

S-Line | LED Linear Lighting System

LED Linear Lighting System



35W / 40W / 45W / 50W / 55W / 60W / 65W / 70W optional

DALI / 1-10V / DIM switch dimmable optional

Sharp / narrow / wide / flood / flat / asymmetric / double asymmetric

5 / 8 / 12 wires trunking rail

Daylight sensor, motion sensor

L , T , X node connector

160LM / 180LM per watt

DC emergency / central safety emergency supply / built-in battery supply

Cord / chain / rod / surface mounted / mounting clip

2700K / 3000K / 3500K / 4000K / 5000K / 5700K / 6500K

600mm / 1200mm / 1500mm / 2400mm / 3000mm / 4500mm

LED Linear Lighting System



Application

Commercial-Industrial-Warehouse-Other indoor lighting



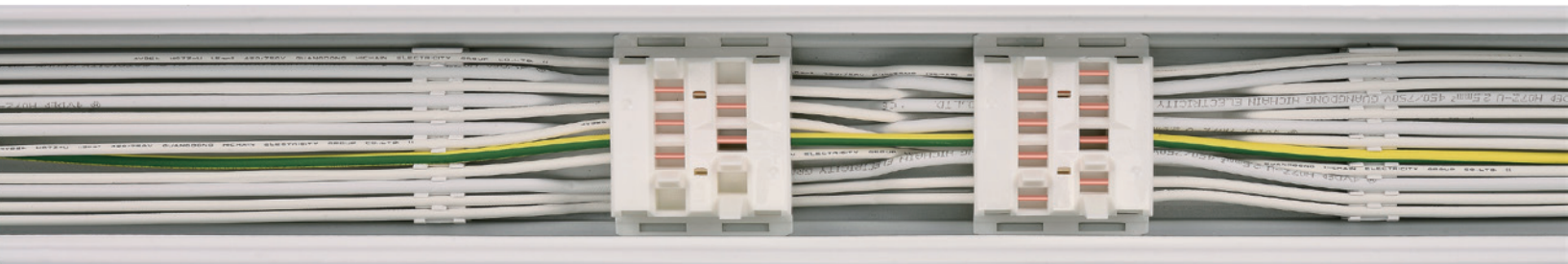
TRUNKING RAIL



- 3-phase pre-selection via moving luminaire male connector pin to right or left to install in the rail
- Trunking rail as standard with 5, 8 or 12-core through-wiring with 2.5mm² cable for power supply and 1.5mm² cable for dimming control.
- The maximum current is 16A, allowing 70pcs of 1500mm 50W in one serial row with 220VAC power supply
- Separate power supplies, dimming or emergency supply can be integrated
- Electrical feed possible in sideward or end area of a trunking rail arrangement via special trunking rail element
- Trunking rail modules with pre-assembled connectors
- Wide distances between suspension points to 3m with self-supporting connector elements
- Simple mounting of trunking rail elements with pre-assembled connectors with integral plug-in system (electrical and mechanical connection)
- Flexible electrical feed-in and feed-out points

Wiring Information

5/8/12 wiring are available



Mode	Function Description						Description Of The Wire											
	3 phase	DALI	1-10V	Batt	EMG1	EMG2	1	2	3	4	5	6	7	8	9	10	11	12

5-core trunking rail :																		
1	✓							L1	N	L2	PE	L3						

8-core trunking rail :																		
2	✓		✓	✓			CHR	L1	N	L2	PE	L3	DIM+	DIM-				
3	✓	✓		✓			CHR	L1	N	L2	PE	L3	DA/L	DA/N				
4	✓			✓	✓		CHR	L1	N	L2	PE	L3	EL1	EN1				

