

# Lighting: Fluorescent & LED Lighting Fixture, DFP1-S Series (Short end cap)

Flameproof and Dust protection by enclosure

Zone 1 & 2 – 21 & 22

## Application

The DFP1-S series can be used worldwide and is suitable for lighting applications in hazardous areas, such as onshore and offshore platforms or refineries. The different light families ensure optimal performance in various environments.

The DFP1-S series consists of a glass tube with two end caps. It is designed for the installation of both single and double T8 and T5 bi-pin fluorescent tubes, LED tubes, or LED PCBs.

## Specification

|                  |                                                                                                                                                    |
|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| Body material    | : Marine grade copper-free aluminium alloy with polyester powder coated, RAL 7032 (grey) (optional offshore painting-acrylic polyurethane coating) |
| Glass tube       | : Borosilicate glass (4J impact)                                                                                                                   |
| Reflector        | : Sheet steel with polyester powder coated, RAL 9016 (white)                                                                                       |
| Protective guard | : Stainless steel, SS 304 (optional SS 316)                                                                                                        |
| Bolts            | : Stainless steel, SS 304 (optional SS 316)                                                                                                        |
| Sealing (O-ring) | : Silicone                                                                                                                                         |

## Product Features

|                              |                                                                                        |
|------------------------------|----------------------------------------------------------------------------------------|
| LED tube                     | : meet TIS 2779-2562                                                                   |
| LED PCB                      | : Cree JK3030 chip                                                                     |
| Colour Rendering Index (CRI) | : ≥80                                                                                  |
| Colour temperature           | : 3,000 K, 5,700 K or 6,500 K                                                          |
| Luminous efficacy            | : LED tube; 100-150 lm/W<br>LED PCB; 125-140 lm/W                                      |
| Beam angle                   | : LED tube; average 115-120°<br>LED PCB; 115-120° with lens<br>30°, 60°, 90° with lens |

## Fixture Life

LED tube (Epistar)

- L70 - rated lifetime of 54,000 hours at an ambient temperature of 100°C.

LED PCB (Cree)

- L70 - Rated lifetime of 72,000 hours at ambient temperatures of 85°C.
- L80 - Rated lifetime of 71,900 hours at ambient temperatures of 85°C.
- L90 - Rated lifetime of 35,400 hours at ambient temperatures of 85°C.

## Technical Data

| Hazardous Area           | Gas                                                                                   | Dust                |
|--------------------------|---------------------------------------------------------------------------------------|---------------------|
| Zones                    | 1 & 2                                                                                 | 21 & 22             |
| Equipment Group/Category | Ex II 2G                                                                              | Ex II 2D            |
| Symbol of Protection     | Ex db IIC T6 Gb                                                                       | Ex tb IIIC T85°C Db |
| Certificate              | KDB 24 ATEX 0024X<br>IECEx KDB 24.0007X                                               |                     |
| Conformity to Standards  | EN IEC 60079-0, EN 60079-1, EN IEC 60079-31<br>IEC 60079-0, IEC 60079-1, IEC 60079-31 |                     |
| Ambient Temperature      | -20°C to +60°C/ 0°C to +55°C (with emergency battery)<br>-40°C to +60°C (option)      |                     |
| Index of Protection      | IP66                                                                                  |                     |

|               |                                                                                                                                                                                                                                                                            |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Entry Threads | Body 1 (2 cable entries);<br>2x M20x1.5, 2x M25x1.5 (with 1x stopping plug) or<br>2x 1/2" NPT, 2x 3/4" NPT (with 1x stopping plug)<br>Body 2 (4 cable entries);<br>4x M20x1.5, 4x M25x1.5 (with 3x stopping plugs) or<br>4x 1/2" NPT, 4x 3/4" NPT (with 3x stopping plugs) |
| Mounting      | Ceiling, Pendant, Bracket, Stanchion or Pole mount                                                                                                                                                                                                                         |
| Connection    | L, N and PE ; for 1-4 mm <sup>2</sup> cable                                                                                                                                                                                                                                |
| Rated Voltage | 110-240 V AC, 50/60 Hz (P.F. ≥ 0.98) or 24-42 V DC                                                                                                                                                                                                                         |

## Connection

### Standard



### Optional (socket+plug)



### Optional (1 each per phase)



## Electrical for Emergency unit

|                    |                                                                                   |
|--------------------|-----------------------------------------------------------------------------------|
| Operation          | : Maintained mode                                                                 |
| Battery            | : Ni-MH, 7.2 V, 2.5 Ah                                                            |
| Recharge time      | : 16-24 hours, continuous battery recharge                                        |
| Emergency duration | : 120 minutes (2 hours)<br>(optional Ni-MH, 7.2 V, 2x 2.5 Ah battery for 3 hours) |



# Lighting: Fluorescent & LED Lighting Fixture, DFP1-S Series (Short end cap)

Flameproof and Dust protection by enclosure

Zone 1 & 2 – 21 & 22



## Catalogue Number Logic (Normal Light)

| Series | Lamp watt<br>(see ordering<br>requirement<br>table below) | Lamp type<br>L4 Fluorescent<br>lamp<br>LT LED tube<br>LP LED PCB | Rated voltage<br>A1 220-240 V AC<br>A2 110-240 V AC<br>D1 24-42 V DC | LED driver<br>none Built-in driver<br>D Driver<br>required | Accessories<br>G Protective guard<br>R External reflector | Body<br>S1 Body 1<br>S2 Body 2 | Entry threads<br>M1 M20x1.5<br>M2 M25x1.5<br>N1 1/2" NPT<br>N2 3/4" NPT | Mounting type<br>C Ceiling (standard)<br>C1 Ceiling (for pipe), Fixed<br>C2 Ceiling (for pipe), Swing<br>P1 Pendant (for chain)<br>P2 Pendant (for pipe)<br>B Bracket | Option<br>SP Surge<br>Protection<br>10 kA, 8/20 μs |
|--------|-----------------------------------------------------------|------------------------------------------------------------------|----------------------------------------------------------------------|------------------------------------------------------------|-----------------------------------------------------------|--------------------------------|-------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|
|--------|-----------------------------------------------------------|------------------------------------------------------------------|----------------------------------------------------------------------|------------------------------------------------------------|-----------------------------------------------------------|--------------------------------|-------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|

