



# the collection

Configure the Orbital conform to your wishes.

**ORBITAL**  
WE WENT THE DISTANCE



# ORBITAL

## THREE IN ONE



CONVENTIONAL VALVE  
VENTILATION



CONVENTIONAL  
SPOT



EMERGENCY  
LIGHTING



# ORBITAL

WE WENT THE DISTANCE

# One futuristic lighting fixture has it all.

With the aesthetics in mind, every project has the same difficulty: where do we have to install (or hide) the visually unappealing ventilation holes that harm the pureness of the interior. TAL has developed the answer with the Orbital range; well-engineered devices with a refined and elegant look that simply combine the ventilation system with a downlight.

Orbital is the perfect tool for any project and suits a great variety of applications. High-end lighting merged with ventilation, as well as sound, smoke and motion detection. A standard downlight can turn into an extensive toolbox, to which you can simply add your desired features. Its smooth curves blend into the architecture for optimal visual comfort.

The Orbital is available in a standard version (installation via leaf springs) and a trimless version (installation via dedicated frame) that merges flush with the ceiling. The device comes in textured white or textured black powder coated finish.

The basic light comes from the outer circle of any Orbital device and provides a profitable efficacy of 150 lumens per watt, which leads to +1000 lumens. The Orbital can be equipped with leds with a colour temperature of 2700K & 3000K and also with the halosphere technology (dim to warm).

The innovative Orbital with integrated ventilation turns your home or office into a healthy environment. Choose between the throughflow or flow control system to create movement of purified air, beneficial to your indoor climate and extends the lifespan of the general light. A smooth designed union of lighting with high quality ventilation in aluminum casing leads to a cost effective and durable product.

by *Erpicum*

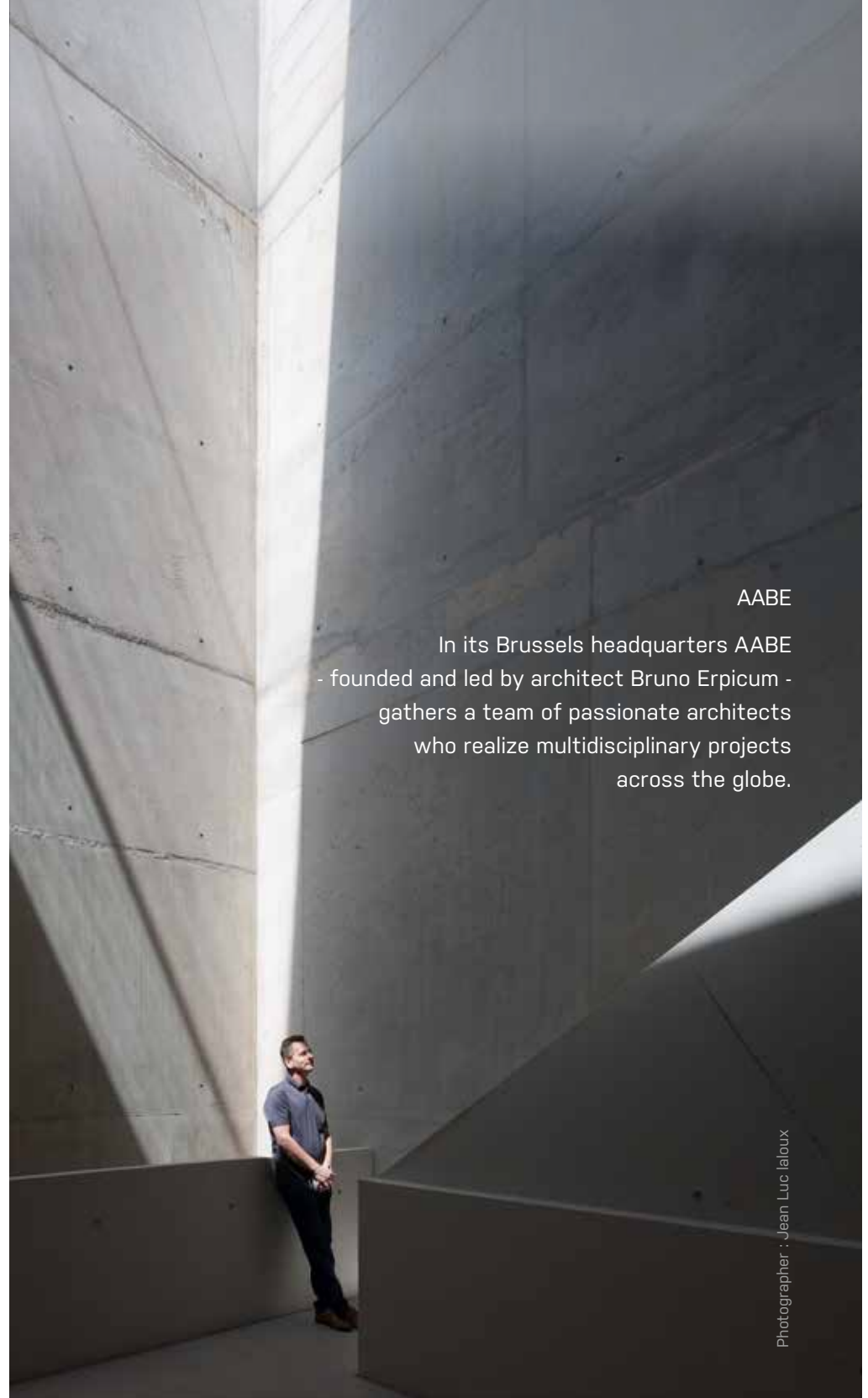


**Modern Architecture is limitless.  
Throughout the process  
of designing a product  
– from the basic concept to  
determining the smallest detail –  
the ambition should remain the same:  
eliminate all redundant elements  
in view of retaining only the essential.**

More than 30 years of experience have resulted in the realization of different types of projects including private dwellings set in an urban context, secluded villa's located on a remote hilltop yet also buildings with a more public function such as museums, office buildings, hotels, commercial real estate, etc.

The numerous publications and awards granted to AABE underpin the worldwide appreciation for the Atelier's architectural philosophy.

The Atelier consists of 15 architects and is hence big enough to master multidisciplinary projects, yet small enough to function as a team collaborating to achieve a unique project - time and time again.



AABE

In its Brussels headquarters AABE  
- founded and led by architect Bruno Erpicum -  
gathers a team of passionate architects  
who realize multidisciplinary projects  
across the globe.

# ABOUT THE DESIGNER

Bruno Erpicum

"Eliminate all redundant in view  
of retaining only the essential."



**ORBITAL**

A ceiling represents the sky of a room. Almost never decorated nor 'littered' with furniture but instead often the only free surface in a room. And yet, very little attention is paid to the design of a ceiling. Lighting, aeration, music, AC, movement detectors, etc. The panoply of techniques required in today's rooms, leads to the fact that 'designing' the ceiling in a uniform color is often the highest achievable goal.

The architects at the Brussels' based studio Bruno Erpicum, have been dreaming for many years about a uniform and standard object that integrates all of the abovementioned techniques and has found the perfect partner in lighting company TAL to realize this objective. The ambition was clear from the start: designing a basic object that hides all of these techniques from the eye.

