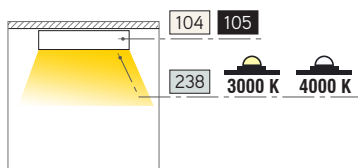
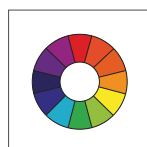
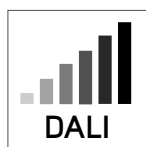


**descrição** description ·

- Luminária de aplicação saliente com tecnologia LED;
  - Desenvolvido com base na tecnologia LED com opção de cor Warm White (3000 K) ou Neutral White (4000 K);
  - Corpo construído em alumínio com difusor em Policarbonato Frost, que combina um elevado coeficiente de transmissão e elevada difusão de luz;
  - Disponível em cinco tamanhos de modo a poder a ser aplicada numa grande diversidade de espaços, desde zonas amplas de grande dimensão até zonas mais pequenas (ex: hall entrada);
  - Em dois acabamentos padrão (branco e preto mate) ou personalizado na cor adequada a cada espaço (sob. consulta);
  - Astra Surface 150 LED proporciona todos os benefícios da tecnologia LED: baixo consumo de energia e longo período de vida útil (60 000 horas), com baixos custos de instalação e manutenção;
  - Inclui conjunto de acessórios de fixação.
- LED lighting luminaire for surface mounting;
  - Engineered around LED technology, available in light colours 3000 K (Warm White) and 4000 K (Neutral White);
  - Aluminium housing with Frost polycarbonate diffuser combining high light transmission coefficient and a high diffusion;
  - Five sizes are available to suit a multitude of environments, from large areas to smaller areas (example: entrance hall)
  - Two standard finishes (matt white and matt black) or customized colour to suit each environment on request;
  - Astra Surface 150 LED provides all the benefits of LED technology: low energy consumption and long operating life (60 000 hours), with low installation and maintenance costs;
  - Mounting accessory set is included.

**pormenores** details ·

- LED de elevada eficiência energética com índice de restituição cromática >80 . High efficacy LED with >80 colour rendering index
- Disponível em versões LED dimáveis com fonte de alimentação DALI . Dimmable LED versions with DALI power supply
- **MULTICOLOR** - Outras cores sob consulta . Other colours on request

**acabamento** finishing ·

- 104 Branco mate RAL 9003 . RAL 9003 matt White
- 105 Preto mate RAL 9005 . RAL 9005 matt Black

## simbologia symbols ·



## características do difusor

diffuser features ·

**238** Policarbonato frost . *Frost polycarbonate*

## características do LED

LED features ·

**3000 K** **3000 K** - Branco Quente . *Warm White* - **128 -160 lm/W** **tp=65°C** - Eficiência do LED . *LED efficiency*

**4000 K** **4000 K** - Branco Neutro . *Neutral White* - **140 -167 lm/W** **tp=65°C** - Eficiência do LED . *LED efficiency*

- **CRI > 80** - LED de elevada eficiência energética com índice de restituição cromática . *High efficacy LED colour rendering index*

- **60 000 horas** - Tempo vida útil . *Long lifetime*

- **MacAdams 3** - Estreita tolerância na variação de cor do LED . *Close tolerance on the LED colour variation*

- **L70** - Manutenção do fluxo luminoso do LED . *LED luminous flux maintenance*

- **F10** - Degradação ou mortalidade do LED . *LED degradation or mortality*

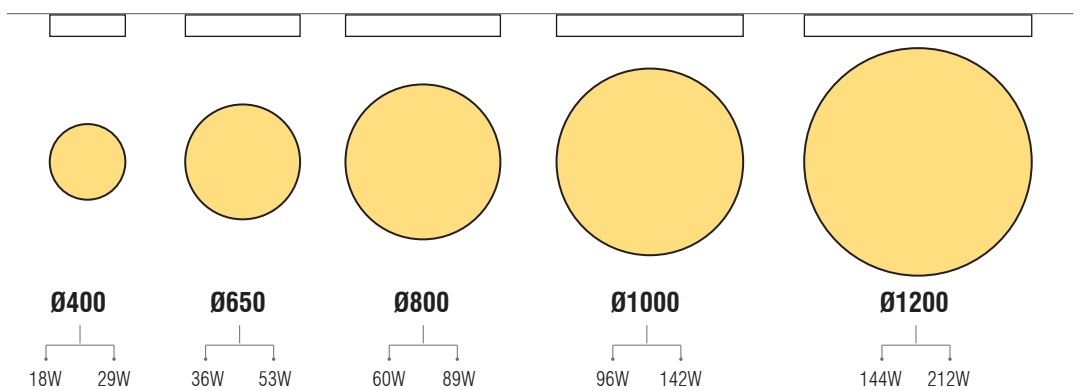
- **120°** - Ângulo de distribuição de luz do LED . *LED light distribution angle*

