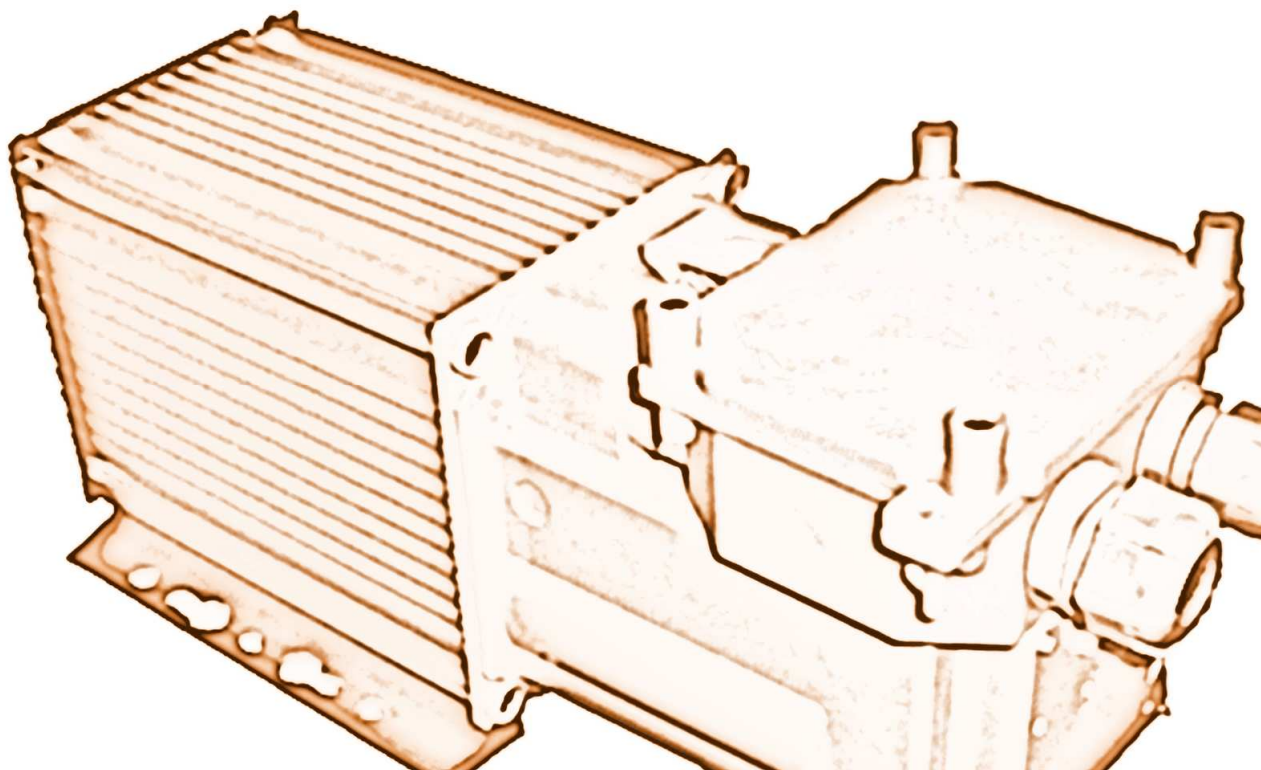
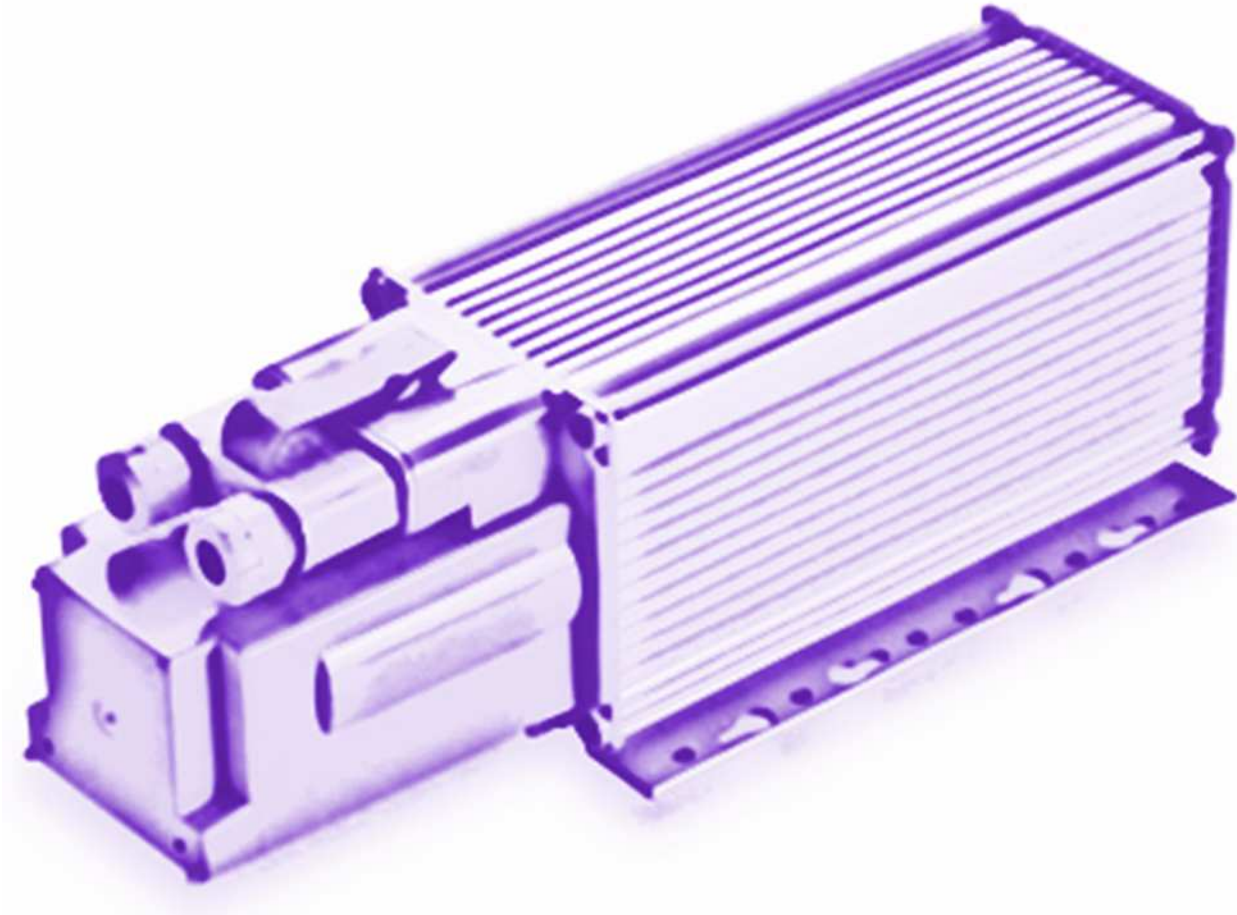




# “ALUMINIUM” Control Gear

Class I Class II

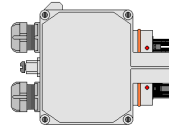
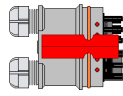
for Discharge Lamps



## Introduction

2

Mechanical dimensions BFA  
 IP66 Class I  
 250 - 2000W



3

Mechanical dimensions BTA  
 IP66 Class I  
 250 - 2000W

3



Mechanical dimensions BTA D  
 IP66 Class II  
 1000 / 2000W

3

Mechanical dimensions CSA  
 IP65 Class I  
 1000 / 2000W



4

**INDEPENDENT CONTROL GEAR FOR HPSV AND METAL HALIDE LAMPS 250 – 1000W**

BFA 250 - 1000W series	IP66 class I	5
BTA 1000W series	IP66 class I	6
CSA 400 - 1000W series	IP65 class I	7