## Ordering Requirements and Dimensions

| Cat. No.                                 | Lamp<br>watt | Voltage                   | Ballast<br>or<br>Driver | Temp. Class<br>(for zone 1 & 2) |         | Max. Surface<br>Temp.*<br>(for zone 21 & 22) |         | Volume<br>(cm³)<br>Body 1<br>(Body 2) | Dimensions<br>in mm<br>Body 1 (Body 2) |                  | Approx. weight<br>(kg) |        |  |
|------------------------------------------|--------------|---------------------------|-------------------------|---------------------------------|---------|----------------------------------------------|---------|---------------------------------------|----------------------------------------|------------------|------------------------|--------|--|
|                                          |              |                           |                         | Ta 40°C                         | Ta 60°C | Ta 40°C                                      | Ta 60°C |                                       | a                                      | b                | Body 1                 | Body 2 |  |
| T8 fluorescent lamp                      |              |                           |                         |                                 |         |                                              |         |                                       |                                        |                  |                        |        |  |
| DFP1-118L4A1 - ○ - S▲ - □□ - ○           | 1x 18 W      | 220-240 V AC,<br>50/60 Hz | Electronic              | T6                              | T6      | T85°C                                        | T85°C   | 3,950                                 | 755                                    | 645              | 6.80                   | 7.47   |  |
| DFP1-218L4A1 - ○ - S▲ - □□ - ○           | 2x 18 W      |                           |                         |                                 |         |                                              |         | (4,090)                               | (840)                                  | (655)            | 6.95                   | 7.62   |  |
| DFP1-136L4A1 - ○ - S▲ - □□ - ○           | 1x 36 W      |                           |                         |                                 |         |                                              |         | 7,020                                 | 1,370                                  | 1,258            | 10.30                  | 10.98  |  |
| DFP1-236L4A1 - ○ - S▲ - □□ - ○           | 2x 36 W      |                           |                         |                                 |         |                                              |         | (7,180)                               | (1,455)                                | (1,270)          | 10.60                  | 11.27  |  |
| T5 fluorescent lamp                      |              |                           |                         |                                 |         |                                              |         |                                       |                                        |                  |                        |        |  |
| DFP1-114L4A1 - ○ - S▲ - □□ - ○           | 1x 14 W      | 220-240 V AC,<br>50/60 Hz | Electronic              | T6                              | T6      | T85°C                                        | T85°C   | 3,950                                 | 755                                    | 645              | 6.80                   | 7.46   |  |
| DFP1-214L4A1 - ○ - S▲ - □□ - ○           | 2x 14 W      |                           |                         |                                 |         |                                              |         | (4,090)                               | (840)                                  | (655)            | 6.95                   | 7.65   |  |
| DFP1-128L4A1 - ○ - S▲ - □□ - ○           | 1x 28 W      |                           |                         |                                 |         |                                              |         | 7,020                                 | 1,370                                  | 1,258            | 10.30                  | 10.95  |  |
| DFP1-228L4A1 - ○ - S▲ - □□ - ○           | 2x 28 W      |                           |                         |                                 |         |                                              |         | (7,180)                               | (1,455)                                | (1,270)          | 10.60                  | 11.25  |  |
| LED tube (Single-ended, Built-in driver) |              |                           |                         |                                 |         |                                              |         |                                       |                                        |                  |                        |        |  |
| DFP1-105LTA2 - ○ - S▲ - □□ - ○           | 1x 5 W       | 110-240 V AC,<br>50/60 Hz | —                       | T6                              | T6      | T85°C                                        | T85°C   | 3,950<br>(4,090)                      | 755<br>(840)                           | 645<br>(655)     | 4.80                   | 5.47   |  |
| DFP1-205LTA2 - ○ - S▲ - □□ - ○           | 2x 5 W       |                           |                         |                                 |         |                                              |         |                                       |                                        |                  | 5.00                   | 5.65   |  |
| DFP1-106LTA2 - ○ - S▲ - □□ - ○           | 1x 6 W       |                           |                         |                                 |         |                                              |         |                                       |                                        |                  | 4.80                   | 5.47   |  |
| DFP1-206LTA2 - ○ - S▲ - □□ - ○           | 2x 6 W       |                           |                         |                                 |         |                                              |         |                                       |                                        |                  | 5.00                   | 5.65   |  |
| DFP1-107LTA2 - ○ - S▲ - □□ - ○           | 1x 7 W       |                           |                         |                                 |         |                                              |         |                                       |                                        |                  | 4.80                   | 5.47   |  |
| DFP1-207LTA2 - ○ - S▲ - □□ - ○           | 2x 7 W       |                           |                         |                                 |         |                                              |         |                                       |                                        |                  | 5.00                   | 5.65   |  |
| DFP1-108LTA2 - ○ - S▲ - □□ - ○           | 1x 8 W       |                           |                         |                                 |         |                                              |         |                                       |                                        |                  | 4.80                   | 5.47   |  |
| DFP1-208LTA2 - ○ - S▲ - □□ - ○           | 2x 8 W       |                           |                         |                                 |         |                                              |         |                                       |                                        |                  | 5.00                   | 5.65   |  |
| DFP1-109LTA2 - ○ - S▲ - □□ - ○           | 1x 9 W       |                           |                         |                                 |         |                                              |         |                                       |                                        |                  | 4.80                   | 5.47   |  |
| DFP1-209LTA2 - ○ - S▲ - □□ - ○           | 2x 9 W       |                           |                         |                                 |         |                                              |         |                                       |                                        |                  | 5.00                   | 5.65   |  |
| DFP1-114LTA2 - ○ - S▲ - □□ - ○           | 1x 14 W      | 110-240 V AC,<br>50/60 Hz | —                       | T6                              | T6      | T85°C                                        | T85°C   | 7,020<br>(7,180)                      | 1,370<br>(1,455)                       | 1,258<br>(1,270) | 9.30                   | 9.95   |  |
| DFP1-214LTA2 - ○ - S▲ - □□ - ○           | 2x 14 W      |                           |                         |                                 |         |                                              |         |                                       |                                        |                  | 9.60                   | 10.26  |  |
| DFP1-115LTA2 - ○ - S▲ - □□ - ○           | 1x 15 W      |                           |                         |                                 |         |                                              |         |                                       |                                        |                  | 9.30                   | 9.95   |  |
| DFP1-215LTA2 - ○ - S▲ - □□ - ○           | 2x 15 W      |                           |                         |                                 |         |                                              |         |                                       |                                        |                  | 9.60                   | 10.26  |  |
| DFP1-116LTA2 - ○ - S▲ - □□ - ○           | 1x 16 W      |                           |                         |                                 |         |                                              |         |                                       |                                        |                  | 9.30                   | 9.95   |  |
| DFP1-216LTA2 - ○ - S▲ - □□ - ○           | 2x 16 W      |                           |                         |                                 |         |                                              |         |                                       |                                        |                  | 9.60                   | 10.26  |  |
| DFP1-117LTA2 - ○ - S▲ - □□ - ○           | 1x 17 W      |                           |                         |                                 |         |                                              |         |                                       |                                        |                  | 9.30                   | 9.95   |  |
| DFP1-217LTA2 - ○ - S▲ - □□ - ○           | 2x 17 W      |                           |                         |                                 |         |                                              |         |                                       |                                        |                  | 9.60                   | 10.26  |  |
| DFP1-118LTA2 - ○ - S▲ - □□ - ○           | 1x 18 W      |                           |                         |                                 |         |                                              |         |                                       |                                        |                  | 9.30                   | 9.95   |  |
| DFP1-218LTA2 - ○ - S▲ - □□ - ○           | 2x 18 W      |                           |                         |                                 |         |                                              |         |                                       |                                        |                  | 9.60                   | 10.26  |  |
| DFP1-119LTA2 - ○ - S▲ - □□ - ○           | 1x 19 W      |                           |                         |                                 |         |                                              |         |                                       |                                        |                  | 9.30                   | 9.95   |  |
| DFP1-219LTA2 - ○ - S▲ - □□ - ○           | 2x 19 W      |                           |                         |                                 |         |                                              |         |                                       |                                        |                  | 9.60                   | 10.26  |  |
| DFP1-120LTA2 - ○ - S▲ - □□ - ○           | 1x 20 W      |                           |                         |                                 |         |                                              |         |                                       |                                        |                  | 9.30                   | 9.95   |  |
| DFP1-220LTA2 - ○ - S▲ - □□ - ○           | 2x 20 W      |                           |                         |                                 |         |                                              |         |                                       |                                        |                  | 9.60                   | 10.26  |  |
| DFP1-121LTA2 - ○ - S▲ - □□ - ○           | 1x 21 W      |                           |                         |                                 |         |                                              |         |                                       |                                        |                  | 9.30                   | 9.95   |  |
| DFP1-221LTA2 - ○ - S▲ - □□ - ○           | 2x 21 W      |                           |                         |                                 |         |                                              |         |                                       |                                        |                  | 9.60                   | 10.26  |  |
| DFP1-122LTA2 - ○ - S▲ - □□ - ○           | 1x 22 W      |                           |                         |                                 |         |                                              |         |                                       |                                        |                  | 9.30                   | 9.95   |  |
| DFP1-222LTA2 - ○ - S▲ - □□ - ○           | 2x 22 W      |                           |                         |                                 |         |                                              |         |                                       |                                        |                  | 9.60                   | 10.26  |  |
| DFP1-123LTA2 - ○ - S▲ - □□ - ○           | 1x 23 W      |                           |                         |                                 |         |                                              |         |                                       |                                        |                  | 9.30                   | 9.95   |  |
| DFP1-223LTA2 - ○ - S▲ - □□ - ○           | 2x 23 W      |                           |                         |                                 |         |                                              |         |                                       |                                        |                  | 9.60                   | 10.26  |  |
| DFP1-124LTA2 - ○ - S▲ - □□ - ○           | 1x 24 W      |                           |                         |                                 |         |                                              |         |                                       |                                        |                  | 9.30                   | 9.95   |  |
| DFP1-224LTA2 - ○ - S▲ - □□ - ○           | 2x 24 W      |                           |                         |                                 |         |                                              |         |                                       |                                        |                  | 9.60                   | 10.26  |  |
| DFP1-125LTA2 - ○ - S▲ - □□ - ○           | 1x 25 W      |                           |                         |                                 |         |                                              |         |                                       |                                        |                  | 10.60                  | 11.25  |  |
| DFP1-225LTA2 - ○ - S▲ - □□ - ○           | 2x 25 W      |                           |                         |                                 |         |                                              |         |                                       |                                        |                  | 11.00                  | 11.65  |  |

Lighting source; daylight (6,500 K) are standard and/or warm white (3,000 K), please specify.

Remark \*: The maximum surface temperatures are specified for dust free condition. The dust layer which may cover around the lighting fixture will cause to higher surface temperature.