The Orbital was created: a minimalistic cylinder integrating a wide array of techniques in an ingenious manner.

The result: a pristine ceiling whereby merely a few vacant cut-aways cluster the techniques.

Ratio? There is more in less.

VENTILATION  
FLOW CONTROL

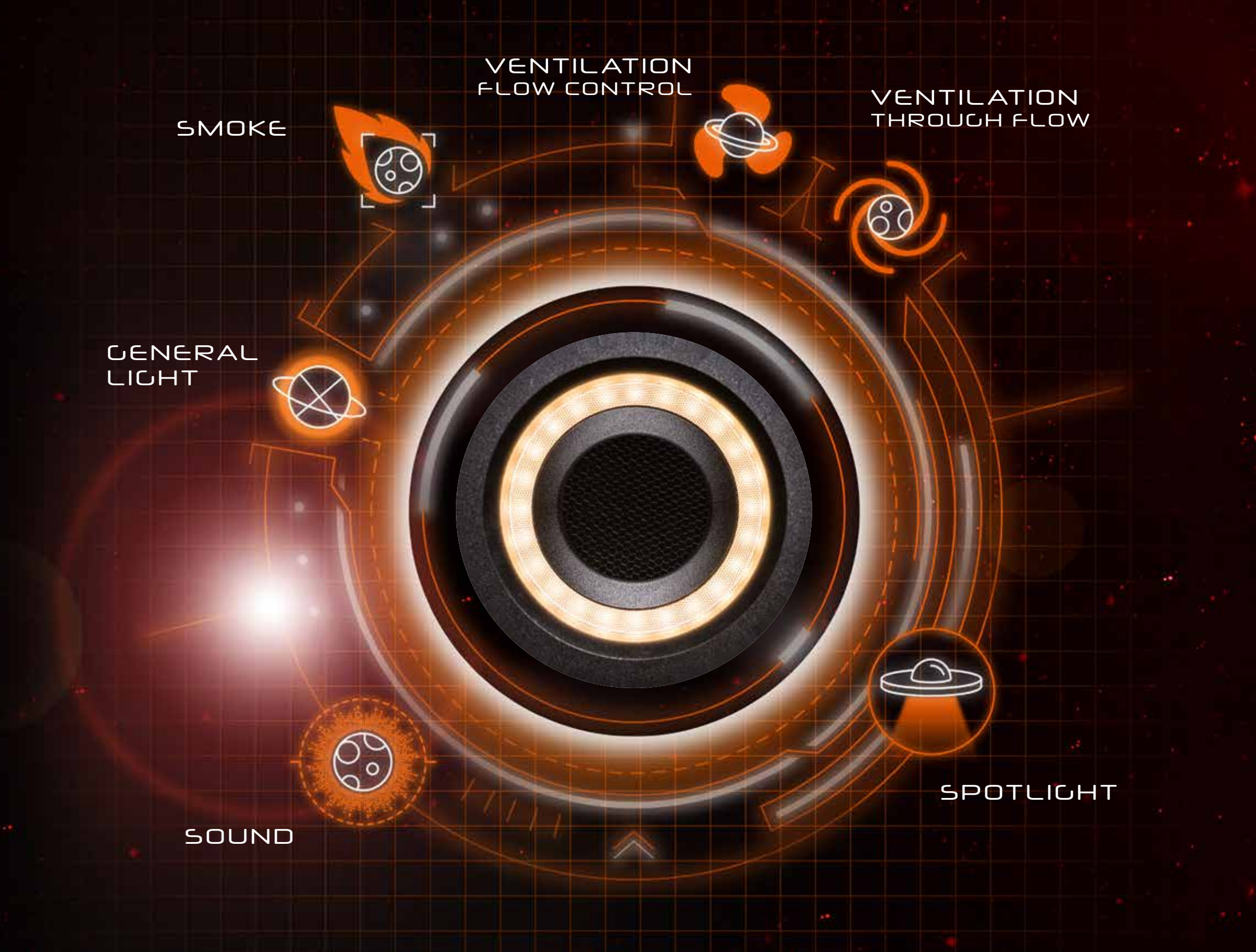
VENTILATION  
THROUGH FLOW

SMOKE

GENERAL  
LIGHT

SPOTLIGHT

SOUND

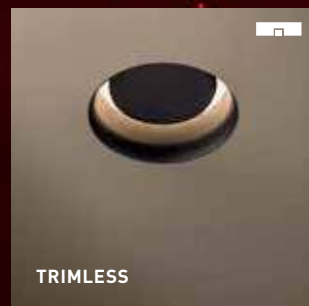




# ORBITAL

**TAL**  
TECHNICAL  
ARCHITECTURAL  
LIGHTING

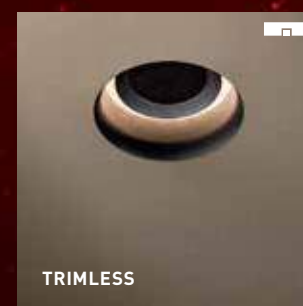
by *Epicum*



ORBITAL  
+ FLOW CONTROL 35



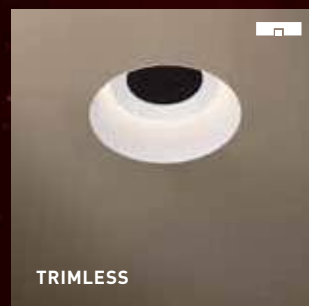
ORBITAL  
+ FLOW CONTROL 43



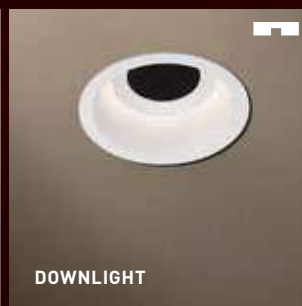
ORBITAL  
+ THROUGH FLOW 37



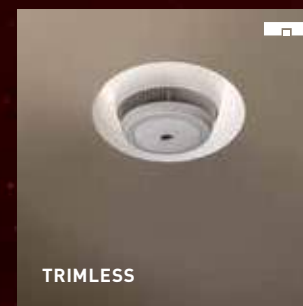
ORBITAL  
+ THROUGH FLOW 45



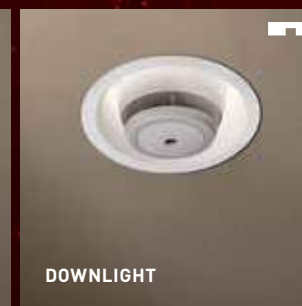
ORBITAL  
+ LOUDSPEAKER 38



ORBITAL  
+ LOUDSPEAKER 46



ORBITAL  
+ SMOKE DETECTOR 39



ORBITAL  
+ SMOKE DETECTOR 47

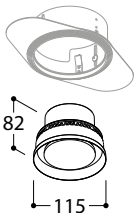
One futuristic lighting fixture has it all.