**INDEPENDENT CONTROL GEAR FOR METAL HALIDE LAMPS 2000W 8,80A**

BFA 2388 series	IP66 class I	8
BTA 2388 series	IP66 class I	9
BTA D 2388 series	IP66 class II	10
CSA 2388 series	IP65 class I	11

**INDEPENDENT CONTROL GEAR FOR METAL HALIDE LAMPS 2000W 10,3 / 11,3A**

BFA 2400 series	IP66 class I	12
BTA 2400 series	IP66 class I	13
BTA D 2400 series	IP66 class II	14
CSA 2400 series	IP65 class I	15

**INDEPENDENT CONTROL GEAR FOR METAL HALIDE LAMPS 2000W 12,20A**

BFA 2400 HF series	IP66 class I	16
BTA 2400 HFseries	IP66 class I	17
BTA D 2400 HF series	IP66 class II	18
CSA 2400 HFseries	IP65 class I	19

**APF** I complessi di alimentazione sono provvisti di tutti i componenti necessari per il corretto funzionamento delle lampade, ed in conformità alle normative Impianti ed Apparecchi di Illuminazione. I complessi di alimentazione sono stati studiati per ottenere i massimi risultati in quanto a sicurezza, durata e praticità di impiego, sia in prima installazione che durante la manutenzione e sono complete di:

- ✓ ALIMENTATORE ELETTROMAGNETICO

A basse perdite con ottima linearità *conform to ErP EUP*

- ✓ ACCENDITORE ELETTRONICO

In funzione della caratteristica della lampada

- ✓ CONDENSATORE DI RIFASAMENTO

con valori di  $\cos\phi \geq a 0,90$ .

- ✓ CONNESSIONI ELETTRICHE

Fondamentali sono inoltre da considerare le svariate tipologie di connessioni elettriche di alimentazione ed interfaccia con gli apparecchi di illuminazione, particolarmente nelle versioni "FAST" sezionabili

**APF** The control gear complete with all the components for the correct work of the lamps and they are in conformity to installation and lighting fitting rules.

Both before the installation and during the maintenance, the integrated system are characterized by security, endurance and practicalness

- ✓ ELECTROMECHANICAL BALLASTS

Our low losses ballasts are linear and conform to ErP EUP

- ✓ ELECTRONIC IGNITOR

APF as different versions like:

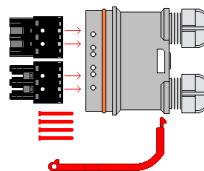
- ✓ HIGH POWER CAPACITOR

$\cos\phi \geq a 0,90$ .

- ✓ ELECTRICAL CONNECTION

APF as many interface connection systems for the lighting fitting in particularly the version "FAST" and other version for looping installation.

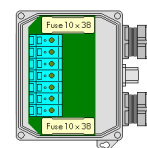
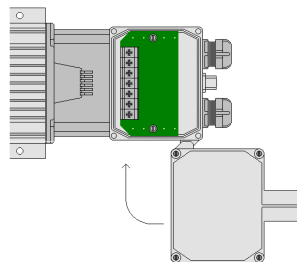
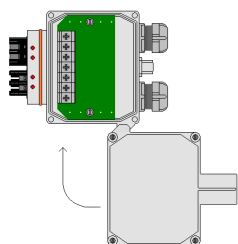
SEPARABLE Connection **BFA** series



SEPARABLE Connection **BFA V** series

Connection system **BTA - BTA D** series

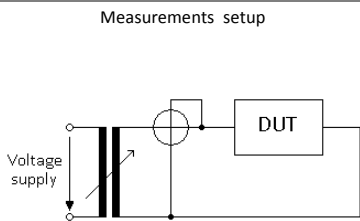
Fuse Version ( 1 x 1000W - 2 x 2000W )



Efficiency data ( Directive 2005 / 32 / EC )

Requisiti di prestazione energetica *Energy performance requirements*

Measurements setup	Minimum efficiency for HID Ballasts		
	RATED POWER LAMP W ( P lamp )	EI A3 ( current ) % ( $\eta$ ballast )	EI A2 ( starting 13 /04 / 2017 ) % ( $\eta$ ballast )
	P < 30	65	78
30 ≤ P ≤ 75	75	85	
75 < P ≤ 105	80	87	
105 < P ≤ 405	85	90	
75 > 405	90	92	



Production range

**IP 65**

Totalmente protetto contro la polvere - Protetto contro i getti d'acqua

*Dust-tight - Protected against water jets*

**IP 66**

Totalmente protetto contro la polvere - Protetto contro le onde

*Dust-tight - Protected against heavy seas*

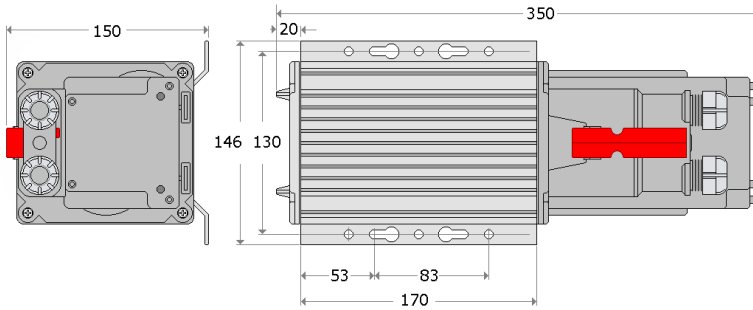
**BFA  
BTA  
BTA D**

**BFA - BTA - BTA D**  
Mechanical dimensions  
IP65 / IP66 - class 1 / class 2

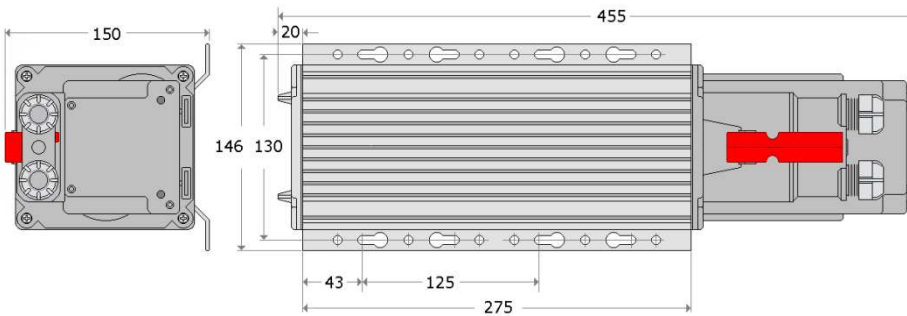


**BFA series**

Draw. 1 ( 1000W )

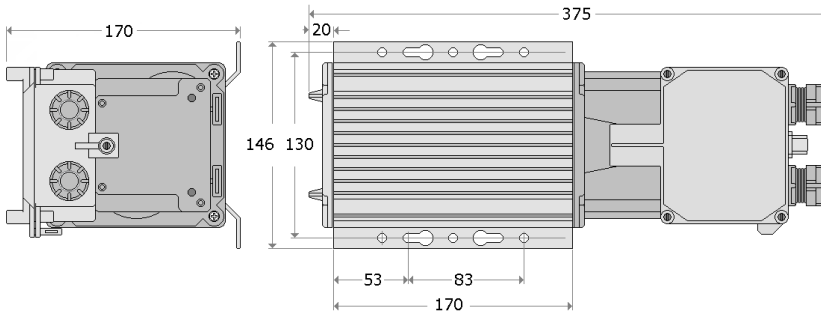


Draw. 2 ( 2000W )

