





# 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 colourtemperature 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 *Epicum*

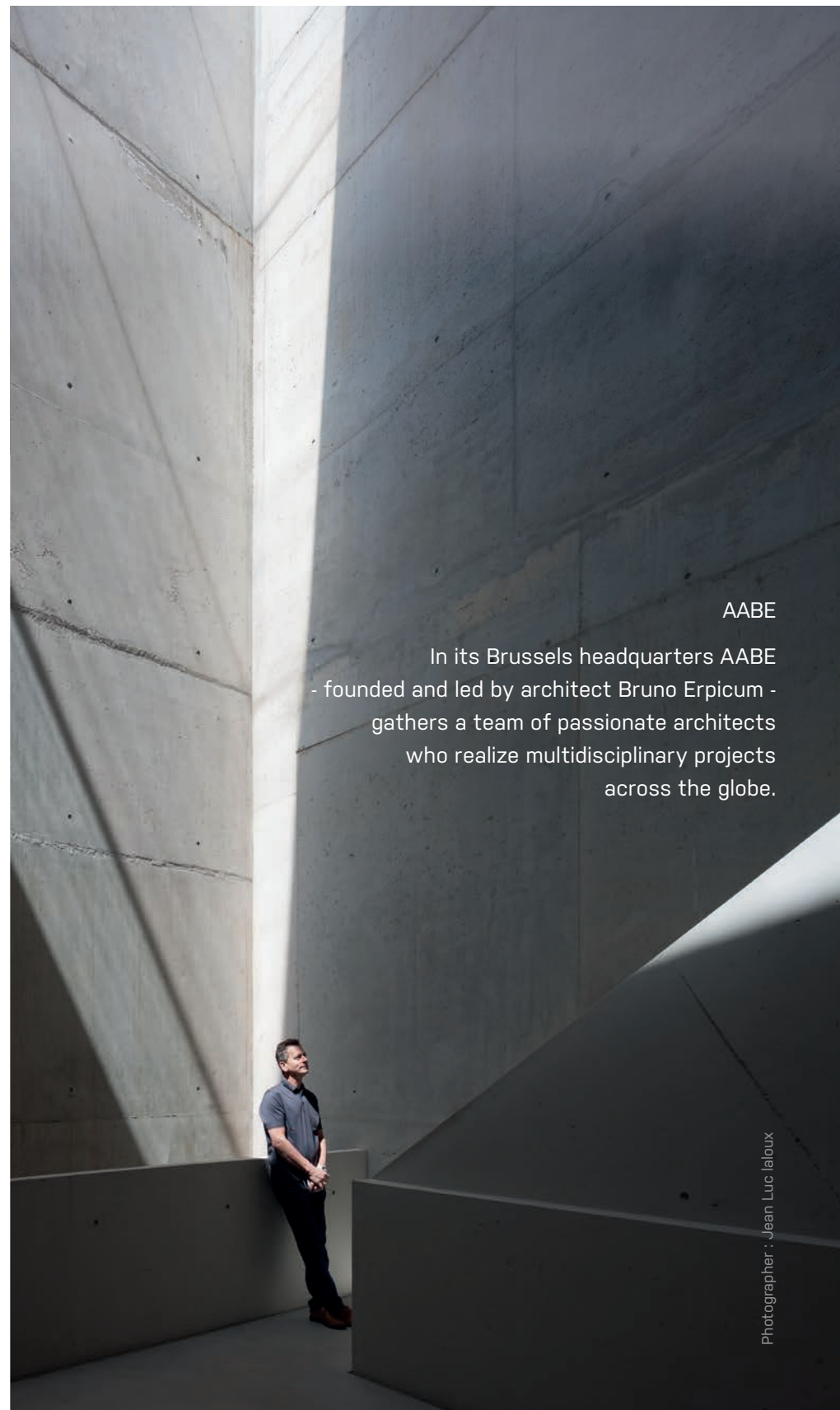


**Modern Architecture is limitless.  
Throughout the process  
of designing a product  
– from the basic concept to  
determining the smallest detail –  
the ambition should remain the same:  
eliminate all redundant elements  
in view of retaining only the essential.**

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.

Photographer : Jean Luc Laloux

# ABOUT THE DESIGNER

Bruno Epicum

"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 Epicum, 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.



