



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.



Robust design, compact form

HF-Matchbox Blue is an affordable, reliable, compact, lightweight and high-frequency ballast for use with system wattages below 25 W in combination with TL mini, TL-D, TL5 and TL5c, PL-T/C, and PL-L/S lamps. The HF-M Blue range has a robust design, meets all relevant international safety and performance standards and has an energy efficiency index (CELMA EEI) of A2.

The ballast is primarily designed for Indoor application. For outdoor application, the luminaire should be minimum ClassI and need to be sufficiently protected against water & dust. The installation should also be guard against any lightning surge or any other necessary electrical protection as deemed in such typical installation & application.

Benefits

- Automatic restart (after voltage dip or lamp exchange) ensures easy operation and hassle-free re-lamping.
- Suitable for use in class I or class II luminaires

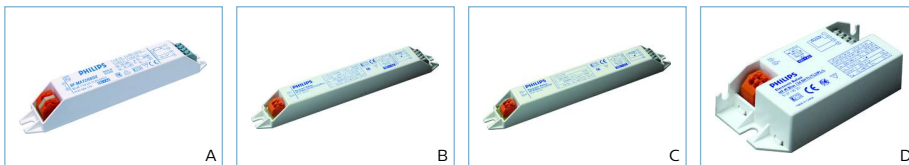
Features

- Suitable for emergency DC operation between 190 and 254 V
- Programmed, flicker-free, pre-heated start (<0.8 s); over 8,000 on/off switches on one lamp (depending on lamp/ballast combination)
- Automatic restart (after voltage dip or lamp exchange) ensures easy operation and hassle-free re-lamping.

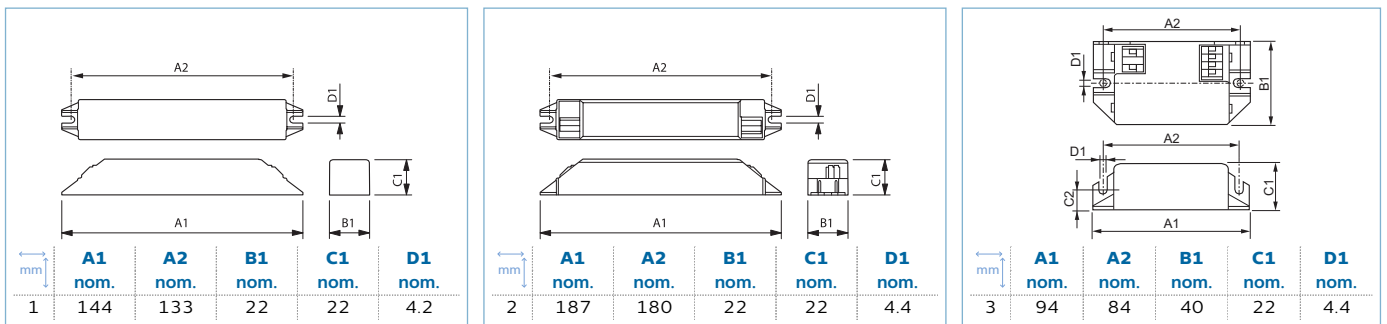
Application

- Used with movement-detection control systems like Philips OccuPlus in applications where lamps burn for a long period of time and the switching cycle is infrequent (e. g. a maximum of three times per day)
- Mainly for indoor applications such as spotlights, downlights, light boxes, and emergency and security fixtures used largely in retail stores, office buildings, hotels, private homes and residential buildings
- Domestic applications such as outdoor garden lighting, garage areas, stairways

Product Range



Dimension Drawing



Main Data

Type	Housing	Lamp family code	Application Code	Input Voltage	SAP Packing (Piece)/Packaging configuration	mm	Photo letter	Ordering number 8711500...
HF-M	LH	TL/PL-S		230 to 240V	NO / 50	1	A	53680830
HF-M	LH	TL/PL-S/PL-C		230 to 240V	NO / 50	1	A	53682230
HF-M	LH	TL/TL5/PL-L		230 to 240V	NO / 50	2	B	53640230
HF-M	LH	TL5		230 to 240V	NO / 50	2	A	93243330
HF-M	LH	TL5		230 to 240V	NO / 50	2	C	53646430
HF-M	SH	TL/TL5/PL-L	mk1	230 to 240V	NO / 50	3	D	53638930



