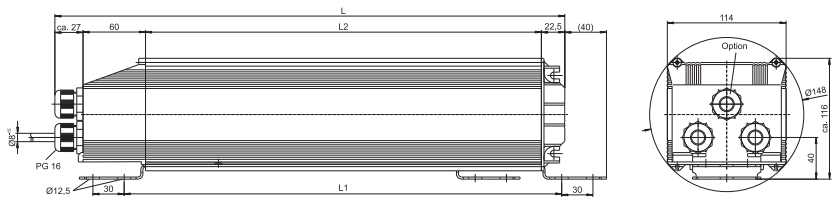


Ballast Units for HS and HI Lamps 1000 and 2000 W

Shape: 114x116 mm

For high-pressure sodium vapour lamps (HS) and metal halide lamps (HI)
Slim, weather-proof ballast unit fully wired with ballast, capacitor and connection terminal
Suitable for installation in or on pylons
With connection for protective earth conductor
Frontal cable feed using a PG thread fitting
Front access to terminals or fuses
Optional additional third PG connection for mains feed-through wiring
Screw-fixed end cap
Diverse mounting options using an assembly plate or rail
Screw terminals: 0.75–10 mm²
For luminaires of protection class I
tw 130



Degree of protection: IP54

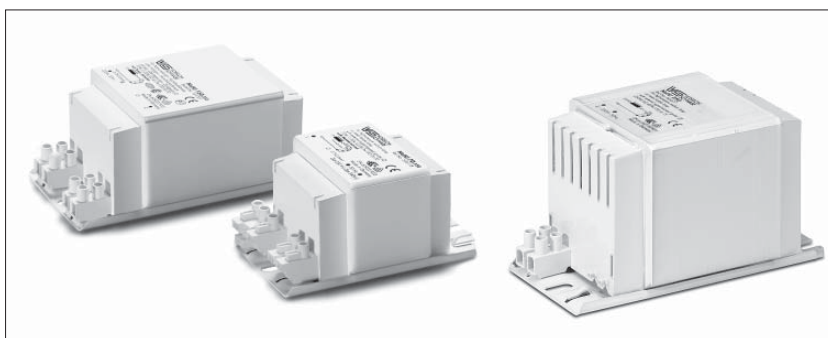
Lamp				Ballast unit								
Output W	Type	Current A	Mains current A	Type	Ref. No.	Voltage AC V, Hz	L mm	L1 mm	L2 mm	Weight kg	Power factor λ	Energy efficiency
1000	HS	10.3	5.0	VNaHJ 1000.61	531472	230–240, 50	487	410	370	11.6	> 0.90	A2
	HI	9.5	4.9									A2
2000	HI	10.3	6.0	VJD 2000.63	531474	380–400, 50	627	550	510	20.2	> 0.90	A2

Degree of protection: IP65

Fully encapsulated ballast unit with leads

Lamp				Ballast unit								
Output W	Type	Current A	Mains current A	Type	Ref. No.	Voltage AC V, Hz	L mm	L1 mm	L2 mm	Weight kg	Power factor λ	Energy efficiency
1000	HS	10.3	5.0	VNaHJ 1000.61	531480	220, 50	487	410	370	11.6	> 0.90	A2
	HI	9.5	4.9									A2
2000	HI	10.3	6.0	VJD 2000.63	531481	380, 50	627	550	510	20.2	> 0.90	A2

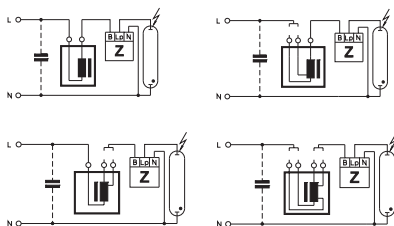
Ballasts with Thermal Cut-out for HS and HI Lamps 35 to 150 W



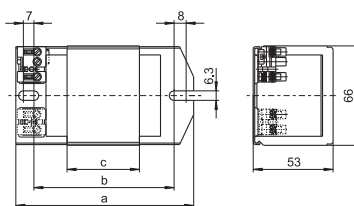
Shape: 53x66 mm

For high pressure sodium lamps (HS), metal halide lamps (HI) and ceramic discharge lamps (C-HI)
 Vacuum-impregnated with polyester resin
 With VS-patented, intelligent temperature switch with automatic reset (evaluates the temperature and current of the ballast)
 Protection class I
 tw 130