SMOKE



VENTILATION  
FLOW CONTROL



VENTILATION  
THROUGH FLOW



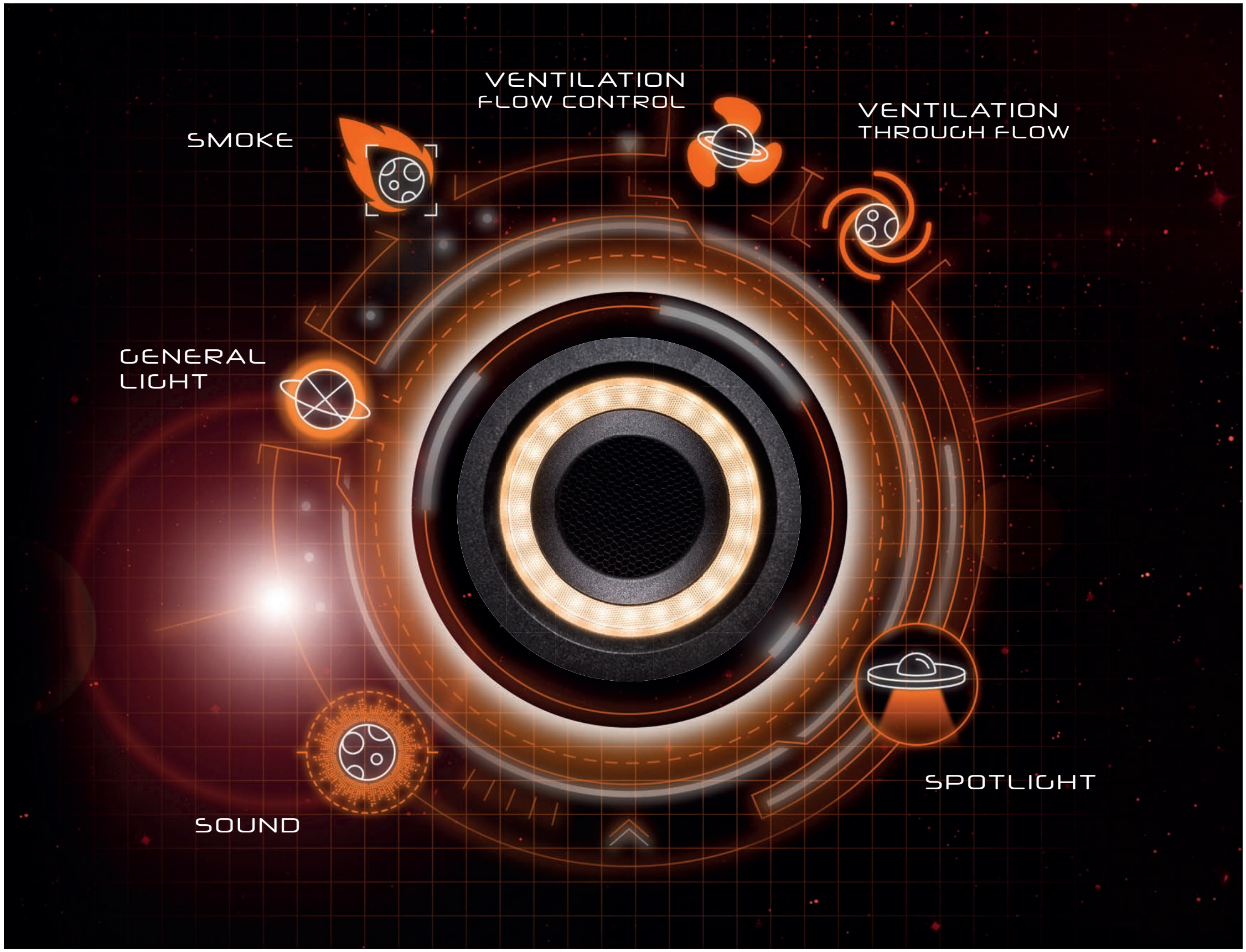
GENERAL  
LIGHT



SOUND



SPOTLIGHT



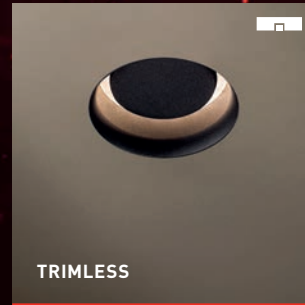


# ORBITAL

**TAL**  
TECHNICAL  
ARCHITECTURAL  
LIGHTING

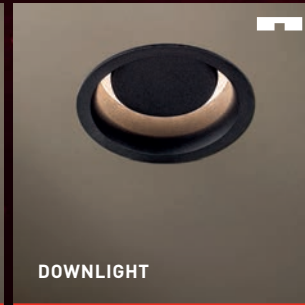


by *Epicum*



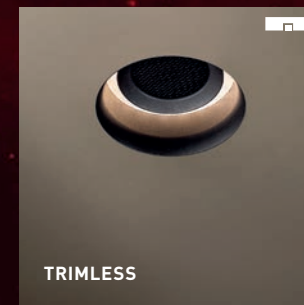
TRIMLESS

ORBITAL  
+ FLOW CONTROL



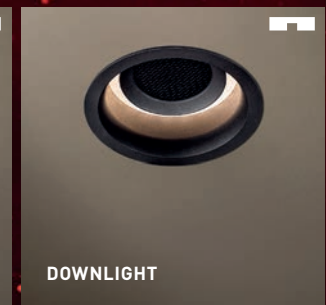
DOWNLIGHT

ORBITAL  
+ FLOW CONTROL



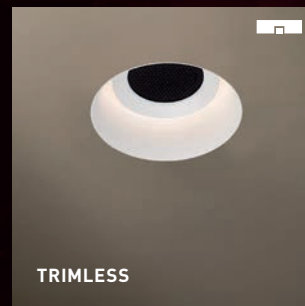
TRIMLESS

ORBITAL  
+ THROUGH FLOW



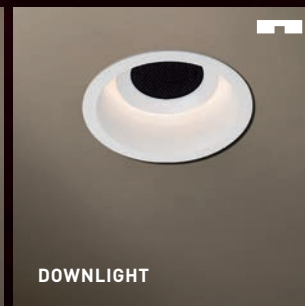
DOWNLIGHT

ORBITAL  
+ THROUGH FLOW



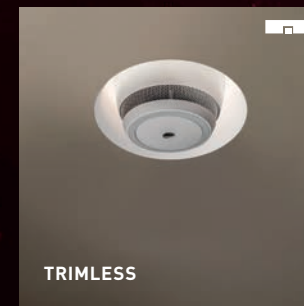
TRIMLESS

ORBITAL  
+ LOUDSPEAKER



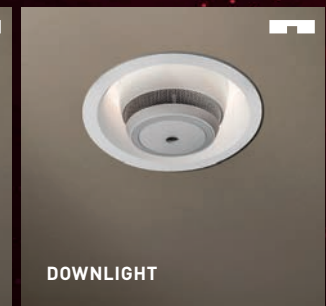
DOWNLIGHT

ORBITAL  
+ LOUDSPEAKER



TRIMLESS

ORBITAL  
+ SMOKE DETECTOR



DOWNLIGHT

ORBITAL  
+ SMOKE DETECTOR

One futuristic lighting fixture has it all.

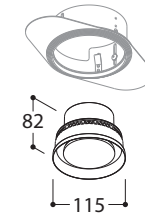


# ORBITAL FLOW CONTROL

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+**

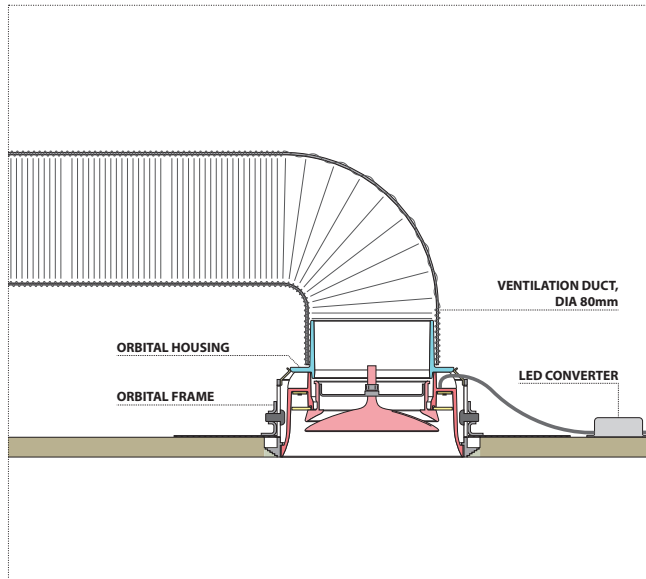
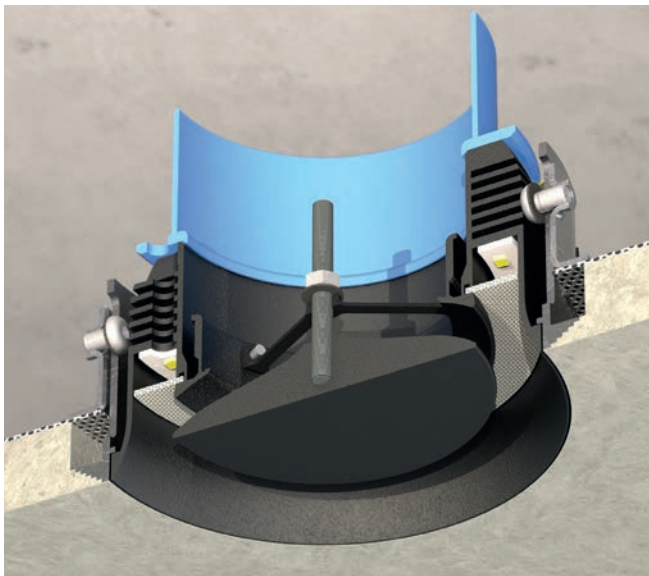
140 mm  
 Installation height 180 mm  
 (when using flexible ventilation  
 valve ø80mm)



	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

CONVERTER p.554 INTAL MARS CATALOGUE HALOSPHERE: dim to warm 3000K-1800K



### FLOW CONTROL = VENTILATION VALVE

- SUPPLY VALVE / EXTRACT VALVE
- INCORPORATED ADJUSTABLE FLOW REGULATOR

### MAX FLOW (THEORETICAL)

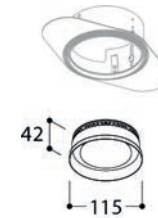
- @V = 1,0M/S: 47M³/S
- @V = 2,0M/S: 94M³/S
- @V = 3,0M/S: 141M³/S