Electrical data

Commercial product name	Input Voltage (V)	Ignition Time (sec. [max.])	Input Frequency (Hz)
HF-M BLUE 109 LH TL/PL-S 230-240V	230 to 240	0.5	50-60
HF-M BLUE 114 LH TL/PL-S/PL-C 230-240V	230 to 240	0.5	50-60
HF-M BLUE 121 LH TL5 230-240V	230 to 240	0.5	50-60
HF-M BLUE 124 LH TL/TL5/PL-L 230-240V	230 to 240	0.5	50-60
HF-M BLUE 124 SH TL/TL5/PL-L 230-240V	230 to 240	0.5	50-60
HF-M BLUE 128 LH TL5 230-240V	230 to 240	0.5	50-60

Lifetime data

Commercial product name	Life to 90% Survivors (h)
HF-M BLUE 124 SH TL/TL5/PL-L 230-240V	25,000

Temperature data

Commercial product name	T-Ambient (°C [min.])	T-Ambient (°C [max.])	T-Case Maximum (°C [max.])
HF-M BLUE 109 LH TL/PL-S 230-240V	-10	40	75
HF-M BLUE 114 LH TL/PL-S/PL-C 230-240V	-10	40	75
HF-M BLUE 121 LH TL5 230-240V	-10	40	75
HF-M BLUE 124 LH TL/TL5/PL-L 230-240V	-10	40	75
HF-M BLUE 124 SH TL/TL5/PL-L 230-240V	-10	40	75
HF-M BLUE 128 LH TL5 230-240V	-10	40	75

Environmental data & ETIM group & Design Requirements

Commercial product name	ETIM Group ¹
HF-M BLUE 109 LH TL/PL-S 230-240V	EC001497
HF-M BLUE 114 LH TL/PL-S/PL-C 230-240V	EC001497
HF-M BLUE 121 LH TL5 230-240V	EC001497
HF-M BLUE 124 LH TL/TL5/PL-L 230-240V	EC001497
HF-M BLUE 124 SH TL/TL5/PL-L 230-240V	EC001497
HF-M BLUE 128 LH TL5 230-240V	EC001497

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

System data

Commercial product name	Number of Lamps/Rated Ballast-Lamp Power	Lamp family code	Number of Products on MCB (16A Type B)	Power Factor 100% Load	Power Losses (W)	Mains voltage performance (AC)	Mains voltage safety (AC)
HF-M BLUE 109 LH TL/PL-S 230-240V	1 x 9 W	TL/PL-S	159	0.64	1.7	-8% - +6%	-10% - +10%
HF-M BLUE 114 LH TL/PL-S/PL-C 230-240V	1 x 14 W	TL/PL-S/PL-C	101	0.64	2.9	-8% - +6%	-10% - +10%
HF-M BLUE 121 LH TL5 230-240V	1 x 21 W	TL5	59	0.64	2.4	-8% - +6%	-10% - +10%
HF-M BLUE 124 LH TL/TL5/PL-L 230-240V	1 x 24 W	TL/TL5/PL-L	60	0.64	1.8-2.1	-8% - +6%	-10% - +10%
HF-M BLUE 124 SH TL/TL5/PL-L 230-240V	1 x 24 W	TL/TL5/PL-L	60	0.64	1.9-2.2	-8% - +6%	-10% - +10%
HF-M BLUE 128 LH TL5 230-240V	1 x 28 W	TL5		0.63	4.5	-8% - +6%	-10% - +10%

Operating data

Commercial product name	Input Frequency (Hz)
HF-M BLUE 109 LH TL/PL-S 230-240V	50-60
HF-M BLUE 114 LH TL/PL-S/PL-C 230-240V	50-60
HF-M BLUE 121 LH TL5 230-240V	50-60
HF-M BLUE 124 LH TL/TL5/PL-L 230-240V	50-60
HF-M BLUE 124 SH TL/TL5/PL-L 230-240V	50-60
HF-M BLUE 128 LH TL5 230-240V	50-60

Emergency data

Commercial product name	Battery Voltage Lamp Ignition (V)
HF-M BLUE 109 LH TL/PL-S 230-240V	194-254
HF-M BLUE 114 LH TL/PL-S/PL-C 230-240V	194-254
HF-M BLUE 121 LH TL5 230-240V	194-254
HF-M BLUE 124 LH TL/TL5/PL-L 230-240V	194-254
HF-M BLUE 124 SH TL/TL5/PL-L 230-240V	194-254
HF-M BLUE 128 LH TL5 230-240V	194-254

