLEX

## Fixture Guide



Indoor/Outdoor | Recessed | Low output up to 280lm/m (85lm/ft)

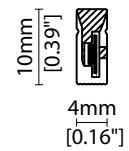


### Key applications

- ✓ Architectural detail
- ✓ Bathrooms
- ✓ Building façades
- ✓ Cabinet/Furniture
- ✓ Interior/Exterior
- ✓ Mirror back lighting
- ✓ Under cabinet
- ✓ Wet area
- ✓ Window Reveal

### Key features

- ✓ Custom lengths
- ✓ Diffusion: Homogenous
- ✓ Direct view
- ✓ Form factor: Micro
- ✓ IP67
- ✓ Output low
- ✓ Thin light line
- ✓ Trimless



### MOUNTING METHODS



KKCP-20 Groove FLEX clip

Flexible

# Groove FLEX

## Specification sheet

# KKDC



<b>Dimension</b>	H12/W6/L60 - 5010mm(H0.47/W0.24/L2.36-197.24in) (Single tail) H12/W6/L68 - 5018mm(H0.47/W0.24/L2.68-197.56in) (Double tail)
<b>PCB increment</b>	50mm increment/5000mm max (1.97in increment/196.9in max)
<b>LED Pitch</b>	8.33mm - 120LED/m (0.32in - 37LED/ft)
<b>Chip</b>	s/e/k-line Samsung
<b>Beam angle</b>	130°
<b>Colours</b>	k-line 2300K/2700K/3000K/3200K/4000K
<b>Bin/Step</b>	s-line 2 Step MacAdam ellipse e/k-line 3 Step MacAdam ellipse
<b>CRI</b>	≥ 90
<b>Lifetime</b>	50,000 hours @ 25°C (50,000 hours @ 77°F)
<b>Operating temp</b>	T <sub>a</sub> = -25 to 40°C (T <sub>C</sub> max = 65°C) T <sub>a</sub> = -13 to 104°F (T <sub>C</sub> max = 149°F)
<b>IP rating</b>	IP67
<b>Finish</b>	White Silicone
<b>Cover/lens</b>	Diffused
<b>Mounting</b>	Surface Mounting via concealed clip
<b>Min bend radius</b>	125mm (4.92in)
<b>Power feed</b>	Sheathed hardwire tails or male/female connectors
<b>Control</b>	0-10V/1-10V/DMX/DALI



### LED Grading Key

#### Exclusive Grade

s-line*	2-step CCT range	*KKDC tuned CCT range
e-line*	3-step CCT range	

#### Base Grade

k-line	3-step commercial range Energy Star CCTs
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### PERFORMANCE DATA @3000K

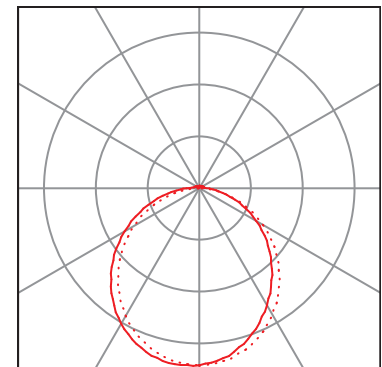
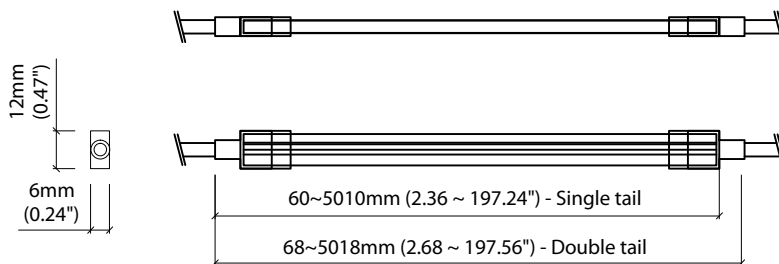
Power consumption	Supply voltage	Supply current
12W/m (3.66W/ft)	24V DC	0.5A/m (0.15A/ft)

### Colour Rendering Index (CRI)

	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14
s-line	91	95	97	90	90	94	91	80	58	88	91	80	92	97
k-line	91	95	97	90	90	94	91	80	58	88	91	80	92	97

### Diffused

		CRI	R9	Rf	Rg
s/e-line	280lm/m (85lm/ft) 23lm/W	90	58	-	-
k-line	240lm/m (73lm/ft) 20lm/W	90	58	-	-