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)



140 mm  
 Installation height 130 mm

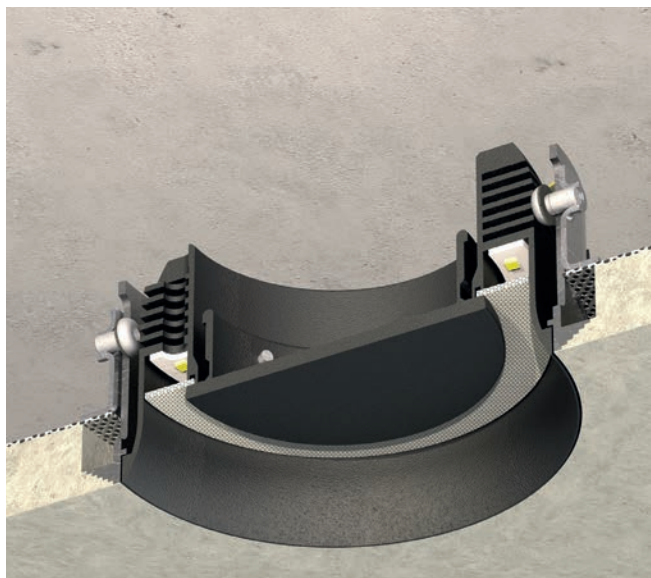


	2700K	3000K	HALOSPHERE
TEXT. WHITE	650047	650067	650087
TEXT. BLACK	650046	650066	650086
	1365 lumen	1400 lumen	1110 lumen

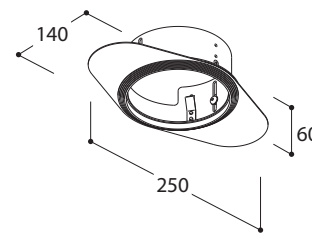
TRIMLESS FRAME 701112  $\phi$ 140 x H 130 mm

CONVERTER p.554 IN TAL MARS CATALOGUE HALOSPHERE: dim to warm 3000K-1800K

## TRIMLESS FRAME



140mm

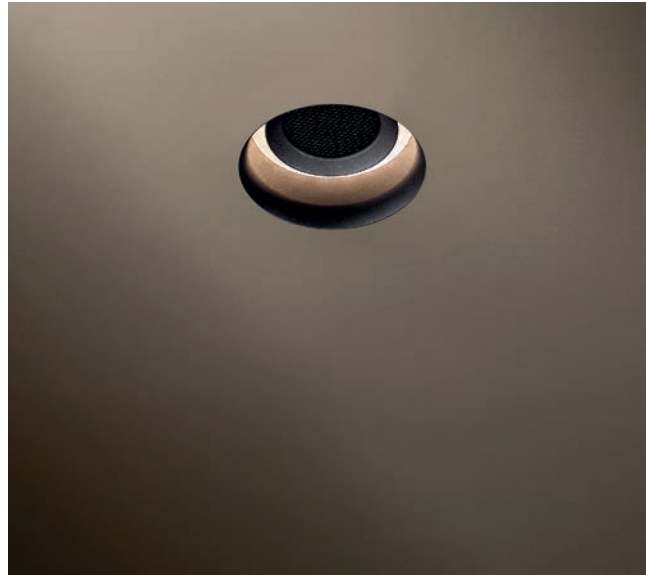


TRIMLESS FRAME 701112

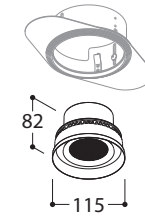


# ORBITAL THROUGH FLOW

trimless



## THROUGH FLOW TRIMLESS



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

**A+**

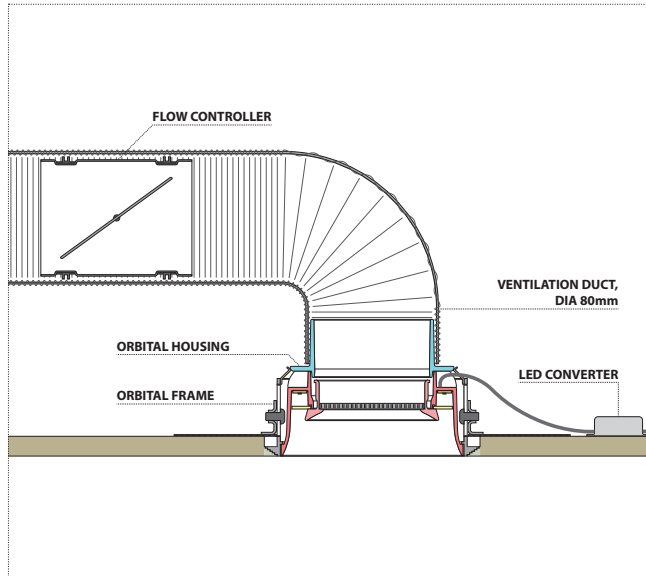
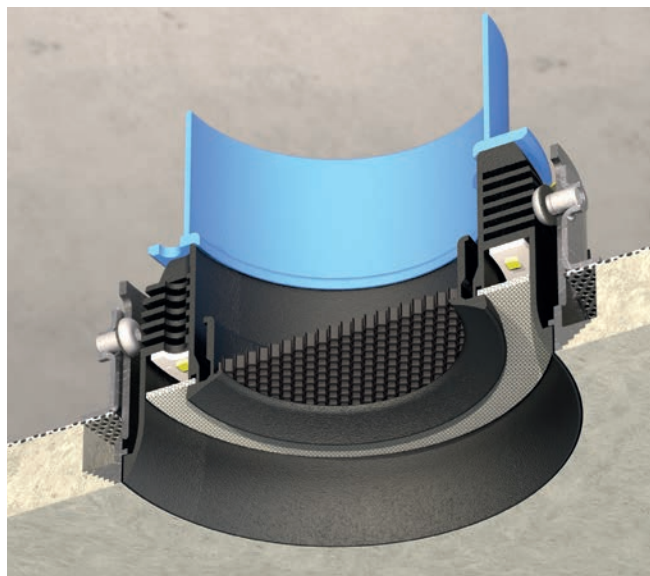
⌀ 140 mm  
 Installation height 180 mm  
 (when using flexible ventilation  
 valve ø80mm)