Protection

Commercial product name	Automatic Restart	IP Classification ²	Overvoltage Protection 320Vac (h)
HF-M BLUE 109 LH TL/PL-S 230-240V	Yes	IP 20	0.03
HF-M BLUE 114 LH TL/PL-S/PL-C 230-240V	Yes	IP 20	0.03
HF-M BLUE 121 LH TL5 230-240V	Yes	IP 20	0.03
HF-M BLUE 124 LH TL/TL5/PL-L 230-240V	Yes	IP 20	0.03
HF-M BLUE 124 SH TL/TL5/PL-L 230-240V	Yes	IP 20	0.03
HF-M BLUE 128 LH TL5 230-240V	Yes	IP 20	0.03

² 'IP Classification' value description(s): 'IP 20' = Ingress Protection 20

Codes - Application data

Commercial product name	Housing	Application Code	ETIM Group ³
HF-M BLUE 109 LH TL/PL-S 230-240V	LH		EC001497
HF-M BLUE 114 LH TL/PL-S/PL-C 230-240V	LH		EC001497
HF-M BLUE 121 LH TL5 230-240V	LH		EC001497
HF-M BLUE 124 LH TL/TL5/PL-L 230-240V	LH		EC001497
HF-M BLUE 124 SH TL/TL5/PL-L 230-240V	SH	mk1	EC001497
HF-M BLUE 128 LH TL5 230-240V	LH		EC001497

³ 'ETIM Group' value description(s): 'EC001497' = Ballast

Compliance & classification standards

Commercial product name	Approval Marks
HF-M BLUE 109 LH TL/PL-S 230-240V	 
HF-M BLUE 114 LH TL/PL-S/PL-C 230-240V	 
HF-M BLUE 121 LH TL5 230-240V	 
HF-M BLUE 124 LH TL/TL5/PL-L 230-240V	 
HF-M BLUE 124 SH TL/TL5/PL-L 230-240V	 
HF-M BLUE 128 LH TL5 230-240V	 



Logistic data

Commercial product name	SAP Packing (Piece)/Packaging configuration ⁴	Numerator - Packs per outer box	Ordering number 8711500...	Material Nr. (12NC) (9137...)	SAP Gross Weight (Piece) (g)	Net Weight (Piece) (g)	EAN-3 8711500...
HF-M BLUE 109 LH TL/PL-S 230-240V	NO / 50	50	53680830	00421366	39	36	536815
HF-M BLUE 114 LH TL/PL-S/PL-C 230-240V	NO / 50	50	53682230	00421766	40	36	536839
HF-M BLUE 121 LH TL5 230-240V	NO / 50	50	53646430	00418366	46	43	536471
HF-M BLUE 124 LH TL/TL5/PL-L 230-240V	NO / 50	50	53640230	00418066	51	45	536419
HF-M BLUE 124 SH TL/TL5/PL-L 230-240V	NO / 50	50	53638930	00417966	43	40	536396
HF-M BLUE 128 LH TL5 230-240V	NO / 50	50	93243330	00419966	50	47	932457

⁴ 'SAP Packing (Piece)/Packaging configuration' value description(s): 'NO / 50' = NO PACKING

Wiring Data

Commercial product name	Color Input Terminals	Input Terminal Cross Section (mm ²)	Color Output Terminals	Output Terminal Cross Section (mm ²)	Cable Length From Device to Lamp (m)	Cable Length Hot Wiring (m)	Wire Striplength (mm)	Wiring Diagram
HF-M BLUE 109 LH TL/PL-S 230-240V	Blue	0.50-1.50	Grey	0.50-1.50	1.5	0.3	8.0-9.0	W1, W2
HF-M BLUE 114 LH TL/PL-S/PL-C 230-240V	Gray	0.50-1.50	Grey	0.50-1.50	1.5	0.3	8.0-9.0	W1, W2
HF-M BLUE 121 LH TL5 230-240V	Gray	0.50-1.50	Grey	0.50-1.50	1.5	0.3	8.0-9.0	W3
HF-M BLUE 124 LH TL/TL5/PL-L 230-240V	Orange	0.50-1.50	Grey	0.50-1.50	1.5	0.3	8.0-9.0	W3
HF-M BLUE 124 SH TL/TL5/PL-L 230-240V	Orange	0.50-1.50	Grey	0.50-1.50	1.5	0.3	8.0-9.0	W3
HF-M BLUE 128 LH TL5 230-240V	Blue	0.50-1.50	Grey	0.50-1.50	1.5	0.3	8.0-9.0	W2