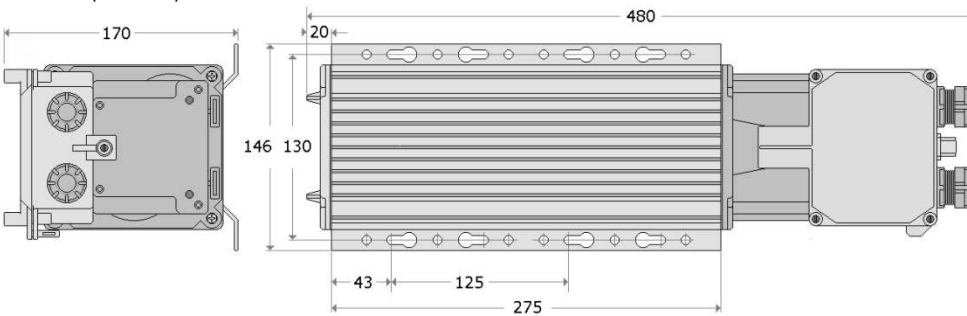


**BFA V - BTA - BTAD series**

Draw. 3 ( 1000W )



Draw. 4 ( 2000W )



CSA

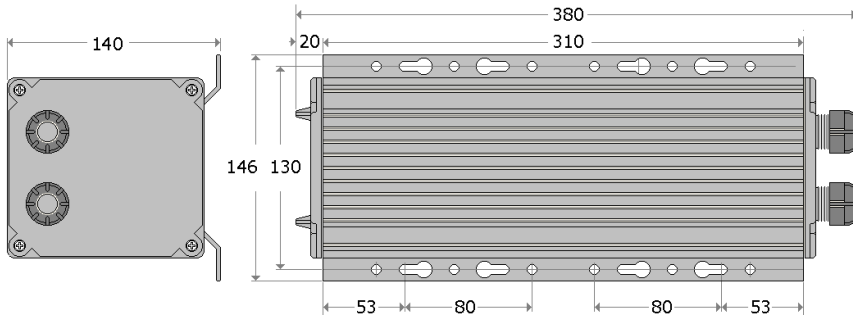
CSA Series  
Mechanical dimensions  
IP65 class I

CE   
tw 130°C

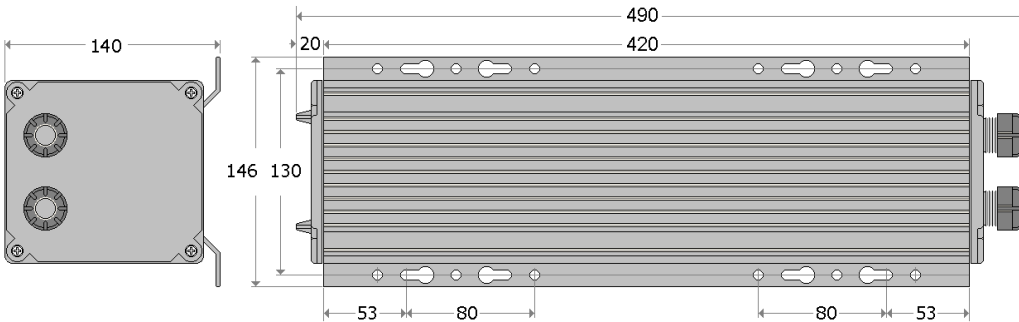


**CSA series**

Draw. 5 ( 400 – 600 - 1000W )



Draw. 6 ( 2000W )



**250W - 1000W**  
**Control Gear**  
**HI - HS** Lamps

BFA 250 - 1000W series

230V 50Hz Weatherproof Independent Control Gear  
 IP65 Class I



tw 130°C



lamp W	Ballast Calibration 230V 50Hz			Losses at 25°C W
	A	ZΩ	(±3%) VZ	
250	3,00	64	192	23
400	4,40	43,6	192	31,5
600	6,20	29,7	184	41
1000	10,3	18,1	186	61

*Reference Standard*

Safety	EN 61347-1	EN 61347-2-9	EN 61347-2-1	EN 60598-1
Performance	EN 60923	EN 60927		
Harmonic limit	EN 61000-3-2		R.F.I. Emissions	EN 55015
Immunity	EN 61547		Flicker	EN 61000-3-3

*Low losses ballast, conform to ErP EUP*  
*High Power Factor Capacitor*  
*Safety Timed long distance Internal Electronic Ignitor*  
*Case material*  
*Cover*  
*Connector*  
 Dimensions N°  
 Cable gland  
 Recommend cables

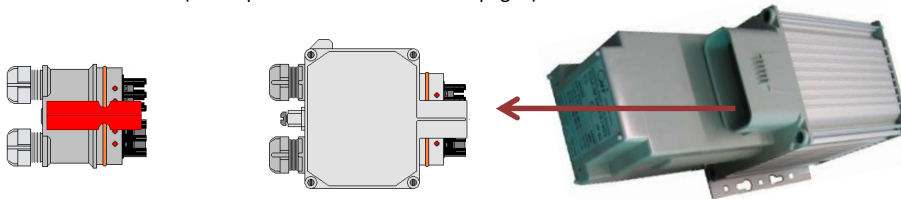
Max. distance installation:

PRODUCTION RANGE	
BFA 250 – 1000W	
tw 130 °C	
$\lambda \geq 0,90$	
3,5...4,5 KV	1500 pF ( max. distance lamp 15m )
ALUMINIUM EXTRUDED	
Tecnopolymer	
Fast Cage Clamp	
1 - 4 mm <sup>2</sup> - 450V	
1 ( pag 3)	
PG 16 $\phi$ mm 10...14	
H07 RN – F or similar	
INTERNAL IGNITOR	EXTERNAL IGNITOR
3,5...4,5 KV 1500 pF 15m	- 50m
Type / Code	Type / Code
BFA PW 250.3 30253A600	-
BFA PW 400.3 30403A600	-
BFA PW 600.3 30603A600	-
BFA PW 1000.3 30003A600	BFA SAPIM 1000.34 / E 300034A03

Mains value 230V 50Hz		$\lambda \geq 0,90$		Ballasts Characteristics		
Lamp	Mains	A	$\lambda \geq$	ta °C	Kg	class EEI
W nominal	HPSV	MH				
250 (3,00A)	•	•	1,35 0,90	50	5,2	A2
400 (4,40A)	•	•	2,10 0,90	50	5,8	A2
600 (6,20A)	•	•	3,10 0,90	50	7,1	A2
1000 (10,3A)	•	•	5,10 0,90	50	11,6	A2

Disponibili / Available 240V 50Hz or 220V 60Hz

Standard furniture ( on request connector – Draw 3 pag 3 )



**1000W**  
**9,50A - 10,30A**  
**HI - HS** Lamps

**BTA 1000 series**

Weatherproof Independent Control Gear

IP66 Class I



tw 130°C

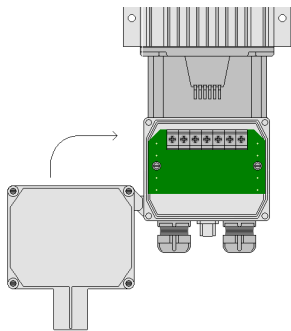
Ta -30 +45°C



Mains V / Hz	Ballast Calibration ( 10,3A )			Losses at 25°C W
	A	ZΩ	( ±3% ) VZ	
230 / 50		18,1	186	70
240 / 50	10,30	19,1	197	72
220 / 60		16,8	173	70

*Reference Standard*

Safety	EN 61347-1	EN 61347-2-9	EN 61347-2-1	EN 60598-1
Performance	EN 60923	EN 60927		
Harmonic limit	EN 61000-3-2		R.F.I. Emissions	EN 55015
Immunity	EN 61547		Flicker	EN 61000-3-3



*Low losses ballast, conform to ErP EUP*  
*High Power Factor Capacitor*  
*External Electronic Ignitor*  
*Case material*  
*Cover*  
*Connector*