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

◉ TRIMLESS FRAME 701112 ⌀140 x H 130 mm

CONVERTER p.554 INTAL MARS CATALOGUE HALOSPHERE: dim to warm 3000K-1800K



### THROUGH FLOW = VENTILATION VALVE

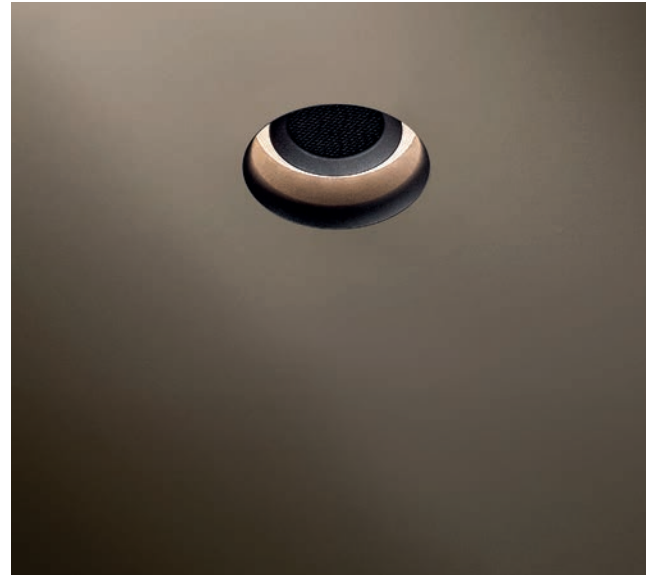
- SUPPLY VALVE / EXTRACT VALVE
- FLOW REGULATOR MUST BE PROVIDED IN AIR DUCTS

### MAX FLOW (THEORETICAL)

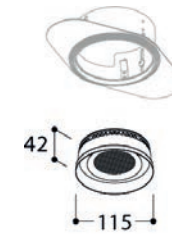
- @V = 1,0M/S: 42M³/S
- @V = 2,0M/S: 84M³/S
- @V = 3,0M/S: 126M³/S

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

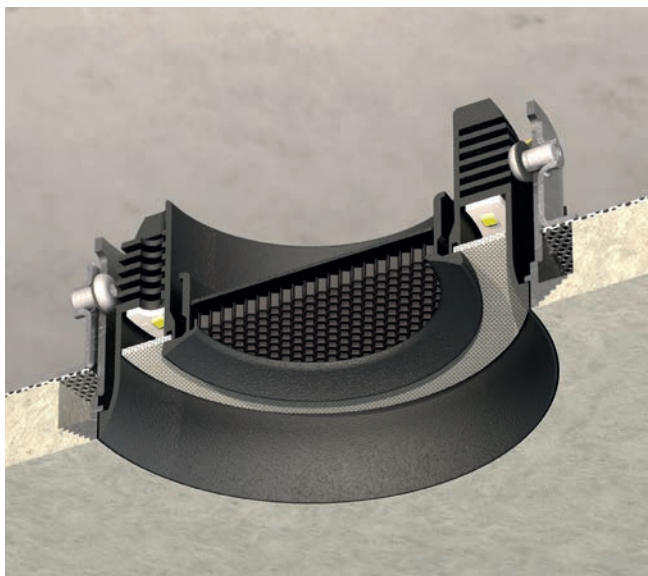
   **IP 20**   

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

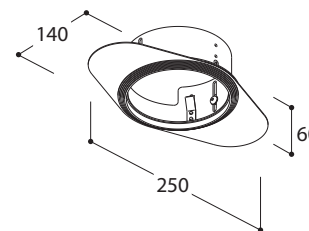
 **TRIMLESS FRAME** **701112**  140 x H 130 mm

CONVERTER p.554 IN TAL MARS CATALOGUE HALOSPHERE: dim to warm 3000K-1800K

## TRIMLESS FRAME



 140mm

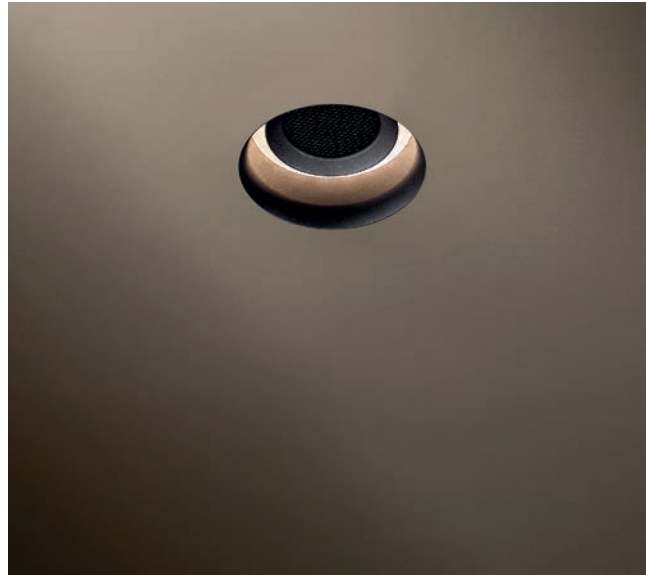


TRIMLESS FRAME **701112**

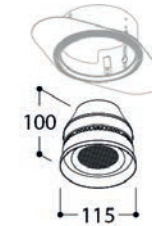


# ORBITAL LOUDSPEAKER

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+**

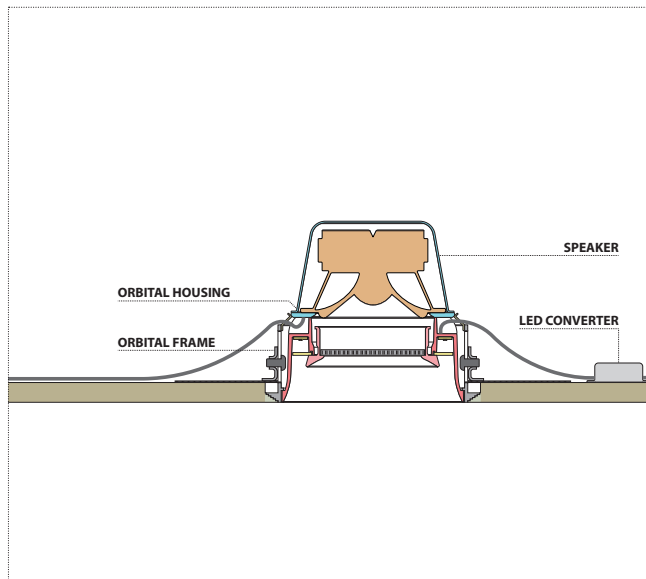
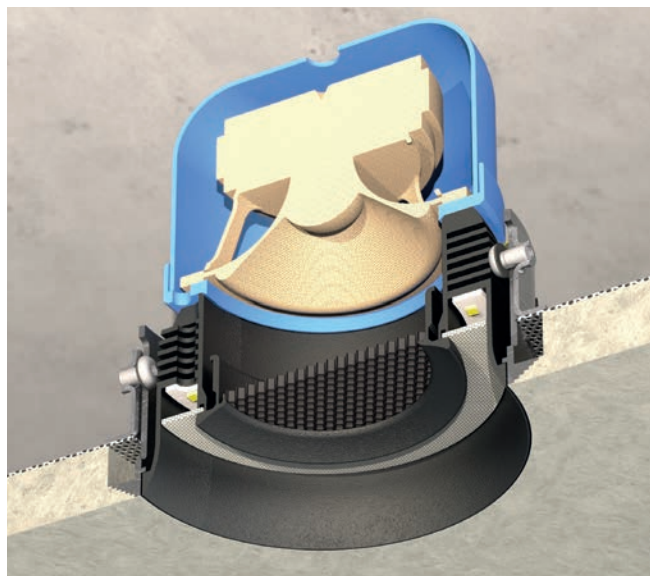
140 mm  
 Installation height 130 mm



	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

CONVERTER p.554 IN TAL MARS CATALOGUE HALOSPHERE: dim to warm 3000K-1800K



### SOUND = 3" FULL RANGE SPEAKER

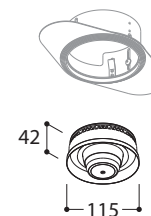
- MAX. POWER = 30W
- RATED POWER INPUT = 15W
- NOMINAL IMPEDANCE = 80HM
- DCR IMPEDANCE = 6,60HM
- SENSITIVITY 1W/1M = 88DB
- FREQUENCY RESPONSE = 75HZ-20KHZ

