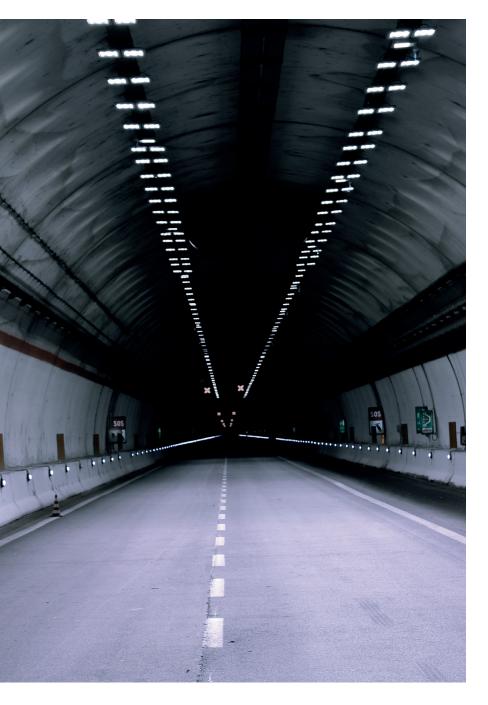
General 2019

Tunnel Models





PHILEO TUNNEL TUNNEL





Phileo is the ideal LED luminaire for every area of the tunnel thanks to the **modular and replaceable optical system** that can reach, in case of reinforcement lighting, up to 50,000 lm.

To ensure a **long-lasting system,** without costly and problematic maintenance, quality materials have been chosen and a design has been perfected to optimize heat dissipation

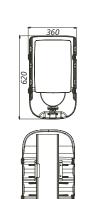
Flux from 2.000 to 50.000 lm Surge 10~kV

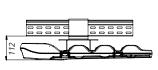
Single

Invalid size for definitive designs.

DIMENSIONS AND VIEWS

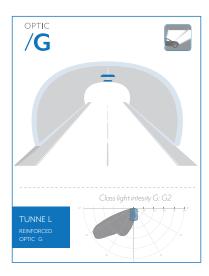
Double T24

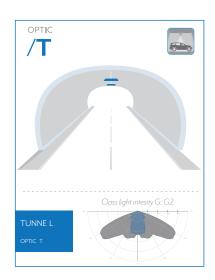






The **total reflection**, applied to the optics of Phileo tunnel, guarantees the **control of glare** even in the entrance zone where a counter-beam optic has been designed. The modularity and the interchangeability of the reflectors allow to **avoid dispersions**, **ensuring a low TCO** both in the permanent section with the symmetrical optics, both in entrance section.





Single Phileo

CODE	N. MODULES	OPTIC	FLUX (Im)	POWER (W)	EFFICIENCY (Im/W)
S-PA028TIGG2T11	2	G	2775	20	139
S-PA028TITG2T11	2	Т	2775	20	139
S-PA038TIGG2T11	2	G	3771	27	140
S-PA038TITG2T11	2	Т	3771	27	140
S-PA054TIGG2T11	2	G	5374	40	134
S-PA054TITG2T11	2	Т	5374	40	134
S-PA073TIGG2T11	2	G	7295	57	128
S-PA073TITG2T11	2	Т	7295	57	128
S-PA097TIGG2T11	2	G	9663	81	119
S-PA097TITG2T11	2	Т	9663	81	119
S-PA121TIGG4T11	4	G	12108	91	133
S-PA121TITG4T11	4	Т	12108	91	133
S-PA145TIGG4T11	4	G	14450	113	128
S-PA145TITG4T11	4	Т	14450	113	128
S-PA202TIGG6T11	6	G	20170	154	131
S-PA202TITG6T11	6	Т	20170	154	131
S-PA253TIGG6T11	6	G	25336	206	123

Double Phileo

CODE	N. MODULES	OPTIC	FLUX (Im)	POWER (W)	EFFICIENCY (Im/W)
S-PA290TIGG8T11	8	G	28980	225	129
S-PA360TIGG10T11	10	G	35977	278	129
S-PA403TIGG12T11	12	G	40340	305	132
S-PA507TIGG12T11	12	G	50672	407	125

