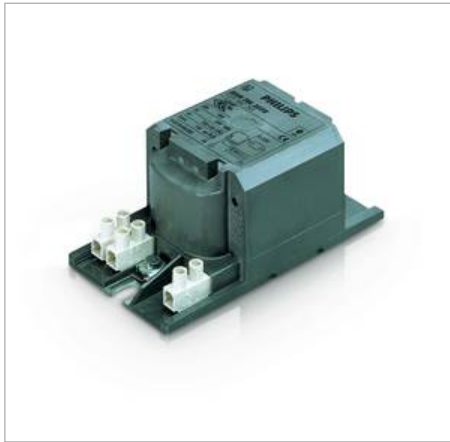




Dear User.

Hereby we would like to inform you, that our site and also this service will end on December 31st, 2018. Please use the Philips product catalog for family and product pages at www.lighting.philips.com.

If you received this page via third-party site, please inform their website administrator about this message.



Long-lasting, reliable solution

Encapsulated electromagnetic copper/iron ballasts for use with an external semi-parallel ignitor for CDM, CDO, MH, HPI (Plus) and SON lamps

Benefits

- Excellent resistance to chemical impact, humid conditions and environmental stress crack
- Long-lasting reliable solution – outstanding product lifetime of 15 years average
- Minimal watt losses thanks to orthocyclic winding process
- Control gear can be installed remotely

Features

- Encapsulated with thermoplastic polyester resin, reinforced with glass fiber
- Equipped with screw terminal blocks as standard; insert contacts available upon request

- Ballasts for alternative mains voltages/frequencies available upon request
- Separate earth terminal (HID 'Heavy Duty')

Application

- Outdoor lighting (most popular application: road and tunnel lighting)

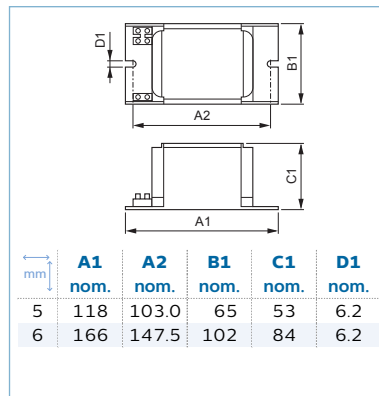
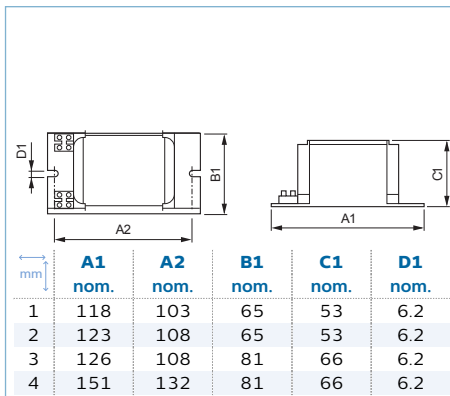
System

- Electromagnetic system requires ballast, ignitor and capacitor
- Semi-parallel circuit: if ballasts with "L" in their description (e. g. BSN 100 L307...) are used, SN(D)... ignitors are required; if ballasts with "K" in their description (e. g. BSN 100 K307...) are used, SK(D)... ignitors are required. Capacitor value to match system power can be found on lamp/ballast combination sheet
- Series circuit: all ballasts are designed to work with series ignitors
- No ignitor needed for SON-I lamps

Product Range



Dimension Drawing





Main Data

BSN

Rated Ballast-Lamp Power	Application Code	Input Voltage	Input Frequency	Design	SAP Packing (Piece)/Packaging configuration	Number of Lamps (piece)	Lamp family code	mm	Photo letter	Ordering number
50 W	L33-A2-TS	230V	50Hz	HD1-118	NO / 6	1	SON	1	A	871869674080400
70 W	L33-A2-TS	230V	50Hz	HD1-118	NO / 6	1	SON/CDO	5	B	871150005968031
70 W	L34-A2-TS	240V	50Hz	HD1-118	NO / 6	1	SON/CDO	5	B	871150005970331
100 W	L33-A2-TS	230V	50Hz	HD1-123	NO / 6	1	SON	2	C	871869674094100
150 W	L33-A2-TS	230V	50Hz	HD2-126	NO / 6	1	SON/MH	3	D	871869674100900
250 W	L33-A2-TS	230V	50Hz	HD2-151	NO / 6	1	SON/MH	4	E	871869674108500
400 W	L33-A2-TS	230V	50Hz	HD3-166	NO / 4	1	SON/HPI	6	B	871150005976530