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)



140 mm  
Installation height 130 mm

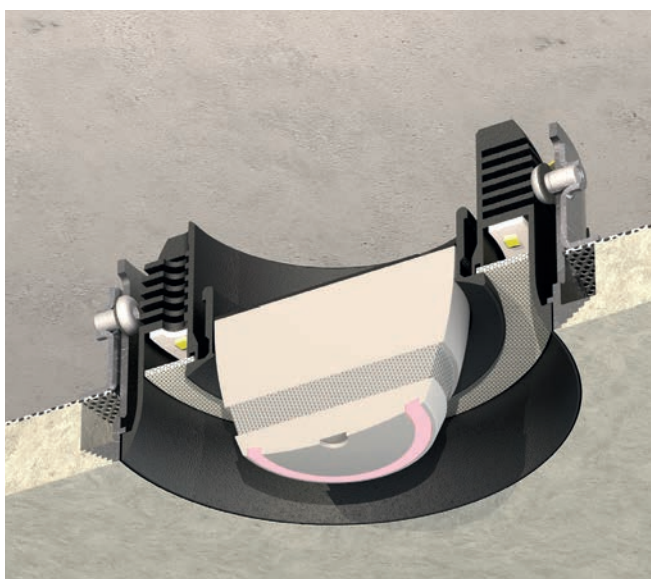


	2700K	3000K	HALOSPHERE
TEXT. WHITE	650447	650467	650487
TEXT. BLACK	650446	650466	650486
	1365 lumen	1400 lumen	1110 lumen

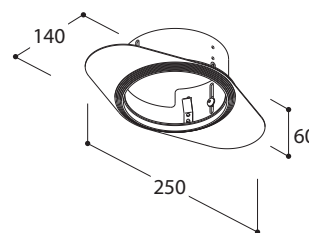
TRIMLESS FRAME 701112 140 x H 130 mm

CONVERTER p.554 IN TAL MARS CATALOGUE 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

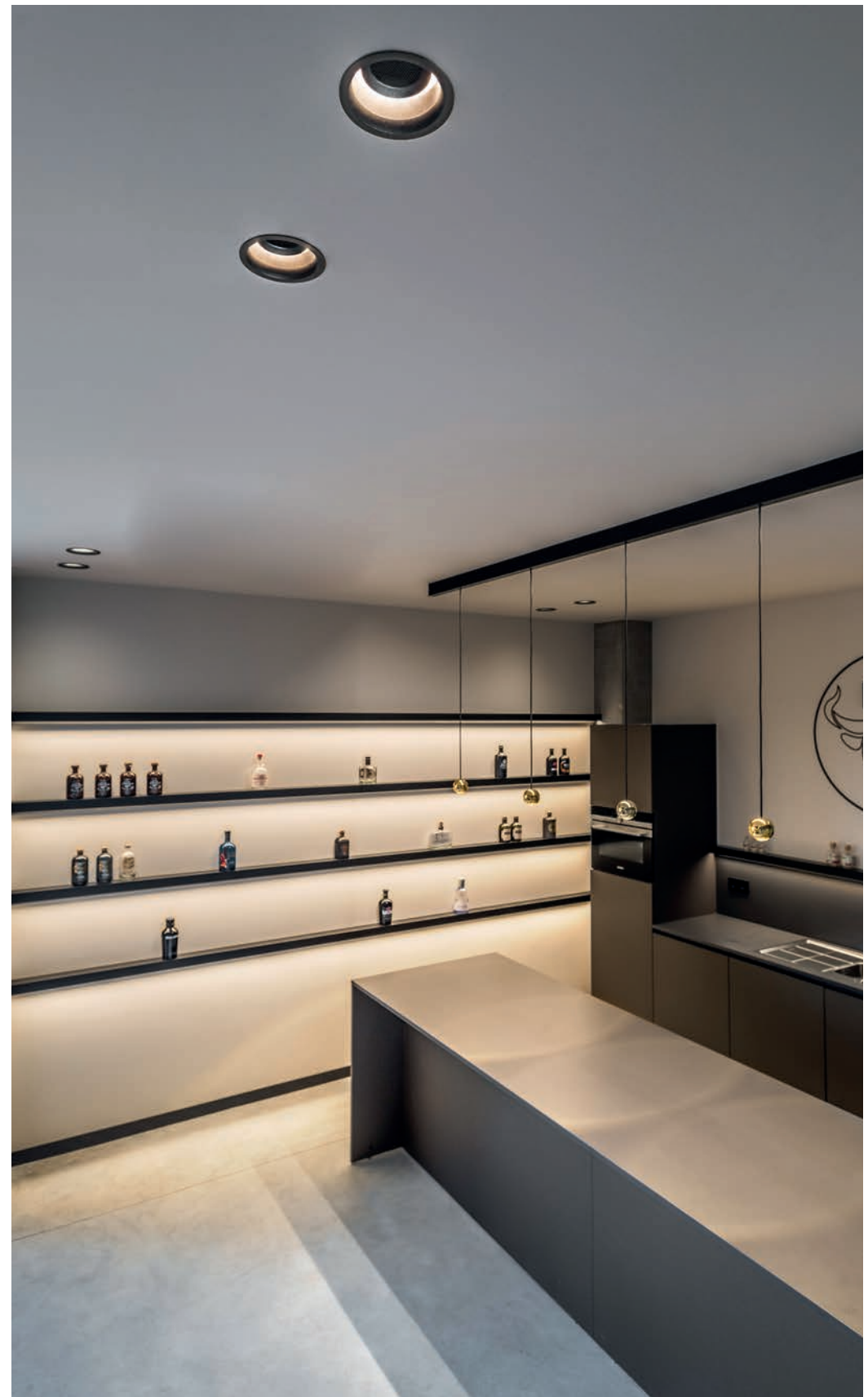








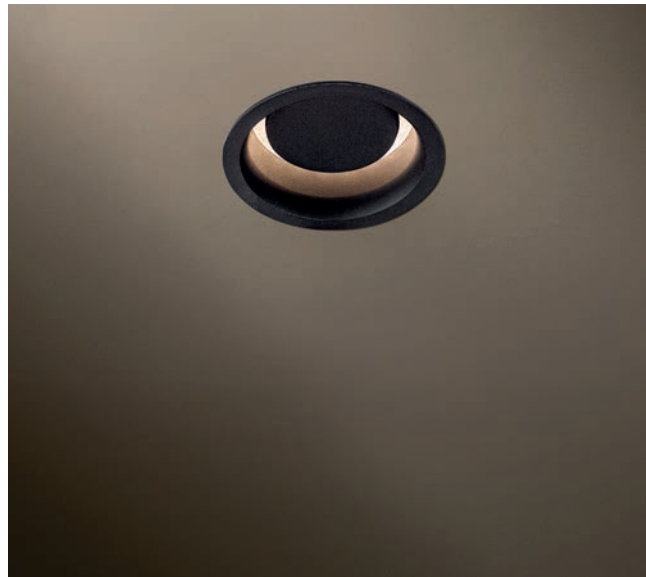
*"Eliminate all redundant in view  
of retaining only the essential."*