Phileo Tunnel code structure

PHILEO's CODE COMPOSITION			
	EMWARREN	6	
POSITION 1,2	FAMILY PREFIX	S-	
POSITION 3	PRODUCT FAMILY	Р	PHILEO
POSITION 4	CUSTOMIZATION	A	Arianna
POSITION 5,6,7	FLUX	123	12.300 lm
		F	Fixed
POSITION 8	POWER SUPPLY PROGRAM	R	TLC Radio
		Т	TLC PLC
		1	4000K - CRI 70
POSITION 9	CCT + CRI	U	4000K – CRI 75
POSITION 9	CCI + CRI	V	4000K - CRI 80
		Z	5700K – CRI 70
POSITION 10	OPTIC	G	Ottica G
POSITION TO	OFFIC	Т	Ottica T
POSITION 11	COLOUR	G	Grey
POSITION 12,13	NB. OF MODULES	1 - 12	6, 10 modules
POSITION 14	FIXING MODE/APPLICATION	Т	Tunnel
POSITION 15	POWER CABLE	1	FTG100M1 2X1,5
POSITION 16	BRACKET	1	Staffa tunnel

Example:	Example: PHILEO TUNNEL 10 grey modules 4000K CRI 70 optic G 35.977 lm with TLC radio															
cod.	S	-	Р	А	3	6	0	R	I	G	G	1	0	Т	1	1
pos.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

The resulting code is: **S-PA360RIGG10T11**



PETRARCA TUNNEL TUNNEL





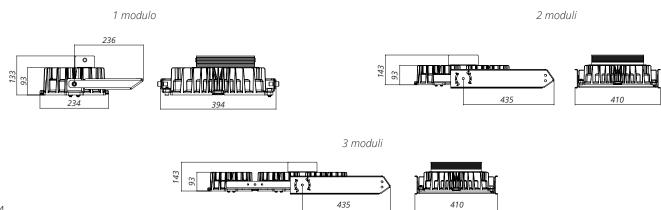
Petrarca is the new floodlight for all the area of the tunnel.

Small and modular to guarantee **easy installation** and **maintenance** with a design thought to optimize heat dissipation thanks to the finned radiator. Total reflection optical system to **maximize energy savings**, without dazzling the tunnel section.

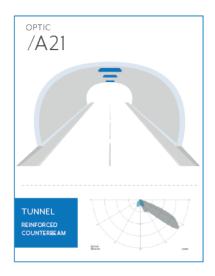
Flux from 2.000 to 55.000 lm Surge 10 kV

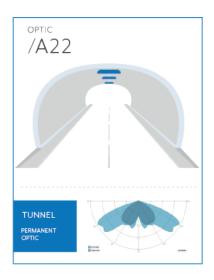
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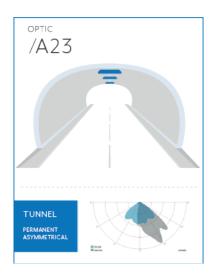
DIMENSIONS AND VIEWS

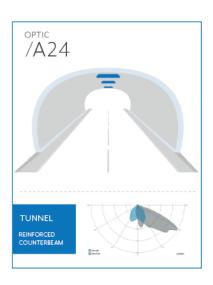


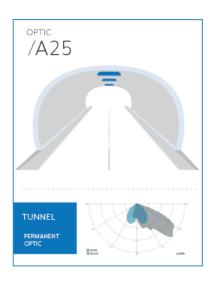
Symmetrical reflection optics ensure, in the permanent section, **visual comfort** along the entire length of the tunnel; in the entrance zone, the couter-beam optics, with total reflection, guarantee **glare control** and avoid dispersion, ensuring a **low TCO**.











CODE	FLUX (Im)	POWER (W)	EFFICIENCY (Im/W)
PET0045TR0021G01F	4500	36	125
PET0091TR0021G02F	9100	70	130
PET0136TR0021G03F	13600	104	131
PET0182TR0021G04F	18200	138	132
PET0227TR0021G05F	22700	172	132
PET0272TR0021G06F	27200	205	133
PET0318TR0021G07F	31800	243	131
PET0363TR0021G08F	36300	278	131
PET0409TR0021G09F	40900	313	131
PET0454TR0021G10F	45400	348	130

CODE	FLUX (Im)	POWER (W)	EFFICIENCY (Im/W)
PET0033TR0022G02F	3300	25	132
PET0045TR0022G02F	4500	36	125
PET0067TR0022G02F	6700	49	137
PET0091TR0022G02F	9100	70	130
PET0136TR0022G02F	13600	104	131