12-core trunking rail :																		
5	✓		✓	✓	✓	✓	CHR	L1	EL1	N	EN1	L2	EN2	PE	EL2	L3	DIM+	DIM-
6	✓	✓		✓	✓	✓	CHR	L1	EL1	N	EN1	L2	EN2	PE	EL2	L3	DA/L	DA/N
7	x2		✓	✓			CHR	L1	L4	N1	N2	L2	L5	PE	L6	L3	DIM+	DIM-
8	x2	✓		✓			CHR	L1	L4	N1	N2	L2	L5	PE	L6	L3	DA/L	DA/N

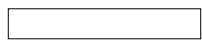
S Line

LED Linear Lighting System

A continuous-row LED lighting system could be created only by a trunking unit and a LED luminaire. It appears as a consistent continuous-row system, without any visual interruption or different reflectors. The luminaire and trunking rail are perfectly matched to each other.



Housing Colors



White
RAL 9016



Black
RAL 9017

DIP Switch Driver

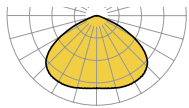
All drivers are DIP SWITCH type. Power can be selectable by setting the buttons in different position, which is more convenient for customers to make inventory.



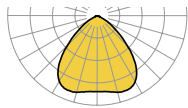
OPTICS



FD-120°
Extremely wide



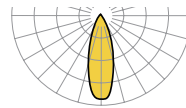
WD-90°
wide



NR-60°
narrow



SP-30°
extremely narrow



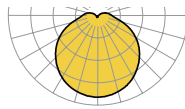
LS / RS
asymmetrical



DS
Double asymmetric



FF
Diffuse



Lenses Module



Central.Line.Optic



Individual.Lens.Optic



Diffusers

EMERGENCY LIGHTING



External emergency with Constant current(On/off) LED driver

Luminaires with Constant current(on/off) led driver connect to the central backup battery or UPS through EL, EN. When no power is detected, the luminaires are off; when power is detected, the luminaires are 100% brightness.

EL/EN	Lamp Brightness
OFF	0%
ON	100%

L/N or EL/EN	Lamp Brightness
OFF	0%
AC 220V ON	100%
DC 220V ON	15%

External emergency with DALI driver

Luminaires with DALI driver connect to the mains electricity, central backup battery or UPS. When no power is detected, the luminaires are off; when AC power is detected, the luminaires are on 100%; when DC power is detected, the luminaires are on 15%.

Internal emergency with built-in battery pack

Different combination of emergency driver and battery pack are available. When CHR detects that there is power, luminaires are on 100%; when no power detected, luminaires will work according to the selected emergency driver. Different emergency drivers and battery packs can be freely combined as below.

L/N	L-CHR/N-CHR	Battery	Emergency driver power	Power when in emergency	Duration time
OFF	ON	/	/	/	0%
OFF	OFF	1800mAh	6W	6W	3 hours
OFF	OFF	3600mAh	12W	12W	3 hours
OFF	OFF	3600mAh	6W	6W	6 hours

FUNCTION MODULES



Spotlight Module



Sensor Module



Exit Sign Module



Wireless Sensor

ACCESSORIES

Power Feed



Feed In Box



Feed In Connector

Mounting Kit



Suspension Chain



Suspension Rod



Suspension Cord



Surface Mounted



Mounting Clip

Node Connector



L Node Connector



T Node Connector



X Node Connector

Closure



End Cap



Blank Cover

Order Number List - Trunking Rail

Category	Length	Option	Wire Quantity	Color
	X	X	X	X
CFT	06	N	05	WH
	09	F	08	BK
	12	T	12	SV
	15			
	24			
	30			
	36			
	45			

Code Definition

CFT = CoreShine Steel trunking rail

Length:

06 = 600mm
 09 = 900mm
 12 = 1200mm
 15 = 1500mm
 24 = 2400mm
 30 = 3000mm
 36 = 3600mm
 45 = 4500mm

Option:

N = normal rail
 F = feed-in rail
 T = terminal rail

Wire quantity:

05 = 5 wires
 08 = 8 wires
 12 = 12 wires

Color:

WH = white
 BK = black
 SV = silver



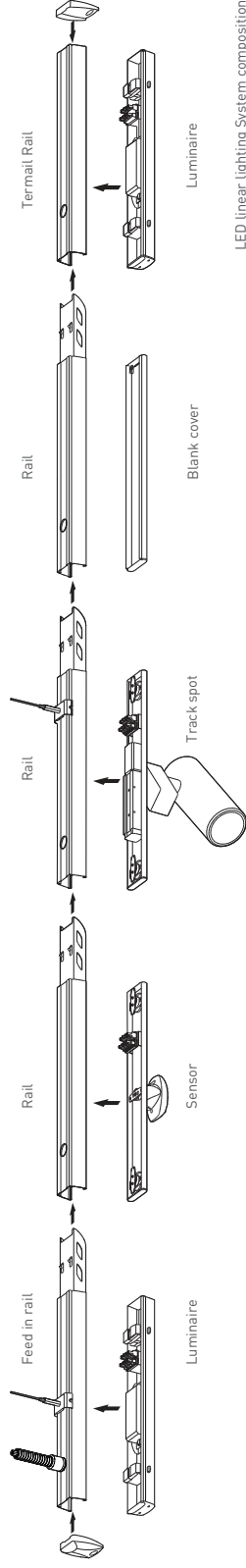
e.g.: CFT-15F-05WH

1.5m linear trunking rail, feed-in, 5 wires, white color

Safety notes:

Installation should be performed only by qualified electrician.

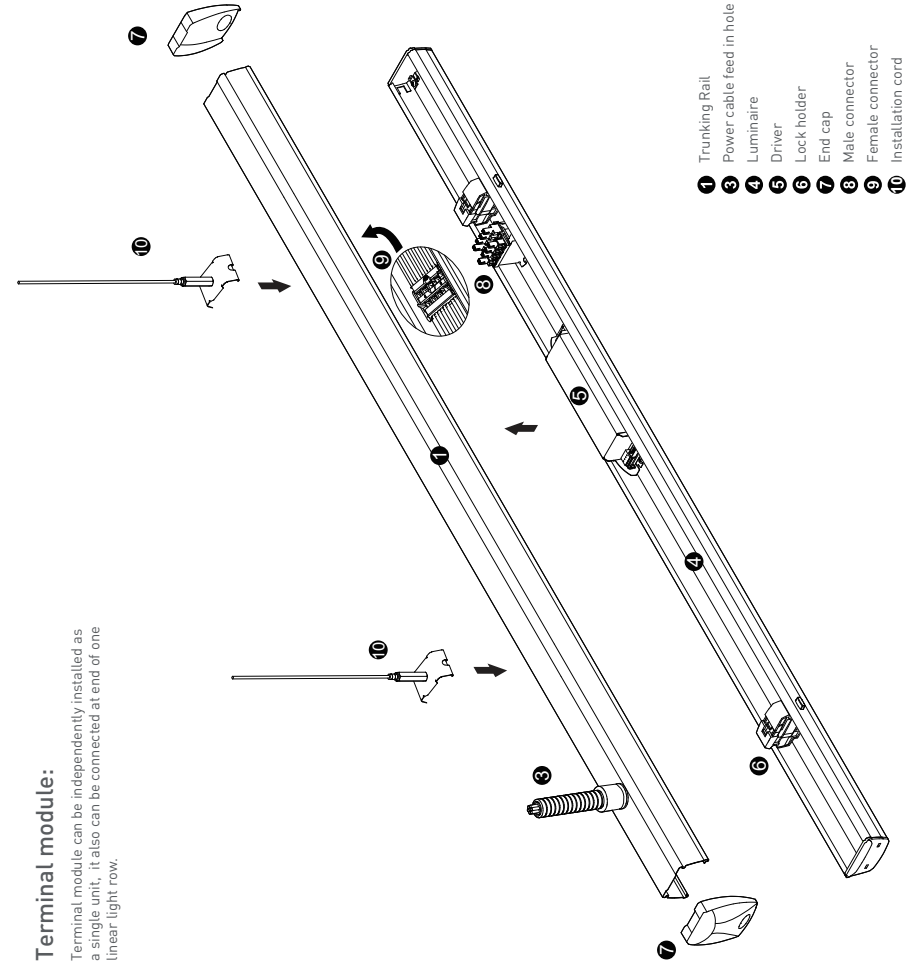
- Make sure no voltage while installation.
- Connect cable wires according to wire labeling.
- Max current should not exceed 16A in one power feed in circuit.