## opções options ·

**ON/OFF** - Fonte de alimentação electrónica . *Electronic control gear*

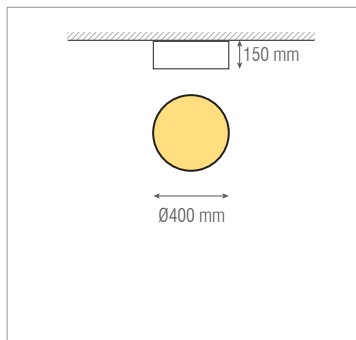
**DALI** - Fonte de alimentação compatível com DALI . *DALI dimmable control gear*

## tamanhos sizes ·



**Ø400mm**

**Warm White (3000 K)**



**A Astra Surface 150 - 104** Branco mate RAL 9003 . *RAL 9003 matt white*

Ref.	W				ON/OFF	DALI
Ø400	18W	LED	6,50	31,0	33.06.30.400000	33.06.30.400004
Ø400	29W	LED	6,50	31,0	33.06.30.400001	33.06.30.400005



**A Astra Surface 150 - 105** Preto mate RAL 9005 . *RAL 9005 matt Black*

Ref.	W				ON/OFF	DALI
Ø400	18W	LED	6,50	31,0	33.06.30.400008	33.06.30.400012
Ø400	29W	LED	6,50	31,0	33.06.30.400009	33.06.30.400013

**Neutral White (4000 K)**

**A Astra Surface 150 - 104** Branco mate RAL 9003 . *RAL 9003 matt white*

Ref.	W				ON/OFF	DALI
Ø400	18W	LED	6,50	31,0	33.06.30.400002	33.06.30.400006
Ø400	29W	LED	6,50	31,0	33.06.30.400003	33.06.30.400007

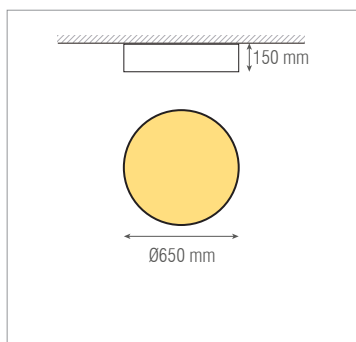


**A Astra Surface 150 - 105** Preto mate RAL 9005 . *RAL 9005 matt Black*

Ref.	W				ON/OFF	DALI
Ø400	18W	LED	6,50	31,0	33.06.30.400010	33.06.30.400014
Ø400	29W	LED	6,50	31,0	33.06.30.400011	33.06.30.400015

**Ø650mm**

**Warm White (3000 K)**



**A Astra Surface 150 - 104** Branco mate RAL 9003 . *RAL 9003 matt white*

Ref.	W				ON/OFF	DALI
Ø650	36W	LED	13,0	77,0	33.06.30.600000	33.06.30.600004
Ø650	53W	LED	13,0	77,0	33.06.30.600001	33.06.30.600005



**A Astra Surface 150 - 105** Preto mate RAL 9005 . *RAL 9005 matt Black*

Ref.	W				ON/OFF	DALI
Ø650	36W	LED	13,0	77,0	33.06.30.600008	33.06.30.600012
Ø650	53W	LED	13,0	77,0	33.06.30.600009	33.06.30.600013

**Neutral White (4000 K)**

**A Astra Surface 150 - 104** Branco mate RAL 9003 . *RAL 9003 matt white*

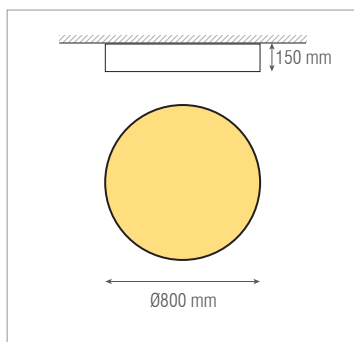
Ref.	W				ON/OFF	DALI
Ø650	36W	LED	13,0	77,0	33.06.30.600002	33.06.30.600006
Ø650	53W	LED	13,0	77,0	33.06.30.600003	33.06.30.600007



**A Astra Surface 150 - 105** Preto mate RAL 9005 . *RAL 9005 matt Black*




Ref.	W				ON/OFF	DALI
Ø650	36W	LED	13,0	77,0	33.06.30.600010	33.06.30.600014
Ø650	53W	LED	13,0	77,0	33.06.30.600011	33.06.30.600015

## Ø800mm






## Warm White (3000 K)

**A Astra Surface 150 - 104** Branco mate RAL 9003 . *RAL 9003 matt white*




Ref.	W				ON/OFF	DALI
Ø800	60W	LED	17,7	114,5	33.06.30.800000	33.06.30.800004
Ø800	89W	LED	17,7	114,5	33.06.30.800001	33.06.30.800005