Petrarca Tunnel code structure

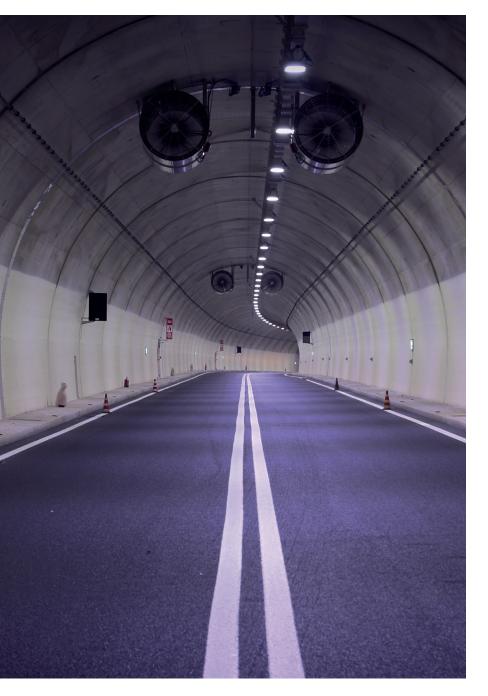
PETRARCA TUNNEL's CODE COM	POSITION		
POSITION 1, 2, 3	PRODUCT FAMILY	PET	Petrarca
POSITION 4, 5, 6, 7	FLUX	1234	123.400 lm
		F	Fixed
		D	DALI
POSITION 8	POVER SUPPLY PROGRAM	Т	TLC PLC
		Р	Standard Night Cycle
		R	TLC Radio
		S	5700K – CRI 70
POSITION 9	CCT + CRI	R	4000K – CRI 70
POSITION 9	CCI + CKI	0	4000K – CRI 80
		U	4000K - CRI 75
		0020	Counter beam optic
POSITION 10, 11, 12, 13	OPTIC	0021	Counter beam optic
		0022	Interior lighting optic
POISITION 14	COLOUR	G	Grey
POSITION 15, 16	NB. OF OPTICS	1 - 10	10 optics
POSITION 17	FIXING MODE/APPLICATION	F	Floodlight

Example: PETRA	Example: PETRARCA TUNNEL 4 grey optics 4000K CRI 70 optic 22 55.000 lm with TLC PLC																
cod.	Р	Е	Т	0	5	5	0	Т	R	0	0	2	2	G	0	4	F
pos.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

The resulting code is: **PET0550TR0022G04F**



TESEO TUNNEL TUNNEL





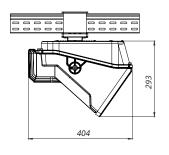
Teseo is the LED luminaire that exploits the **international total reflection patent.** The internal reflector is designed to guide LED emissions and direct them in a smart way only where it is necessary, **giving energy saving and high performances**.

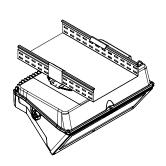
Flux from 15.000 to 30.000 lumen Surge $8/10 \ kV$

Invalid size for definitive designs.

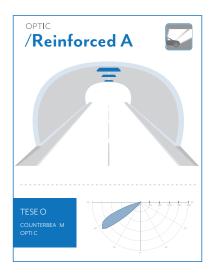
DIMENSIONS AND VIEWS

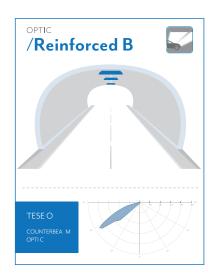






Arianna has designed an asymmetrical, counter-beam lighting that **minimise glare** and the light under the luminaire.





