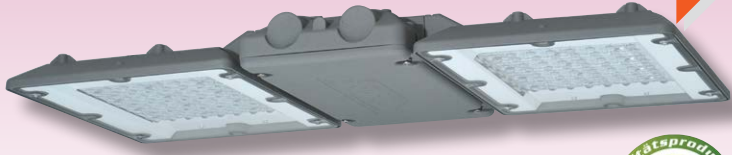


NEW

Explosion protected LED High Bay Series nD8301/nD8302... LED



Application:

Hazardous locations, of Zones 2 (gas atmosphere) and 22 (dust atmosphere), production halls and warehouses, in industrial sectors, workshops and chemical factories etc.

Design:

Two versions are available: 1 or 2 LED wings for substitution of 250W / 400W high pressure discharge lamps
 Housing: Diecast aluminum, DB 702N (mica-iron paint). LED-housing with LED mo-

dules, optics behind tempered safety glass (IK08). ECG housing with integrated electronic control gear, prewired on terminals.

Optics: Narrow-wide respectively wide beam without lenses.

Connection: 3 poles up to 2,5.

Entries: 1 gland M25 x 1,5.

Mounting material: See accessories/spare parts.

General Purpose: Beaming downwards (0°).

Technical Data:

LED: Highpower-LED 4,000K, $R_a > 80$, life cycle $L_{80B_{10}} > 50.000h$ at max. ambient temperature (see notes).

Version nD830. L ...: Mid-Power-LED 4,000K, $R_a > 80$, life cycle $L_{70B_{10}} > 50.000h$ at max. ambient temperature (see notes).

ECG: 220 - 240V, 50-60Hz. Due to the inrush current of the electronic ballasts, the maximum permissible number of light fittings per circuit breaker is limited. Overvoltage protection 4kV, excess temperature protection-, overload and short circuit protection, temperature monitoring of the LED modules (types nD830. L... excluded).

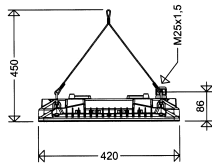
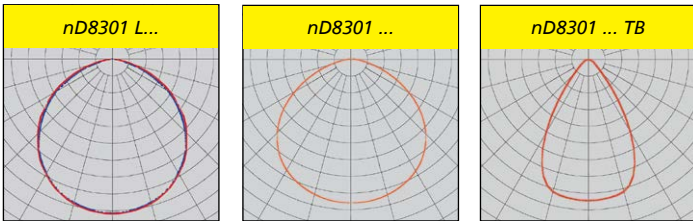
DALI-interface for dim light operation

Ambient temperature: -20°C up to +40°C / +50°C / +55°C (see article tables)

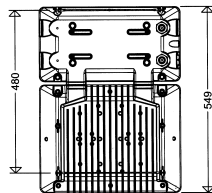
Options:

- 5.700K ($R_a > 70$)
- dimmable version 1-10V interface (DIMA) for analog components
- light output reduction (LR) per 230V control line (dimmable)
- uniform luminous flux option (CL) to keep the light output on same level for

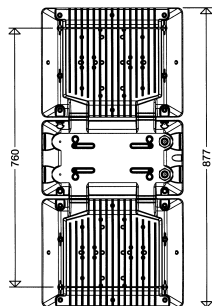
- the whole life cycle
- **narrow beam version (T)**
- asymmetrical optics (A)
- version with additional borings for wall mounting by means of angle brackets (swivel range 45°)



nD8301...

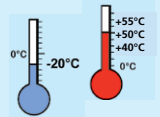


nD8302...



SCHUCH Quality - your advantage:

- energy efficient and economical
 - up to **68% energy savings** compared to conventional light sources
 - up to **86% energy savings** in dimming mode
 - further **energy saving via the life of the LED by the uniform luminous flux function (CL-option)**. No luminous flux decrease due to the omission of the usual oversizing in new plannings.
 - uniform illumination due to the „Multi-Layer Principle“ i.e. every individual LED illuminates the whole surface, the light curves of the individual LED are overlapping. No dark zones if any single LED would fail and the uniformity of the illumination is kept.
- high quality level, reliable over whole life cycle
 - diecast aluminum housing
 - tempered safety glass IK08
 - optimized thermo management due to direct adaption of the LED modules at the housing, huge heat sink with excellent heat dissipation
 - temperature controlled by the ECG (versions nD830. L... excluded)
- ECG with overvoltage, overload, short-circuit and overvoltage protection
- DALI interface (standard) for dimmed operation
- operational at ambient temperatures from -20°C up to +40°C / +50°C / +55°C (depending on version)
- colour reproduction $R_a > 80$
- low maintenance and downtime costs because of extended maintenance intervals



Notes:

Limitations for LED-light fittings: See chapter „Use of LED lighting in corrosive atmospheres“ in the Technical Appendix.