**A Astra Surface 150 - 105** Preto mate RAL 9005 . *RAL 9005 matt Black*




Ref.	W				ON/OFF	DALI
Ø800	60W	LED	17,7	114,5	33.06.30.800008	33.06.30.800012
Ø800	89W	LED	17,7	114,5	33.06.30.800009	33.06.30.800013

## Neutral White (4000 K)

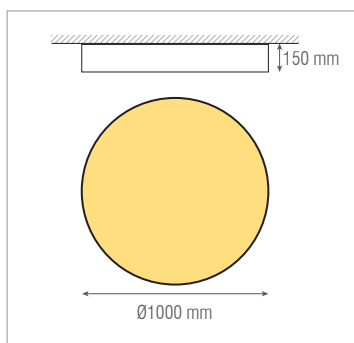
**A Astra Surface 150 - 104** Branco mate RAL 9003 . *RAL 9003 matt white*

Ref.	W				ON/OFF	DALI
Ø800	60W	LED	17,7	114,5	33.06.30.800002	33.06.30.800006
Ø800	89W	LED	17,7	114,5	33.06.30.800003	33.06.30.800007


**A Astra Surface 150 - 105** Preto mate RAL 9005 . *RAL 9005 matt Black*




Ref.	W				ON/OFF	DALI
Ø800	60W	LED	17,7	114,5	33.06.30.800010	33.06.30.800014
Ø800	89W	LED	17,7	114,5	33.06.30.800011	33.06.30.800015

## Ø1000mm






## Warm White (3000 K)

**A Astra Surface 150 - 104** Branco mate RAL 9003 . *RAL 9003 matt white*




Ref.	W				ON/OFF	DALI
Ø1000	96W	LED	26,0	176,0	33.06.30.100001	33.06.30.100005
Ø1000	142W	LED	26,0	176,0	33.06.30.100002	33.06.30.100006


**A Astra Surface 150 - 105** Preto mate RAL 9005 . *RAL 9005 matt Black*




Ref.	W				ON/OFF	DALI
Ø1000	96W	LED	26,0	176,0	33.06.30.100009	33.06.30.100013
Ø1000	142W	LED	26,0	176,0	33.06.30.100010	33.06.30.100014

## Neutral White (4000 K)

**A Astra Surface 150 - 104** Branco mate RAL 9003 . *RAL 9003 matt white*

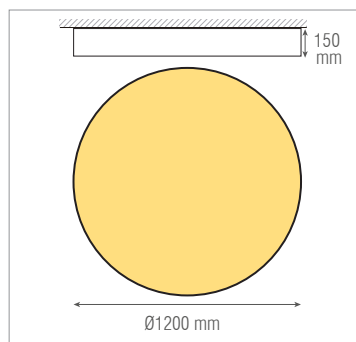
Ref.	W				ON/OFF	DALI
Ø1000	96W	LED	26,0	176,0	33.06.30.100003	33.06.30.100007
Ø1000	142W	LED	26,0	176,0	33.06.30.100004	33.06.30.100008





**A Astra Surface 150 - 105** Preto mate RAL 9005 . *RAL 9005 matt Black*

Ref.	W				ON/OFF	DALI
Ø1000	96W	LED	26,0	176,0	33.06.30.100011	33.06.30.100015
Ø1000	142W	LED	26,0	176,0	33.06.30.100012	33.06.30.100016



Ø1200mm

Warm White (3000 K)


**A Astra Surface 150 - 104** Branco mate RAL 9003 . *RAL 9003 matt white*




Ref.	W				ON/OFF	DALI
Ø1200	144W	LED	34,5	282,3	33.06.30.120000	33.06.30.120004
Ø1200	212W	LED	34,5	282,3	33.06.30.120001	33.06.30.120005


**A Astra Surface 150 - 105** Preto mate RAL 9005 . *RAL 9005 matt Black*




Ref.	W				ON/OFF	DALI
Ø1200	144W	LED	34,5	282,3	33.06.30.120008	33.06.30.120012
Ø1200	212W	LED	34,5	282,3	33.06.30.120009	33.06.30.120013













Neutral White (4000 K)

**A Astra Surface 150 - 104** Branco mate RAL 9003 . *RAL 9003 matt white*

Ref.	W				ON/OFF	DALI
Ø1200	144W	LED	34,5	282,3	33.06.30.120002	33.06.30.120006
Ø1200	212W	LED	34,5	282,3	33.06.30.120003	33.06.30.120007


**A Astra Surface 150 - 105** Preto mate RAL 9005 . *RAL 9005 matt Black*

Ref.	W				ON/OFF	DALI
Ø1200	144W	LED	34,5	282,3	33.06.30.120010	33.06.30.120014
Ø1200	212W	LED	34,5	282,3	33.06.30.120011	33.06.30.120015