LED linear lighting system composition

Terminal module:

Terminal module can be independently installed as a single unit, it also can be connected at end of one linear light row.

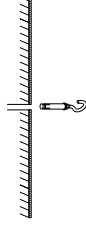


- 1 Trunking Rail
- 2 Power cable feed in hole
- 3 Luminaire
- 4 Driver
- 5 Lock holder
- 6 End cap
- 7 Male connector
- 8 Female connector
- 9 Installation cord
- 10

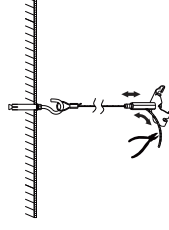
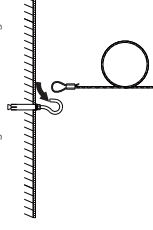
Step 1

Mounting Suspension

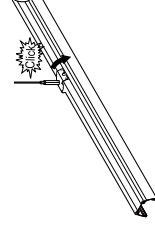
Drill a hole on ceiling



Fix mounting hook into ceiling



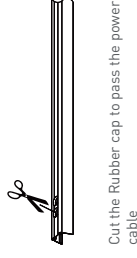
Adjust length of suspension cord:
a. press down Hexagon bolt;
b. Pull in/out cord to adjust length



Click in mounting clip into trunking rail

Step 2

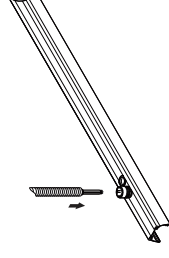
Connecting Power Supply



Cut the Rubber cap to pass the power cable



Screw in the conduit gland



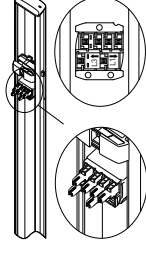
Put in conduit with cable inside and pull up conduit gland to lock



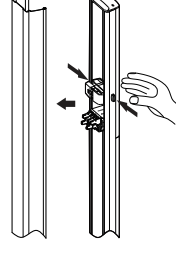
Connect wires according labeling on wires to feed in connector then connect to connector in trunking rail