# Lighting: Fluorescent & LED Lighting Fixture, DFP1-S Series (Short end cap)

Flameproof and Dust protection by enclosure

Zone 1 & 2 – 21 & 22

## Ordering Requirements and Dimensions

| Cat. No.                                        | Lamp watt | Voltage                | Ballast or Driver | Temp. Class (for zone 1 & 2) |         | Max. Surface Temp.* (for zone 21 & 22) |         | Volume (cm³)<br>Body 1 (Body 2) | Dimensions in mm<br>Body 1 (Body 2) |               | Approx. weight (kg) |        |  |
|-------------------------------------------------|-----------|------------------------|-------------------|------------------------------|---------|----------------------------------------|---------|---------------------------------|-------------------------------------|---------------|---------------------|--------|--|
|                                                 |           |                        |                   | Ta 40°C                      | Ta 60°C | Ta 40°C                                | Ta 60°C |                                 | a                                   | b             | Body 1              | Body 2 |  |
| LED tube (72 V DC, Double-ended)                |           |                        |                   |                              |         |                                        |         |                                 |                                     |               |                     |        |  |
| DFP1-105LTA2 -D○-S▲-□□-○                        | 1x 5 W    | 110-240 V AC, 50/60 Hz | LED driver        | T6                           | T6      | T85°C                                  | T85°C   | 3,950 (4,090)                   | 755 (840)                           | 645 (655)     | 4.84                | 5.50   |  |
| DFP1-205LTA2 -D○-S▲-□□-○                        | 2x 5 W    |                        |                   |                              |         |                                        |         |                                 |                                     |               | 5.04                | 5.70   |  |
| DFP1-106LTA2 -D○-S▲-□□-○                        | 1x 6 W    |                        |                   |                              |         |                                        |         |                                 |                                     |               | 4.84                | 5.50   |  |
| DFP1-206LTA2 -D○-S▲-□□-○                        | 2x 6 W    |                        |                   |                              |         |                                        |         |                                 |                                     |               | 5.04                | 5.70   |  |
| DFP1-107LTA2 -D○-S▲-□□-○                        | 1x 7 W    |                        |                   |                              |         |                                        |         |                                 |                                     |               | 4.84                | 5.50   |  |
| DFP1-207LTA2 -D○-S▲-□□-○                        | 2x 7 W    |                        |                   |                              |         |                                        |         |                                 |                                     |               | 5.04                | 5.70   |  |
| DFP1-108LTA2 -D○-S▲-□□-○                        | 1x 8 W    |                        |                   |                              |         |                                        |         |                                 |                                     |               | 4.84                | 5.50   |  |
| DFP1-208LTA2 -D○-S▲-□□-○                        | 2x 8 W    |                        |                   |                              |         |                                        |         |                                 |                                     |               | 5.04                | 5.70   |  |
| DFP1-109LTA2 -D○-S▲-□□-○                        | 1x 9 W    |                        |                   |                              |         |                                        |         |                                 |                                     |               | 4.84                | 5.50   |  |
| DFP1-209LTA2 -D○-S▲-□□-○                        | 2x 9 W    | 5.04                   | 5.70              |                              |         |                                        |         |                                 |                                     |               |                     |        |  |
| DFP1-114LTA2 -D○-S▲-□□-○                        | 1x 14 W   | 110-240 V AC, 50/60 Hz | LED driver        | T6                           | T6      | T85°C                                  | T85°C   | 7,020 (7,180)                   | 1,370 (1,455)                       | 1,258 (1,270) | 9.34                | 10.04  |  |
| DFP1-214LTA2 -D○-S▲-□□-○                        | 2x 14 W   |                        |                   |                              |         |                                        |         |                                 |                                     |               | 9.64                | 10.34  |  |
| DFP1-115LTA2 -D○-S▲-□□-○                        | 1x 15 W   |                        |                   |                              |         |                                        |         |                                 |                                     |               | 9.34                | 10.04  |  |
| DFP1-215LTA2 -D○-S▲-□□-○                        | 2x 15 W   |                        |                   |                              |         |                                        |         |                                 |                                     |               | 9.64                | 10.34  |  |
| DFP1-116LTA2 -D○-S▲-□□-○                        | 1x 16 W   |                        |                   |                              |         |                                        |         |                                 |                                     |               | 9.34                | 10.04  |  |
| DFP1-216LTA2 -D○-S▲-□□-○                        | 2x 16 W   |                        |                   |                              |         |                                        |         |                                 |                                     |               | 9.64                | 10.34  |  |
| DFP1-117LTA2 -D○-S▲-□□-○                        | 1x 17 W   |                        |                   |                              |         |                                        |         |                                 |                                     |               | 9.34                | 10.04  |  |
| DFP1-217LTA2 -D○-S▲-□□-○                        | 2x 17 W   |                        |                   |                              |         |                                        |         |                                 |                                     |               | 9.64                | 10.34  |  |
| DFP1-118LTA2 -D○-S▲-□□-○                        | 1x 18 W   |                        |                   |                              |         |                                        |         |                                 |                                     |               | 9.34                | 10.04  |  |
| DFP1-218LTA2 -D○-S▲-□□-○                        | 2x 18 W   |                        |                   |                              |         |                                        |         |                                 |                                     |               | 9.64                | 10.34  |  |
| DFP1-119LTA2 -D○-S▲-□□-○                        | 1x 19 W   |                        |                   |                              |         |                                        |         |                                 |                                     |               | 9.34                | 10.04  |  |
| DFP1-219LTA2 -D○-S▲-□□-○                        | 2x 19 W   |                        |                   |                              |         |                                        |         |                                 |                                     |               | 9.64                | 10.34  |  |
| DFP1-120LTA2 -D○-S▲-□□-○                        | 1x 20 W   |                        |                   |                              |         |                                        |         |                                 |                                     |               | 9.34                | 10.04  |  |
| DFP1-220LTA2 -D○-S▲-□□-○                        | 2x 20 W   |                        |                   |                              |         |                                        |         |                                 |                                     |               | 9.64                | 10.34  |  |
| DFP1-121LTA2 -D○-S▲-□□-○                        | 1x 21 W   |                        |                   |                              |         |                                        |         |                                 |                                     |               | 9.34                | 10.04  |  |
| DFP1-221LTA2 -D○-S▲-□□-○                        | 2x 21 W   |                        |                   |                              |         |                                        |         |                                 |                                     |               | 9.64                | 10.34  |  |
| DFP1-122LTA2 -D○-S▲-□□-○                        | 1x 22 W   |                        |                   |                              |         |                                        |         |                                 |                                     |               | 9.34                | 10.04  |  |
| DFP1-222LTA2 -D○-S▲-□□-○                        | 2x 22 W   |                        |                   |                              |         |                                        |         |                                 |                                     |               | 9.64                | 10.34  |  |
| DFP1-123LTA2 -D○-S▲-□□-○                        | 1x 23 W   |                        |                   |                              |         |                                        |         |                                 |                                     |               | 9.34                | 10.04  |  |
| DFP1-223LTA2 -D○-S▲-□□-○                        | 2x 23 W   |                        |                   |                              |         |                                        |         |                                 |                                     |               | 9.64                | 10.34  |  |
| DFP1-124LTA2 -D○-S▲-□□-○                        | 1x 24 W   |                        |                   |                              |         |                                        |         |                                 |                                     |               | 10.64               | 11.34  |  |
| DFP1-224LTA2 -D○-S▲-□□-○                        | 2x 24 W   |                        |                   |                              |         |                                        |         |                                 |                                     |               | 11.04               | 11.68  |  |
| DFP1-125LTA2 -D○-S▲-□□-○                        | 1x 25 W   |                        |                   |                              |         |                                        |         |                                 |                                     |               | 10.64               | 11.34  |  |
| DFP1-225LTA2 -D○-S▲-□□-○                        | 2x 25 W   |                        |                   |                              |         |                                        |         |                                 |                                     |               | 11.04               | 11.68  |  |
| LED PCB (72 V DC) – Requires an external driver |           |                        |                   |                              |         |                                        |         |                                 |                                     |               |                     |        |  |
| DFP1-25LPA2 -D○-S▲-□□-○                         | 25 W      | 110-240 V AC, 50/60 Hz | LED driver        | T6                           | T6      | T85°C                                  | T85°C   | 3,950 (4,090)                   | 755 (840)                           | 645 (655)     | 5.40                | 6.06   |  |
| DFP1-30LPA2 -D○-S▲-□□-○                         | 30 W      |                        |                   |                              |         |                                        |         |                                 |                                     |               | 5.40                | 6.06   |  |
| DFP1-40LPA2 -D○-S▲-□□-○                         | 40 W      |                        |                   |                              |         |                                        |         |                                 |                                     |               | 5.40                | 6.06   |  |
| DFP1-50LPA2 -D○-S▲-□□-○                         | 50 W      |                        |                   |                              |         |                                        |         |                                 |                                     |               | 5.40                | 6.06   |  |
| DFP1-60LPA2 -D○-S▲-□□-○                         | 60 W      |                        |                   |                              |         |                                        |         |                                 |                                     |               | 5.40                | 6.06   |  |
| DFP1-60LP1A2 -D○-S▲-□□-○                        | 60 W      |                        |                   |                              |         |                                        |         | 7,020 (7,180)                   | 1,370 (1,455)                       | 1,258 (1,270) | 8.70                | 9.36   |  |
| DFP1-75LPA2 -D○-S▲-□□-○                         | 75 W      |                        |                   |                              |         |                                        |         |                                 |                                     |               | 8.70                | 9.36   |  |
| DFP1-90LPA2 -D○-S▲-□□-○                         | 90 W      |                        |                   |                              |         |                                        |         |                                 |                                     |               | 8.70                | 9.36   |  |

Lighting source; daylight (6,500 K) are standard and/or warm white (3,000 K), please specify.

## LED tube data

| LED power | Total lumen flux | LED efficacy | Colour rendering index | Colour temp. | Driver             | Type             |
|-----------|------------------|--------------|------------------------|--------------|--------------------|------------------|
| 9 W       | 1,000 lm         | 100 lm/W     | ≥ 80                   | 6,500 K      | Built-in driver    | Single-end input |
| 18 W      | 2,600 lm         | 140 lm/W     | ≥ 80                   | 6,500 K      | Built-in driver    | Single-end input |
| 20 W      | 2,800 lm         | 140 lm/W     | ≥ 80                   | 6,500 K      | Built-in driver    | Single-end input |
| 22 W      | 3,500 lm         | 150 lm/W     | ≥ 80                   | 6,500 K      | Built-in driver    | Single-end input |
| 25 W      | 3,800 lm         | 150 lm/W     | ≥ 80                   | 6,500 K      | Built-in driver    | Single-end input |
| 25 W      | 3,800 lm         | 150 lm/W     | ≥ 80                   | 6,500 K      | External (DC lamp) | Double-end input |

Remark \*: The maximum surface temperatures are specified for dust free condition. The dust layer which may cover around the lighting fixture will cause to higher surface temperature.



# Lighting: Fluorescent & LED Lighting Fixture, DFP1-S Series (Short end cap)

Flameproof and Dust protection by enclosure

Zone 1 & 2 – 21 & 22

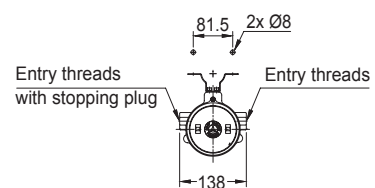
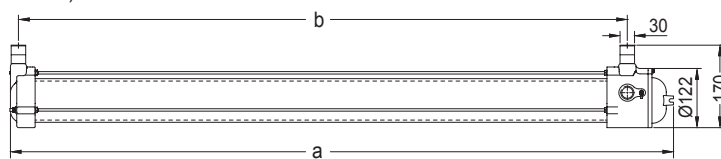