	Saliente tecto <i>Ceiling surface</i>		Aplique parede <i>Wall surface</i>		Saliente chão <i>Floor surface</i>		De canto <i>Corner mounted</i>
	Encastrado tecto <i>Ceiling recessed</i>		Encastrado parede <i>Wall recessed</i>		Encastrado chão <i>Floor recessed</i>		De pé <i>Floor standing</i>
	Trimless tecto <i>Ceiling trimless</i>		Trimless parede <i>Wall trimless</i>		Suspenso tecto <i>Ceiling suspended</i>		De mesa <i>Table standing</i>



Lâmpada não incluída. *Lamp not included.*



Lâmpada incluída. *Lamp included.*



Marca de conformidade com as Normas Europeias do Comité Europeu de Normalização Electrotécnica (CENELEC), aplicável a todo o material eléctrico certificado pela CERTIF no âmbito do acordo CCA do CENELEC. *Reference symbol of compliance with the European Norms of the European Electrotechnical Standardization Committee (CENELEC) applied to every electrical material certified by CERTIF in accordance with the CCA of the CENELEC.*



ENEC - Marca comum europeia concedida no âmbito do Acordo ENEC, aplicável a todo o tipo de luminárias em conformidade com as normas da série EN 60 598. Marca reconhecida em todos os países subscritores do referido acordo. 04 - Numeração atribuída a Portugal. *ENEC - European common reference symbol granted in accordance with the ENEC Agreement, applicable to every type of luminaire within the Standards of the EN 60 598 series. Reference symbol recognized in all the countries that subscribed the referred agreement. 04 -Number assigned to Portugal.*



Produto projectado e fabricado em conformidade com a directiva comunitária 2004 / 108 / CE relativa à Compatibilidade Electromagnética e com a directiva comunitária 2006 / 95 / CE para equipamentos de Baixa Tensão. *Product designed and manufactured in accordance with the Council Directive 2004 / 108 / CE concerning the Electromagnetic Compatibility and the Council Directive 2006 / 95 / CE for Low-Tension equipment.*



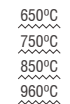
Esta luminária não pode ser coberta com material isolante ou análogo. *Luminaire not suitable for covering with thermally insulating material.*



Fonte luminosa LED. *LED light source.*



**Classe I** - Isolamento principal e protecção por ligação à terra prevista nas partes metálicas acessíveis. *Class I - All the exposed metal parts are connected to one another and to the protective earth conductor.*



O ensaio é efectuado utilizando um fio de Ni-Cr incandescente aquecido a 650°C, 750°C, 850°C ou 960°C. *The test is made using nickel-chromium flow-wire heated to 650°C, 750°C, 850°C or 960°C.*



**Classe II** - Com isolamento principal e isolamento suplementar, mas sem meio de protecção por ligação à terra. *Class II - The luminaire is insulated in such a way that there are no exposed metal parts that can carry current. There is no protective earth conductor.*



Luminária protegida contra o arremesso de bolas, de acordo com especificado na norma DIN VDE 0710 part 13/05.81. *Luminaire safe to ball throwing in accordance with DIN VDE 0710 part 13/05.81 standard.*



**Classe III** - Previsto para alimentação em muita baixa tensão de segurança ( $\leq 50V$ ). *Class III - Appliance designed to be supplied from a safety extra-low voltage power source.*



Dimensão do corte no tecto para encastrar luminária (tolerância em mm). *Cut-out dimension for recessed luminaires (tolerance in mm).*



Casquilho / Suporte de lâmpada. *Lamp holder.*



Adaptável aos módulos standard dos tectos falsos. *Adaptable to the standard modules of the false ceilings.*



Peso unitário aproximado sem embalagem (em Kg). *Unit approximate weight without package (specified in Kg).*



O prefixo IP seguido de dois algarismos, indica a "resistência" oferecida pelo aparelho à penetração de corpos sólidos e líquidos, sendo que o primeiro algarismo identifica a protecção à entrada de elementos sólidos e o segundo aos líquidos. *The IP prefix followed by two figures indicates the "resistance" offered by the device to solid bodies and liquids penetration, the first figure being representative of the protection to solid bodies penetration and the second to liquids.*



Volume unitário com embalagem (em dm<sup>3</sup>). *Unit approximate volume with package. Specified in dm<sup>3</sup>.*



Dimensões em mm. *Dimensions in mm.*



Índice Resistência Mecânica - Grau de resistência dos invólucros das luminárias a impactos mecânicos externos, definidos pela norma EN 62262. *Mechanical Resistance Classes - Resistance degree of the luminaires envelope against external mechanical impacts, defined by EN 62262 standards.*



Distância mínima dos objectos iluminados (em metros). *Minimum distance between the lit object and the luminaire (in metres).*