Cable gland  
 Recommend cables  
 Dimensions N°  
 Weight Kg.  
 On requeste

PRODUCTION RANGE <b>BTA 1000</b> tw 130 °C $\lambda \geq 0,90$ ( vedi schemi / see drawing ) ALUMINIUM EXTRUDED Tecnopolimero " Glow wire test 850°C 5sec Screw Terminal 1 - 10 mm <sup>2</sup> - 750V / 57A M 25 $\phi$ mm 10...17 H07 RN - F or similar 2 ( pag 3 ) 11,6 Fuse (n. 2 - 10 x 38mm )	
IGNITOR INSIDE	EXTERNAL IGNITOR
Type / Code	Type / Code
BTA 1000.3 V 30003A0T1	BTA 1000.34 V-E 30003AT13

Mains value				Ballasts Characteristics		
V	Hz	A	$\lambda \geq$	ta °C	appr.	class EEI
230	50	5,10	0,90	45		A2
230 / 240	50	5,10	0,90	45		A2

Disponibili a 380-400V 60Hz

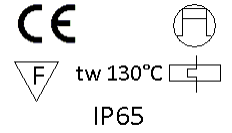
Available in 380-400V 60Hz

Schemi di collegamento - Abbinamenti componenti / Drawing and coupling components

IGNITOR:	IGNITOR INSIDE (SP 303)	EXTERNAL IGNITOR (SP303 or Digital PW 1000)
Wiring diagram:		
Max. distance:	Control gear / LUMINAIRE : 2m total	Control gear / IGNITOR: 50m IGNITOR/LAMP: 50m

**400W - 1000W**  
**Control Gear**  
**HI - HS** Lamps

IP65 Class I CSA ALUMINIUM series  
 230V 50Hz Weatherproof Independent Control Gear  
 IP65 Class I



lamp W	Ballast Calibration			Losses at 25°C W
	A	ZΩ	(±3%) VZ	
400	4,40	43,6	192	31,5
600	6,20	29,7	184	41
1000	10,3	18,1	186	60

*Reference Standard*

Safety	EN 61347-1	EN 61347-2-9	EN 61347-2-1
	EN 60598-1		
Performance	EN 60923	EN 60927	
Harmonic limit	EN 61000-3-2	R.F.I. Emissions	EN 55015
Immunity	EN 61547	Flicker	EN 61000-3-3

*Low losses ballast, conform to ErP EUP*  
*High Power Factor Capacitor*  
*Superimposed Internal Electronic Ignitor*  
 Case material  
 Cover  
 Connector  
  
 Dimensions N°  
 Cable gland  
 Recommend cables  
 Dimensions N°.. ( pag.. )

PRODUCTION RANGE	
<b>CSA 100- 1000W</b>	
tw 130 °C	
$\lambda \geq 0,90$	
3,5...4,5 KV	200 pF ( max. distance lamp 2m )
ALUMINIUM EXTRUDED	
ALUMINIUM	
Screw Terminal	
1 - 4 mm <sup>2</sup> - 450V	
1 ( pag 4)	
M 20 $\phi$ mm 10...14	
H07 RN – F or similar	
xxxx	

Mains value 230V 50Hz			$\lambda \geq 0,90$		Ballasts Characteristics			Standard Version	
Lamp W nominal	HPSV	MH	Mains A	$\lambda \geq$	ta °C	Kg	class EEI	Type	Code
<b>400</b> (4,40A)	•	•	2,10	0,90	50	6,20	A2	CSA 400.3	5040300AD
<b>600</b> (6,20A)	•		3,10	0,90	50	8,20	A2	CSA 600.3	5060300AD
<b>1000</b> (10,3A)	•	•	5,10	0,90	45	11,6	A2	CSA 1000.3	5000300AD

Disponibili / Available 240V 50Hz or 220V 60Hz

	Schemi di collegamento - Abbinamenti componenti /	Drawing and coupling components
IGNITOR:	IGNITOR INSIDE	EXTERNAL IGNITOR (ON REQUEST) .../E
Wiring diagram:		
Max. distance:	Control gear / LUMINAIRE : 2m total	Control gear / IGNITOR: 50m IGNITOR/LAMP: 50m



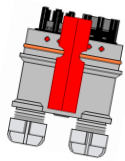
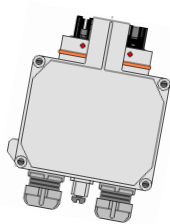
**2000W  
8,80A  
HI Lamps**

**BFA 2388 series**

Weatherproof Independent Control Gear  
IP66 Class I



tw 130°C  
Ta -30 +45°C



*Low losses ballast, conform to ErP EUP  
High Power Factor Capacitor  
External Electronic Ignitor  
Case material  
Cover*

Series  
Connector  
Cable gland  
Recommend cables  
Dimensions N°  
Weight Kg.  
On requeste

Mains V / Hz	Ballast Calibration			Losses at 25°C W
	A	ZΩ	(±3%) VZ	
400 / 50		31	272	75
415 / 50	8,80	32,8	289	78
380 / 50		28	247	75

*Reference Standard*

Safety	EN 61347-1	EN 61347-2-9	EN 61347-2-1	EN 60598-1
Performance	EN 60923	EN 60927		
Harmonic limit	EN 61000-3-2		R.F.I. Emissions	EN 55015
Immunity	EN 61547		Flicker	EN 61000-3-3

PRODUCTION RANGE <b>BFA 2388</b> tw 130 °C $\lambda \geq 0,90$ ( vedi schemi / see drawing ) ALUMINIUM EXTRUDED Tecnopolimero " Glow wire test 850°C 5sec	
F series	V series
Fast Cage clamp 1 - 4 mm <sup>2</sup> - 400V / 25A PG 16 $\phi$ mm 10...14	Screw Terminal 1 - 10 mm <sup>2</sup> - 750V / 57A M 25 $\phi$ mm 10...17
H07 RN - F or similar	
2 ( pag 3 ) 16	2 ( pag 3 ) 16 Fuse ( n. 2 - 10 x 38mm )
Type / Code	Type / Code
BFA 2388.34 322334000	BFA 2388.34V 32233400V
BFA 2388.44 322334000	BFA 2388.44V 32233400V

Mains value				Ballasts Characteristics		
V	Hz	A	$\lambda \geq$	ta °C	appr.	class EEI
380 / 400	50	5,90	0,90	45		A2
400 / 415	50	5,90	0,90	45		A2

Disponibili a 380-400V 60Hz

Available in 380-400V 60Hz

	Schemi di collegamento - Abbinamenti componenti / Drawing and coupling components		
Lamps type:	HQI T 2000 / N	HQI T 2000 / N / SN HPI T 2000 / 380	HQI T 2000 / N / E
IGNITOR:	NO necessary	IM 4 (EXTERNAL)	SP 403 (EXTERNAL)
Wiring diagram:			
Max. distance:	Control gear / LUMINAIRE : 50m	Control gear / LUMINAIRE WITH IGNTOR AND LAMPS: 50m	

**2000W**  
**8,80A**  
**HI Lamps**

**BTA 2388 series**

Weatherproof Independent Control Gear

IP66 Class I



tw 130°C

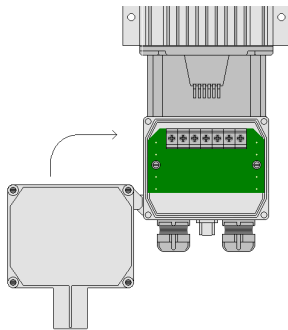
Ta -30 +45°C



Mains V / Hz	Ballast Calibration			Losses at 25°C W
	A	ZΩ	(±3%) VZ	
400 / 50		31	272	75
415 / 50	8,80	32,8	289	78
380 / 50		28	247	75

*Reference Standard*

Safety	EN 61347-1	EN 61347-2-9	EN 61347-2-1	EN 60598-1
Performance	EN 60923	EN 60927		
Harmonic limit	EN 61000-3-2		R.F.I. Emissions	EN 55015
Immunity	EN 61547		Flicker	EN 61000-3-3



*Low losses ballast, conform to ErP EUP*  
*High Power Factor Capacitor*  
*External Electronic Ignitor*  
*Case material*  
*Cover*  
*Connector*