COD.	MODEL	FLUX (Im)	POWER (W)	EFFICIENCY (Im/W)
TES0152TY000AN24TA	135 watt	15206	137	111
TES0228TY000AN24TA	205 watt	22869	201	114
TES0306TY000AN24TA	305 watt	30660	303	101

Optional

CODE	DESCRIPTION
CLASS I	Class luminaire I
TLC RF	Remote control RF
DALI	DALI power supply predisposition
PAINTING	RAL CODE
FLOOD BRACKET	FLOOD BRACKET

Flow data refers to devices with CRI 70 and 4000 $\rm K$

Teseo code structure

TESEO TUNNEL'S CODE COM	POSITION		
POSITION 1, 2, 3	PRODUCT FAMILY	TES	Teseo
POSITION 4, 5, 6, 7	FLUX	0152	15 200 lm
		F	Fixed
POSITION	POVER SUPPLY PROGRAM	D	DALI
POSITION	POVER SUPPLY PROGRAMI	Т	TLC PLC
		R	TLC Radio
POSITION 9	CCT + CRI	Z	5.700K - CRI 70
POSITION 9	CCI + CRI	Υ	4.000K - CRI 70
DOCITION 10, 11, 12, 12	OPTIC	000A	Optic A
POSITION 10, 11, 12, 13	OPTIC	000B	Optic B
POISITION 14	COLOUR	N	Black
POSITION 15, 16	NB. OF LEDs	16	16 LEDs
POSITION 17	FIXING MODE/APPLICATION	Т	Tunnel
POSITION 17	FIXING MODE/APPLICATION	F	Floodlight
POSITION 18	BRACKET	Α	200×75 (interior light) FTG10OM1 $2 \times 1,5$
PUSITION TO	DIVACNET	D	Floodlight bracket H07RN-F 2x1,5

EXAMPI	EXAMPLE: Teseo Tunnel 16 LED, black, 15.200 lm - 4000K CRI 70, with optic A and remote control OC																	
COD.	Т	Е	S	0	1	5	2	Т	Υ	0	0	0	Α	Ν	1	6	Т	А
POS.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

The resulting code is: **TES0152TY000AN16TA**



SNELLTUNNEL TUNNEL





Snell is the ideal luminaire for **tunnel lighting** for its **low weight and the modularity** of the opticals both symmetrical and asymmetrical.

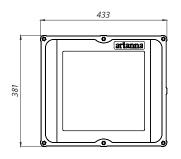
Flux from 3.000 to 16.000 lm Surge 6/8 kV

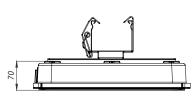


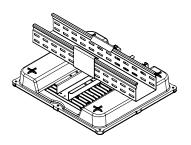


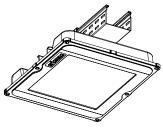
Invalid size for definitive designs.

DIMENSIONS AND VIEWS

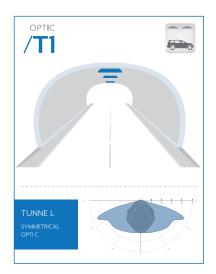


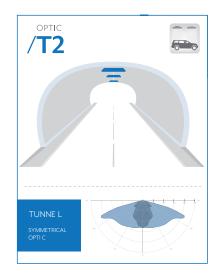


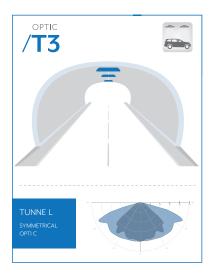


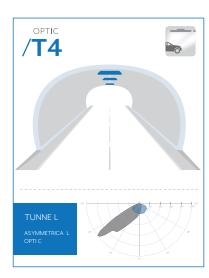


Optics designed to **reduce glare** and ensure **uniform lighting on the ground**.









Price List

Counterbeam



COD.	FLUX (Im)	POWER (W)	EFFICIENCY (Im/W)
SNE0031TY00T4G04TB	3100	30	103
SNE0039TY00T4G04TB	3900	36	108
SNE0050TY00T4G06TB	5000	45	111
SNE0067TY00T4G08TB	6700	60	112
SNE0083TY00T4G10TB	8300	75	110
SNE0099TY00T4G10TB	9900	95	104
SNE0115TY00T4G12TB	11500	110	104
SNE0133TY00T4G14TB	13300	125	106
SNE0142TY00T4G14TB	14200	140	101
SNE0161TY00T4G16TB	16100	160	100

Symmetrical



COD.	FLUX (Im)	POWER (W)	EFFICIENCY (Im/W)
SNE0031TY00T3G04TA	3100	30	103
SNE0039TY00T3G04TA	3900	36	108
SNE0050TY00T3G06TA	5000	45	111
SNE0067TY00T3G08TA	6700	60	112
SNE0083TY00T3G10TA	8300	75	110
SNE0099TY00T3G10TA	9900	95	104
SNE0115TY00T3G12TA	11500	110	104
SNE0133TY00T3G14TA	13300	125	106
SNE0142TY00T3G14TA	14200	140	101
SNE0161TY00T3G16TA	16100	160	100