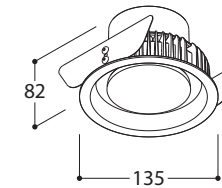


# ORBITAL FLOW CONTROL

 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)

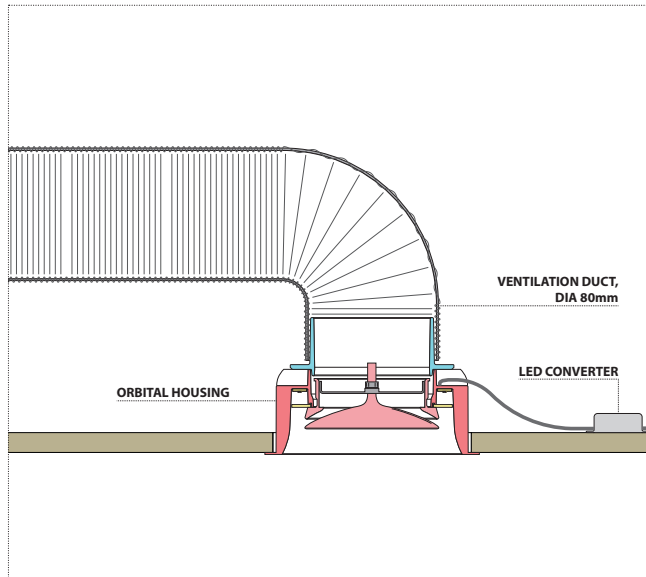
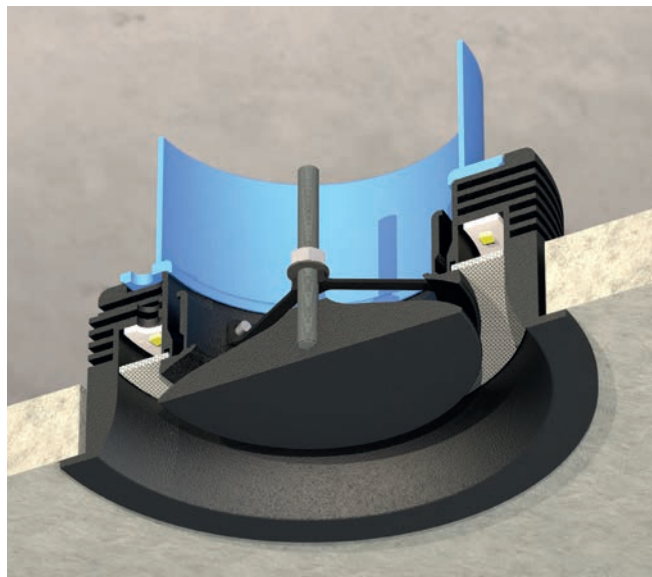
**A+**

 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

CONVERTER p.554 INTAL MARS CATALOGUE HALOSPHERE: dim to warm 3000K-1800K



### FLOW CONTROL = VENTILATION VALVE

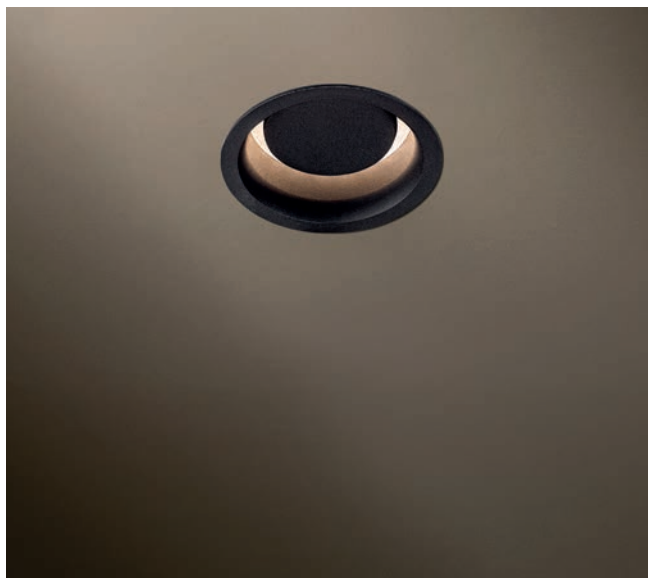
- SUPPLY VALVE / EXTRACT VALVE
- INCORPORATED ADJUSTABLE FLOW REGULATOR

### MAX FLOW (THEORETICAL)

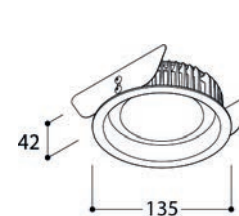
- @V = 1,0M/S: 47M³/S
- @V = 2,0M/S: 94M³/S
- @V = 3,0M/S: 141M³/S

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)

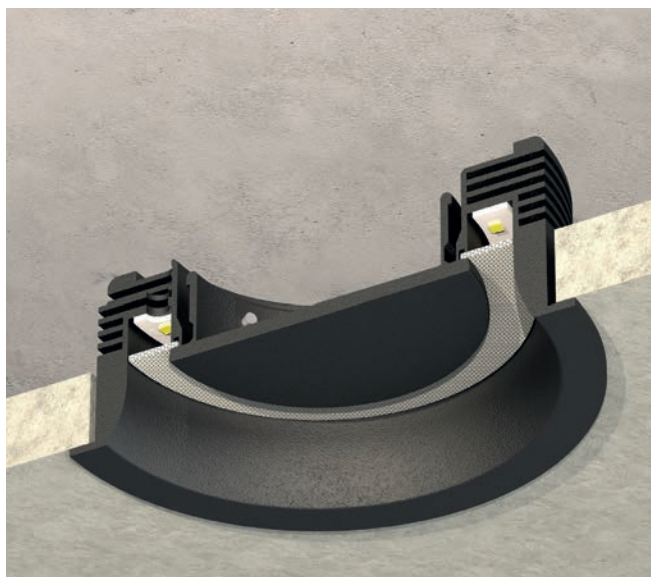
**A+**

 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

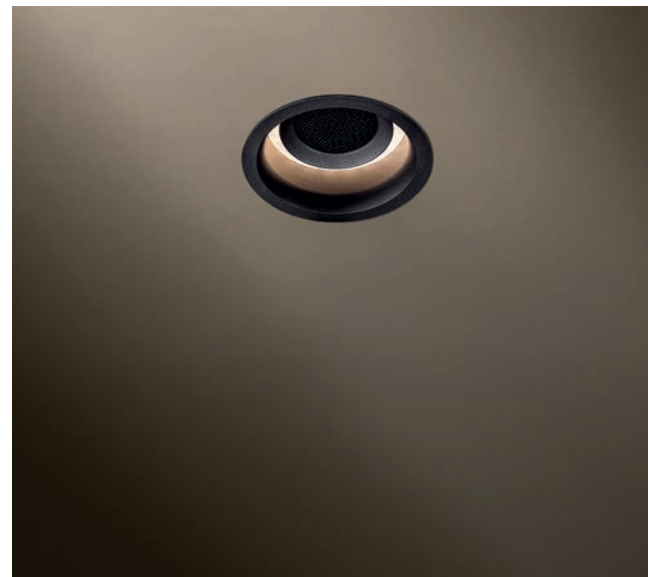
CONVERTER p.554 IN TAL MARS CATALOGUE HALOSPHERE: dim to warm 3000K-1800K