All technical data is relevant at the time of print. Actual technical data can be found in the internet under www.schuch.de.

| Article no. | Type | Power consumption [W] * | Luminous flux [lm] * | Light output [lm/W] | Wide beam | Narrow-wide beam | Energy efficiency class | Substitute for ** | Weight [kg] (without packing material) |
|-------------|------|-------------------------|----------------------|---------------------|-----------|------------------|-------------------------|-------------------|--|
|-------------|------|-------------------------|----------------------|---------------------|-----------|------------------|-------------------------|-------------------|--|

Ignition protection: nR

Rated voltage: 220V - 240V, 50-60Hz

Marking:

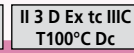
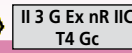
Permissible ambient temperature:

II 3 G Ex nR IIC T4 Gc (Zone 2)

-20°C up to +40°C / +50°C / +55°C

II 3 D Ex tc IIIC T100°C Dc (Zone 22)

nD8301/nD8302...



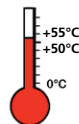
... for ambient temperatures up to +40°C

1 LED wing

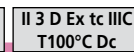
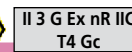
| | | | | | | | | | |
|------------|---------------|-----|--------|-----|----|---|-----|-----------------|-----|
| 83012 0001 | nD8301 L115 | 100 | 12.270 | 123 | 40 | • | A++ | HME 250 | 8,8 |
| 83012 0002 | nD8301 6403 | 135 | 14.140 | 105 | 40 | • | A+ | HIT 250/HME 400 | 8,9 |
| 83012 0003 | nD8301 6403TB | 135 | 13.940 | 103 | 40 | • | A+ | HIT 250/HME 400 | 8,9 |

2 LED wings

| | | | | | | | | | |
|------------|----------------|-----|--------|-----|----|---|-----|---------|------|
| 83012 0101 | nD8302 L230 | 200 | 24.540 | 123 | 40 | • | A++ | HIT 400 | 14,5 |
| 83012 0102 | nD8302 12803 | 270 | 28.280 | 105 | 40 | • | A+ | HIT 400 | 14,6 |
| 83012 0103 | nD8302 12803TB | 270 | 27.880 | 103 | 40 | • | A+ | HIT 400 | 14,6 |



nD8301/nD8302... H50/H55



... for ambient temperatures up to +50°C/+55°C

1 LED wing

| | | | | | | | | | |
|------------|-----------------|-----|--------|-----|----|---|-----|-----------------|-----|
| 83012 0011 | nD8301 L115 H55 | 100 | 12.270 | 123 | 55 | • | A++ | HME 250 | 8,8 |
| 83012 0007 | nD8301 6403 H50 | 135 | 14.140 | 105 | 50 | • | A+ | HIT 250/HME 400 | 8,9 |

2 LED wings

| | | | | | | | | | |
|------------|------------------|-----|--------|-----|----|---|-----|---------|------|
| 83012 0111 | nD8302 L230 H55 | 200 | 24.540 | 123 | 55 | • | A++ | HIT 400 | 14,5 |
| 83012 0104 | nD8302 12803 H50 | 270 | 28.280 | 105 | 50 | • | A+ | HIT 400 | 14,6 |

* see notes

** The given information is for rough orientation only. In each individual case a lighting calculation is necessary.

Accessories / Spare Parts

| Type | Article no. | |
|------------|---------------|---|
| 33001 9001 | 3301/10 | spare safety glass, for nD8301... or nD8302... |
| 90117 9006 | 2537 G | plastic gland M25x1,5 with nut |
| 90118 9006 | 2538 G | plastic plug M25x1,5 with nut |
| 33001 9004 | 3301/3302 Y P | 1 pair of Y-ropes, (2-point-mounting) |
| 33001 9002 | 3301/3302 D | 1 pair of angle brackets for direct ceiling mounting |
| 33001 9003 | 3301 W | 1 angle bracket, adjustable, for wall mounting series nD8301... ¹⁾ |
| 33001 9007 | 3302 W | 1 angle bracket, adjustable, for wall mounting series nD8302... ¹⁾ |

1) For mounting these brackets additional mounting holes are required on the luminaire. Please indicate way of mounting when ordering the luminaire.