Optional

CODE	DESCRIPTION	
CLASS I	class luminaire l	
TLC RF	remote control RF	
DALI	DALI power supply predisposition	
PAINTING	RAL CODE	
FLOOD BRACKET	FLOOD BRACKET	

Flow data refers to devices with CRI 70 and 4000 $\ensuremath{\mathrm{K}}$

Snell Tunnel code structure

SNELL TUNNEL's CODE COM			
POSITION 1, 2, 3	PRODUCT FAMILY	SNE	Snell
POSITION 4, 5, 6, 7	FLUX	0161	16 100 lm
		F	Fixed
POSITION		D	DALI
	POVER SUPPLY PROGRAM	Т	TLC PLC
		Р	Standard Night Cycle
		R	TLC Radio
		Z	5700K – CRI 70
POSITION 9	CCT : CDI	Υ	4000K – CRI 70
	CCT + CRI	V	4000K - CRI 80
		U	4000K - CRI 75
POSITION 10, 11, 12, 13		00T1	Optic T1
	OPTIC	00T2	Optic T2
	OPTIC	00T3	Optic T3
		00T4	Optic T4
		G	Grey
POISITION 14	COLOUR	N	Black
		В	White
POSITION 15, 16	NB. OF LEDs	16	16 LEDs
		Т	Tunnel
POSITION 17	FIXING MODE/APPLICATION	F	Floodlight
POSITION 18		А	200 x 75 (interior light) FTG100M1 2x1,5
	BRACKET	В	200 x 75 + 10° (counter beam) FTG100M1 2x1,5
		D	Floodlight bracket H07RN-F 2x1,5

EXAMPLE: Snell Tunnel 16 LED, grey, 16.000 lm - 4000K CRI 70, with optic T2 e remote control OC																		
COD.	S	Ν	Е	0	1	6	0	Т	Υ	0	0	Т	2	G	1	6	Т	А
POS.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

The resulting code is: ${\bf SNE0160TY00T2G16TA}$

TERMS AND CONDITIONS OF SALE

1. 1 APPLICATION

- 1.1 These general terms and conditions of sale (hereinafter "General Terms") apply to any contract stipulated between Arianna s.p.a. (hereinafter "Arianna") and its customers (hereinafter "Customers") in relation to the supply of products sold by Arianna (hereinafter "Products") to Customers or other third parties indicated by Customers
- 1.2 Unless otherwise specified written between the Parties, in cases of discrepancy, the General Conditions prevail over all other conditions of purchase eventually recalled by customers with purchase orders of products (hereinafter "Orders).

2. CONTRACT

- 2.1 Purchase orders for Products shall be sent by Customers to Arianna in writing, shall specify the type of Products ordered and, for each Product, the required quantity. Such Orders shall be considered as having been accepted by Arianna only when Arianna sends the Customer confirmation (hereinafter "Order Confirmation. Arianna reserves the right to totally or partially refuse Orders in the event where the Products ordered are not available and/or the Customer is not up-\$\pi\$tot_0\pi\$date with payments owed to Arianna in relation to other or prior Contracts.
- 2.2 When requested, Arianna may send the Customer a written quotation for the supply of Products (hereinafter "Quotation"), specifying the contract price for each Product required by the Customer, where the Product is available, any additional costs, and the corresponding delivery times.
- 2.3 Pursuant to article 1, Contracts are considered as stipulated between Arianna and the Customer:
- (a) when the Customer receives Order Confirmation from Arianna;
- (b) when Arianna receives acceptance of the Quotation from the Customer.
- 2.4 Once the Contract has been stipulated, the Customer cannot terminate nor revoke such Contract.

Prices are net of any taxes, duties and other charges that may apply to the Products. The Customer shall be responsible for all such taxes, duties and charges. Prices include the cost of packing according to the standards of Arianna. Any special packaging requested by the Customer, if accepted by Arianna, will be charged to the same Customer.