Cable gland  
Recommend cables  
Dimensions N°  
Weight Kg.  
On requeste

PRODUCTION RANGE	
<b>BTA 2388</b>	
tw 130 °C	
$\lambda \geq 0,90$	
( vedi schemi / see drawing )	
ALUMINIUM EXTRUDED	
"Tecnopolimero" Glow wire test 850°C 5sec	
Screw Terminal	
1 - 10 mm <sup>2</sup> - 750V / 57A	
M 25 $\phi$ mm 10...17	
H07 RN – F or similar	
2 ( pag 3 )	
16	
Fuse (n. 2 - 10 x 38mm )	
Standard Version	2 fuse 10 x38mm
Type / Code	Type / Code
BTA 2388.34 V 322334T01	BTA 2388.34 VF 322334T02
BTA 2388.44 V 322344T01	BTA 2388.44 VF 322344T02

Mains value				Ballasts Characteristics		
V	Hz	A	$\lambda \geq$	ta °C	appr.	class EEI
380 / 400	50	5,90	0,90	45		A2
400 / 415	50	5,90	0,90	45		A2

Disponibili a 380-400V 60Hz


Available in 380-400V 60Hz

	Schemi di collegamento - Abbinamenti componenti / Drawing and coupling components		
Lamps type:	HQI T 2000 / N	HQI T 2000 / N / SN HPI T 2000 / 380	HQI T 2000 / N / E
IGNITOR:	NO necessary	IM 4 (EXTERNAL)	SP 403 (EXTERNAL)
Wiring diagram:			
Max. distance:	Control gear / LUMINAIRE : 50m	Control gear / LUMINAIRE WITH IGNTOR AND LAMPS: 50m	

**2000W**  
**8,80A**  
HI Lamps

**BTA D 2388 series**

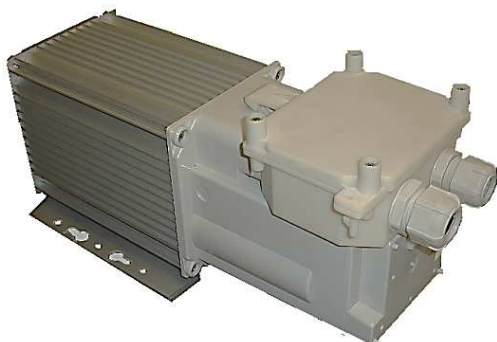
Weatherproof Independent Control Gear

IP65 Class II 



tw 130°C

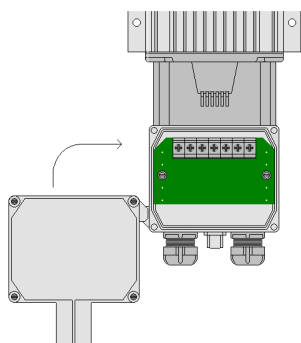
Ta -30 +45°C



Mains V / Hz	Ballast Calibration			Losses at 25°C W
	A	ZΩ	(±3%) VZ	
400 / 50		31	272	75
415 / 50	8,80	32,8	289	78
380 / 50		28	247	75

*Reference Standard*

Safety	EN 61347-1	EN 61347-2-9	EN 61347-2-1	EN 60598-1
Performance	EN 60923	EN 60927		
Harmonic limit	EN 61000-3-2		R.F.I. Emissions	EN 55015
Immunity	EN 61547		Flicker	EN 61000-3-3



*Low losses ballast, conform to ErP EUP*  
*High Power Factor Capacitor*  
*External Electronic Ignitor*  
*Case material*  
*Cover*  
*Connector*

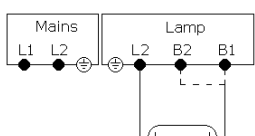
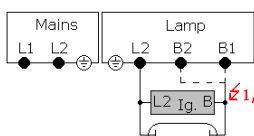
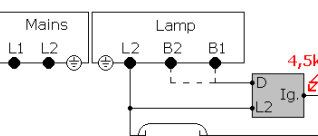
Cable gland  
Recommend cables  
Dimensions N°  
Weight Kg.  
On request

PRODUCTION RANGE	
<b>BTA D 2388</b>	
tw 130 °C	
$\lambda \geq 0,90$	
( vedi schemi / see drawing )	
ALUMINIUM EXTRUDED	
Tecnopolimero " Glow wire test 850°C 5sec	
Screw Terminal	
1 - 10 mm <sup>2</sup> - 750V / 57A	
M 25 $\phi$ mm 10...17	
H07 RN - F or similar	
2 ( pag 3)	
16	
Fuse (n. 2 - 10 x 38mm )	
Standard Version	2 fuse 10 x38mm
Type / Code	Type / Code
BTA D 2388.34 V 322334T03	BTA D 2388.34 VF 322334T04
BTA D 2388.44 V 322344T03	BTA D 2388.44 VF 322344T04

Mains value				Ballasts Characteristics		
V	Hz	A	$\lambda \geq$	ta °C	appr.	class EEI
380 / 400	50	5,90	0,90	45		A2
400 / 415	50	5,90	0,90	45		A2

Disponibili a 380-400V 60Hz

Available in 380-400V 60Hz

	Schemi di collegamento - Abbinamenti componenti / Drawing and coupling components		
Lamps type:	HQI T 2000 / N	HQI T 2000 / N / SN HPI T 2000 / 380	HQI T 2000 / N / E
IGNITOR:	NO necessary	IM 4 (EXTERNAL)	SP 403 (EXTERNAL)
Wiring diagram:			
Max. distance:	Control gear / LUMINAIRE : 50m	Control gear / LUMINAIRE WITH IGNTOR AND LAMPS: 50m	

**2000W**  
**8,80A**  
**HI Lamps**

**CSA 2388 series**



Weatherproof Independent Control Gear

tw 130°C

IP65 Class I

Ta -30 +45°C



Mains V / Hz	Ballast Calibration			Losses at 25°C W
	A	ZΩ	(±3%) VZ	
400 / 50		31	272	75
415 / 50	8,80	32,8	289	78
380 / 50		28	247	75

*Reference Standard*

Safety	EN 61347-1	EN 61347-2-9	EN 61347-2-1	EN 60598-1
Performance	EN 60923	EN 60927		
Harmonic limit	EN 61000-3-2		R.F.I. Emissions	EN 55015
Immunity	EN 61547		Flicker	EN 61000-3-3

*Low losses ballast, conform to ErP EUP  
High Power Factor Capacitor  
External Electronic Ignitor  
Case material  
Cover  
Connector  
  
Cable gland  
Recommend cables  
Dimensions N°  
Weight Kg.  
On requeste*

PRODUCTION RANGE
<b>CSA 2388</b>
tw 130 °C
$\lambda \geq 0,90$
( vedi schemi / see drawing )
ALUMINIUM EXTRUDED
ALUMINIUM
Screw Terminal
1 - 4 mm <sup>2</sup> - 450V
M 20 $\phi$ mm 10...14
H07 RN – F or similar
2 ( pag 4)
16
Fuse (n. 2 - 10 x 38mm )
Standard Version
Type / Code
CSA 2388.34 5223340AD
CSA 2388.44 5223440AD

Mains value				Ballasts Characteristics			Standard Version
V	Hz	A	$\lambda \geq$	ta °C	appr.	class EEI	
380 / 400	50	5,90	0,90	40		A2	CSA 2388.34 5223340AD
400 / 415	50	5,90	0,90	40		A2	CSA 2388.44 5223440AD

Disponibili a 380-400V 60Hz

Available in 380-400V 60Hz

	Schemi di collegamento - Abbinamenti componenti / Drawing and coupling components	
Lamps type:	HQI T 2000 / N	HQI T 2000 / N / SN HPI T 2000 / 380
IGNITOR:	NO necessary	IM 4 (EXTERNAL)
Wiring diagram:		
Max. distance:	Control gear / LUMINAIRE : 50m	Control gear / LUMINAIRE WITH IGNTOR AND LAMPS: 50m