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



# Groove FLEX

## Code Table



### FIXTURE

Model	Cover	Grade*	LED	Colour (CCT)	Length Availability**	IP	Cable Length	Power Feed***	Input			
Groove FLEX	GE	Diffused	C	950	2300K 23 2700K 27 3000K 30 3200K 32 4000K 40	m i	60-5010mm <sup>1</sup> 68-5018mm <sup>2</sup> 50mm increments 2.36-197.24in <sup>1</sup> 2.68-197.56in <sup>2</sup> 1.97in increments (Specify length code OR total run length)	IP67 67	300mm (11.81in) 0300	Single ø4.3mm sheath tail Double ø4.3mm sheath tail Single ø4.3mm sheath IP67 connector Double ø4.3mm sheath IP67 connector	S00A D00A S67A D67A	DC 24V g

<sup>1</sup> Single tail      <sup>2</sup> Double tail

\* Refer to **LED Grading Key** on **Specification sheet** page      \*\* Refer to **Length Availability List** or enter total run length instead of length code      \*\*\* Refer to **Power Feed Options** on **Options** pages

### Code Example:

GE	-	C	-	s	-	950	-	30	-	m	-	500	-	67	-	0300	-	D00A	-	g
Groove FLEX		Diffused				950		3000K		500mm		IP67		300mm/11.81"		Double ø4.3mm sheath tail		DC 24V		

### ACCESSORIES

#### Mounting Accessories

KKCP-20 Clip

\* Refer to **Mounting Options** on **Accessories** pages

#### Connection Accessories

CN67-2P-0300 IP67 2 PIN male & female 300mm/11.81" pair  
 CN67-2P-1000 IP67 2 PIN male & female 1000mm/39.37" pair  
 CN67-2P-3000 IP67 2 PIN male & female 3000mm/118.11" pair

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

#### 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

### LED ENGINE VARIANTS (LED STRIP TYPE)

Luminaire	Output	LED	Lumen/m	Lumen/ft	W/m	W/ft	Spec Doc	Length	Increment
Groove FLEX	Low	950	280	85	12	3.66	Groove FLEX	60-5010mm/2.36-197.24in	50mm/1.97in