## Ordering Requirements and Dimensions

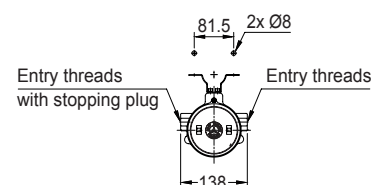
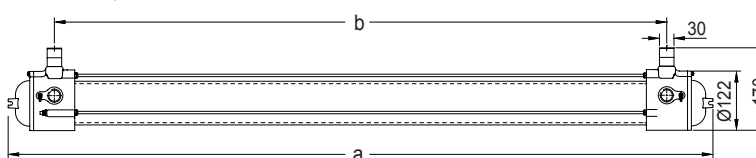
| Cat. No.                                 | Lamp watt | Voltage    | Ballast or Driver | Temp. Class (for zone 1 & 2) |         | Max. Surface Temp.* (for zone 21 & 22) |         | Volume (cm³) Body 1 (Body 2) | Dimensions in mm Body 1 (Body 2) |               | Approx. weight (kg) |        |  |
|------------------------------------------|-----------|------------|-------------------|------------------------------|---------|----------------------------------------|---------|------------------------------|----------------------------------|---------------|---------------------|--------|--|
|                                          |           |            |                   | Ta 40°C                      | Ta 60°C | Ta 40°C                                | Ta 60°C |                              | a                                | b             | Body 1              | Body 2 |  |
| LED tube (Double-ended, Built-in driver) |           |            |                   |                              |         |                                        |         |                              |                                  |               |                     |        |  |
| DFP1-105LTD1 - ○ -S▲-□□ - ○              | 1x 5 W    | 24-42 V DC | —                 | T6                           | T6      | T85°C                                  | T85°C   | 3,950 (4,090)                | 755 (840)                        | 645 (655)     | 4.84                | 5.50   |  |
| DFP1-205LTD1 - ○ -S▲-□□ - ○              | 2x 5 W    |            |                   |                              |         |                                        |         |                              |                                  |               | 5.04                | 5.70   |  |
| DFP1-106LTD1 - ○ -S▲-□□ - ○              | 1x 6 W    |            |                   |                              |         |                                        |         |                              |                                  |               | 4.84                | 5.50   |  |
| DFP1-206LTD1 - ○ -S▲-□□ - ○              | 2x 6 W    |            |                   |                              |         |                                        |         |                              |                                  |               | 5.04                | 5.70   |  |
| DFP1-107LTD1 - ○ -S▲-□□ - ○              | 1x 7 W    |            |                   |                              |         |                                        |         |                              |                                  |               | 4.84                | 5.50   |  |
| DFP1-207LTD1 - ○ -S▲-□□ - ○              | 2x 7 W    |            |                   |                              |         |                                        |         |                              |                                  |               | 5.04                | 5.70   |  |
| DFP1-108LTD1 - ○ -S▲-□□ - ○              | 1x 8 W    |            |                   |                              |         |                                        |         |                              |                                  |               | 4.84                | 5.50   |  |
| DFP1-208LTD1 - ○ -S▲-□□ - ○              | 2x 8 W    |            |                   |                              |         |                                        |         |                              |                                  |               | 5.04                | 5.70   |  |
| DFP1-109LTD1 - ○ -S▲-□□ - ○              | 1x 9 W    |            |                   |                              |         |                                        |         |                              |                                  |               | 4.84                | 5.50   |  |
| DFP1-209LTD1 - ○ -S▲-□□ - ○              | 2x 9 W    |            |                   |                              |         |                                        |         |                              |                                  |               | 5.04                | 5.70   |  |
| DFP1-114LTD1 - ○ -S▲-□□ - ○              | 1x 14 W   | 24-42 V DC | —                 | T6                           | T6      | T85°C                                  | T85°C   | 7,020 (7,180)                | 1,370 (1,455)                    | 1,258 (1,270) | 9.34                | 10.04  |  |
| DFP1-214LTD1 - ○ -S▲-□□ - ○              | 2x 14 W   |            |                   |                              |         |                                        |         |                              |                                  |               | 9.64                | 10.34  |  |
| DFP1-115LTD1 - ○ -S▲-□□ - ○              | 1x 15 W   |            |                   |                              |         |                                        |         |                              |                                  |               | 9.34                | 10.04  |  |
| DFP1-215LTD1 - ○ -S▲-□□ - ○              | 2x 15 W   |            |                   |                              |         |                                        |         |                              |                                  |               | 9.64                | 10.34  |  |
| DFP1-116LTD1 - ○ -S▲-□□ - ○              | 1x 16 W   |            |                   |                              |         |                                        |         |                              |                                  |               | 9.34                | 10.04  |  |
| DFP1-216LTD1 - ○ -S▲-□□ - ○              | 2x 16 W   |            |                   |                              |         |                                        |         |                              |                                  |               | 9.64                | 10.34  |  |
| DFP1-117LTD1 - ○ -S▲-□□ - ○              | 1x 17 W   |            |                   |                              |         |                                        |         |                              |                                  |               | 9.34                | 10.04  |  |
| DFP1-217LTD1 - ○ -S▲-□□ - ○              | 2x 17 W   |            |                   |                              |         |                                        |         |                              |                                  |               | 9.64                | 10.34  |  |
| DFP1-118LTD1 - ○ -S▲-□□ - ○              | 1x 18 W   |            |                   |                              |         |                                        |         |                              |                                  |               | 9.34                | 10.04  |  |
| DFP1-218LTD1 - ○ -S▲-□□ - ○              | 2x 18 W   |            |                   |                              |         |                                        |         |                              |                                  |               | 9.64                | 10.34  |  |
| DFP1-119LTD1 - ○ -S▲-□□ - ○              | 1x 19 W   |            |                   |                              |         |                                        |         |                              |                                  |               | 9.34                | 10.04  |  |
| DFP1-219LTD1 - ○ -S▲-□□ - ○              | 2x 19 W   |            |                   |                              |         |                                        |         |                              |                                  |               | 9.64                | 10.34  |  |
| DFP1-120LTD1 - ○ -S▲-□□ - ○              | 1x 20 W   |            |                   |                              |         |                                        |         |                              |                                  |               | 9.34                | 10.04  |  |
| DFP1-220LTD1 - ○ -S▲-□□ - ○              | 2x 20 W   |            |                   |                              |         |                                        |         |                              |                                  |               | 9.64                | 10.34  |  |
| DFP1-121LTD1 - ○ -S▲-□□ - ○              | 1x 21 W   |            |                   |                              |         |                                        |         |                              |                                  |               | 9.34                | 10.04  |  |
| DFP1-221LTD1 - ○ -S▲-□□ - ○              | 2x 21 W   |            |                   |                              |         |                                        |         |                              |                                  |               | 9.64                | 10.34  |  |
| DFP1-122LTD1 - ○ -S▲-□□ - ○              | 1x 22 W   |            |                   |                              |         |                                        |         |                              |                                  |               | 9.34                | 10.04  |  |
| DFP1-222LTD1 - ○ -S▲-□□ - ○              | 2x 22 W   |            |                   |                              |         |                                        |         |                              |                                  |               | 9.64                | 10.34  |  |
| DFP1-123LTD1 - ○ -S▲-□□ - ○              | 1x 23 W   |            |                   |                              |         |                                        |         |                              |                                  |               | 9.34                | 10.04  |  |
| DFP1-223LTD1 - ○ -S▲-□□ - ○              | 2x 23 W   |            |                   |                              |         |                                        |         |                              |                                  |               | 9.64                | 10.34  |  |
| DFP1-124LTD1 - ○ -S▲-□□ - ○              | 1x 24 W   |            |                   |                              |         |                                        |         |                              |                                  |               | 10.64               | 11.24  |  |
| DFP1-224LTD1 - ○ -S▲-□□ - ○              | 2x 24 W   |            |                   |                              |         |                                        |         |                              |                                  |               | 11.04               | 11.66  |  |
| DFP1-125LTD1 - ○ -S▲-□□ - ○              | 1x 25 W   |            |                   |                              |         |                                        |         |                              |                                  |               | 10.64               | 11.24  |  |
| DFP1-225LTD1 - ○ -S▲-□□ - ○              | 2x 25 W   |            |                   |                              |         |                                        |         |                              |                                  |               | 11.04               | 11.66  |  |
| LED PCB – Requires an external driver    |           |            |                   |                              |         |                                        |         |                              |                                  |               |                     |        |  |
| DFP1-25LPD1 -D○-S▲-□□-○                  | 25 W      | 24-42 V DC | LED driver        | T6                           | T6      | T85°C                                  | T85°C   | 3,950 (4,090)                | 755 (840)                        | 645 (655)     | 5.40                | 6.06   |  |
| DFP1-30LPD1 -D○-S▲-□□-○                  | 30 W      |            |                   |                              |         |                                        |         |                              |                                  |               | 5.40                | 6.06   |  |
| DFP1-40LPD1 -D○-S▲-□□-○                  | 40 W      |            |                   |                              |         |                                        |         |                              |                                  |               | 5.40                | 6.06   |  |
| DFP1-50LPD1 -D○-S▲-□□-○                  | 50 W      |            |                   |                              |         |                                        |         |                              |                                  |               | 5.40                | 6.06   |  |
| DFP1-60LPD1 -D○-S▲-□□-○                  | 60 W      |            |                   |                              |         |                                        |         | 7,020 (7,180)                | 1,370 (1,455)                    | 1,258 (1,270) | 5.40                | 6.06   |  |
| DFP1-60LP1D1 -D○-S▲-□□-○                 | 60 W      |            |                   |                              |         |                                        |         |                              |                                  |               | 8.70                | 9.36   |  |
| DFP1-75LPD1 -D○-S▲-□□-○                  | 75 W      |            |                   |                              |         |                                        |         |                              |                                  |               | 8.70                | 9.36   |  |
| DFP1-90LPD1 -D○-S▲-□□-○                  | 90 W      |            |                   |                              |         |                                        |         |                              |                                  |               | 8.70                | 9.36   |  |

Lighting source; daylight (6,500 K) are standard and/or warm white (3,000 K), please specify.

Body 1 (2 cable entries)



Body 2 (4 cable entries)



**Remark \*** : The maximum surface temperatures are specified for dust free condition. The dust layer which may cover around the lighting fixture will cause to higher surface temperature.