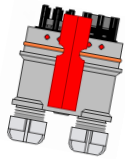
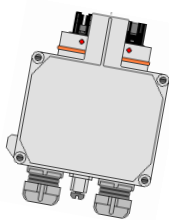
**2000W**  
**10,30 – 11,30A**  
**HI Lamps**

**BFA 2400 series**

Weatherproof Independent Control Gear  
 IP66 Class I



tw 130°C  
 Ta -30 +45°C



*Low losses ballast, conform to ErP EUP*  
*High Power Factor Capacitor*  
*External Electronic Ignitor*  
*Case material*  
*Cover*  
 Series  
 Connector  
 Cable gland  
 Recommend cables  
 Dimensions N°  
 Weight Kg.  
 On request

Mains V / Hz	Ballast Calibration ( 10,3A )			Losses at 25°C W
	A	ZΩ	( ±3% ) VZ	
400 / 50		28	288	103
415 / 50	10,30	30	309	102
380 / 50		26	268	101

*Reference Standard*

Safety	EN 61347-1	EN 61347-2-9	EN 61347-2-1	EN 60598-1
Performance	EN 60923	EN 60927		
Harmonic limit	EN 61000-3-2		R.F.I. Emissions	EN 55015
Immunity	EN 61547		Flicker	EN 61000-3-3

PRODUCTION RANGE <b>BFA 2400</b> tw 130 °C $\lambda \geq 0,90$ ( vedi schemi / see drawing ) ALUMINIUM EXTRUDED Tecnopolimero " Glow wire test 850°C 5sec	
F series	V series
Fast Cage clamp 1 - 4 mm <sup>2</sup> - 400V / 25A PG 16 $\phi$ mm 10...14	Screw Terminal 1 - 10 mm <sup>2</sup> - 750V / 57A M 25 $\phi$ mm 10...17
H07 RN - F or similar	
2 ( pag 3 ) 16	2 ( pag 3 ) 16 Fuse ( n. 2 - 10 x 38mm )
Type / Code	Type / Code
BFA 2400.34 322434000	BTA 2400.34 V 32243400V
BFA 2400.44 322444000	BTA 2400.44 V 3224400V

Mains value				Ballasts Characteristics		
V	Hz	A	$\lambda \geq$	ta °C	appr.	class EEI
380 / 400	50	6,20	0,90	45		A2
400 / 415	50	6,20	0,90	45		A2

Disponibili a 380-400V 60Hz

Available in 380-400V 60Hz

	Schemi di collegamento - Abbinamenti componenti /	Drawing and coupling components
Lamps type:	HQI T 2000 / D / I	HQI T 2000 / D - HQI T 2000 / DS MHN LA 2000 - MHN SA 2000
IGNITOR:	NO necessary	SP 403 ( EXTERNAL )
Wiring diagram:		
Max. distance:	Control gear / LUMINAIRE : 50m	Control gear / LUMINAIRE WITH IGNTOR AND LAMPS: 50m

**2000W**  
**10,30 – 11,30A**  
**HI Lamps**

**BTA 2400 series**

Weatherproof Independent Control Gear

IP66 Class I



tw 130°C

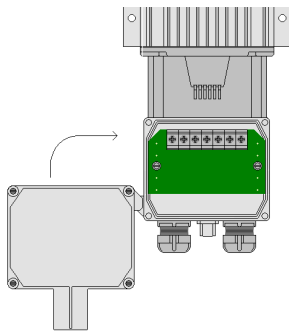
Ta -30 +45°C



Mains V / Hz	Ballast Calibration ( 10,3A )			Losses at 25°C W
	A	ZΩ	( ±3% ) VZ	
400 / 50		28	288	103
415 / 50	10,30	30	309	102
380 / 50		26	268	101

*Reference Standard*

Safety	EN 61347-1	EN 61347-2-9	EN 61347-2-1	EN 60598-1
Performance	EN 60923	EN 60927		
Harmonic limit	EN 61000-3-2		R.F.I. Emissions	EN 55015
Immunity	EN 61547		Flicker	EN 61000-3-3



*Low losses ballast, conform to ErP EUP*  
*High Power Factor Capacitor*  
*External Electronic Ignitor*  
*Case material*  
*Cover*  
*Connector*

Cable gland  
 Recommend cables  
 Dimensions N°  
 Weight Kg.  
 On requeste

PRODUCTION RANGE	
<b>BTA 2400</b>	
tw 130 °C	
$\lambda \geq 0,90$	
( vedi schemi / see drawing )	
ALUMINIUM EXTRUDED	
Tecnopolimero " Glow wire test 850°C 5sec	
Screw Terminal	
1 - 10 mm <sup>2</sup> - 750V / 57A	
M 25 $\phi$ mm 10...17	
H07 RN – F or similar	
2 ( pag 3 )	
16	
Fuse (n. 2 - 10 x 38mm )	
Standard Version	2 fuse 10 x38mm
Type / Code	Type / Code
BTA 2400.34 V 322434T01	BTA 2400.34 V-F 322434T02
BTA 2400.44 V 322444T01	BTA 2400.44 V-F 322444T02

Mains value				Ballasts Characteristics		
V	Hz	A	$\lambda \geq$	ta °C	appr.	class EEI
380 / 400	50	5,90	0,90	45		A2
400 / 415	50	5,90	0,90	45		A2

Disponibili a 380-400V 60Hz


Available in 380-400V 60Hz


	Schemi di collegamento - Abbinamenti componenti	/	Drawing and coupling components
Lamps type:	HQI T 2000 / D / I		HQI T 2000 / D - HQI T 2000 / DS MHN LA 2000 - MHN SA 2000
IGNITOR:	NO necessary		SP 403 ( EXTERNAL )
Wiring diagram:			
Max. distance:	Control gear / LUMINAIRE : 50m		Control gear / LUMINAIRE WITH IGNTOR AND LAMPS: 50m

**2000W**  
**10,30 – 11,30A**  
**HI Lamps**

**BTA D 2400 series**

Weatherproof Independent Control Gear

IP65 Class II 

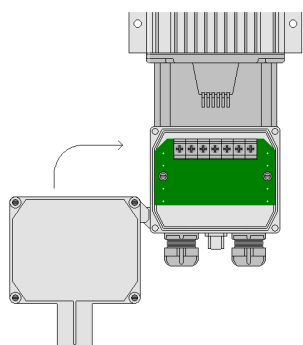
**CE**   
 tw 130°C  
 Ta -30 +45°C



Mains V / Hz	Ballast Calibration			Losses at 25°C W
	A	ZΩ	(±3%) VZ	
400 / 50		31	272	75
415 / 50	8,80	32,8	289	78
380 / 50		28	247	75

*Reference Standard*

Safety	EN 61347-1	EN 61347-2-9	EN 61347-2-1	EN 60598-1
Performance	EN 60923	EN 60927		
Harmonic limit	EN 61000-3-2		R.F.I. Emissions	EN 55015
Immunity	EN 61547		Flicker	EN 61000-3-3



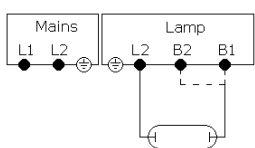
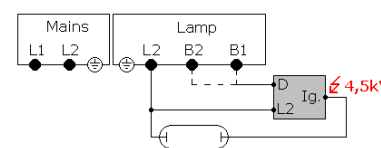
*Low losses ballast, conform to ErP EUP*  
*High Power Factor Capacitor*  
*External Electronic Ignitor*  
*Case material*  
*Cover*  
*Connector*  
  
*Cable gland*  
*Recommend cables*  
*Dimensions N°*  
*Weight Kg.*  
*On requeste*