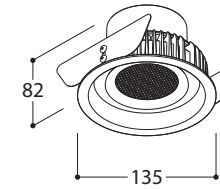


# ORBITAL THROUGH FLOW

 125 mm downlights



## THROUGH FLOW



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

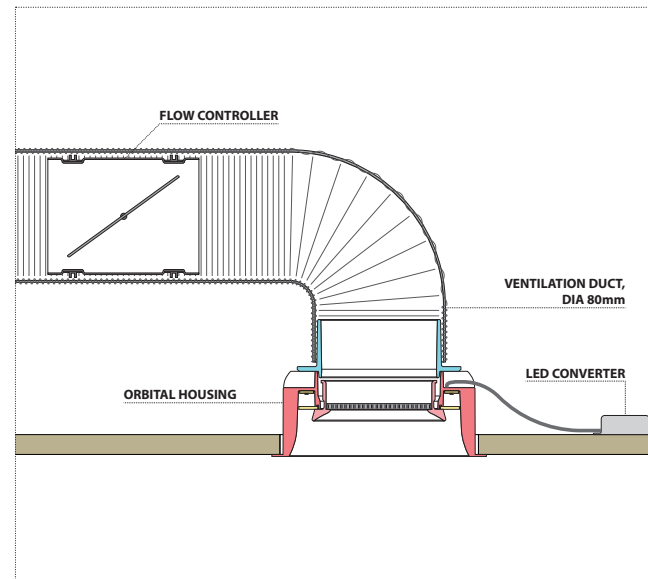
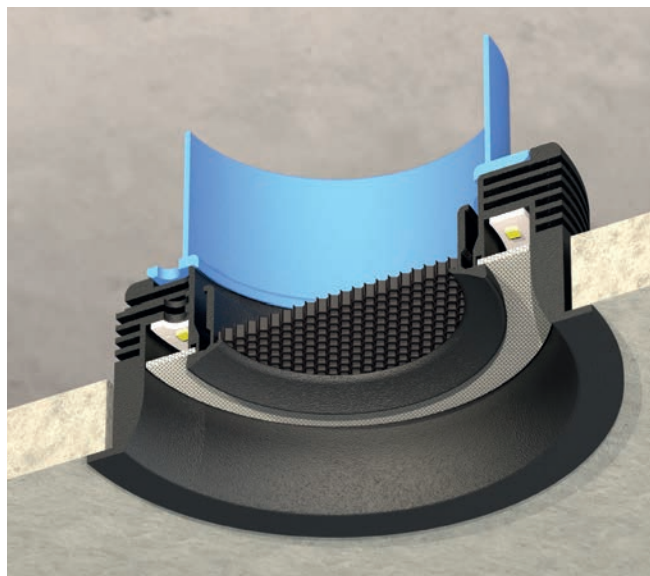
**A+**

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



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

CONVERTER p.554 INTAL MARS CATALOGUE 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)

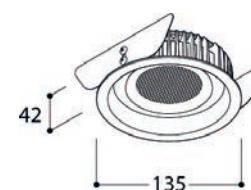
- @V = 1,0M/S: 42M³/S
- @V = 2,0M/S: 84M³/S
- @V = 3,0M/S: 126M³/S

downlights  125 mm

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



## THROUGH FLOW LOOK



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

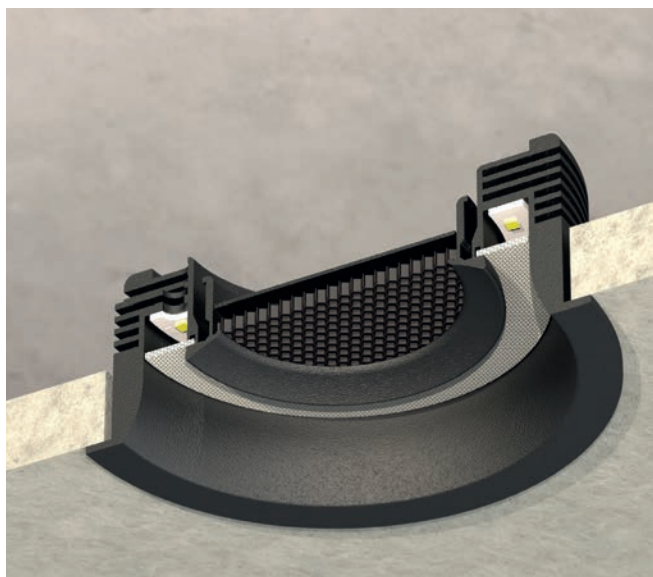
**A+**

 125 mm  
 Installation height 60 (45) mm

   **IP 20**   

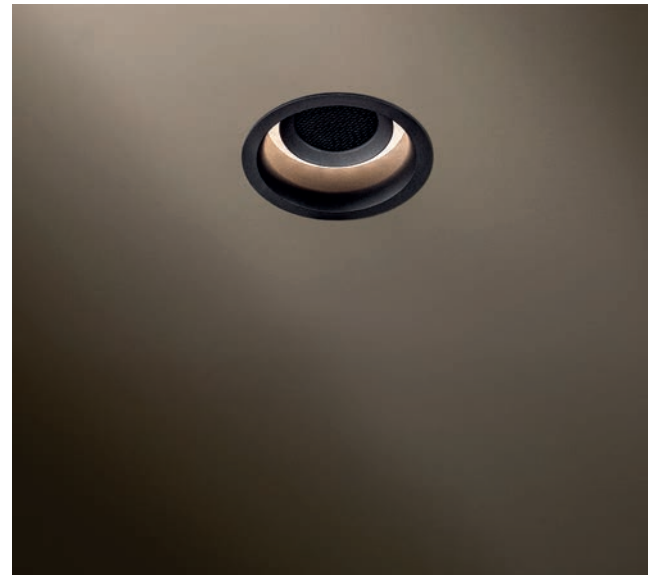
	2700K	3000K	HALOSPHERE
TEXT. WHITE	650544	650564	650584
TEXT. BLACK	650542	650562	650582
	1365 lumen	1400 lumen	1110 lumen

CONVERTER p.554 IN TAL MARS CATALOGUE HALOSPHERE: dim to warm 3000K-1800K

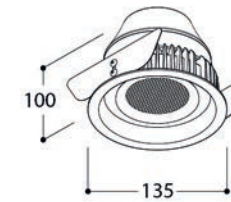


# ORBITAL LOUDSPEAKER

 125 mm downlights




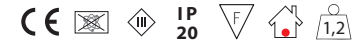
## LOUDSPEAKER



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)