# ORBITAL FLOW CONTROL

trimless



## FLOW CONTROL TRIMLESS



ANNULAR LED ARRAY 11,4W  
max. 350mA DC (32,5 Vf)  
dimmable PWM or CCR  
(Halosphere only CCR)  
beam 120°  
CRI 92  
(Halosphere CRI 97)

A+

140 mm  
Installation height 180 mm  
(when using flexible ventilation  
valve ø80mm)

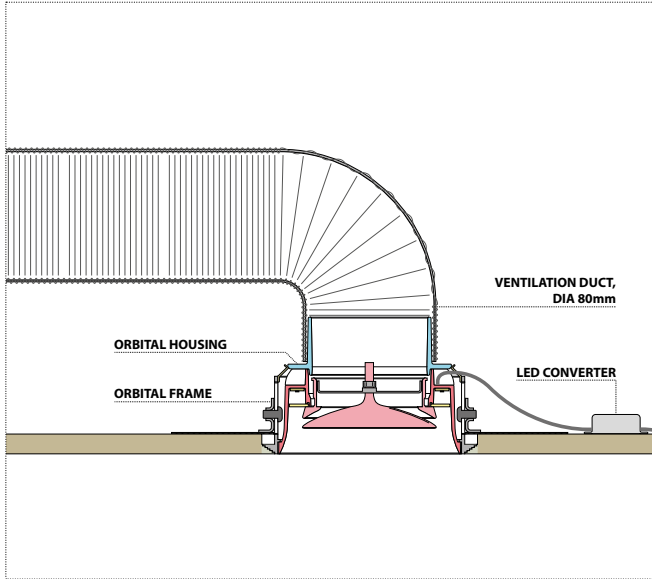
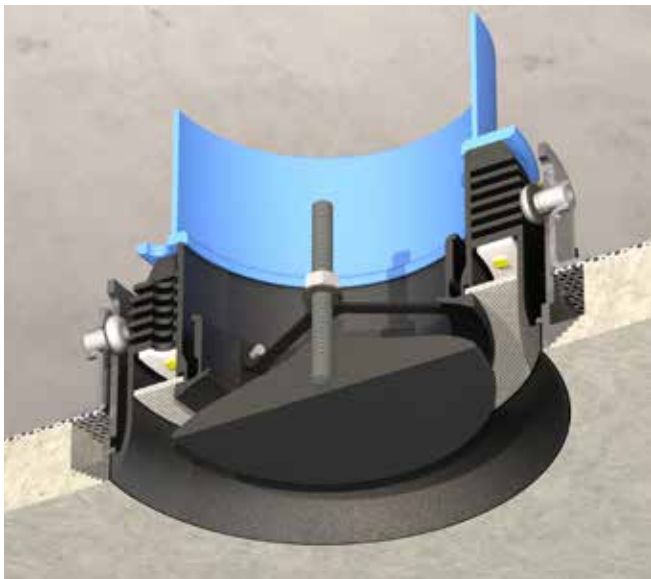


|             | 2700K      | 3000K      | HALOSPHERE |
|-------------|------------|------------|------------|
| TEXT. WHITE | 650247     | 650267     | 650287     |
| TEXT. BLACK | 650246     | 650266     | 650286     |
|             | 1365 lumen | 1400 lumen | 1110 lumen |

TRIMLESS FRAME

701112 140 x H 130 mm

HALOSPHERE: dim to warm 3000K-1800K



### FLOW CONTROL = VENTILATION VALVE

- SUPPLY VALVE / EXTRACT VALVE
- INCORPORATED ADJUSTABLE FLOW REGULATOR

### MAX FLOW (THEORETICAL)

- @V = 1,0M/S: 47M³/S
- @V = 2,0M/S: 94M³/S
- @V = 3,0M/S: 141M³/S

trimless

# LIGHT ONLY (FLOW CONTROL LOOK) **ORBITAL**



## ○ FLOW CONTROL LOOK TRIMLESS



ANNULAR LED ARRAY 11,4W  
max. 350mA DC (32,5 Vf)  
dimmable PWM or CCR  
(Halosphere only CCR)  
beam 120°  
CRI 92  
(Halosphere CRI 97)

**A+**

⌀ 140 mm  
Installation height 130 mm

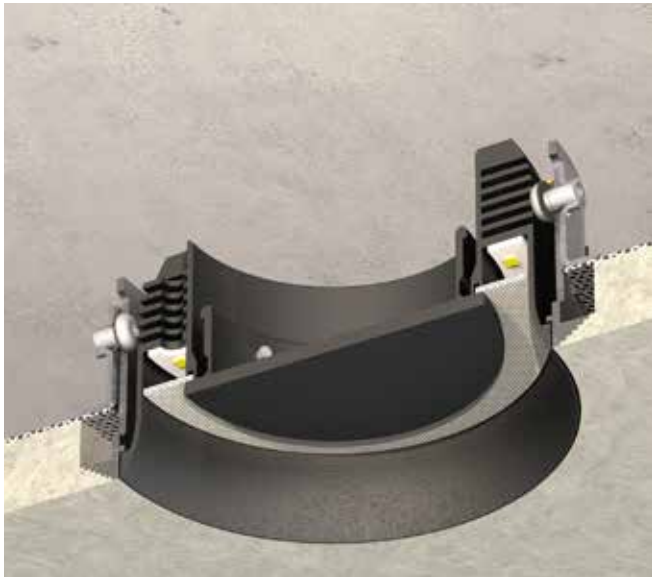


|             | 2700K      | 3000K      | HALOSPHERE |
|-------------|------------|------------|------------|
| TEXT. WHITE | 650047     | 650067     | 650087     |
| TEXT. BLACK | 650046     | 650066     | 650086     |
|             | 1365 lumen | 1400 lumen | 1110 lumen |

○ TRIMLESS FRAME

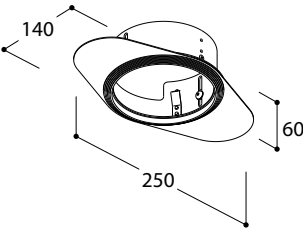
701112 ⌀140 x H 130 mm

HALOSPHERE: dim to warm 3000K-1800K



## TRIMLESS FRAME

⌀ 140mm



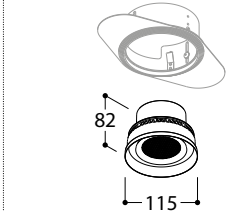
TRIMLESS FRAME 701112



# ORBITAL THROUGH FLOW

trimless

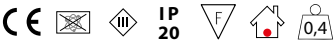
## THROUGH FLOW TRIMLESS



ANNULAR LED ARRAY 11,4W  
max. 350mA DC (32,5 Vf)  
dimable PWM or CCR  
(Halosphere only CCR)  
beam 120°  
CRI 92  
(Halosphere CRI 97)

A+

140 mm  
Installation height 180 mm  
(when using flexible ventilation  
valve ø80mm)