\* Performance data: s-line, diffused cover, 3000K

Flexible

# Groove FLEX

## Length Availability List



Length Code		Fixture Length <sup>1</sup>		LED Strip <sup>2</sup>		End Cap Dimension <sup>3</sup>		Wattage (W)	Output (lm)	
Metric	Imperial(US)	Metric	Imperial(US)	Metric	Imperial(US)	Metric	Imperial(US)		3000K (Test Data)	Range Data
m0068	i0003	68mm	2.68in	50mm	1.97in	18mm	0.71in	0.60	12	10-12
m0118	i0005	118mm	4.65in	100mm	3.94in	18mm	0.71in	1.20	24	19-25
m0168	i0007	168mm	6.61in	150mm	5.91in	18mm	0.71in	1.80	36	29-37
m0218	i0009	218mm	8.58in	200mm	7.87in	18mm	0.71in	2.40	48	38-50
m0268	i0011	268mm	10.55in	250mm	9.84in	18mm	0.71in	3.00	60	48-62
m0318	i0013	318mm	12.52in	300mm	11.81in	18mm	0.71in	3.60	72	58-75
m0368	i0014	368mm	14.49in	350mm	13.78in	18mm	0.71in	4.20	84	67-87
m0418	i0016	418mm	16.46in	400mm	15.75in	18mm	0.71in	4.80	96	77-100
m0468	i0018	468mm	18.43in	450mm	17.72in	18mm	0.71in	5.40	108	86-112
m0518	i0020	518mm	20.39in	500mm	19.69in	18mm	0.71in	6.00	120	96-125
m0568	i0022	568mm	22.36in	550mm	21.65in	18mm	0.71in	6.60	132	106-137
m0618	i0024	618mm	24.33in	600mm	23.62in	18mm	0.71in	7.20	144	115-150
m0668	i0026	668mm	26.30in	650mm	25.59in	18mm	0.71in	7.80	156	125-162
m0718	i0028	718mm	28.27in	700mm	27.56in	18mm	0.71in	8.40	168	134-175
m0768	i0030	768mm	30.24in	750mm	29.53in	18mm	0.71in	9.00	180	144-187
m0818	i0032	818mm	32.20in	800mm	31.50in	18mm	0.71in	9.60	192	154-200
m0868	i0034	868mm	34.17in	850mm	33.46in	18mm	0.71in	10.20	204	163-212
m0918	i0036	918mm	36.14in	900mm	35.43in	18mm	0.71in	10.80	216	173-225
m0968	i0038	968mm	38.11in	950mm	37.40in	18mm	0.71in	11.40	228	182-237
m1018	i0040	1018mm	40.08in	1000mm	39.37in	18mm	0.71in	12.00	240	192-250
m1068	i0042	1068mm	42.05in	1050mm	41.34in	18mm	0.71in	12.60	252	202-262
m1118	i0044	1118mm	44.02in	1100mm	43.31in	18mm	0.71in	13.20	264	211-275
m1168	i0046	1168mm	45.98in	1150mm	45.28in	18mm	0.71in	13.80	276	221-287
m1218	i0048	1218mm	47.95in	1200mm	47.24in	18mm	0.71in	14.40	288	230-300
m1268	i0050	1268mm	49.92in	1250mm	49.21in	18mm	0.71in	15.00	300	240-312
m1318	i0052	1318mm	51.89in	1300mm	51.18in	18mm	0.71in	15.60	312	250-324
m1368	i0054	1368mm	53.86in	1350mm	53.15in	18mm	0.71in	16.20	324	259-337
m1418	i0056	1418mm	55.83in	1400mm	55.12in	18mm	0.71in	16.80	336	269-349
m1468	i0058	1468mm	57.80in	1450mm	57.09in	18mm	0.71in	17.40	348	278-362
m1518	i0060	1518mm	59.76in	1500mm	59.06in	18mm	0.71in	18.00	360	288-374
m1568	i0062	1568mm	61.73in	1550mm	61.02in	18mm	0.71in	18.60	372	298-387
m1618	i0064	1618mm	63.70in	1600mm	62.99in	18mm	0.71in	19.20	384	307-399
m1668	i0066	1668mm	65.67in	1650mm	64.96in	18mm	0.71in	19.80	396	317-412
m1718	i0068	1718mm	67.64in	1700mm	66.93in	18mm	0.71in	20.40	408	326-424
m1768	i0070	1768mm	69.61in	1750mm	68.90in	18mm	0.71in	21.00	420	336-437
m1818	i0072	1818mm	71.57in	1800mm	70.87in	18mm	0.71in	21.60	432	346-449
m1868	i0074	1868mm	73.54in	1850mm	72.83in	18mm	0.71in	22.20	444	355-462
m1918	i0076	1918mm	75.51in	1900mm	74.80in	18mm	0.71in	22.80	456	365-474
m1968	i0077	1968mm	77.48in	1950mm	76.77in	18mm	0.71in	23.40	468	374-487
m2018	i0079	2018mm	79.45in	2000mm	78.74in	18mm	0.71in	24.00	480	384-499
m2068	i0081	2068mm	81.42in	2050mm	80.71in	18mm	0.71in	24.60	492	394-512
m2118	i0083	2118mm	83.39in	2100mm	82.68in	18mm	0.71in	25.20	504	403-524
m2168	i0085	2168mm	85.35in	2150mm	84.65in	18mm	0.71in	25.80	516	413-537