PRODUCTION RANGE BTA D 2400	
tw 130 °C	
$\lambda \geq 0,90$	
( vedi schemi / see drawing )	
ALUMINIUM EXTRUDED	
Tecnopolimero " Glow wire test 850°C 5sec	
Screw Terminal	
1 - 10 mm <sup>2</sup> - 750V / 57A	
M 25 $\phi$ mm 10...17	
H07 RN - F or similar	
2 ( pag 3)	
16	
Fuse (n. 2 - 10 x 38mm)	
Standard Version	2 fuse 10 x38mm
Type / Code	Type / Code
BTA D 2400.34 V 322434T03	BTA D 2400.34 V-F 322434T04
BTA D 2400.44 V 322444T03	BTA D 2400.44 V-F 322444T04

Mains value			Ballasts Characteristics			
V	Hz	A	$\lambda \geq$	ta °C	appr.	class EEI
380 / 400	50	5,90	0,90	45		A2
400 / 415	50	5,90	0,90	45		A2

Disponibili a 380-400V 60Hz

Available in 380-400V 60Hz

	Schemi di collegamento - Abbinamenti componenti	/	Drawing and coupling components
Lamps type:	HQI T 2000 / D / I		HQI T 2000 / D - HQI T 2000 / DS MHN LA 2000 - MHN SA 2000
IGNITOR:	NO necessary		SP 403 ( EXTERNAL )
Wiring diagram:			
Max. distance:	Control gear / LUMINAIRE : 50m		Control gear / LUMINAIRE WITH IGNTOR AND LAMPS: 50m

**2000W**  
**10,30 – 11,30A**  
**HI Lamps**

**CSA 2400 series**

Weatherproof Independent Control Gear  
 IP65 Class I



tw 130°C  
 Ta -30 +45°C



Mains V / Hz	Ballast Calibration			Losses at 25°C W
	A	ZΩ	(±3%) VZ	
400 / 50		31	272	75
415 / 50	8,80	32,8	289	78
380 / 50		28	247	75

*Reference Standard*

Safety	EN 61347-1	EN 61347-2-9	EN 61347-2-1	EN 60598-1
Performance	EN 60923	EN 60927		
Harmonic limit	EN 61000-3-2		R.F.I. Emissions	EN 55015
Immunity	EN 61547		Flicker	EN 61000-3-3

*Low losses ballast, conform to ErP EUP*  
*High Power Factor Capacitor*  
*External Electronic Ignitor*  
*Case material*  
*Cover*  
*Connector*  
  
*Cable gland*  
*Recommend cables*  
*Dimensions N°*  
*Weight Kg.*  
*On requeste*

PRODUCTION RANGE
<b>CSA 2400</b>
tw 130 °C
$\lambda \geq 0,90$
( vedi schemi / see drawing )
ALUMINIUM EXTRUDED
ALUMINIUM
Screw Terminal
1 - 4 mm <sup>2</sup> - 450V
M 20 $\phi$ mm 10...14
H07 RN – F or similar
2 ( pag 4)
16
Fuse (n. 2 - 10 x 38mm )
Standard Version
Type / Code
CSA 2400.34 5224340AD
CSA 2400.44 5224440AD

Mains value				Ballasts Characteristics			class EEI
V	Hz	A	$\lambda \geq$	ta °C	appr.		
380 / 400	50	5,90	0,90	40		A2	
400 / 415	50	5,90	0,90	40		A2	

Disponibili a 380-400V 60Hz

Available in 380-400V 60Hz


	Schemi di collegamento - Abbinamenti componenti	/	Drawing and coupling components
Lamps type:	HQI T 2000 / D / I		HQI T 2000 / D - HQI T 2000 / DS MHN LA 2000 - MHN SA 2000
IGNITOR:	NO necessary		SP 403 ( EXTERNAL )
Wiring diagram:			
Max. distance:	Control gear / LUMINAIRE : 50m		Control gear / LUMINAIRE WITH IGNTOR AND LAMPS: 50m

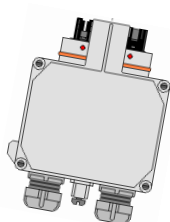


**2000W**  
**12,20A**  
HI Lamps

**BFA 2400 HF series**

Weatherproof Independent Control Gear  
IP66 Class I

**CE**   
tw 130°C  
Ta -30 +45°C



*Low losses ballast, conform to ErP EUP*  
*High Power Factor Capacitor*  
*External Electronic Ignitor*  
*Case material*  
*Cover*  
Series  
Connector  
Cable gland  
Recommend cables  
Dimensions N°  
Weight Kg.  
On request

Mains V / Hz	Ballast Calibration			Losses at 25°C W
	A	ZΩ	(±3%) VZ	
400 / 50		26	317	<b>100</b>
415 / 50	12,20	26,8	335	<b>100</b>
380 / 50		24,4	297	<b>99</b>

*Reference Standard*

Safety	EN 61347-1	EN 61347-2-9	EN 61347-2-1	EN 60598-1
Performance	EN 60923	EN 60927		
Harmonic limit	EN 61000-3-2		R.F.I. Emissions	EN 55015
Immunity	EN 61547		Flicker	EN 61000-3-3

**PRODUCTION RANGE**

**BFA 2400 HF**

tw 130 °C

$\lambda \geq 0,90$

( vedi schemi / see drawing )

ALUMINIUM EXTRUDED

Tecnopolimero " Glow wire test 850°C 5sec

**F series**

**V series**

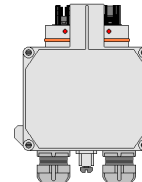
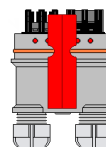
Fast Cage clamp  
1 - 4 mm<sup>2</sup> - 400V / 25A  
PG 16  $\phi$  mm 10...14

Screw Terminal  
1 - 10 mm<sup>2</sup> - 750V / 57A  
M 25  $\phi$  mm 10...17

H07 RN - F or similar

2 ( pag 3 )  
16

2 ( pag 3 )  
16  
Fuse ( n. 2 - 10 x 38mm )



Mains value				Ballasts Characteristics			Type / Code	
V	Hz	A	$\lambda \geq$	ta °C	appr.	class EEI	F series	V series
380 / 400	50	6,20	0,90	40		A2	BFA 2400HF.34 3224340H0	BFA 2400HF.34V 3224340HV
400 / 415	50	6,20	0,90	40		A2	BFA 2400HF.44 3224440H0	BFA 2400HF.44V 3224440HV

Disponibili a 380-400V 60Hz

Available in 380-400V 60Hz

Schemi di collegamento - Abbinamenti componenti / Drawing and coupling components

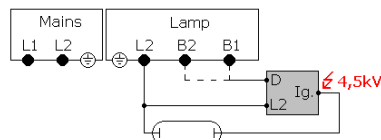
Lamps type:

HQI T 2000 / D / S HIGH FLUX

IGNITOR:

SP 403 ( EXTERNAL )

Wiring diagram:




Max. distance:

Control gear / LUMINARE WITH IGNTOR AND LAMPS: 50m

**2000W**  
**12,20A**  
HI Lamps

**BTA 2400 HF series**

Weatherproof Independent Control Gear  
IP66 Class I

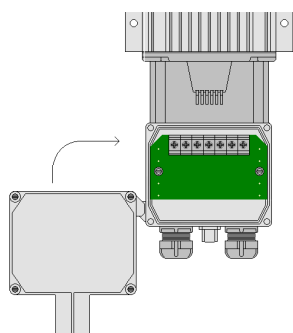
**CE**   
tw 130°C  
Ta -30 +45°C



Mains V / Hz	Ballast Calibration ( 10,3A )			Losses at 25°C W
	A	ZΩ	( ±3% ) VZ	
400 / 50		26	288	<b>100</b>
415 / 50	12,20	26,8	309	<b>100</b>
380 / 50		24,4	268	<b>99</b>