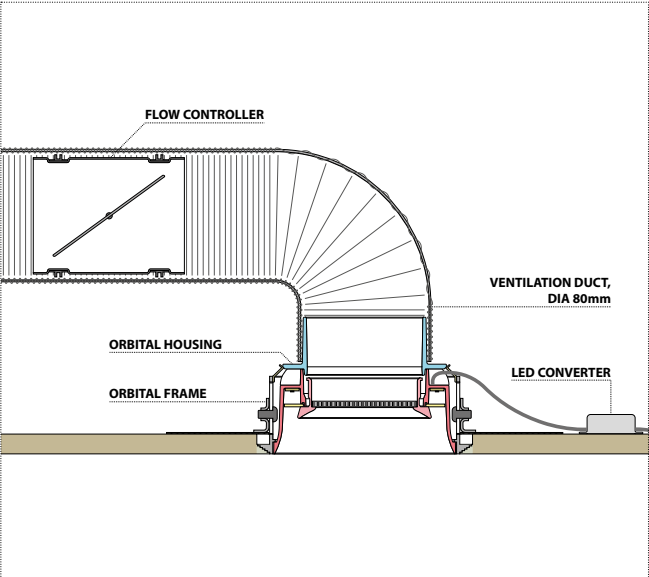
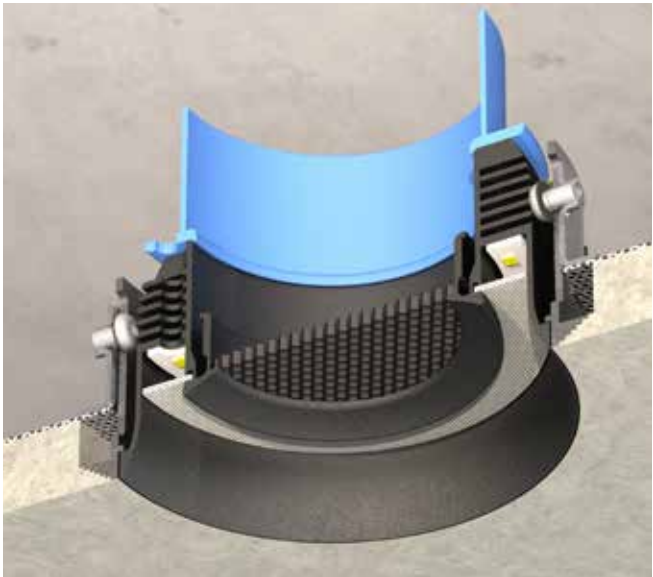


|             | 2700K      | 3000K      | HALOSPHERE |
|-------------|------------|------------|------------|
| TEXT. WHITE | 650147     | 650167     | 650187     |
| TEXT. BLACK | 650146     | 650166     | 650186     |
|             | 1365 lumen | 1400 lumen | 1110 lumen |

TRIMLESS FRAME

701112 140 x H 130 mm

HALOSPHERE: dim to warm 3000K-1800K



### THROUGH FLOW = VENTILATION VALVE

- SUPPLY VALVE / EXTRACT VALVE
- FLOW REGULATOR MUST BE PROVIDED IN AIR DUCTS

### MAX FLOW (THEORETICAL)

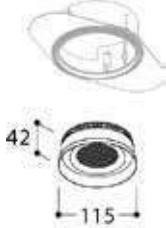
- @V = 1,0M/S: 42M³/S
- @V = 2,0M/S: 84M³/S
- @V = 3,0M/S: 126M³/S

trimless

# LIGHT ONLY [THROUGH FLOW LOOK] **ORBITAL**



## THROUGH FLOW LOOK TRIMLESS



ANNULAR LED ARRAY 11,4W  
max. 350mA DC (32,5 Vf)  
dimmable PWM or CCR  
(Halosphere only CCR)  
beam 120°  
CRI 92  
(Halosphere CRI 97)

**A+**

140 mm  
Installation height 130 mm

CE, IP 20, F, 0,4

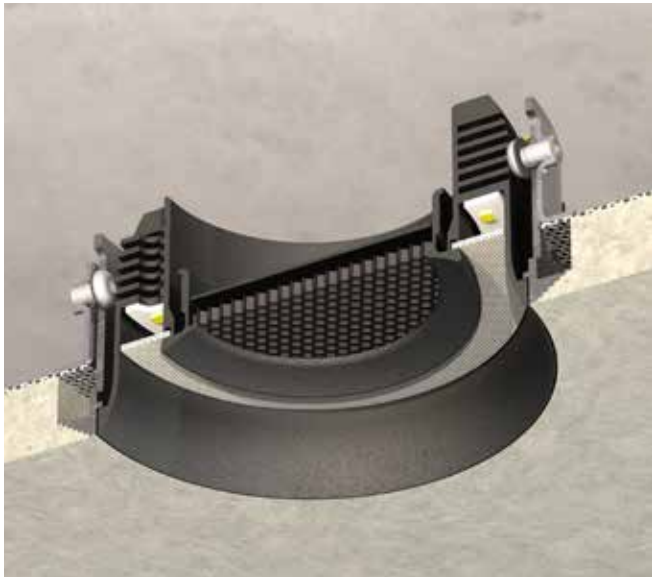
|             | 2700K      | 3000K      | HALOSPHERE |
|-------------|------------|------------|------------|
| TEXT. WHITE | 650044     | 650064     | 650084     |
| TEXT. BLACK | 650042     | 650062     | 650082     |
|             | 1365 lumen | 1400 lumen | 1110 lumen |

TRIMLESS FRAME

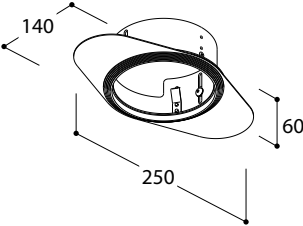
701112 140 x H 130 mm

HALOSPHERE: dim to warm 3000K-1800K

## TRIMLESS FRAME



140mm

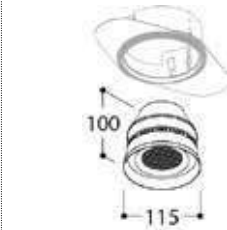


|                |        |
|----------------|--------|
| TRIMLESS FRAME | 701112 |
|----------------|--------|

# ORBITAL LOUDSPEAKER

trimless

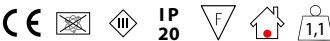
## LOUDSPEAKER TRIMLESS



ANNULAR LED ARRAY 11,4W  
max. 350mA DC (32,5 Vf)  
dimmable PWM or CCR  
(Halosphere only CCR)  
beam 120°  
CRI 92  
(Halosphere CRI 97)