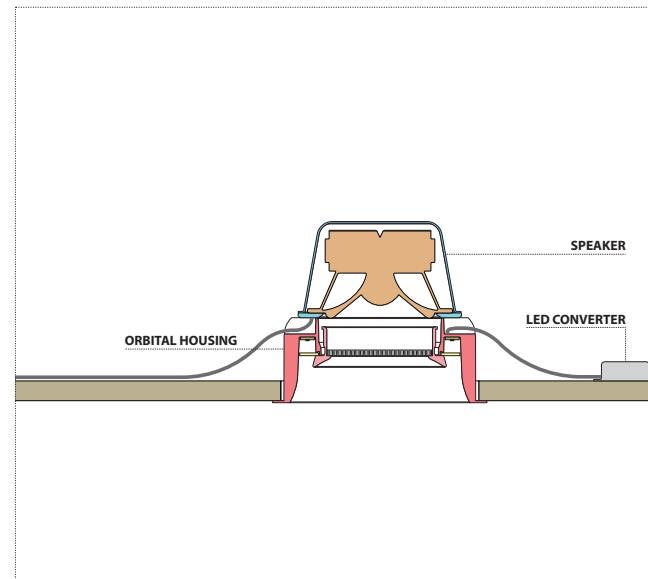
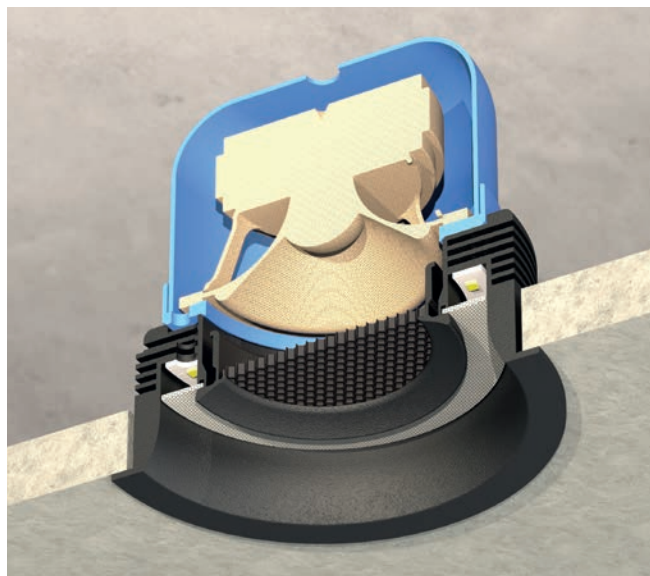
**A+**

 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

CONVERTER p.554 INTAL MARS CATALOGUE 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

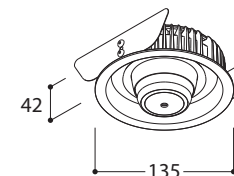


downlights  125 mm

# SMOKE DETECTOR **ORBITAL**



## SMOKE DETECTOR



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

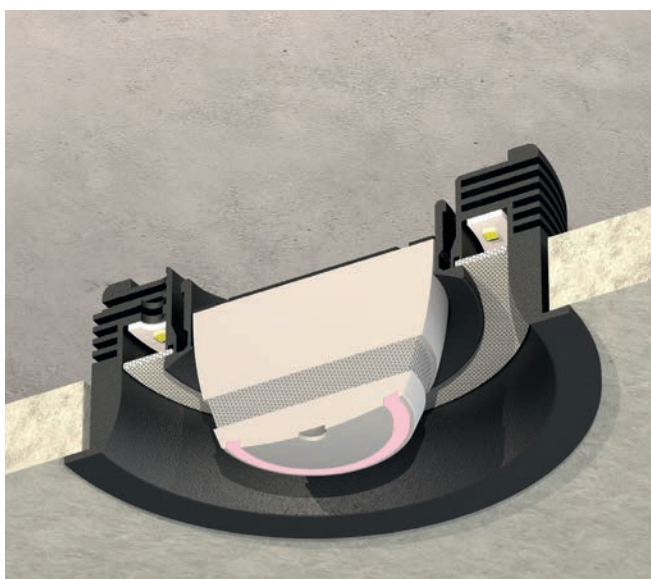


 125 mm  
Installation height 60 (45) mm



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

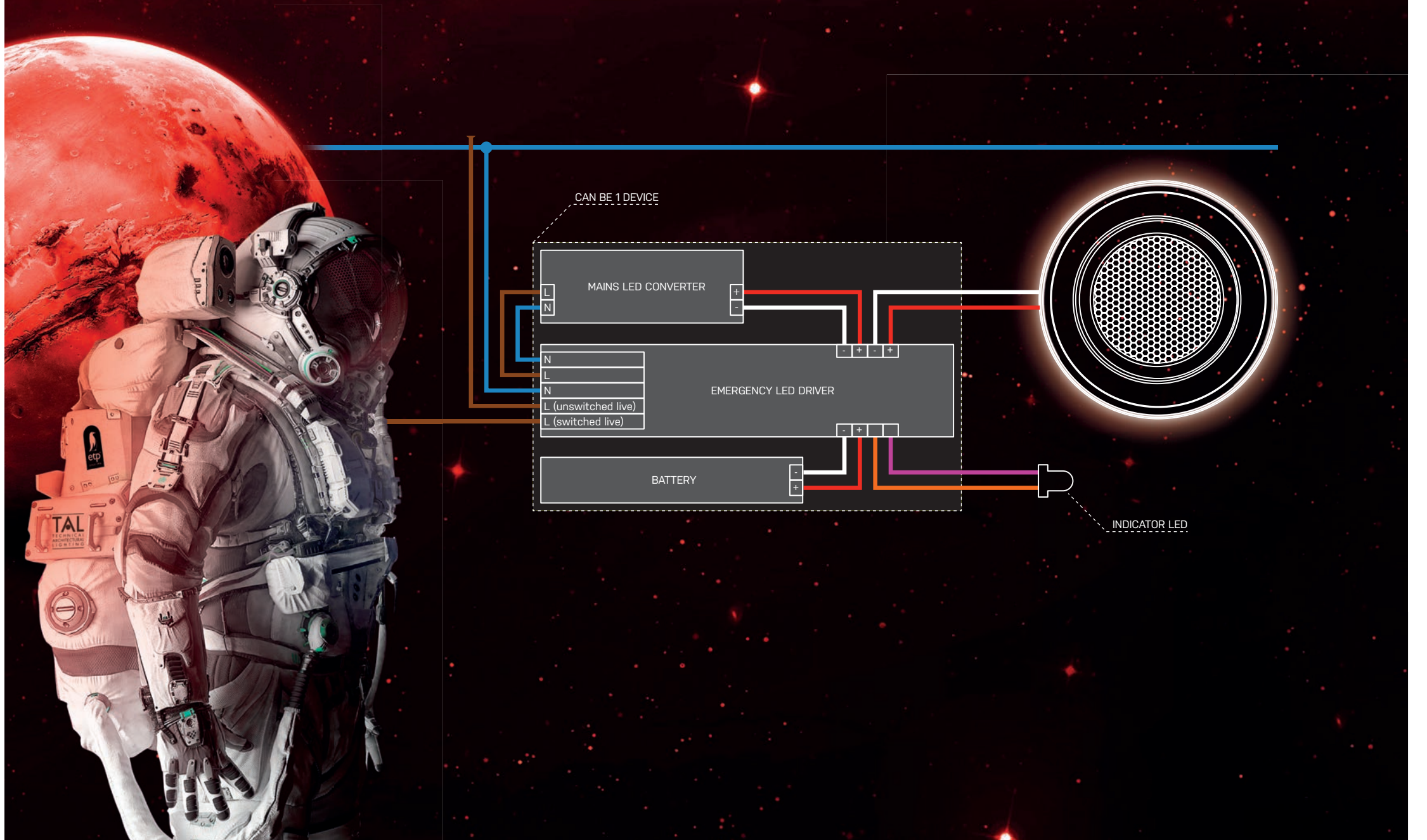
CONVERTER p.554 IN TAL MARS CATALOGUE HALOSPHERE: dim to warm 3000K-1800K



### **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](http://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](http://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](http://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](http://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.