# Lighting: Fluorescent & LED Lighting Fixture, DFP1-S Series (Short end cap)

Flameproof and Dust protection by enclosure

Zone 1 & 2 – 21 & 22

## Catalogue Number Logic (Emergency Light)

|                                          |                                                            |                                               |                                         |                                        |                                                                                                                                   |                                       |                                                                                |                                                                                                                                                                         |                                                     |
|------------------------------------------|------------------------------------------------------------|-----------------------------------------------|-----------------------------------------|----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|--------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|
| DFP1 - ■■■■ ■■ A2 - D ○ - S▲ - □ □ □ □ □ |                                                            |                                               |                                         |                                        |                                                                                                                                   |                                       |                                                                                |                                                                                                                                                                         |                                                     |
| <b>Series</b>                            | <b>Lamp watt</b><br>(see ordering requirement table below) | <b>Lamp type</b><br>LT LED tube<br>LP LED PCB | <b>Rated voltage</b><br>A2 110-240 V AC | <b>LED driver</b><br>D Driver required | <b>Accessories</b><br>G Protective guard<br>R External reflector<br>E1 Emergency (1-lamp backup)<br>E2 Emergency (2-lamps backup) | <b>Body</b><br>S1 Body 1<br>S2 Body 2 | <b>Entry threads</b><br>M1 M20x1.5<br>M2 M25x1.5<br>N1 1/2" NPT<br>N2 3/4" NPT | <b>Mounting</b><br>C Ceiling (standard)<br>C1 Ceiling (for pipe), Fixed<br>C2 Ceiling (for pipe), Swing<br>P1 Pendant (for chain)<br>P2 Pendant (for pipe)<br>B Bracket | <b>Option</b><br>SP Surge protection 10 kA, 8/20 μs |

## Ordering Requirements and Dimensions

| Cat. No.                                                       | Lamp watt | Voltage                | Ballast or Driver | Temp. Class (for zone 1 & 2) |         | Max. Surface Temp.* (for zone 21 & 22) |         | Volume (cm³) Body 1 (Body 2) | Dimensions in mm Body 1 (Body 2) |               | Approx. weight (kg) |        |  |
|----------------------------------------------------------------|-----------|------------------------|-------------------|------------------------------|---------|----------------------------------------|---------|------------------------------|----------------------------------|---------------|---------------------|--------|--|
|                                                                |           |                        |                   | Ta 40°C                      | Ta 55°C | Ta 40°C                                | Ta 55°C |                              | a                                | b             | Body 1              | Body 2 |  |
| LED tube (72 V DC, Double-ended) – Requires an external driver |           |                        |                   |                              |         |                                        |         |                              |                                  |               |                     |        |  |
| DFP1-105LTA2-D ○ E1-S▲-□□-○                                    | 1x 5 W    | 110-240 V AC, 50/60 Hz | LED driver        | T6                           | T6      | T85°C                                  | T85°C   | 3,950 (4,090)                | 755 (840)                        | 645 (655)     | 4.80                | 5.47   |  |
| DFP1-205LTA2-D ○ E1-S▲-□□-○                                    | 2x 5 W    |                        |                   |                              |         |                                        |         |                              |                                  |               | 5.00                | 5.65   |  |
| DFP1-106LTA2-D ○ E1-S▲-□□-○                                    | 1x 6 W    |                        |                   |                              |         |                                        |         |                              |                                  |               | 4.80                | 5.47   |  |
| DFP1-206LTA2-D ○ E1-S▲-□□-○                                    | 2x 6 W    |                        |                   |                              |         |                                        |         |                              |                                  |               | 5.00                | 5.65   |  |
| DFP1-107LTA2-D ○ E1-S▲-□□-○                                    | 1x 7 W    |                        |                   |                              |         |                                        |         |                              |                                  |               | 4.80                | 5.47   |  |
| DFP1-207LTA2-D ○ E1-S▲-□□-○                                    | 2x 7 W    |                        |                   |                              |         |                                        |         |                              |                                  |               | 5.00                | 5.65   |  |
| DFP1-108LTA2-D ○ E1-S▲-□□-○                                    | 1x 8 W    |                        |                   |                              |         |                                        |         |                              |                                  |               | 4.80                | 5.47   |  |
| DFP1-208LTA2-D ○ E1-S▲-□□-○                                    | 2x 8 W    |                        |                   |                              |         |                                        |         |                              |                                  |               | 5.00                | 5.65   |  |
| DFP1-109LTA2-D ○ E1-S▲-□□-○                                    | 1x 9 W    |                        |                   |                              |         |                                        |         |                              |                                  |               | 4.80                | 5.47   |  |
| DFP1-209LTA2-D ○ E1-S▲-□□-○                                    | 2x 9 W    |                        |                   |                              |         |                                        |         |                              |                                  |               | 5.00                | 5.65   |  |
| DFP1-114LTA2-D ○ E1-S▲-□□-○                                    | 1x 14 W   | 110-240 V AC, 50/60 Hz | LED driver        | T6                           | T6      | T85°C                                  | T85°C   | 7,020 (7,180)                | 1,370 (1,455)                    | 1,258 (1,270) | 9.30                | 9.95   |  |
| DFP1-214LTA2-D ○ E1-S▲-□□-○                                    | 2x 14 W   |                        |                   |                              |         |                                        |         |                              |                                  |               | 9.60                | 10.26  |  |
| DFP1-214LTA2-D ○ E2-S▲-□□-○                                    | 2x 14 W   |                        |                   |                              |         |                                        |         |                              |                                  |               | 9.60                | 10.26  |  |
| DFP1-115LTA2-D ○ E1-S▲-□□-○                                    | 1x 15 W   |                        |                   |                              |         |                                        |         |                              |                                  |               | 9.30                | 9.95   |  |
| DFP1-215LTA2-D ○ E1-S▲-□□-○                                    | 2x 15 W   |                        |                   |                              |         |                                        |         |                              |                                  |               | 9.60                | 10.26  |  |
| DFP1-215LTA2-D ○ E1-S▲-□□-○                                    | 2x 15 W   |                        |                   |                              |         |                                        |         |                              |                                  |               | 9.60                | 10.26  |  |
| DFP1-116LTA2-D ○ E1-S▲-□□-○                                    | 1x 16 W   |                        |                   |                              |         |                                        |         |                              |                                  |               | 9.30                | 9.95   |  |
| DFP1-216LTA2-D ○ E1-S▲-□□-○                                    | 2x 16 W   |                        |                   |                              |         |                                        |         |                              |                                  |               | 9.60                | 10.26  |  |
| DFP1-216LTA2-D ○ E2-S▲-□□-○                                    | 2x 16 W   |                        |                   |                              |         |                                        |         |                              |                                  |               | 9.60                | 10.26  |  |
| DFP1-117LTA2-D ○ E1-S▲-□□-○                                    | 1x 17 W   |                        |                   |                              |         |                                        |         |                              |                                  |               | 9.30                | 9.95   |  |
| DFP1-217LTA2-D ○ E1-S▲-□□-○                                    | 2x 17 W   |                        |                   |                              |         |                                        |         |                              |                                  |               | 9.60                | 10.26  |  |
| DFP1-217LTA2-D ○ E2-S▲-□□-○                                    | 2x 17 W   |                        |                   |                              |         |                                        |         |                              |                                  |               | 9.60                | 10.26  |  |
| DFP1-118LTA2-D ○ E1-S▲-□□-○                                    | 1x 18 W   |                        |                   |                              |         |                                        |         |                              |                                  |               | 9.30                | 9.95   |  |
| DFP1-218LTA2-D ○ E1-S▲-□□-○                                    | 2x 18 W   |                        |                   |                              |         |                                        |         |                              |                                  |               | 9.60                | 10.26  |  |
| DFP1-218LTA2-D ○ E2-S▲-□□-○                                    | 2x 18 W   |                        |                   |                              |         |                                        |         |                              |                                  |               | 9.60                | 10.26  |  |
| DFP1-119LTA2-D ○ E1-S▲-□□-○                                    | 1x 19 W   |                        |                   |                              |         |                                        |         |                              |                                  |               | 9.30                | 9.95   |  |
| DFP1-219LTA2-D ○ E1-S▲-□□-○                                    | 2x 19 W   |                        |                   |                              |         |                                        |         |                              |                                  |               | 9.60                | 10.26  |  |
| DFP1-219LTA2-D ○ E2-S▲-□□-○                                    | 2x 19 W   |                        |                   |                              |         |                                        |         |                              |                                  |               | 9.60                | 10.26  |  |
| DFP1-120LTA2-D ○ E1-S▲-□□-○                                    | 1x 20 W   |                        |                   |                              |         |                                        |         |                              |                                  |               | 9.30                | 9.95   |  |
| DFP1-220LTA2-D ○ E1-S▲-□□-○                                    | 2x 20 W   |                        |                   |                              |         |                                        |         |                              |                                  |               | 9.60                | 10.26  |  |
| DFP1-220LTA2-D ○ E2-S▲-□□-○                                    | 2x 20 W   |                        |                   |                              |         |                                        |         |                              |                                  |               | 9.60                | 10.26  |  |
| DFP1-121LTA2-D ○ E1-S▲-□□-○                                    | 1x 21 W   |                        |                   |                              |         |                                        |         |                              |                                  |               | 9.30                | 9.95   |  |
| DFP1-221LTA2-D ○ E1-S▲-□□-○                                    | 2x 21 W   |                        |                   |                              |         |                                        |         |                              |                                  |               | 9.60                | 10.26  |  |
| DFP1-221LTA2-D ○ E2-S▲-□□-○                                    | 2x 21 W   |                        |                   |                              |         |                                        |         |                              |                                  |               | 9.60                | 10.26  |  |
| DFP1-122LTA2-D ○ E1-S▲-□□-○                                    | 1x 22 W   |                        |                   |                              |         |                                        |         |                              |                                  |               | 9.30                | 9.95   |  |
| DFP1-222LTA2-D ○ E1-S▲-□□-○                                    | 2x 22 W   |                        |                   |                              |         |                                        |         |                              |                                  |               | 9.60                | 10.26  |  |
| DFP1-222LTA2-D ○ E2-S▲-□□-○                                    | 2x 22 W   |                        |                   |                              |         |                                        |         |                              |                                  |               | 9.60                | 10.26  |  |
| DFP1-123LTA2-D ○ E1-S▲-□□-○                                    | 1x 23 W   |                        |                   |                              |         |                                        |         |                              |                                  |               | 9.30                | 9.95   |  |
| DFP1-223LTA2-D ○ E1-S▲-□□-○                                    | 2x 23 W   |                        |                   |                              |         |                                        |         |                              |                                  |               | 9.60                | 10.26  |  |
| DFP1-223LTA2-D ○ E2-S▲-□□-○                                    | 2x 23 W   |                        |                   |                              |         |                                        |         |                              |                                  |               | 9.60                | 10.26  |  |
| DFP1-124LTA2-D ○ E1-S▲-□□-○                                    | 1x 24 W   |                        |                   |                              |         |                                        |         |                              |                                  |               | 9.30                | 9.95   |  |
| DFP1-224LTA2-D ○ E1-S▲-□□-○                                    | 2x 24 W   |                        |                   |                              |         |                                        |         |                              |                                  |               | 9.60                | 10.26  |  |
| DFP1-224LTA2-D ○ E2-S▲-□□-○                                    | 2x 24 W   |                        |                   |                              |         |                                        |         |                              |                                  |               | 9.60                | 10.26  |  |

Lighting source; daylight (6,500 K) are standard and/or warm white (3,000 K), please specify.