Electrical data

Commercial product name	Input Voltage (V)	Input Frequency (Hz)
BSN 50 L33-A2-TS 230V 50Hz	230	50
BSN 70 L33-A2-TS 230V 50Hz HD1-118	230	50
BSN 70 L34-A2-TS 240V 50Hz HD1-118	240	50
BSN 100 L33-A2-TS 230V 50Hz	230	50
BSN 150 L33-A2-TS 230V 50Hz	230	50
BSN 250 L33-A2-TS 230V 50Hz	230	50
BSN 400 L33-A2-TS 230V 50Hz HD3-166	230	50

Temperature data

Commercial product name	Delta-T Normal Conditions	T-Storage	T-Storage	T-Winding	Active Temperature Protection
	(°C)	(°C [min.])	(°C [max.])	(°C [max.])	
BSN 50 L33-A2-TS 230V 50Hz	50	-30	130	130	Yes
BSN 70 L33-A2-TS 230V 50Hz HD1-118	55	-30	130	130	Yes
BSN 70 L34-A2-TS 240V 50Hz HD1-118	55	-30	130	130	Yes
BSN 100 L33-A2-TS 230V 50Hz	65	-30	130	130	Yes
BSN 150 L33-A2-TS 230V 50Hz	60	-30	130	130	Yes
BSN 250 L33-A2-TS 230V 50Hz	75	-30	130	130	Yes
BSN 400 L33-A2-TS 230V 50Hz HD3-166	70	-30	130	130	Yes

Environmental data & ETIM group & Design Requirements

Commercial product name	ETIM Group ¹
BSN 70 L33-A2-TS 230V 50Hz HD1-118	EC001497
BSN 70 L34-A2-TS 240V 50Hz HD1-118	EC001497
BSN 400 L33-A2-TS 230V 50Hz HD3-166	EC001497

¹ 'ETIM Group' value description(s): 'EC001497' = Ballast

System data

Commercial product name	Number of Lamps/Rated Ballast-Lamp Power	Lamp family code	Capacitor	Power Factor 100% Load	Power Factor without PF Compensation	Power Losses	Mains voltage performance (AC)	Mains voltage safety (AC)
						(W)		
BSN 50 L33-A2-TS 230V 50Hz	1 x 50 W	SON	10µF/250V	0.85	0.35	8.6	-8%+6%	-10%+10%
BSN 70 L33-A2-TS 230V 50Hz HD1-118	1 x 70 W	SON/CDO	12µF/250V	0.87	0.35	11.0	-8%+6%	-10%+10%
BSN 70 L34-A2-TS 240V 50Hz HD1-118	1 x 70 W	SON/CDO	12µF/250V	0.87	0.35	11.5	-8%+6%	-10%+10%
BSN 100 L33-A2-TS 230V 50Hz	1 x 100 W	SON	14µF/250V	0.85	0.40	14.8	-8%+6%	-10%+10%
BSN 150 L33-A2-TS 230V 50Hz	1 x 150 W	SON/MH	18µF/250V	0.85	0.40	17.0	-8%+6%	-10%+10%
BSN 250 L33-A2-TS 230V 50Hz	1 x 250 W	SON/MH	32µF/250V	0.85	0.40	25.4	-8%+6%	-10%+10%
BSN 400 L33-A2-TS 230V 50Hz HD3-166	1 x 400 W	SON/HPI	45µF/250V	0.87	0.40	28.0	-8%+6%	-10%+10%



Operating data

Commercial product name	Input Frequency	Input Current with PF Correction	Input Current without PF Correction
	(Hz)	(A)	(A)
BSN 50 L33-A2-TS 230V 50Hz	50	0.35	0.76
BSN 70 L33-A2-TS 230V 50Hz HD1-118	50	0.45	1.00
BSN 70 L34-A2-TS 240V 50Hz HD1-118	50	0.45	1.00
BSN 100 L33-A2-TS 230V 50Hz	50	0.60	1.20
BSN 150 L33-A2-TS 230V 50Hz	50	0.85	1.80
BSN 250 L33-A2-TS 230V 50Hz	50	1.40	3.00
BSN 400 L33-A2-TS 230V 50Hz HD3-166	50	2.20	4.45