Step 3

Mounting Luminaire



Slide knob to select phase L1/L2/L3



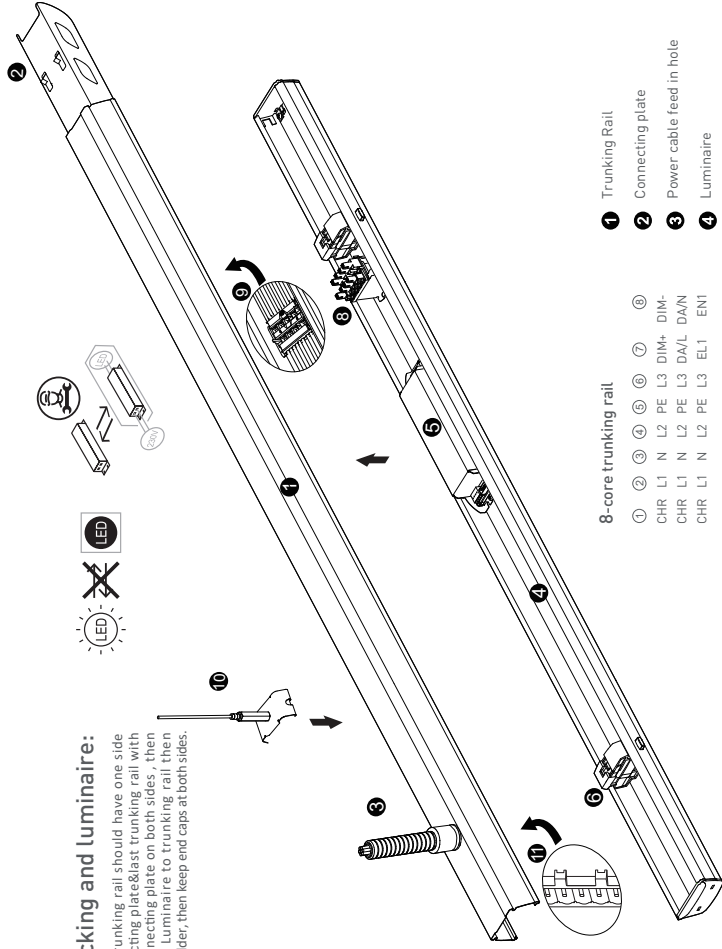
Make sure male & female connectors in right position then fix the luminaire to trunking rail



Push the sliding lock to lock the luminaire to trunking rail

Tracking and luminaire:

First trunking rail should have one side connecting plate & last trunking rail with no connecting plate on both sides, then fix the Luminaire to trunking rail then lock holder, then keep end caps at both sides.



8-core trunking rail

- ① Trunking Rail
- ② Connecting plate
- ③ Power cable feed in hole
- ④ Luminaire
- ⑤ Driver
- ⑥ Lock holder
- ⑦ Male connector
- ⑧ Female connector
- ⑨ Installation cord

12-core trunking rail

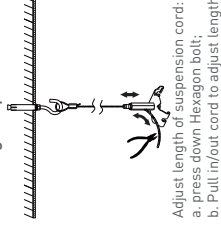
- ① Trunking Rail
- ② Connecting plate
- ③ Power cable feed in hole
- ④ Luminaire
- ⑤ Driver
- ⑥ Lock holder
- ⑦ Male connector
- ⑧ Female connector
- ⑨ Installation cord

Definition of 5-core 8-core and 12-core trunking rail

- 5-core trunking rail ① ② ③ ④ ⑤
L1 N L2 PE L3

Step 1

Mounting Suspension

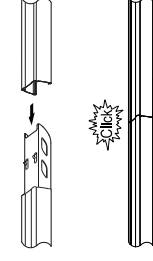


Adjust length of suspension cord:
a. press down Hexagon bolt;
b. Pull in/out cord to adjust length

Step 3

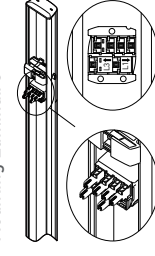
Connecting Trunking Rail

Both trunking rails should keep in perfect position then push to click



Step 4

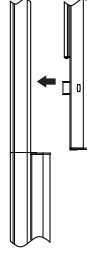
Mounting Luminaire



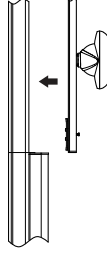
Slide knob to select phase L1/L2/L3

Step 5

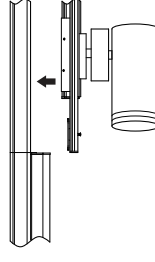
LED linear lighting system



Including luminaires



Including luminaires and sensor

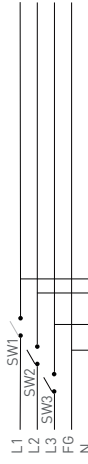


Including luminaires and spotlight

Make sure male & female connectors in right position then fix the luminaire to trunking rail