Remark \*: The maximum surface temperatures are specified for dust free condition. The dust layer which may cover around the lighting fixture will cause to higher surface temperature.

# Lighting: Fluorescent & LED Lighting Fixture, DFP1-S Series (Short end cap)

Flameproof and Dust protection by enclosure

Zone 1 & 2 – 21 & 22

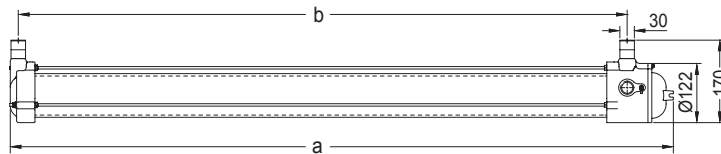


## Ordering Requirements and Dimensions

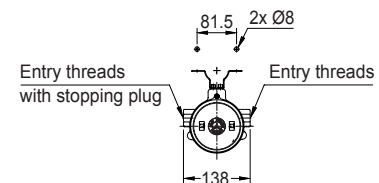
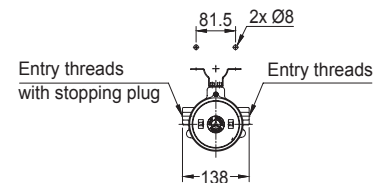
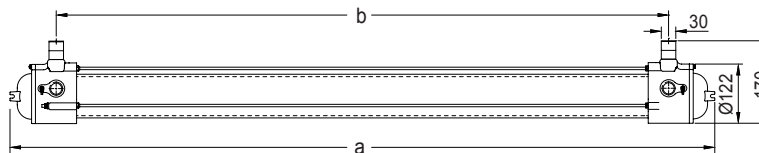
| Cat. No.                                                       | Lamp watt | Voltage       | Ballast or Driver | Temp. Class (for zone 1 & 2) |         | Max. Surface Temp.* (for zone 21 & 22) |         | Volume (cm³) Body 1 (Body 2) | Dimensions in mm Body 1 (Body 2) |         | Approx. weight (kg) |        |  |
|----------------------------------------------------------------|-----------|---------------|-------------------|------------------------------|---------|----------------------------------------|---------|------------------------------|----------------------------------|---------|---------------------|--------|--|
|                                                                |           |               |                   | Ta 40°C                      | Ta 55°C | Ta 40°C                                | Ta 55°C |                              | a                                | b       | Body 1              | Body 2 |  |
| LED tube (72 V DC, Double-ended) – Requires an external driver |           |               |                   |                              |         |                                        |         |                              |                                  |         |                     |        |  |
| DFP1-125LTA2 -D ○ E1-S▲-□□ -○                                  | 1x 25 W   | 110-240 V AC, | LED driver        | T6                           | T6      | T85°C                                  | T85°C   | 7,020                        | 1,370                            | 1,258   | 5.60                | 6.24   |  |
| DFP1-225LTA2 -D ○ E1-S▲-□□ -○                                  | 2x 25 W   | 50/60 Hz      |                   |                              |         |                                        |         | (7,180)                      | (1,455)                          | (1,270) | 5.60                | 6.24   |  |
| DFP1-225LTA2 -D ○ E2-S▲-□□ -○                                  | 2x 25 W   |               |                   |                              |         |                                        |         |                              |                                  |         | 6.00                | 6.24   |  |
| LED PCB (72 V DC) – Requires an external driver                |           |               |                   |                              |         |                                        |         |                              |                                  |         |                     |        |  |
| DFP1-25LPA2 -D ○ E2-S▲-□□ -○                                   | 25 W      | 110-240 V AC, | LED driver        | T6                           | T6      | T85°C                                  | T85°C   | 3,950                        | 755                              | 645     | 6.00                | 6.66   |  |
| DFP1-30LPA2 -D ○ E2-S▲-□□ -○                                   | 30 W      | 50/60 Hz      |                   |                              |         |                                        |         | (4,090)                      | (840)                            | (655)   | 6.00                | 6.66   |  |
| DFP1-50LPA2 -D ○ E2-S▲-□□ -○                                   | 50 W      |               |                   |                              |         |                                        |         |                              |                                  |         | 6.00                | 6.66   |  |
| DFP1-60LPA2 -D ○ E2-S▲-□□ -○                                   | 60 W      |               |                   |                              |         |                                        |         |                              |                                  |         | 6.00                | 6.66   |  |
| DFP1-60LP1A2 -D ○ E2-S▲-□□ -○                                  | 60 W      |               |                   |                              |         |                                        |         | 7,020                        | 1,370                            | 1,258   | 9.00                | 9.66   |  |
| DFP1-75LPA2 -D ○ E2-S▲-□□ -○                                   | 75 W      |               |                   |                              |         |                                        |         | (7,180)                      | (1,455)                          | (1,270) | 9.00                | 9.66   |  |
| DFP1-90LPA2 -D ○ E2-S▲-□□ -○                                   | 90 W      |               |                   |                              |         |                                        |         |                              |                                  |         | 9.00                | 9.66   |  |

Remark \*: The maximum surface temperatures are specified for dust free condition. The dust layer which may cover around the lighting fixture will cause to higher surface temperature.

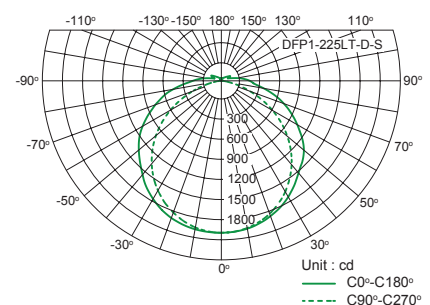
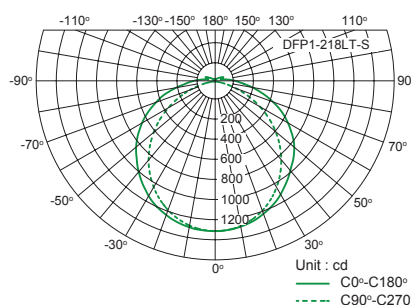
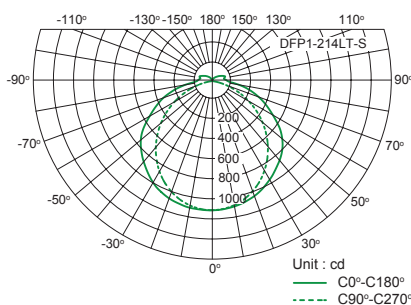
Body 1 (2 cable entries)



Body 2 (4 cable entries)



## Luminous Intensity Distribution Curve



Complete photometrics, please contact us.

## Catalogue Number Logic (Exit Emergency Light)

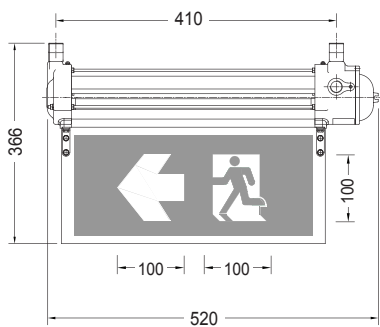
|          |           |                       |                               |            |                                  |      |                  |                                |                                                                         |                                                                                                                                                                       |                                                 |   |   |   |
|----------|-----------|-----------------------|-------------------------------|------------|----------------------------------|------|------------------|--------------------------------|-------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|---|---|---|
| DFP1 - ■ | LT        | A2                    | -                             | D          | E1                               | X    | ⬡                | -                              | S ▲                                                                     | -                                                                                                                                                                     | □                                               | □ | - | ○ |
| Series   | Lamp watt | Lamp type<br>LED tube | Rated voltage<br>110-240 V AC | LED driver | Emergency<br>E1 Emergency backup | Exit | Pictogram format | Body<br>S1 Body 1<br>S2 Body 2 | Entry threads<br>M1 M20x1.5<br>M2 M25x1.5<br>N1 1/2" NPT<br>N2 3/4" NPT | Mounting type<br>C Ceiling (standard)<br>C1 Ceiling (for pipe), Fixed<br>C2 Ceiling (for pipe), Swing<br>P1 Pendant (for chain)<br>P2 Pendant (for pipe)<br>B Bracket | Option<br>SP Surge Protection<br>10 kA, 8/20 μs |   |   |   |