A+

140 mm  
Installation height 130 mm

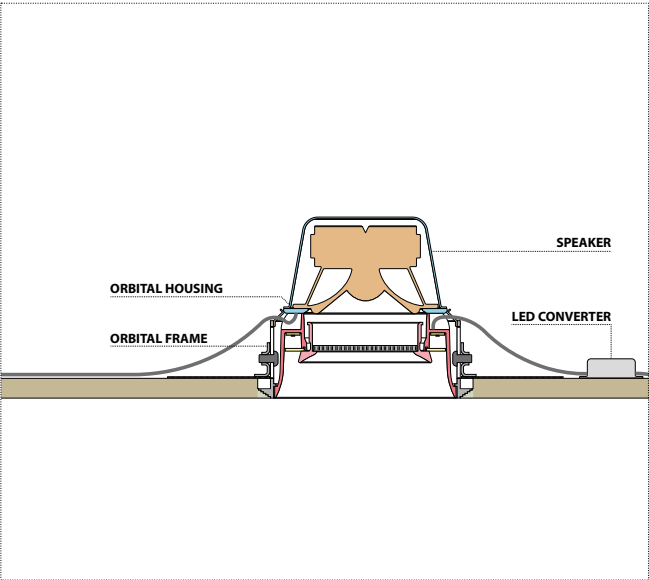
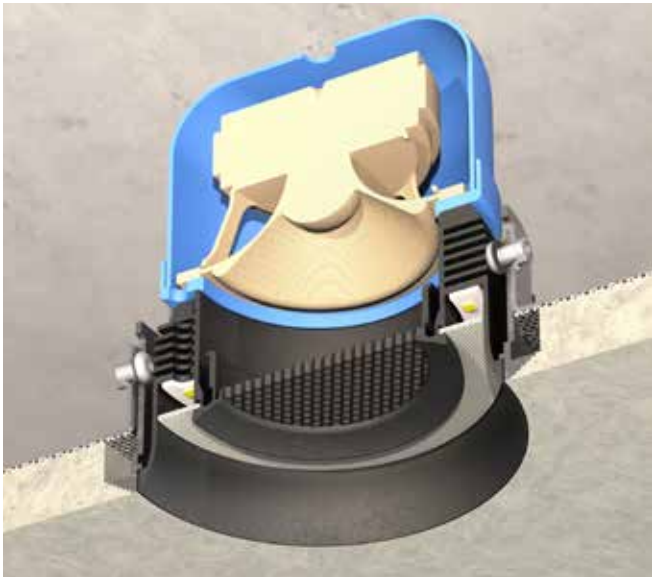


|             | 2700K      | 3000K      | HALOSPHERE |
|-------------|------------|------------|------------|
| TEXT. WHITE | 650347     | 650367     | 650387     |
| TEXT. BLACK | 650346     | 650366     | 650386     |
|             | 1365 lumen | 1400 lumen | 1110 lumen |

TRIMLESS FRAME

701112 140 x H 130 mm

HALOSPHERE: dim to warm 3000K-1800K



### SOUND = 3" FULL RANGE SPEAKER


- MAX. POWER = 30W
- RATED POWER INPUT = 15W
- NOMINAL IMPEDANCE = 80HM
- DCR IMPEDANCE = 6,60HM
- SENSITIVITY 1W/1M = 88DB
- FREQUENCY RESPONSE = 75HZ-20KHZ

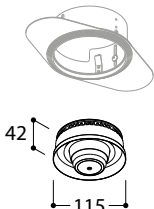


trimless

# SMOKE DETECTOR ORBITAL



 SMOKE DETECTOR TRIMLESS



ANNULAR LED ARRAY 11,4W  
max. 350mA DC (32,5 Vf)  
dimmable PWM or CCR (Halosphere only CCR)  
beam 120°  
CRI 92 (Halosphere CRI 97)

**A+**

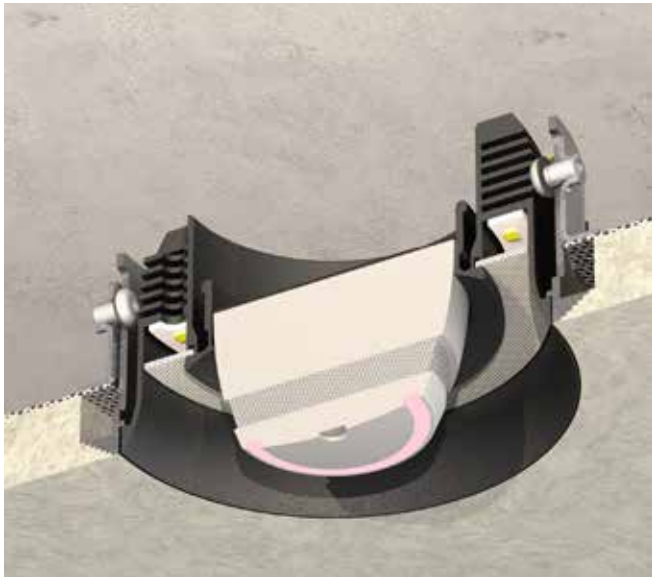
140 mm  
Installation height 130 mm

CE, IP 20, F, 0,5

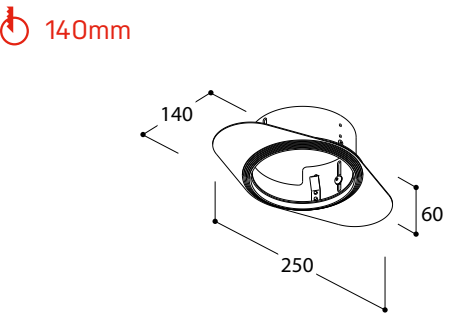
|             | 2700K      | 3000K      | HALOSPHERE |
|-------------|------------|------------|------------|
| TEXT. WHITE | 650447     | 650467     | 650487     |
| TEXT. BLACK | 650446     | 650466     | 650486     |
|             | 1365 lumen | 1400 lumen | 1110 lumen |

TRIMLESS FRAME 701112 140 x H 130 mm

HALOSPHERE: dim to warm 3000K-1800K



TRIMLESS FRAME



140mm

|                |        |
|----------------|--------|
| TRIMLESS FRAME | 701112 |
|----------------|--------|

**SMOKE**  
= OPTICAL SMOKE ALARM DEVICE

- INTEGRATED WIRELESS INTERLINK (MAX. 32 DEVICES) - RF: 868MHZ
- REPLACABLE 3V CR123A LITHIUM BATTERY 1600MAH
- MIN. 5 YEAR BATTERY LIFE
- LOW BATTERY INDICATION
- 100M OPEN FIELD RANGE
- VISIBLE INDICATOR






*"Eliminate all redundant in view  
of retaining only the essential."*



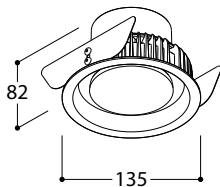


# ORBITAL FLOW CONTROL

 125 mm downlights




## FLOW CONTROL



ANNULAR LED ARRAY 11,4W  
max. 350mA DC (32,5 Vf)  
dimmable PWM or CCR  
(Halosphere only CCR)  
beam 120°  
CRI 92  
(Halosphere CRI 97)

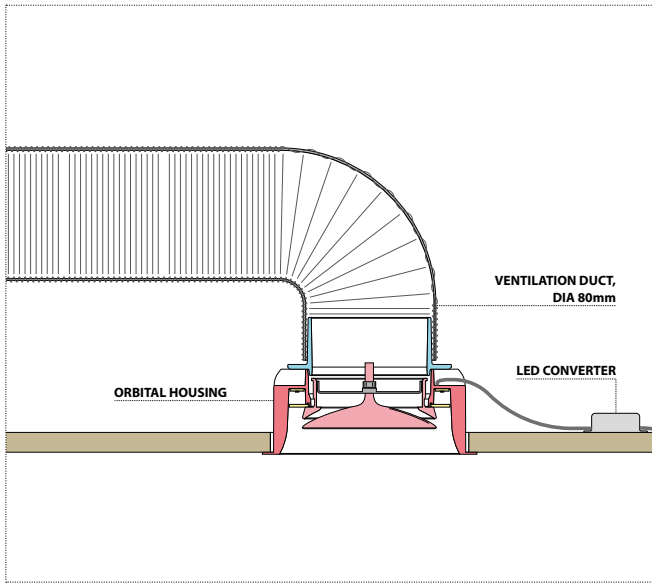
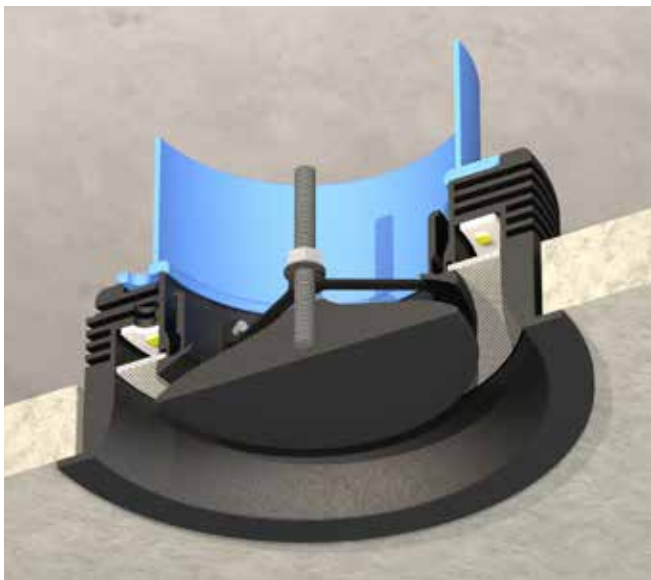
**A+**