*Reference Standard*

Safety	EN 61347-1	EN 61347-2-9	EN 61347-2-1	EN 60598-1
Performance	EN 60923	EN 60927		
Harmonic limit	EN 61000-3-2		R.F.I. Emissions	EN 55015
Immunity	EN 61547		Flicker	EN 61000-3-3



*Low losses ballast, conform to ErP EUP*  
*High Power Factor Capacitor*  
*External Electronic Ignitor*  
*Case material*  
*Cover*  
*Connector*  
  
*Cable gland*  
*Recommend cables*  
*Dimensions N°*  
*Weight Kg.*  
*On requeste*

PRODUCTION RANGE <b>BTA 2400 HF</b>	
tw 130 °C	
$\lambda \geq 0,90$	
( vedi schemi / see drawing )	
ALUMINIUM EXTRUDED	
Tecnopolimero " Glow wire test 850°C 5sec	
Screw Terminal	
1 - 10 mm <sup>2</sup> - 750V / 57A	
M 25 $\phi$ mm 10...17	
H07 RN - F or similar	
Dimensions N° 2 ( pag 3)	
Weight Kg. 16	
Fuse (n. 2 - 10 x 38mm)	
Standard Version	2 fuse 10 x38mm
Type / Code	Type / Code
BTA 2400HF.34 V 322434TH1	BTA 2400HF.34 V-F 322434TH2
BTA 2400HF.44 V 322444TH1	BTA 2400HF.44 V-F 322444TH2

Mains value			Ballasts Characteristics			
V	Hz	A	$\lambda \geq$	ta °C	appr.	class EEI
380 / 400	50	6,20	0,90	40		A2
400 / 415	50	6,20	0,90	40		A2

Disponibili a 380-400V 60Hz

Available in 380-400V 60Hz

Schemi di collegamento - Abbinamenti componenti / Drawing and coupling components

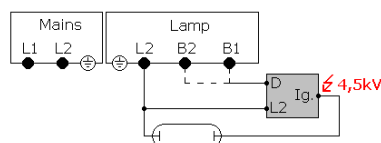
Lamps type:

HQI T 2000 / D / S HIGH FLUX

IGNITOR:

SP 403 ( EXTERNAL )

Wiring diagram:




Max. distance:


Control gear / LUMINARE WITH IGNTOR AND LAMPS: 50m

**2000W**  
**12,20A**  
HI Lamps

**BTA D 2400 HF series**

**CE**   
tw 130°C  
Ta -30 +45°C

Weatherproof Independent Control Gear

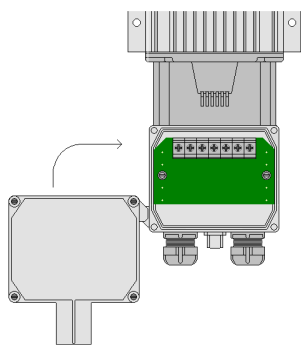
IP65 Class II 



Mains V / Hz	Ballast Calibration			Losses at 25°C W
	A	ZΩ	(±3%) VZ	
400 / 50		26	272	<b>100</b>
415 / 50	12,20	26,8	289	<b>100</b>
380 / 50		24,4	247	<b>99</b>

*Reference Standard*

Safety	EN 61347-1	EN 61347-2-9	EN 61347-2-1	EN 60598-1
Performance	EN 60923	EN 60927		
Harmonic limit	EN 61000-3-2		R.F.I. Emissions	EN 55015
Immunity	EN 61547		Flicker	EN 61000-3-3



*Low losses ballast, conform to ErP EUP*  
*High Power Factor Capacitor*  
*External Electronic Ignitor*  
*Case material*  
*Cover*  
*Connector*  
  
*Cable gland*  
*Recommend cables*  
*Dimensions N°*  
*Weight Kg.*  
*On requeste*

PRODUCTION RANGE <b>BTA D 2400 HF</b>	
tw 130 °C	
$\lambda \geq 0,90$	
( vedi schemi / see drawing )	
ALUMINIUM EXTRUDED	
Tecnopolimero " Glow wire test 850°C 5sec	
Screw Terminal	
1 - 10 mm <sup>2</sup> - 750V / 57A	
M 25 $\phi$ mm 10...17	
H07 RN – F or similar	
2 ( pag 3)	
16	
Fuse (n. 2 - 10 x 38mm )	
Standard Version	2 fuse 10 x38mm
Type / Code	Type / Code
BTA D 2400HF.34 V 322434TH3	BTA D 2400HF.34 V-F 322434TH4
BTA D 2400HF.44 V 322444TH3	BTA D 2400HF.44 V-F 322444TH4

Mains value				Ballasts Characteristics		
V	Hz	A	$\lambda \geq$	ta °C	appr.	class EEI
380 / 400	50	6,20	0,90	40		A2
400 / 415	50	6,20	0,90	40		A2

Disponibili a 380-400V 60Hz

Available in 380-400V 60Hz

Schemi di collegamento - Abbinamenti componenti / Drawing and coupling components

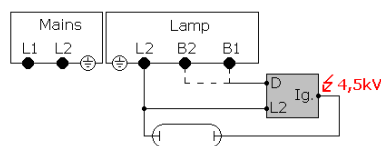
Lamps type:

HQI T 2000 / D / S HIGH FLUX

IGNITOR:

SP 403 ( EXTERNAL )

Wiring diagram:




Max. distance:

Control gear / LUMINARE WITH IGNTOR AND LAMPS: 50m

**2000W**  
**12,20A**  
HI Lamps

**CSA 2400 HF series**

Weatherproof Independent Control Gear  
IP65 Class I

**CE**   
tw 130°C  
Ta -30 +45°C



Mains V / Hz	Ballast Calibration			Losses at 25°C W
	A	ZΩ	(±3%) VZ	
400 / 50		31	272	75
415 / 50	8,80	32,8	289	78
380 / 50		28	247	75

*Reference Standard*

Safety	EN 61347-1	EN 61347-2-9	EN 61347-2-1	EN 60598-1
Performance	EN 60923	EN 60927		
Harmonic limit	EN 61000-3-2		R.F.I. Emissions	EN 55015
Immunity	EN 61547		Flicker	EN 61000-3-3

*Low losses ballast, conform to ErP EUP  
High Power Factor Capacitor  
External Electronic Ignitor  
Case material  
Cover  
Connector  
  
Cable gland  
Recommend cables  
Dimensions N°  
Weight Kg.  
On requeste*

PRODUCTION RANGE
<b>CSA 2400 HF</b>
tw 130 °C
$\lambda \geq 0,90$
( vedi schemi / see drawing )
ALUMINIUM EXTRUDED
ALUMINIUM
Screw Terminal
1 - 4 mm <sup>2</sup> - 450V
M 20 $\phi$ mm 10...14
H07 RN – F or similar
2 ( pag 4)
16
Fuse (n. 2 - 10 x 38mm )
Standard Version
Type / Code
CSA 2400. HF34 522434HAD
CSA 2400. HF44 522444HAD

Mains value				Ballasts Characteristics			Standard Version
V	Hz	A	$\lambda \geq$	ta °C	appr.	class EEI	
380 / 400	50	6,20	0,90	40		A2	CSA 2400. HF34 522434HAD
400 / 415	50	6,20	0,90	40		A2	CSA 2400. HF44 522444HAD

Disponibili a 380-400V 60Hz

Available in 380-400V 60Hz

Schemi di collegamento - Abbinamenti componenti / Drawing and coupling components

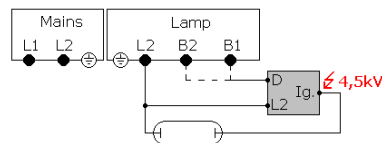
Lamps type:

HQI T 2000 / D / S HIGH FLUX

IGNITOR:

SP 403 ( EXTERNAL )

Wiring diagram:



Max. distance:

Control gear / LUMINARE WITH IGNTOR AND LAMPS: 50m



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