- 4.2 Arianna reserves the right to update its price list in relation to both existing Products and any new Products that extend the range. Nonetheless, each new price list or update to existing price lists shall only apply to Orders received by Arianna and to Quotations sent by Arianna to Customers after the date that the new Prices come into force.
- 4.3 Prices shall be paid to Arianna in accordance with the procedures and terms agreed on in the Contract, specifically and unless otherwise stipulated, payment on receipt of invoice by bank transfer, in accordance with the bank details provided by Arianna to the Customer.
- 4.4 If the Customer does not pay the Contract Price by the due date: (a) the Customer shall pay Arianna interest at the rate specified in article 5 of Italian leg. decree no. 231 of 9.10.2002, where applicable, or interest at the legal rate of interest plus five percent, otherwise; (b) without prejudice to any other right or remedies in favour of Arianna specified in the Contract and/or in these General Terms, where the delay in payment of the Prices by the Customer exceeds 10 (ten) days, Arianna has the right to suspend the Contract or Contracts in relation to the late payment by the Customer until the Customer has paid the full amount of capital, interest and costs owing to Arianna, as well as require advance payment of Prices or provision of suitable guarantees by such Customer for any future sales;
- (c) the Customer may not make any claims under the warranty described in article 7.
- 4.5 Pursuant to article 1462 of the Italian civil code, the Customer may not refuse or delay payment of the Prices for any reason.

3. PRODUCTS

- 3.1 Products and their technical specifications are identified in the catalogues and/or price lists published periodically by Arianna.
- 3.2 Arianna works to continually develop and improve its Products and extend its range, and consequently the Customer accepts that Arianna may periodically modify, without prior notice, the range and/or features of its Products, including to guarantee compliance with new safety standards and/or new technical or legislative requirements.
- 3.3 In the event where the above-Imentioned modifications are implemented while one or more Contracts is yet to be concluded, Arianna shall supply the Customer with Products whose technical and quality specifications are better than or equivalent to those of the Products specified in each Contract.

4. CONTRACT PRICE

4.1 Unless otherwise specified in the Contract, the Products are supplied to the Customer by Arianna at the unit prices (hereinafter "Prices") shown in the Arianna price list in force at the time the Order is sent, or alternatively, where applicable, at the time the Quotation is prepared.

5. DELIVERY OF PRODUCTS

- 5.1 Delivery of the products is to be understood Ex Works loaded. All risks relating to the Products shall pass from Arianna to the Customer on consignment to the carrier and/or shipping agent. The Customer is moreover responsible for all costs pertaining to insurance, customs clearance, transport and the like, as well as the related risks.
- 5.2 The Products shall be delivered to the Customer in compliance with the terms agreed on in the Contract.
- 5.3 The delivery terms specified in paragraph 5.2 are: (a) suspended if, subsequent to stipulation of the Contract:
- (a) suspended if, subsequent to stipulation of the Contract
- (i) the Customer and Arianna agree to make changes to the Products supplied, in which case the aforementioned terms shall be applicable from the date in which such changes are agreed on in writing between the Customer and Arianna;
- (ii) the Contract cannot be settled due to events of force majeure, in which case the aforementioned terms shall be applicable from the date in which such events of force majeure cease, as long as Arianna is still capable of fulfilling the Contract.

6. ACCEPTANCE OF PRODUCTS -CLAIMS FOR EVIDENT DEFECTS

6.1 The Customer shall inspect the Products upon delivery of such and shall notify Arianna of any missing or incorrect delivery of the Products ordered and/or any evident defects on the Products no more than 8 (eight) days from the date the Products are received, as demonstrated by the related delivery documents. Such notification shall be made in writing and shall contain the list of missing or defective Products (regarding the latter, complete with corresponding serial number), a complete description of the defects found and the date the Products were received.

6.2 If such notification is not formally provided before the deadline specified in paragraph 6.1, the delivery shall be considered to be perfectly compliant with the terms of contract agreed on, the Products delivered shall be considered as having been completely accepted by the Customer and free of evident defects, and consequently the related warranty shall no longer apply. Nonetheless, the Customer may still make claims in relation to the warranty described in article 7.

6.3 In the case where the Customer reports defects under the terms described in paragraph 6.1, the Customer shall keep the defective Products for at least one month from the date in which notification is received by Arianna, and allow the latter to inspect the Products. Only on receiving written instructions from Arianna shall the Customer send the defective Products to Arianna or a third party specified by Arianna. The Customer shall be responsible for all costs relating to storage and transport of such Products, and any returns not previously agreed will not be taken into account.