 125 mm  
Installation height 180 mm  
(when using flexible ventilation  
valve ø80mm)



|             | 2700K      | 3000K      | HALOSPHERE |
|-------------|------------|------------|------------|
| TEXT. WHITE | 650747     | 650767     | 650787     |
| TEXT. BLACK | 650746     | 650766     | 650786     |
|             | 1365 lumen | 1400 lumen | 1110 lumen |

HALOSPHERE: dim to warm 3000K-1800K



### FLOW CONTROL = VENTILATION VALVE

- SUPPLY VALVE / EXTRACT VALVE
- INCORPORATED ADJUSTABLE FLOW REGULATOR

### MAX FLOW (THEORETICAL)

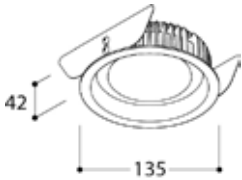
- @V = 1,0M/S: 47M³/S
- @V = 2,0M/S: 94M³/S
- @V = 3,0M/S: 141M³/S

downlights  125 mm

# LIGHT ONLY (FLOW CONTROL LOOK) **ORBITAL**




## FLOW CONTROL LOOK



ANNULAR LED ARRAY 11,4W  
max. 350mA DC (32,5 Vf)  
dimmable PWM or CCR  
(Halosphere only CCR)  
beam 120°  
CRI 92  
(Halosphere CRI 97)

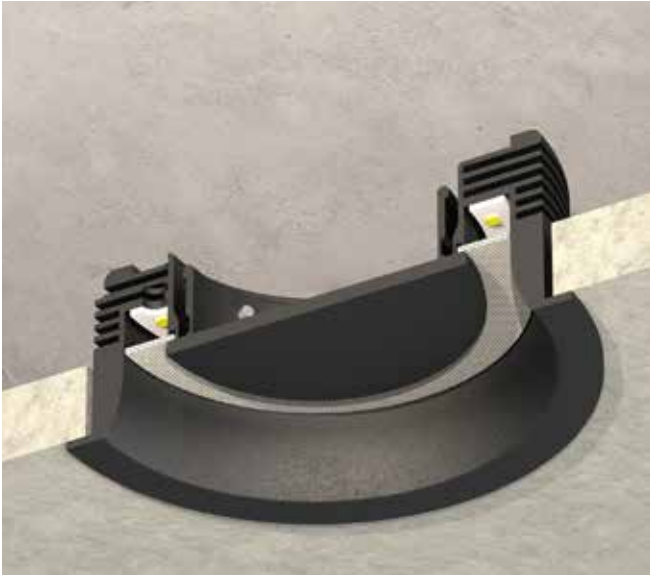
**A+**

 125 mm  
Installation height 60 (45) mm


   **IP 20**   

|             | 2700K         | 3000K         | HALOSPHERE    |
|-------------|---------------|---------------|---------------|
| TEXT. WHITE | <b>650547</b> | <b>650567</b> | <b>650587</b> |
| TEXT. BLACK | <b>650546</b> | <b>650566</b> | <b>650586</b> |
|             | 1365 lumen    | 1400 lumen    | 1110 lumen    |

HALOSPHERE: dim to warm 3000K-1800K

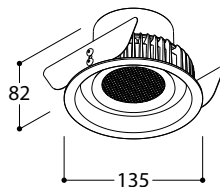


# ORBITAL THROUGH FLOW

 125 mm downlights




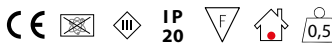
## THROUGH FLOW



ANNULAR LED ARRAY 11,4W  
max. 350mA DC (32,5 Vf)  
dimable PWM or CCR  
(Halosphere only CCR)  
beam 120°  
CRI 92  
(Halosphere CRI 97)

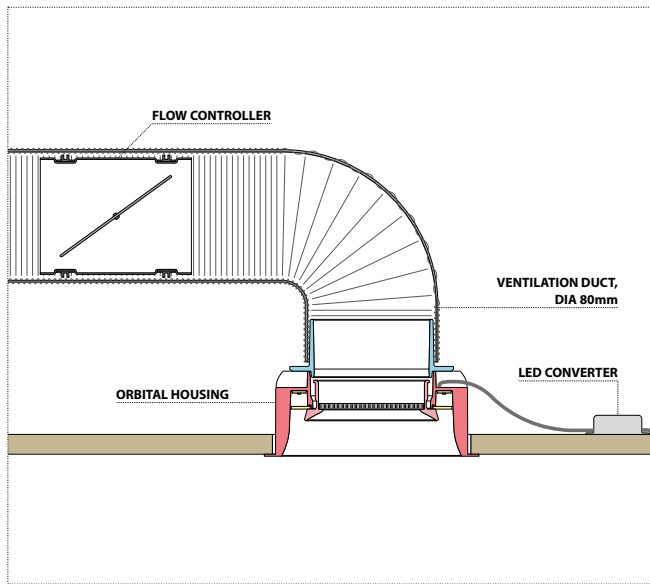
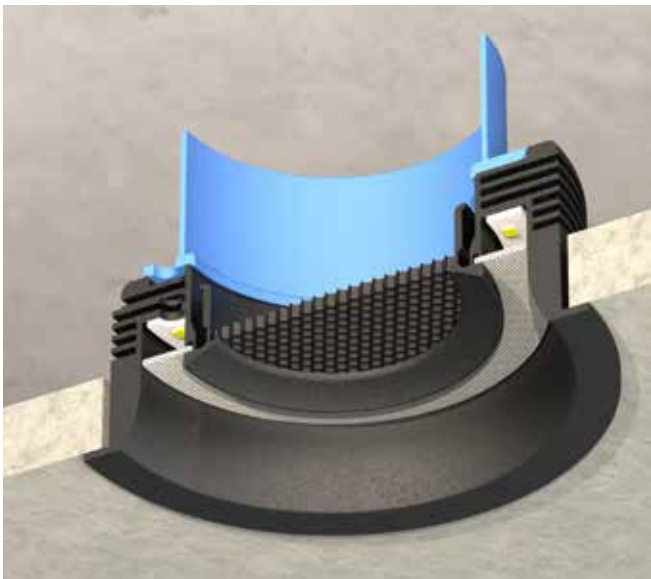
**A+**