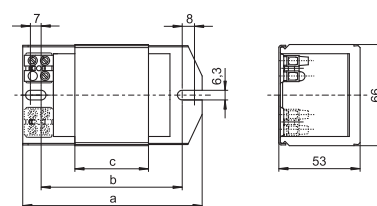
Ballasts for pulse ignition system on request



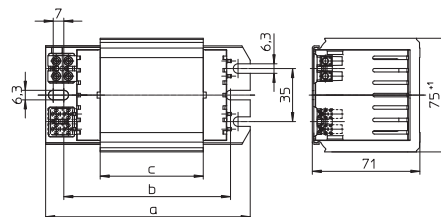
A Push-in terminals: 0.5–1.5 mm²



B Screw terminals: 0.5–2.5 mm²



C Screw terminals: 0.75–2.5 mm²



Lamp			Ballast											Capacitor	
Output W	Type	Current A	Type	Ref. No.	Voltage AC V, Hz	Drawing	a mm	b mm	c mm	Weight kg	Δt K	Power factor (λ)	Energy efficiency	C _P μF	I _N A
Push-in terminals: 0.5–1.5 mm²															
35	HS, HI	0.53	NaHJ 35.209	543737	230/240, 50	A	108	86	36	1.07	35	0.36	A2	6	0.22
			NaHJ 35.485*	506122	230/240, 50	A	108	86	36	1.07	60	0.40	EEI=A3	6	0.22/0.21
			NaHJ 35.638	509170	220, 60	A	108	86	36	1.07	50	0.41	EEI=A3	5	0.23
50	HS, HI	0.76	NaH 50.206	543738	230, 50	A	108	86	48	1.39	45	0.35	A2	8	0.30
50	HS, HI	0.76	NaHJ 70/50.157*	507341	230, 50	A	108	86	42	1.23	55	0.37	EEI=A3	8	0.30
											70	0.37	EEI=A3	12	0.38
50	HS, HI	0.76	NaHJ 70/50.520*	538361	230, 50	A	117	92	48	1.39	45	0.36	EEI=A3	8	0.30
											55	0.36	EEI=A3	12	0.38
70	HS, HI	0.98	NaHJ 70.128*	535191	230, 50	A	108	86	36	1.07	70	0.36	EEI=A3	12	0.38
			NaHJ 70.226	543741	230, 50	A	108	86	48	1.39	50	0.37	A2	12	0.38
			NaHJ 70.128*	533572	230/240, 50	A	108	86	36	1.07	70/75	0.36	EEI=A3	12	0.38/0.37
			NaHJ 70.653	509169	220, 60	A	108	86	36	1.07	60	0.42	EEI=A3	10	0.40
70	HS, HI	0.98	NaHJ 100/70.703*	507342	230, 50	A	145	120	48	1.39	60	0.37	EEI=A3	12	0.38
100	HS, HI	1.20									70	0.43	EEI=A3	12	0.55
100	HS, HI	1.20	NaHJ 100.670*	506120	230/240, 50	A	117	92	48	1.39	70	0.42	EEI=A3	12	0.55/0.53
			NaHJ 100.941*	539492	230/240, 50	A	108	86	42	1.23	75/80	0.42	EEI=A3	12	0.55/0.53
100	HS, HI	1.20	NaHJ 150/100.973*	507343	230, 50	A	145	120	75	2.02	55	0.41	A2	12	0.55
150	HS, HI	1.80									75	0.41	EEI=A3	20	0.57
150	HS, HI	1.80	NaHJ 150.620*	535216	230, 50	A	145	120	64	1.80	70	0.40	EEI=A3	20	0.77
			NaHJ 150.620*	538543	230/240, 50	A	145	120	64	1.80	70/75	0.40	EEI=A3	20	0.77/0.74
			NaHJ 150.355*	509100	230/240, 50	A	145	120	75	2.02	65	0.39	EEI=A3	20	0.77/0.74
			NaHJ 150.679	509171	220, 60	A	145	120	75	2.02	65	0.42	EEI=A3	16	0.80