6.4 Only in the event where, following inspection by Arianna, the Products reported by the Customer are affected by defects relating to materials, components and/or the Product manufacturing process shall Arianna either repair or replace, at its sole discretion, the defective Products free-Oof-Ocharge. Following such repair or replacement, the Products will be sent back to the Customer, who shall be responsible for all transport and insurance costs.

6.5 Any repairs and/or replacements of defective products or parts do not imply the start of a new warranty period for which will be worth the initial one of the disputed product.

7. WARRANTY - CLAIMS FOR DEFECTS

7.1 Without prejudice to the terms described in article 6, Arianna guarantees that the Products are manufactured in compliance with the standards in force, are free of defects and are guaranteed for 2 (two) years from the date of delivery, offering performance that is consistent with the related technical specifications. The warranty may be extended without additional costs to 5 (five) years upon registering the Products at www.ariannaled.com.

7.2 The warranty described in paragraph 7.1 shall only be applicable in all of the following conditions: $\frac{1}{2} \left(\frac{1}{2} \right) = \frac{1}{2} \left(\frac{1}{2} \right) \left($

(a) the Arianna Products are installed on systems which include surge protectors in the electrical panel, otherwise the warranty shall be null and void;

(b) the defects and/or malfunctions reported by the Customer are exclusively attributable to the materials, components and/or Product manufacturing process and are therefore not due to events of force majeure or any causes in general not relating to the manufacturing process:

(c) the Products are assembled and installed by Arianna authorised personnel or in compliance with the instructions provided by Arianna.

(d) the Products are used by the Customer in accordance with

the instructions provided by Arianna and the related technical specifications;

(e) the products shall not be modified or tampered, otherwise the warranty shall be null and void;

(f) maintenance is performed on the Products in accordance with the times and procedures specified by Arianna.

7.3 except in limits of the law and the cases of willful misconduct and gross negligence, arianna does not assume liability resulting from breach of contract or for any direct or indirect damages, losses, even of profits, costs, charges, including the possibility of removal of the products from the market, missing gain resulting from defects of the products, however, limiting its potential liability to pay a sum not exceeding the price of the defective product.

8. TECHNICAL SERVICE

8.1 Arianna provides Customers technical service (you can refer to the contacts listed at the bottom of the document) to solve any technical problems affecting the Products and that are not due to defects and malfunctions as described in articles 6 and 7.

8.2 Technical service is provided to Customers by Arianna through designated third parties, and requires payment of the corresponding costs by the Customer to the third parties that provide such technical service. 8.3 Except where otherwise agreed on with the Customer, upon payment by the Customer for any work performed pursuant to article 8 of these Terms 8, the Product in question shall be returned to the Customer, while Arianna - I or the third party that performs the work on behalf of Arianna - I shall retain title to the aforementioned Product until the Customer has paid the aforementioned amount owing.

9. TERMINATION OF THE CONTRACT

9.1 Without prejudice to the laws governing termination and any other terms specifically stipulated in the Contract and in these General Terms, Arianna has right to terminate the Contract in the following circumstances:

(a) more than 30 (thirty) days have elapsed since expiry of the due date agreed on for payment of the Prices defined in the Contract without the Customer having fulfilled its payment obligations;

(b) if, for any reason whatsoever, the Customer ceases to trade and/or goes into liquidation or files for bankruptcy.

9.2 Should any of the circumstances listed in paragraph 9.1 occur, the Contract is considered as terminated by right, pursuant to article 1456 of the Italian civil code, upon receipt by the Customer of the unilateral written declaration in which Arianna expresses the will to make use of this termination clause, without prejudice to the right of Arianna to obtain compensation for damage due to the Customer's failure to fulfil its obligations and termination of the Contract.

10. JURISDICTION

All disputes that may arise between the parties in relation to the Contract and these General Terms are subject to the exclusive jurisdiction of Italian law at the Court of Padova. Should the Customer be regarded as a Consumer pursuant to Italian leg. decree no. 206 of 6.9.2005, the court of the Customer's place of residence shall have jurisdiction.

Arianna Spa

Via dell'Industria, 14 35020 Brugine (PD) – Italy info@ariannaled.com

Tel. +39 049 73 89 920 Fax +39 049 73 899 24 P.I. 04387780283

www.ariannaled.com