Flexible

# Groove FLEX

## Length Availability List



Length Code		Fixture Length <sup>1</sup>		LED Strip <sup>2</sup>		End Cap Dimension <sup>3</sup>		Wattage (W)	Output (lm)	
Metric	Imperial(US)	Metric	Imperial(US)	Metric	Imperial(US)	Metric	Imperial(US)		3000K (Test Data)	Range Data
m2218	i0087	2218mm	87.32in	2200mm	86.61in	18mm	0.71in	26.40	528	422-549
m2268	i0089	2268mm	89.29in	2250mm	88.58in	18mm	0.71in	27.00	540	432-562
m2318	i0091	2318mm	91.26in	2300mm	90.55in	18mm	0.71in	27.60	552	442-574
m2368	i0093	2368mm	93.23in	2350mm	92.52in	18mm	0.71in	28.20	564	451-587
m2418	i0095	2418mm	95.20in	2400mm	94.49in	18mm	0.71in	28.80	576	461-599
m2468	i0097	2468mm	97.17in	2450mm	96.46in	18mm	0.71in	29.40	588	470-612
m2518	i0099	2518mm	99.13in	2500mm	98.43in	18mm	0.71in	30.00	600	480-624
m2568	i0101	2568mm	101.10in	2550mm	100.39in	18mm	0.71in	30.60	612	490-636
m2618	i0103	2618mm	103.07in	2600mm	102.36in	18mm	0.71in	31.20	624	499-649
m2668	i0105	2668mm	105.04in	2650mm	104.33in	18mm	0.71in	31.80	636	509-661
m2718	i0107	2718mm	107.01in	2700mm	106.30in	18mm	0.71in	32.40	648	518-674
m2768	i0109	2768mm	108.98in	2750mm	108.27in	18mm	0.71in	33.00	660	528-686
m2818	i0111	2818mm	110.94in	2800mm	110.24in	18mm	0.71in	33.60	672	538-699
m2868	i0113	2868mm	112.91in	2850mm	112.20in	18mm	0.71in	34.20	684	547-711
m2918	i0115	2918mm	114.88in	2900mm	114.17in	18mm	0.71in	34.80	696	557-724
m2968	i0117	2968mm	116.85in	2950mm	116.14in	18mm	0.71in	35.40	708	566-736
m3018	i0119	3018mm	118.82in	3000mm	118.11in	18mm	0.71in	36.00	720	576-749
m3068	i0121	3068mm	120.79in	3050mm	120.08in	18mm	0.71in	36.60	732	586-761
m3118	i0123	3118mm	122.76in	3100mm	122.05in	18mm	0.71in	37.20	744	595-774
m3168	i0125	3168mm	124.72in	3150mm	124.02in	18mm	0.71in	37.80	756	605-786
m3218	i0127	3218mm	126.69in	3200mm	125.98in	18mm	0.71in	38.40	768	614-799
m3268	i0129	3268mm	128.66in	3250mm	127.95in	18mm	0.71in	39.00	780	624-811
m3318	i0131	3318mm	130.63in	3300mm	129.92in	18mm	0.71in	39.60	792	634-824
m3368	i0133	3368mm	132.60in	3350mm	131.89in	18mm	0.71in	40.20	804	643-836
m3418	i0135	3418mm	134.57in	3400mm	133.86in	18mm	0.71in	40.80	816	653-849
m3468	i0137	3468mm	136.54in	3450mm	135.83in	18mm	0.71in	41.40	828	662-861
m3518	i0139	3518mm	138.50in	3500mm	137.80in	18mm	0.71in	42.00	840	672-874
m3568	i0140	3568mm	140.47in	3550mm	139.76in	18mm	0.71in	42.60	852	682-886
m3618	i0142	3618mm	142.44in	3600mm	141.73in	18mm	0.71in	43.20	864	691-899
m3668	i0144	3668mm	144.41in	3650mm	143.70in	18mm	0.71in	43.80	876	701-911
m3718	i0146	3718mm	146.38in	3700mm	145.67in	18mm	0.71in	44.40	888	710-924
m3768	i0148	3768mm	148.35in	3750mm	147.64in	18mm	0.71in	45.00	900	720-936
m3818	i0150	3818mm	150.31in	3800mm	149.61in	18mm	0.71in	45.60	912	730-948
m3868	i0152	3868mm	152.28in	3850mm	151.57in	18mm	0.71in	46.20	924	739-961
m3918	i0154	3918mm	154.25in	3900mm	153.54in	18mm	0.71in	46.80	936	749-973
m3968	i0156	3968mm	156.22in	3950mm	155.51in	18mm	0.71in	47.40	948	758-986
m4018	i0158	4018mm	158.19in	4000mm	157.48in	18mm	0.71in	48.00	960	768-998
m4068	i0160	4068mm	160.16in	4050mm	159.45in	18mm	0.71in	48.60	972	778-1011
m4118	i0162	4118mm	162.13in	4100mm	161.42in	18mm	0.71in	49.20	984	787-1023
m4168	i0164	4168mm	164.09in	4150mm	163.39in	18mm	0.71in	49.80	996	797-1036
m4218	i0166	4218mm	166.06in	4200mm	165.35in	18mm	0.71in	50.40	1008	806-1048
m4268	i0168	4268mm	168.03in	4250mm	167.32in	18mm	0.71in	51.00	1020	816-1061
m4318	i0170	4318mm	170.00in	4300mm	169.29in	18mm	0.71in	51.60	1032	826-1073

