



## Explosion-Protected Polyester Emergency Light Fitting for Zones 2 and 22 with Self-Contained Battery Unit Series nD161/162...

### Applications:

Hazardous areas of zones 2 and 22 for illuminating escape routes acc. to DIN VDE 0108.

### Mechanical design:

**Housing:** Glass fibre reinforced polyester resin; EPDM gasket.

**Cover:** Injected clear polycarbonate with internal prisms.

**Closure:** Stainless steel clips (KE), one of them as safety clip (KES), to be opened with screwdriver only. Stainless steel hinges (SC) on the opposite side.

**Reflector:** Suspendable, white powder coated sheet steel, carrying the electrical

components.

**Connection:** 4 poles up to 2,5mm<sup>2</sup>.

**Cable entries:** 2 entries M20 (2 glands - one of them is plugged).

**Through wiring system:**

Up to 6 x 2,5mm<sup>2</sup>.

**Standard:** Horizontal, facing downwards or forwards.

**Mechanical installation:**

There are closed knock-outs in the housing for direct ceiling mounting. Sealing gaskets can be found inside the light fitting.

(Mounting accessories see spare parts/accessories.

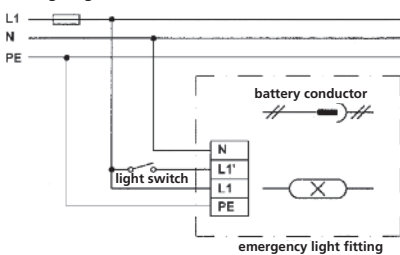
### Shock tested:

1 x 18/36W	RK 4,0/40B
1 x 58W	RK 1,6/16A
162 2..	RK 2,5/25A

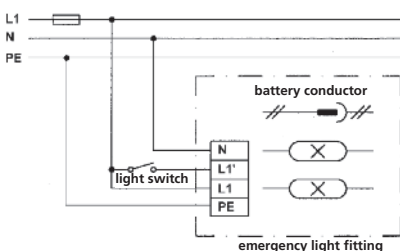
shock and earth-quake tested (by TÜV)

**DB** standardized by Deutsche Bahn AG

Wiring diagram (maintained) nD161..., nD162 1..



Wiring diagram (maintained) nD162 2..

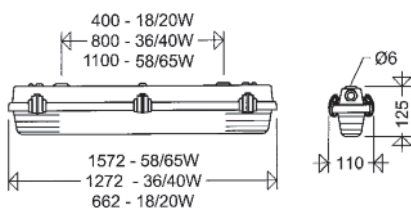


**Starting:** Connect battery conductor.

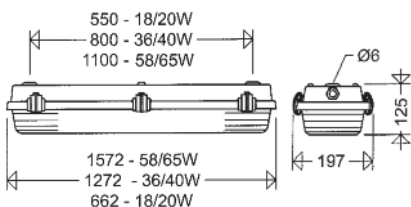
**Out-of-operation:** separate battery conductor.

**Stand-by operation:** Do not connect L1'.

### Series nD 161...



### Series nD 162...



### Electrical design:

**Incorporated NiCd battery set** which is kept ready for operation through continuous conservation charging.

**Monitoring:**

Automatic monitoring of the emergency fitting with weekly function and annual duration test according to EN 62034. LED inside the fitting showing the test result.

**Ambient temperature:**

0°C up to +30°C (maintained operation)

0°C up to +40°C types nD161 1.. (stand by) or types nD162 1..

**Electronic deep discharge protection** with re-switch locking system.

**Recharging time:**

24 hours, according to EN 60598-2-22.

**Connection voltage:** 220-240V, 50-60Hz

**Modes of operation:**

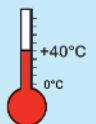
**Maintained operation** = Change-over to battery operation in case of mains failure.

**Stand-by operation** = emergency operation in case of mains failure.

### Schuch Quality - your advantage:

In addition to the outstanding advantages of the basic version (series nD161.../nD162...) the emergency version does offer additional advantages:

- reliable, fail-safe and long-lasting due to low integration level (separate electronic ballast and separate emergency electronic device)
  - operation in maintained, switched maintained or stand-by mode possible
  - multifunctional LED with coded indication of the functions, states and potential faults of the electronic device and the battery
  - automatic weekly function test
  - automatic annual duration test
  - manual actuation of function and duration test is possible
  - easy battery replacement due to connector
- for ambient temperatures from 0°C to +40°C
- one sided loop-in/loop-out or integrated through-wiring system can be offered for all wattages





EC-Type Examination Certificate:

TÜV 00 ATEX 1541

Other approvals:

GOST-R/ROSTECH-NADZOR (Russia)

Marking:

II 3 G Ex nA nC IIC T4 (Zone 2)

II 3 D Ex tD A22 IP65 T80°C (Zone 22)

Ignition protection: nA nC

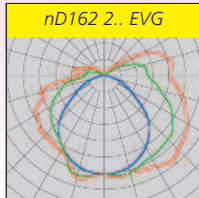
Admissible ambient temperature:

0°C up to +30°C or

0°C up to +40°C (nD162 1..)

Rated voltage/frequency:

220-240V AC, 50/60Hz



Types	Article nos.	Lamps W	Flux factor <sup>1)</sup> appr. %	Weight <sup>2)</sup> ca. kg
<b>1 hour operation - with electronic ballast (EVG)</b>				
nD161 136/22/1 EVG	16107 0101	1 x 36W	22	3,6
nD161 158/17/1 EVG	16107 0102	1 x 58W	17	4,1
nD162 118/35/1 EVG	16207 0101	1 x 18W	35	3,6
nD162 136/22/1 EVG	16207 0102	1 x 36W	22	5,5
nD162 158/17/1 EVG	16207 0103	1 x 58W	17	6,3
nD162 218/35/1 EVG	16207 0104	2 x 18W	35	3,6
nD162 236/22/1 EVG	16207 0105	2 x 36W	22	5,3
nD162 258/17/1 EVG	16207 0106	2 x 58W	17	6,3
<b>3 hour operation - with electronic ballast (EVG)</b>				
nD161 136/10/3 EVG	16107 0103	1 x 36W	10	3,9
nD161 158/07/3 EVG	16107 0104	1 x 58W	7	4,1
nD162 118/20/3 EVG	16207 0107	1 x 18W	20	3,9
nD162 136/10/3 EVG	16207 0108	1 x 36W	10	5,6
nD162 218/20/3 EVG	16207 0109	2 x 18W	20	3,6
nD162 236/10/3 EVG	16207 0110	2 x 36W	10	5,6
nD162 258/07/3 EVG	16207 0111	2 x 58W	7	6,4

1) Ratio effective lamp flux/nominal flux

2) Weights without packing material

Explosion-proof Light Fittings Zone 2/22



type 162 218 with legend

**Note:**

All accessories and spare parts can be found under series nD 161/162...  
When ordering any electronic components please indicate the type no. /production date of the luminaire.

Self-adhesive legends for light fittings of type nD 162 118 and nD 162 218... for escape route illumination can be ordered as follows:



590/125/33 W



../34 W



../35 W

**Self-adhesive legends**

for marking emergency ways acc. to VGB 125 and DIN 4844.

Sighting distance acc. to EN 1838 and DIN 4844 = 25m.



**Further Series / Equipment**

- .../B stand-by system = emergency lighting in case of mains failure only (series 162..with 1 lamp = 1621..)

- halogen-free
- silicone-free
- with through wiring system up to 5 x 2,5 mm<sup>2</sup>
- 2 entries at one end of the housing for looping the mains cable (instead of through wiring system)
- for outdoor application