Put in conduit with cable inside and pull up conduit gland to lock

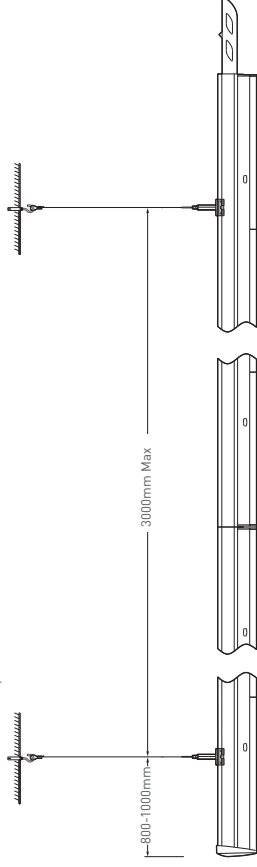
Wire diagram of triple circuits function



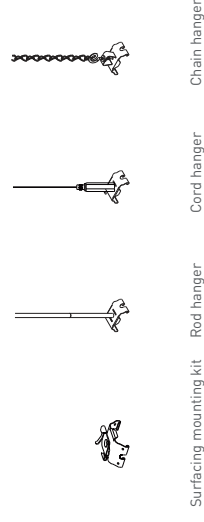
This Triple Circuits function offers to control lighting ON/OFF by three switches SW1, SW2, SW3 which are connected by live lines L1, L2, L3

Pendant and mounting installation

Starting installation distances point should be 800 mm to 1000 mm, then in between 1st & 2nd point should be 3000 mm max



Four options for installation



Order Number List - Luminaire

Category	Length	Power	CCT	Beam Angle	Wire	Color	Function			
CFL-	12	30-	27	X	05	WH-	E1	B1	DA	
				SP-						
				NR						
	15	35	40	30	WD	12	BK	E2	B2	10
					FD					
					DS					
	24	50	50	50	RS	12	SV	E2	B2	10
					LS					
					FF					
	30	70	70	65	FT	12	SV	E2	B2	10
					FD					
					DS					

e.g.: CFL-1550-40NR-08WH-DA
1.5m linear luminaire, 50W, 4000K, narrow angle,
8 wires, white color, DALI dimming.

Code Definition

CFL = CoreShine Steel luminaire

Length:

12 = 1200mm
15 = 1500mm
24 = 2400mm
30 = 3000mm

Power:

30, 40, 60 = 30W, 40W, 60W
35, 50, 70 = 35W, 50W, 70W

CCT:

27 = 2700K
30 = 3000K
35 = 3500K
40 = 4000K
50 = 5000K
57 = 5700K
65 = 6500K

Beam angle

SP = sharp
NR = narrow
WD = wide
FD = flood
DS = double asymmetric
RS / LS = right / left asymmetric
FF / FT = flat frosted / transparent

Wire quantity:

05 = 5 wires,
08 = 8 wires,
12 = 12 wires
Color of the housing:
WH = white shell
BK = black shell
SV = silver shell

Function:

E1 = 6W emergency power supply
E2 = 12W emergency power supply
B1 = 1800mAh emergency battery pack
B2 = 3600mAh emergency battery pack
DA = DALI dimming
10 = 1-10V dimming



Order Number List - Node Connector - Feed-in Box

Category	Model	Wire Quantity	Color
CFN -	BF	X	X
		05	WH
		08	BK
		12	SV

Code Definition

CFN=Coreshine Steel node connector

Model:

BF= Feed-in box

Wire quantity:

05= 5 wires

08= 8 wires

12= 12 wires

Color:

WH= white

BK= black

SV= silver



e.g.: CFN-BF-05WH
Feed-in box, 5 wires, white color

Order Number List - L, T, X Node Connector

Category	Model	Option	Wire Quantity	Color
CFN -	L	X	X	X
		01	None	WH
		10	05	BK
		100	08	SV
		X	010	12
		001		
		1000		

Option:

01=feed-in by the left side; feed-out by right side

10=feed-in by the right side; feed-out by left side

010=one side for feed-in; two sides for feed-out

1000=one side for feed-in; three sides for feed-out



L Node Connector



T Node Connector



X Node Connector

e.g.: CFN-L01-05WH
L-node connector, feed in by the left side and feed out by right side, 5 wires, white color

S Line
LED Linear Lighting System

Luminaire Characteristics / Standard Version / 35W/50W/70W

Product Description

Tool free installation
Continuous line
Plug and play

Application

Commercial
Industrial
Warehouse



Model No.	CFLS-1535	CFLS-1550	CFLS-1570
Outer dimensions	1500*76*70mm	1500*76*70mm	1500*76*70mm
Input power	35W	50W	70W
Dip switch to	35/40/45/50W	35/40/45/50W	55/60/65/70W
Input voltage	220 - 240VAC	220 - 240VAC	220 - 240VAC
Input current	0.2A max	0.3A max	0.4A max
Mains frequency	50/60HZ	50/60HZ	50/60HZ
PF (at 230 V, 50 Hz, full load)	0.9	0.9	0.9
Lumen	6300lm	9000lm	12600lm
Efficiency	180lm/W	180lm/W	180lm/W
CCT	2700-6500K	2700-6500K	2700-6500K
CRI	80Ra	80Ra	80Ra
R9	>0	>0	>0
SDCM	<3	<3	<3
Beam Angle	30°, 60°, 90°, 120° LS/RS, DS, FF	30°, 60°, 90°, 120° LS/RS, DS, FF	30°, 60°, 90°, 120° LS/RS, DS, FF
Dimming	NO	NO	NO
Dimming range	/	/	/
Flicker percent	≤5%	≤5%	≤5%
Flicker metric Pst LM	≤1.0	≤1.0	≤1.0
Stroboscopic effect metric SVM	≤0.4	≤0.4	≤0.4
Type of protection	IP20	IP20	IP20
Operating humidity	10% - 80%	10% - 80%	10% - 80%
Storage humidity	10% - 80%	10% - 80%	10% - 80%
Ambient temperature Ta (at life-time 50,000 h)	-25 - 40°C	-25 - 40°C	-25 - 40°C
Warranty	5 years	5 years	5 years
Storage temperature Ts	-40 - 85°C	-40 - 85°C	-40 - 85°C

S Line
LED Linear Lighting System

Luminaire Characteristics / Dali 2.0 version / 35W/50W/70W

Product Description

Tool free installation
Continuous line
Plug and play

Application

Commercial
Industrial
Warehouse



Model No.	CFLS-1535-DA	CFLS-1550-DA	CFLS-1570-DA
Outer dimensions	1500*76*70mm	1500*76*70mm	1500*76*70mm
Input power	35W	50W	70W
Dip switch to	35/40/45/50W	35/40/45/50W	55/60/65/70W
Input voltage	220 - 240VAC	220 - 240VAC	220 - 240VAC
Input current	0.2A max	0.3A max	0.4A max
Mains frequency	50/60HZ	50/60HZ	50/60HZ
PF (at 230 V, 50 Hz, full load)	0.9	0.9	0.9
Lumen	6300lm	9000lm	12600lm
Efficiency	180lm/W	180lm/W	180lm/W
CCT	2700-6500K	2700-6500K	2700-6500K
CRI	80Ra	80Ra	80Ra
R9	>0	>0	>0
SDCM	<3	<3	<3
Beam Angle	30°, 60°, 90°, 120° LS/RS, DS, FF	30°, 60°, 90°, 120° LS/RS, DS, FF	30°, 60°, 90°, 120° LS/RS, DS, FF
Dimming	DALI DT6/switch	DALI DT6/switch	DALI DT6/switch
Dimming range	1% - 100%	1% - 100%	1% - 100%
Flicker percent	≤5%	≤5%	≤5%
Flicker metric Pst LM	≤1.0	≤1.0	≤1.0
Stroboscopic effect metric SVM	≤0.4	≤0.4	≤0.4
Type of protection	IP20	IP20	IP20
Operating humidity	10% - 80%	10% - 80%	10% - 80%
Storage humidity	10% - 80%	10% - 80%	10% - 80%
Ambient temperature Ta (at life-time 50,000 h)	-25 - 40°C	-25 - 40°C	-25 - 40°C
Warranty	5 years	5 years	5 years
Storage temperature Ts	-40 - 85°C	-40 - 85°C	-40 - 85°C