## Ordering Requirements and Dimensions

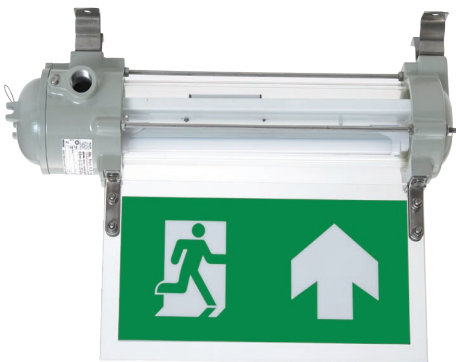
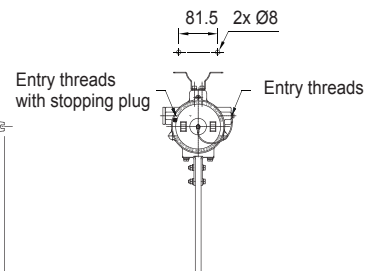
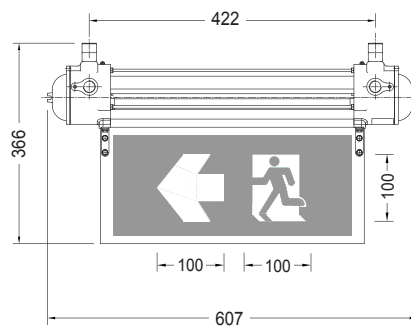
| Cat. No.                                                       | Lamp watt | Image element size | Voltage                | Ballast or Driver | Temp. Class (for zone 1 & 2) |         | Max. Surface Temp.* (for zone 21 & 22) |         | Volume (cm³) Body 1 (Body 2) | Approx. weight (kg) |        |
|----------------------------------------------------------------|-----------|--------------------|------------------------|-------------------|------------------------------|---------|----------------------------------------|---------|------------------------------|---------------------|--------|
|                                                                |           |                    |                        |                   | Ta 40°C                      | Ta 55°C | Ta 40°C                                | Ta 55°C |                              | Body 1              | Body 2 |
| LED tube (72 V DC, Double-ended) – Requires an external driver |           |                    |                        |                   |                              |         |                                        |         |                              |                     |        |
| DFP1-107LTA2-DE1X○-S▲-□□-○                                     | 1x 7 W    | 10 cm              | 110-240 V AC, 50/60 Hz | LED driver        | T6                           | T6      | T85°C                                  | T85°C   | 2,500 (2,910)                | 7.10                | 7.76   |

Remark: \* The maximum surface temperatures are specified for dust free condition. The dust layer which may cover around the lighting fixture will cause to higher surface temperature.

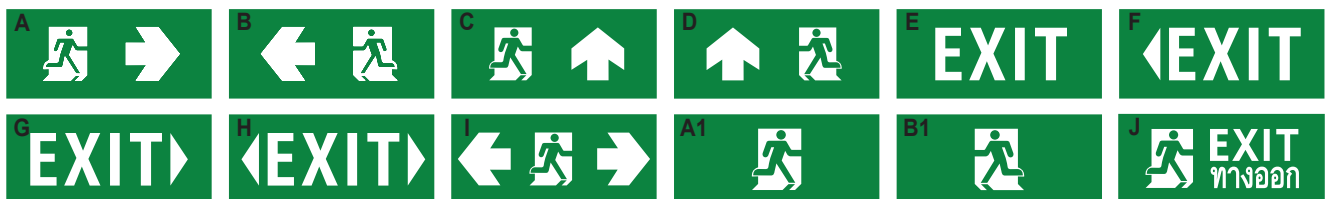
Body 1 (2 cable entries)



Body 2 (4 cable entries)



Pictogram format (○): Image element size 10 cm as follow EIT standard 021004-22



# Lighting: Fluorescent & LED Lighting Fixture, DFP1-S Series (Short end cap)

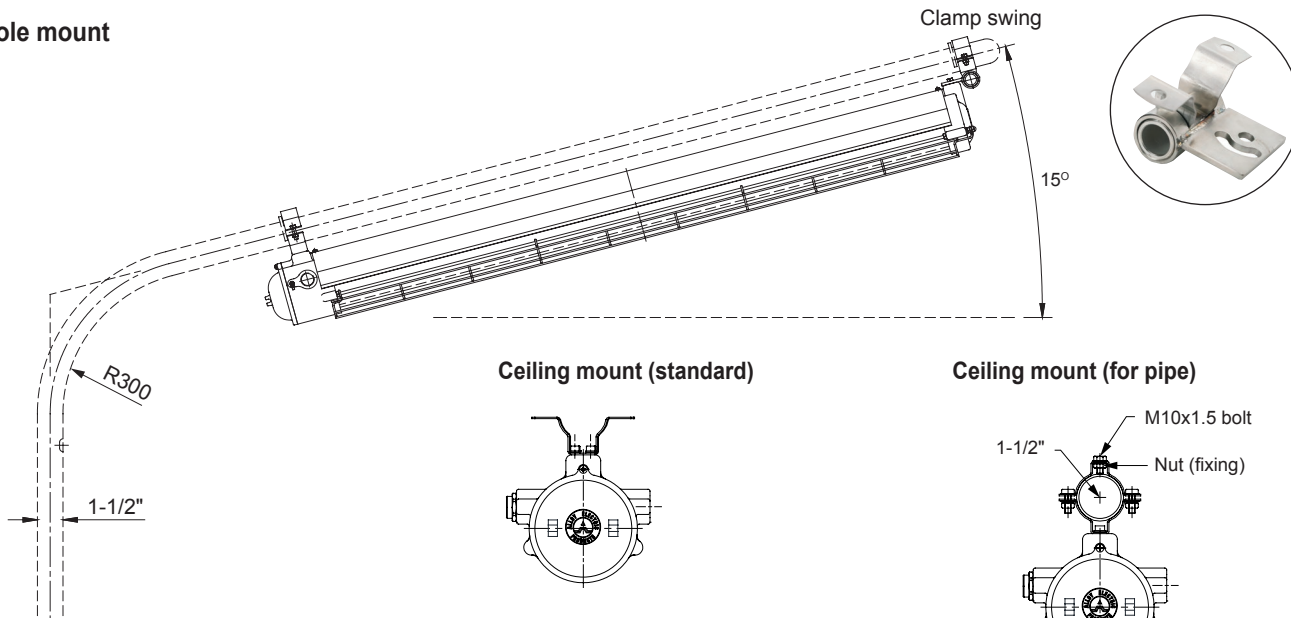
Flameproof and Dust protection by enclosure

Zone 1 & 2 – 21 & 22

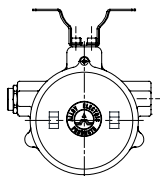


## Installation Information

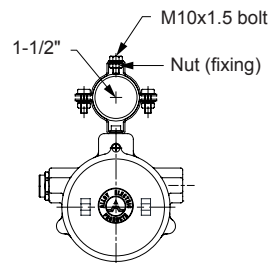
### Pole mount



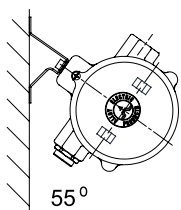
Ceiling mount (standard)



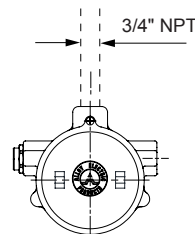
Ceiling mount (for pipe)



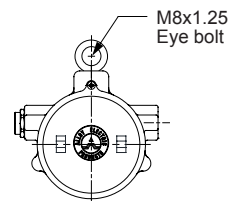
### Bracket mount (or wall mount)



Pendant mount (for pipe)

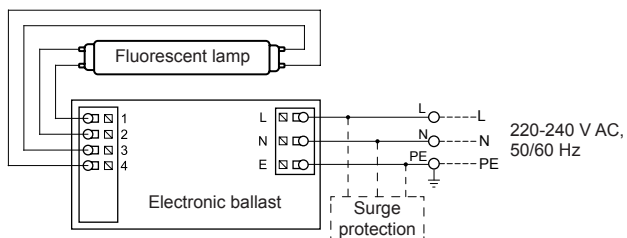


Pendant mount (for chain)

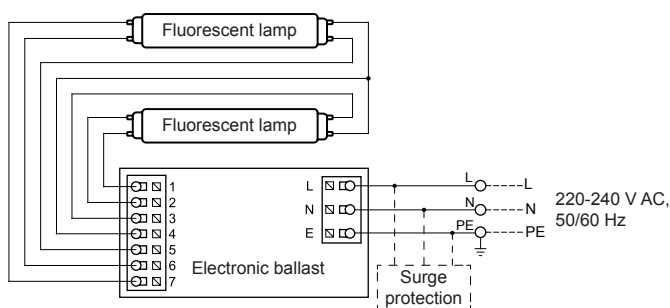


## Wiring Diagram

Electronic ballast for fluorescent lamp;  
1x 14 W, 1x 28 W, 1x 18 W and 1x 36 W

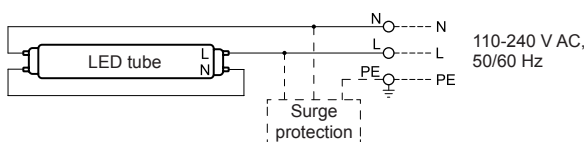


Electronic ballast for fluorescent lamp;  
2x 14 W, 2x 28 W, 2x 18 W and 2x 36 W

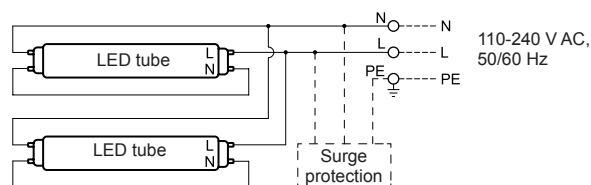


LED tube (Single-ended, Built-in driver)

1x Lamp



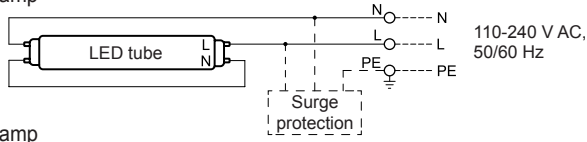
2x Lamp



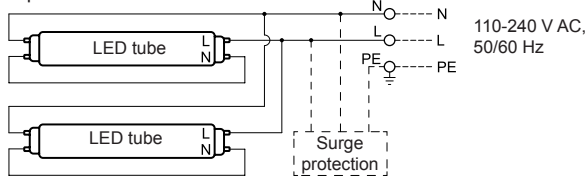
## Wiring Diagram

LED tube (Single-ended, Built-in driver)