 125 mm  
Installation height 180 mm  
(when using flexible ventilation  
valve ø80mm)



|             | 2700K      | 3000K      | HALOSPHERE |
|-------------|------------|------------|------------|
| TEXT. WHITE | 650647     | 650667     | 650687     |
| TEXT. BLACK | 650646     | 650666     | 650686     |
|             | 1365 lumen | 1400 lumen | 1110 lumen |

HALOSPHERE: dim to warm 3000K-1800K



### THROUGH FLOW = VENTILATION VALVE

- SUPPLY VALVE / EXTRACT VALVE
- FLOW REGULATOR MUST BE PROVIDED IN AIR DUCTS

### MAX FLOW (THEORETICAL)

- @V = 1,0M/S: 42M³/S
- @V = 2,0M/S: 84M³/S
- @V = 3,0M/S: 126M³/S

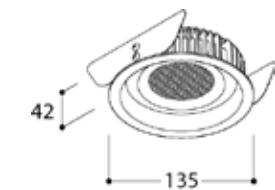


downlights  125 mm

# LIGHT ONLY [THROUGH FLOW LOOK] **ORBITAL**




## THROUGH FLOW LOOK



ANNULAR LED ARRAY 11,4W  
max. 350mA DC (32,5 Vf)  
dimnable PWM or CCR  
(Halosphere only CCR)  
beam 120°  
CRI 92  
(Halosphere CRI 97)

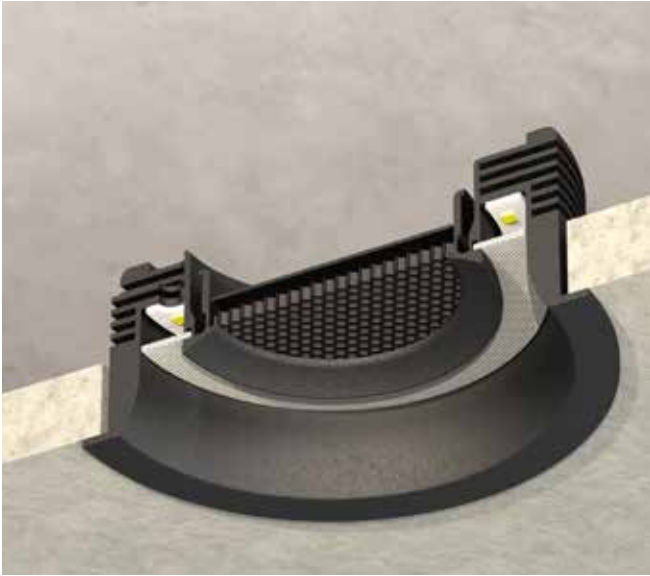
**A+**

 125 mm  
Installation height 60 (45) mm

   **IP 20**   

|             | 2700K      | 3000K      | HALOSPHERE |
|-------------|------------|------------|------------|
| TEXT. WHITE | 650544     | 650564     | 650584     |
| TEXT. BLACK | 650542     | 650562     | 650582     |
|             | 1365 lumen | 1400 lumen | 1110 lumen |

HALOSPHERE: dim to warm 3000K-1800K

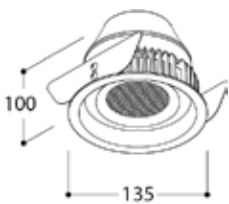


# ORBITAL LOUDSPEAKER

125 mm downlights



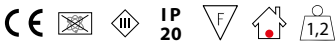
## LOUDSPEAKER



ANNULAR LED ARRAY 11,4W  
max. 350mA DC (32,5 Vf)  
dimmable PWM or CCR  
(Halosphere only CCR)  
beam 120°  
CRI 92  
(Halosphere CRI 97)

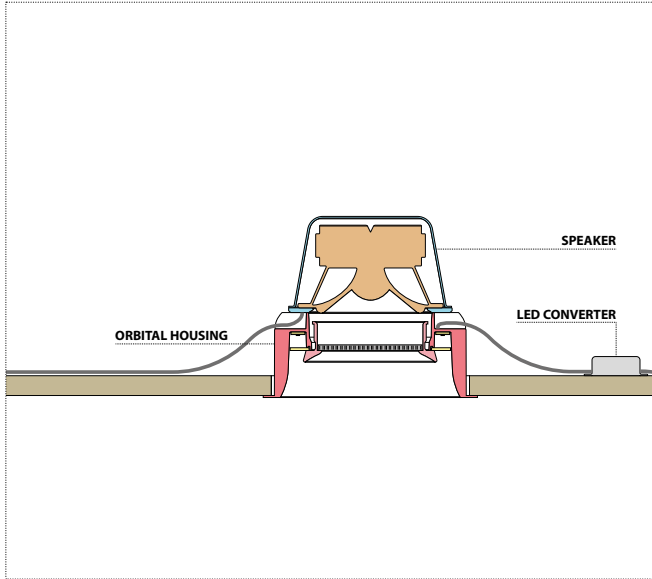
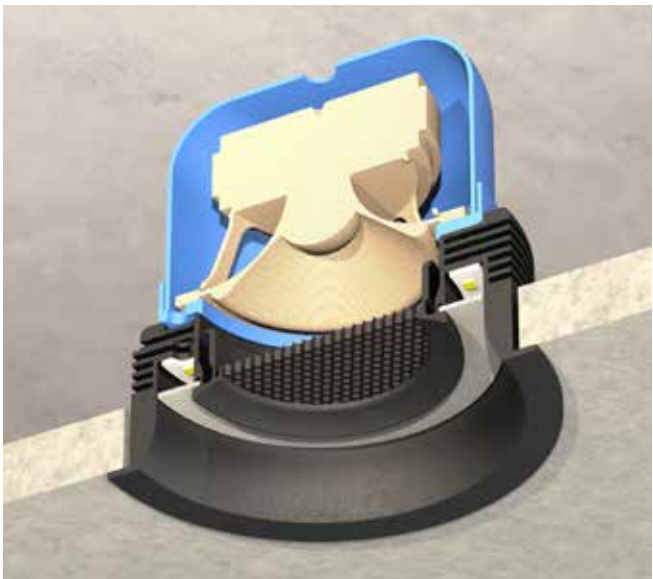
A+

125 mm  
Installation height 120 (105) mm



|             | 2700K      | 3000K      | HALOSPHERE |
|-------------|------------|------------|------------|
| TEXT. WHITE | 650847     | 650867     | 650887     |
| TEXT. BLACK | 650846     | 650866     | 650886     |
|             | 1365 lumen | 1400 lumen | 1110 lumen |

HALOSPHERE: dim to warm 3000K-1800K





### SOUND = 3" FULL RANGE SPEAKER

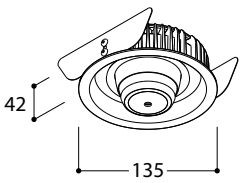
- MAX. POWER = 30W
- RATED POWER INPUT = 15W
- NOMINAL IMPEDANCE = 80HM
- DCR IMPEDANCE = 6,60HM
- SENSITIVITY 1W/1M = 88DB
- FREQUENCY RESPONSE = 75HZ-20KHZ

downlights  125 mm

# SMOKE DETECTOR ORBITAL











 SMOKE DETECTOR 



ANNULAR LED ARRAY 11,4W  
max. 350mA DC (32,5 Vf)  
dimmable PWM or CCR (Halosphere only CCR)  
beam 120°  
CRI 92 (Halosphere CRI 97)