S Line
LED Linear Lighting System

Electrical Characteristics | Output Selectable Driver | 50W/70W

Product description

Constant current LED driver
Lifespan: 50,000h
5 years warranty

Properties

Over voltage protection with automatic restart
Overload protection
Short-circuit protection with automatic restart
Surge voltage: 2.5KV



Model No.	CSD2U-50	CSD2U-70
Input voltage	220 - 240VAC	220 - 240VAC
Input current	0.33A max	0.47A max
Mains frequency	50/60HZ	50/60HZ
PF (at 230 V, 50 Hz, full load)	0.9	0.9
THD (at 230 V, 50 Hz, full load)	15%	15%
Inrush current	28A@110us	30A@110us
Turn on time (output)	≤1s	≤1s
Output voltage	55 - 82V	55 - 82V
Output current	0.43/0.49/0.55/0.61A	0.69/0.73/0.79/0.85A
Max output power	50W	70W
Efficiency (at 230V,50Hz,full load)	90%	91%
Dimming	NO	NO
Dimming range	/	/
Output LF current ripple	≤5%	≤5%
Surge (between L - N)	2.5KV	2.5KV
Surge (between L/N - PE)	2KV	2KV
Type of protection	IP20	IP20
Operating humidity	10% - 80%	10% - 80%
Storage humidity	10% - 80%	10% - 80%
Ambient temperature Ta (at life-time 50,000 h)	-25 - 60°C	-25 - 60°C
Max. Casing temperature Tc	80°C	80°C
Storage temperature Ts	-40 - 85°C	-40 - 85°C
Outer dimensions	280*30*22mm	280*37*31mm

Electrical Characteristics | DALI DT6 Dimming Driver | 50W/70W

Product description

Constant current LED driver
Lifespan: 50,000h
5 years warranty

Properties

Over voltage protection with automatic restart
Overload protection
Short-circuit protection with automatic restart
Surge voltage: 2.5KV



Model No.	CSD2H-50-DT6	CSD2H-70-DT6
Input voltage	220 - 240V	220 - 240V
Input current	0.3A max	0.43A max
Mains frequency	0/50/60HZ	0/50/60HZ
PF (at 230 V, 50 Hz, full load)	0.9	0.9
THD (at 230 V, 50 Hz, full load)	15%	15%
Inrush current	25A@120us	30A@110us
Turn on time (output)	≤1s	≤1s
Standby power P _{sb}	≤0.5W	≤0.5W
Output voltage	30 - 40V	30 - 40V
Output current	0.84/0.95/1.07/1.18A	1.3/1.42/1.53/1.65A
Max output power	47W	66W
Efficiency (at 230V,50Hz,full load)	88%	88%
Dimming	DALI DT6/switch	DALI DT6/switch
Dimming range	1% - 100%	1% - 100%
Output LF current ripple	≤5%	≤5%
Surge (between L - N)	2.5KV	2.5KV
Surge (between L/N - PE)	2KV	2KV
Type of protection	IP20	IP20
Operating humidity	10% - 80%	10% - 80%
Storage humidity	10% - 80%	10% - 80%
Ambient temperature T _a (at life-time 50,000 h)	-25 - 60°C	-25 - 60°C
Max. Casing temperature T _c	85°C	85°C
Storage temperature T _s	-40 - 85°C	-40 - 85°C
Outer dimensions	280*32*30mm	360*32*30mm