1x Lamp

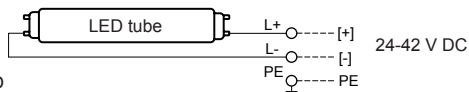


2x Lamp

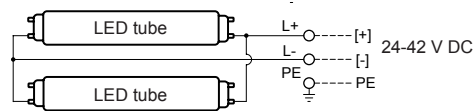


LED tube (Double-ended), 24-42 V DC

1x Lamp

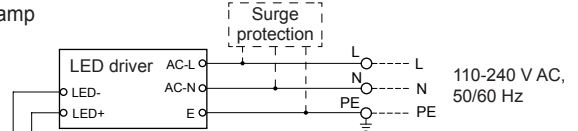


2x Lamp

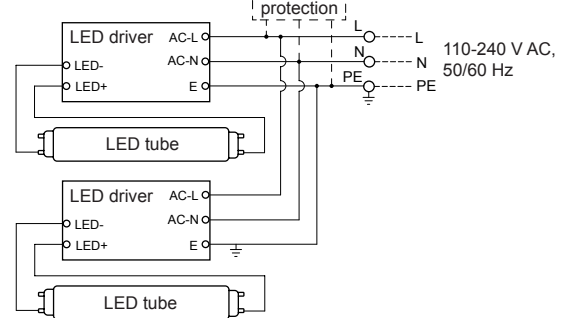


LED tube: requires an external driver  
(72 V DC, Double-ended)

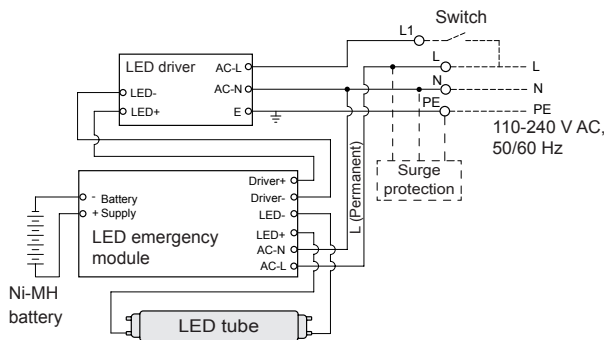
1x Lamp



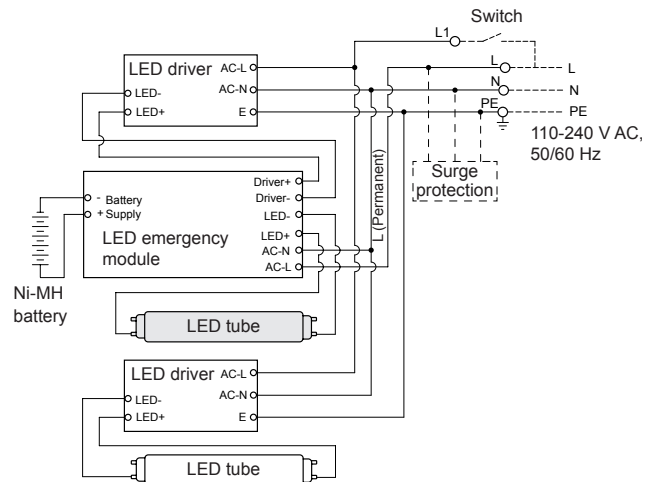
2x Lamp



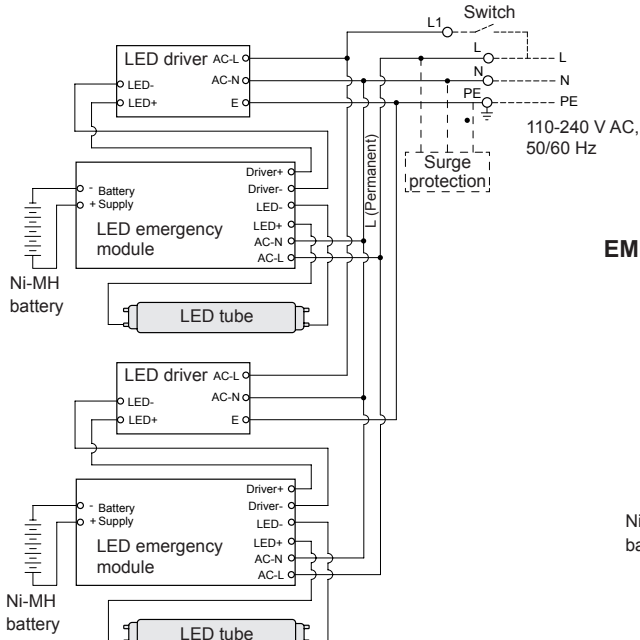
1x Lamp fixture with emergency backup (E1)



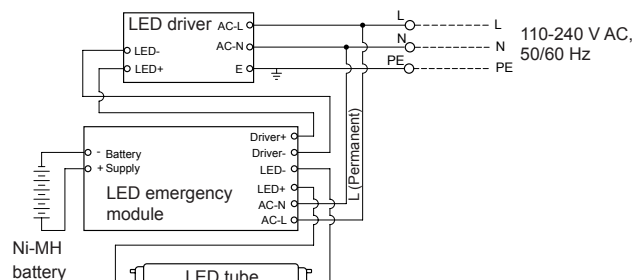
2x Lamp fixture with 1x lamp emergency backup (E1)



2x Lamp fixture with 2x lamp emergency backup (E2)



## EMERGENCY LIGHT WITH EXIT SIGN



# Lighting: Fluorescent & LED Lighting Fixture, DFP1-S Series (Short end cap)

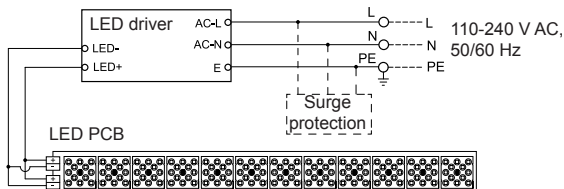
Flameproof and Dust protection by enclosure

Zone 1 & 2 – 21 & 22

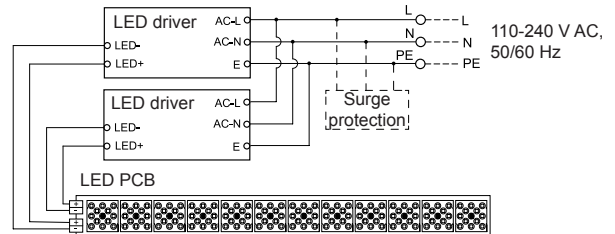


## Wiring Diagram; LED PCB

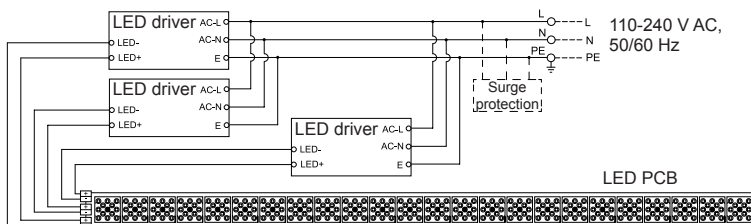
LED PCB (2 modules): 25 W and 30 W



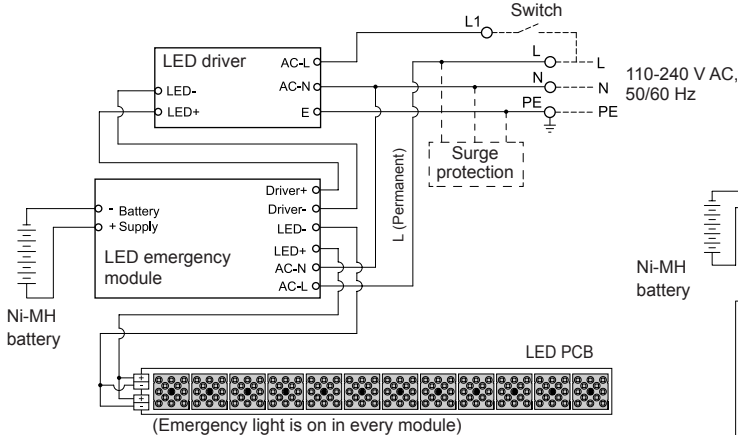
LED PCB (2 modules): 40 W, 50 W, and 60 W



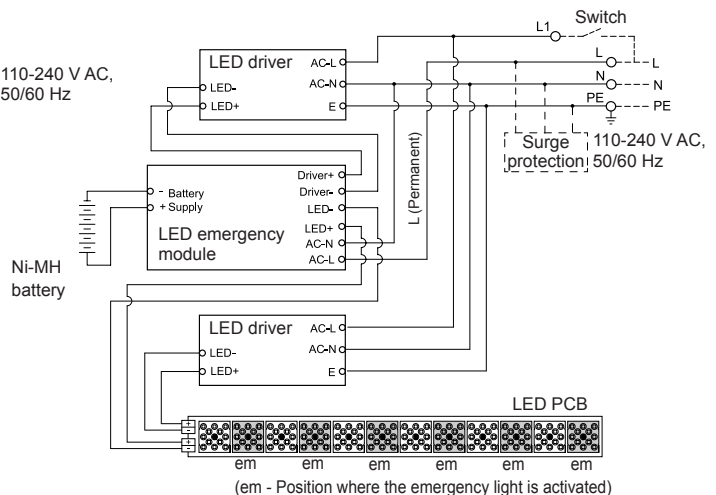
LED PCB (3 modules): 60 W, 75 W, and 90 W



LED PCB (2 modules) with emergency backup: 25 W and 30 W



LED PCB (2 modules) with emergency backup: 40 W, 50 W, and 60 W



LED PCB (3 modules) with emergency backup: 60 W, 75 W, and 90 W