# Groove FLEX

## Length Availability List

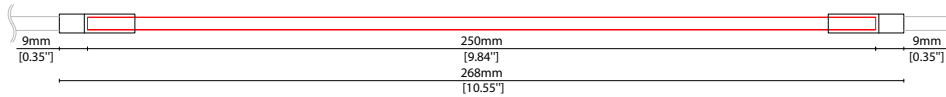


Length Code		Fixture Length <sup>1</sup>		LED Strip <sup>2</sup>		End Cap Dimension <sup>3</sup>		Wattage (W)	Output (lm)	
Metric	Imperial(US)	Metric	Imperial(US)	Metric	Imperial(US)	Metric	Imperial(US)		3000K (Test Data)	Range Data
m4368	i0172	4368mm	171.97in	4350mm	171.26in	18mm	0.71in	52.20	1044	835-1086
m4418	i0174	4418mm	173.94in	4400mm	173.23in	18mm	0.71in	52.80	1056	845-1098
m4468	i0176	4468mm	175.91in	4450mm	175.20in	18mm	0.71in	53.40	1068	854-1111
m4518	i0178	4518mm	177.87in	4500mm	177.17in	18mm	0.71in	54.00	1080	864-1123
m4568	i0180	4568mm	179.84in	4550mm	179.13in	18mm	0.71in	54.60	1092	874-1136
m4618	i0182	4618mm	181.81in	4600mm	181.10in	18mm	0.71in	55.20	1104	883-1148
m4668	i0184	4668mm	183.78in	4650mm	183.07in	18mm	0.71in	55.80	1116	893-1161
m4718	i0186	4718mm	185.75in	4700mm	185.04in	18mm	0.71in	56.40	1128	902-1173
m4768	i0188	4768mm	187.72in	4750mm	187.01in	18mm	0.71in	57.00	1140	912-1186
m4818	i0190	4818mm	189.69in	4800mm	188.98in	18mm	0.71in	57.60	1152	922-1198
m4868	i0192	4868mm	191.65in	4850mm	190.94in	18mm	0.71in	58.20	1164	931-1211
m4918	i0194	4918mm	193.62in	4900mm	192.91in	18mm	0.71in	58.80	1176	941-1223
m4968	i0196	4968mm	195.59in	4950mm	194.88in	18mm	0.71in	59.40	1188	950-1236
m5018	i0198	5018mm	197.56in	5000mm	196.85in	18mm	0.71in	60.00	1200	960-1248

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

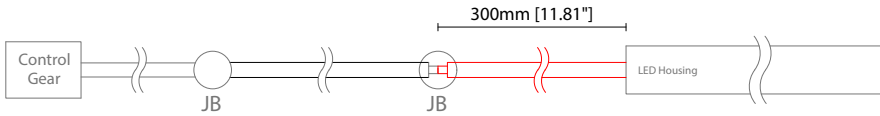
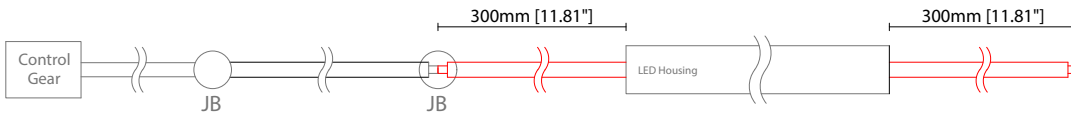
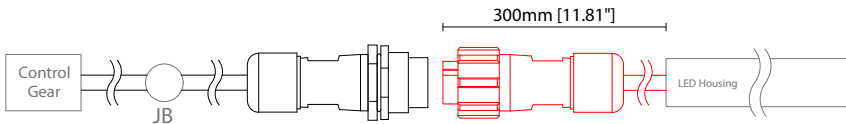
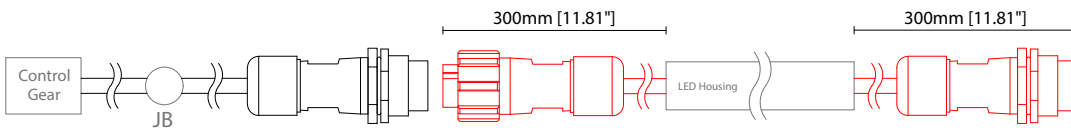
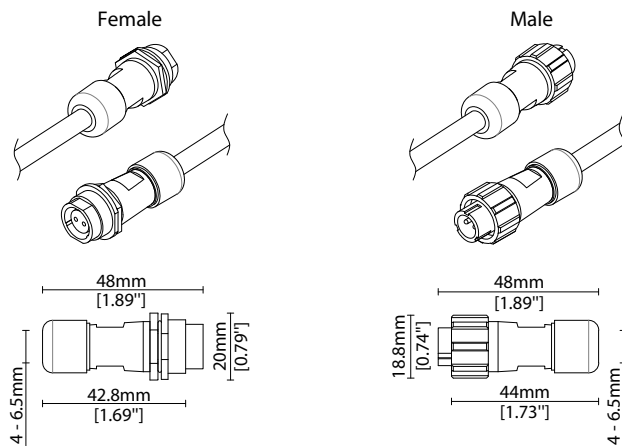
<sup>2</sup> Actual length of PCB strip