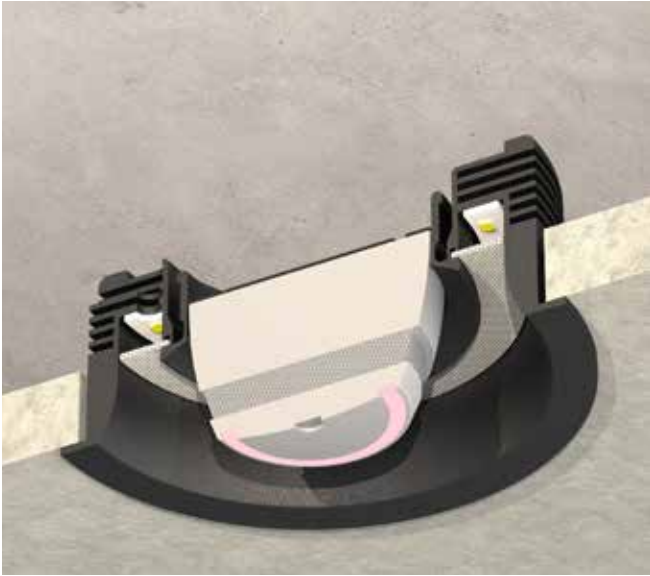
**A+**

 125 mm  
Installation height 60 (45) mm



|             | 2700K      | 3000K      | HALOSPHERE |
|-------------|------------|------------|------------|
| TEXT. WHITE | 650947     | 650967     | 650987     |
| TEXT. BLACK | 650946     | 650966     | 650986     |
|             | 1365 lumen | 1400 lumen | 1110 lumen |

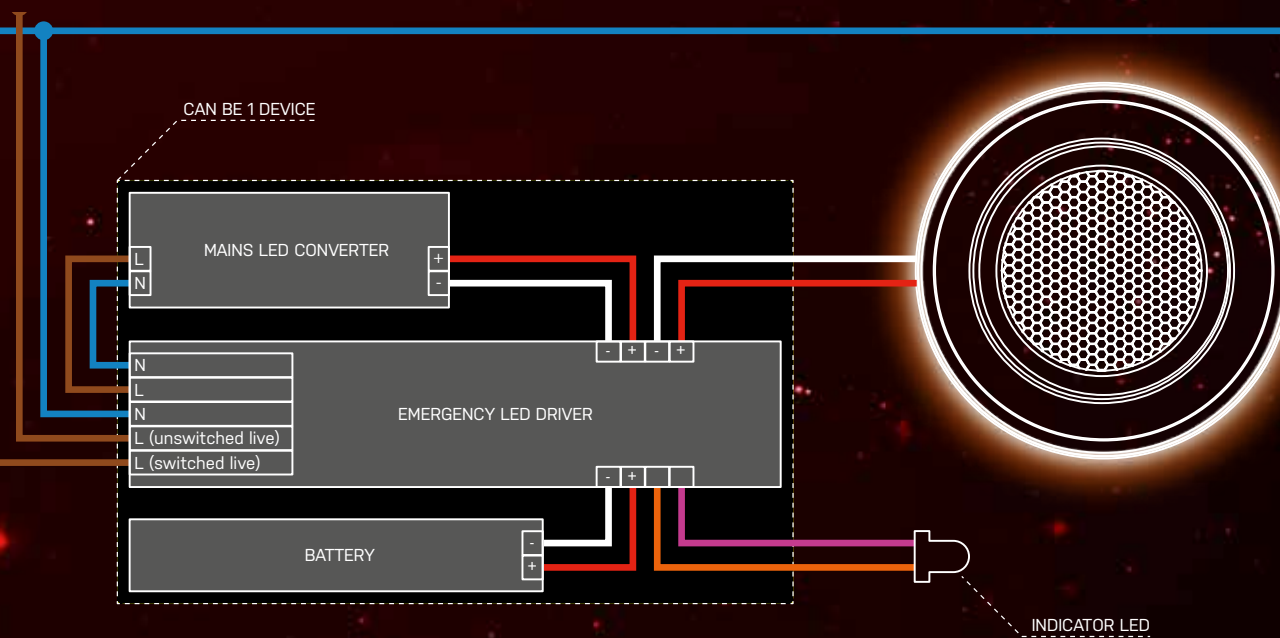
HALOSPHERE: dim to warm 3000K-1800K



**SMOKE**  
= OPTICAL SMOKE ALARM DEVICE

- INTEGRATED WIRELESS INTERLINK (MAX. 32 DEVICES) - RF: 868MHZ
- REPLACABLE 3V CR123A LITHIUM BATTERY 1600MAH
- MIN. 5 YEAR BATTERY LIFE
- LOW BATTERY INDICATION
- 100M OPEN FIELD RANGE
- VISIBLE INDICATOR

# WIRING DIAGRAM ORBITAL + EMERGENCY





# BASIC VALVES **ORBITAL**



**ORBITAL BASIC TRIMLESS  
FLOW CONTROL  
(VENTILATION VALVE)**

|                               |               |
|-------------------------------|---------------|
|                               | NO LIGHT      |
| TEXT. WHITE                   | <b>650207</b> |
| TEXT. BLACK                   | <b>650206</b> |
| ORDER/INFO: WWW.ELEKTRENDS.BE |               |



**ORBITAL BASIC TRIMLESS  
THROUGH FLOW  
(VENTILATION VALVE)**

|                               |               |
|-------------------------------|---------------|
|                               | NO LIGHT      |
| TEXT. WHITE                   | <b>650107</b> |
| TEXT. BLACK                   | <b>650106</b> |
| ORDER/INFO: WWW.ELEKTRENDS.BE |               |



**ORBITAL BASIC LEAF  
FLOW CONTROL  
(VENTILATION VALVE)**

|                               |               |
|-------------------------------|---------------|
|                               | NO LIGHT      |
| TEXT. WHITE                   | <b>650707</b> |
| TEXT. BLACK                   | <b>650706</b> |
| ORDER/INFO: WWW.ELEKTRENDS.BE |               |



**ORBITAL BASIC LEAF  
THROUGH FLOW  
(VENTILATION VALVE)**

|                               |               |
|-------------------------------|---------------|
|                               | NO LIGHT      |
| TEXT. WHITE                   | <b>650607</b> |
| TEXT. BLACK                   | <b>650606</b> |
| ORDER/INFO: WWW.ELEKTRENDS.BE |               |

## TAL ARCHITECTURAL LIGHTING & ELEK TRENDS PRODUCTIONS

Orbital is the result of a collaboration between 2 different companies, each being a specialist in its domain. TAL as specialist in architectural lighting has taken care of the lighting concept, ETP as specialist in mechanical ventilation has taken care of the ventilation part. Orbital is the symbiosis of lighting and ventilation.