Codes - Application data

Commercial product name	Application Code	ETIM Group ²
BSN 50 L33-A2-TS 230V 50Hz	L33-A2-TS	
BSN 70 L33-A2-TS 230V 50Hz HD1-118	L33-A2-TS	EC001497
BSN 70 L34-A2-TS 240V 50Hz HD1-118	L34-A2-TS	EC001497
BSN 100 L33-A2-TS 230V 50Hz	L33-A2-TS	
BSN 150 L33-A2-TS 230V 50Hz	L33-A2-TS	
BSN 250 L33-A2-TS 230V 50Hz	L33-A2-TS	
BSN 400 L33-A2-TS 230V 50Hz HD3-166	L33-A2-TS	EC001497

² 'ETIM Group' value description(s): 'EC001497' = Ballast

Compliance & classification standards

Commercial product name	Ap- proval Marks
BSN 50 L33-A2-TS 230V 50Hz	CE
BSN 70 L33-A2-TS 230V 50Hz HD1-118	CE
BSN 70 L34-A2-TS 240V 50Hz HD1-118	CE
BSN 100 L33-A2-TS 230V 50Hz	CE
BSN 150 L33-A2-TS 230V 50Hz	CE
BSN 250 L33-A2-TS 230V 50Hz	CE
BSN 400 L33-A2-TS 230V 50Hz HD3-166	CE

Logistic data

Commercial product name	SAP Packing (Piece)/Packaging configuration ³	Numerator - Packs per outer box	Ordering number	Material Nr. (12NC)	SAP Gross Weight (Piece)	Net Weight (Piece)	EAN-3
				(9137...)	(g)	(g)	
BSN 50 L33-A2-TS 230V 50Hz	NO / 6	6	871869674080400	00752026	1,286	1,270	8718696740811
BSN 70 L33-A2-TS 230V 50Hz HD1-118	NO / 6	6	871150005968031	00226526	1,296	1,280	8711500062154
BSN 70 L34-A2-TS 240V 50Hz HD1-118	NO / 6	6	871150005970331	00226626	1,296	1,280	8711500062161
BSN 100 L33-A2-TS 230V 50Hz	NO / 6	6	871869674094100	00752526	1,396	1,380	8718696740958
BSN 150 L33-A2-TS 230V 50Hz	NO / 6	6	871869674100900	00752826	1,933	1,910	8718696741016
BSN 250 L33-A2-TS 230V 50Hz	NO / 6	6	871869674108500	00753126	2,827	2,800	8718696741092
BSN 400 L33-A2-TS 230V 50Hz HD3-166	NO / 4	4	871150005976530	00226926	4,591	4,550	8711500059772

³ 'SAP Packing (Piece)/Packaging configuration' value description(s): 'NO / 4' = NO PACKING, 'NO / 6' = NO PACKING

Wiring Data

Commercial product name	Connector Type	Ballast Contact Wire Cross Section (mm ²)	Wire Striplength (mm)	Wiring Diagram
BSN 50 L33-A2-TS 230V 50Hz	Screw	2.5	6	W1
BSN 70 L33-A2-TS 230V 50Hz HD1-118	Screw	0.70-6.00	7	W1
BSN 70 L34-A2-TS 240V 50Hz HD1-118	Screw	0.70-6.00	7	W1

More data see next page

Commercial product name	Connector Type	Ballast Contact Wire Cross Section (mm ²)	Wire Striplength (mm)	Wiring Diagram
BSN 100 L33-A2-TS 230V 50Hz	Screw	2.5	6	W1
BSN 150 L33-A2-TS 230V 50Hz	Screw	2.5	6	W1
BSN 250 L33-A2-TS 230V 50Hz	Screw	2.5	6	W1
BSN 400 L33-A2-TS 230V 50Hz HD3-166	Screw	0.70-6.00	7	W1