<sup>3</sup> Actual length of 2x end caps



**POWER FEED OPTIONS**

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

**0300 S00A 300mm (11.81") Single ø4.3mm sheath tail****0300 D00A 300mm (11.81") Double ø4.3mm sheath tail****0300 S67A 300mm (11.81") Single ø4.3mm sheath IP67 male connector****0300 D67A 300mm (11.81") Double ø4.3mm sheath IP67 connector****IP67 2 Pin Connector****Key**

Control Gear Power supply, sub-controllers & control systems

JB Junction box / cable connection



# Groove FLEX Accessories



## MOUNTING OPTIONS

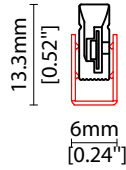
Note: Accessories are to be ordered separately with corresponding code shown below.



KKCP-20

Groove FLEX clip  
(allow 6 per metre/40in)

S/Steel finish



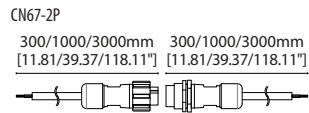
GEEC-01

Groove FLEX end caps

## POWER FEED



IP67



- CN67-2P-0300 300mm (11.81in) pair
- CN67-2P-1000 1000mm (39.37in) pair
- CN67-2P-3000 3000mm (118.11in) pair

IP67

2 PIN male + female connector set

## EXTERIOR JUNCTION BOXES



KKJB-07

IP67 Slim J-Box  
(including type A,B,C,D bushings)



KKJB-07R

Potting resin for IP67 Slim J-Box



Flexible

# Groove FLEX Accessories

# KKDÖ

## KKDC CONTROL



IP20  
Black plastic housing  
L164/W64/H34mm  
(L6.46/W2.52/H1.34in)

**KKDM-05** 1-10V  
visDIM dimmable sub-controller



IP20  
Black plastic housing  
L164/W64/H34mm  
(L6.46/W2.52/H1.34in)

**KKSC-03A** DMX (screw terminal)  
visDIM dimmable sub-controller



IP20  
Black plastic housing  
L164/W64/H34mm  
(L6.46/W2.52/H1.34in)

**KKSC-03B** DMX (RJ45)  
visDIM dimmable sub-controller



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)

### 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-05	90-295V	24V	2.5A	60W	100-0.9	IP67/IP20
	HLG-60H-24	KKDM-05	90-295V	24V	2.5A	60W	100-0.9	IP67/IP20
	HLG-100H-24	KKDM-05	90-295V	24V	4.0A	100W	100-0.9	IP67/IP20
	HLG-150H-24	KKDM-05	90-295V	24V	6.3A	150W	100-0.9	IP67/IP20
	HLG-240H-24	KKDM-05	90-295V	24V	10.0A	240W	100-0.9	IP67/IP20
DALI	CEN-60-24	KKDL-02/03	90-295V	24V	2.5A	60W	100-0.1	IP67/IP20
	HLG-60H-24	KKDL-02/03	90-305V	24V	2.5A	60W	100-0.1	IP67/IP20
	HLG-100H-24	KKDL-02/03	90-305V	24V	4.0A	100W	100-0.1	IP67/IP20
	HLG-150H-24	KKDL-02/03	90-305V	24V	6.3A	150W	100-0.1	IP67/IP20
	HLG-240H-24	KKDL-02/03	90-305V	24V	10.0A	240W	100-0.1	IP67/IP20
DMX RGB	CEN-60-24	KKSC-03	90-295V	24V	2.5A	60W	100-0.9	IP67/IP20
	HLG-60H-24	KKSC-03	90-305V	24V	2.5A	60W	100-0.9	IP67/IP20
	HLG-100H-24	KKSC-03	90-305V	24V	4A	100W	100-0.9	IP67/IP20
	HLG-150H-24	KKSC-03	90-305V	24V	6.3A	150W	100-0.9	IP67/IP20
	HLG-240H-24	KKSC-03	90-305V	24V	10.0A	240W	100-0.9	IP67/IP20

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

<sup>2</sup> 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

<sup>3</sup> Electrical shop drawing will include detailed information of PSU and relevant control drivers

<sup>4</sup> Cut sheets are available on the controls section of [www.kkdc.lighting](http://www.kkdc.lighting) or upon request