* Ballasts without CE marking for replacements or markets outside of the EU

Ballasts with Thermal Cut-out for HS and HI Lamps 35 to 250 W

Shape: 53x66 mm

Lamp			Ballast											Capacitor	
Output W	Type	Current A	Type	Ref. No.	Voltage AC V, Hz	Drawing	a mm	b mm	c mm	Weight kg	Δt K	Power factor λ	Energy efficiency	Cp μF	In A
Screw terminals: 0.5–2.5 mm² (Drawing B) or 0.75–2.5 mm² (Drawing C)															
35	HS, HI	0.53	NaHj 35.485*	503010	230/240, 50	B	108	86	36	1.07	60	0.40	EEL=A3	6	0.22/0.21
35	HS, HI	0.53	NaH 50/35.412	563871	230, 50	B	117	92	55	1.52	25	0.36	A2	6	0.22
50	HS, HI	0.76									40	0.34	A2	8	0.30
35	HS, HI	0.53	NaH 50/35.797*	539515	230, 50	B	108	86	36	1.07	45	0.40	EEL=A3	6	0.22
50	HS, HI	0.76									70	0.37	EEL=A3	8	0.30
50	HS, HI	0.76	NaH 50.486*	507498	230/240, 50	B	108	86	36	1.07	65	0.37	EEL=A3	8	0.30
50	HS, HI	0.76	NaHj 70/50.695*	507697	230/240, 50	B	108	86	48	1.39	50	0.37	EEL=A3	8	0.30/0.29
70	HS, HI	0.98									70	0.37	EEL=A3	12	0.38/0.37
70	HS, HI	0.98	NaHj 70.226	563039	230, 50	B	108	86	48	1.39	50	0.37	A2	12	0.38
			NaHj 70.128*	536582	230, 50	B	108	86	36	1.07	70	0.36	EEL=A3	12	0.38
			NaHj 70.158*	169722	230/240, 50	B	108	86	42	1.23	70	0.36	EEL=A3	12	0.38/0.37
			NaHj 70.128*	538830	230/240, 50	B	108	86	36	1.07	70/75	0.36	EEL=A3	12	0.38/0.37
			NaHj 70.158	546817	240, 50	B	108	86	42	1.23	70	0.36	EEL=A3	12	0.37
70	HS, HI	0.98	NaHj 100/70.519	507628	230, 50	B	145	120	75	2.03	60	0.36	A2	12	0.38
100	HS, HI	1.20									70	0.41	A2	12	0.55
70	HS, HI	0.98	NaHj 100/70.703*	504131	230, 50	B	117	92	48	1.39	60	0.37	EEL=A3	12	0.38
100	HS, HI	1.20									70	0.43	EEL=A3	12	0.55
100	HS, HI	1.20	NaHj 100.213	554005	230/240, 50	B	117	92	55	1.55	60	0.41	A2	12	0.55/0.53
			NaHj 100.941*	543349	230, 50	B	108	86	42	1.23	75	0.42	EEL=A3	12	0.55
			NaHj 100.941*	502799	230/240, 50	B	108	86	42	1.23	75/80	0.42	EEL=A3	12	0.55/0.53
100	HS, HI	1.20	NaHj 150/100.923	563876	230, 50	C	135	115	68	2.87	30	0.40	A2	12	0.55
150	HS, HI	1.80									45	0.40	A2	20	0.77
100	HS, HI	1.20	NaHj 150/100.973*	504135	230, 50	B	145	120	75	2.02	55	0.41	A2	12	0.55
150	HS, HI	1.80									75	0.41	EEL=A3	20	0.77
150	HS, HI	1.80	NaHj 150.166	562450	230/240, 50	B	160	135	95	2.5	50	0.40	A2	20	0.77/0.74
			NaHj 150.355	539270	220, 50	B	145	120	75	2.02	65	0.39	EEL=A3	20	0.80
			NaHj 150.620*	536593	230, 50	B	145	120	64	1.80	70	0.40	EEL=A3	20	0.77
			NaHj 150.995*	169721	230/240, 50	B	145	120	75	2.02	70	0.40	EEL=A3	20	0.77/0.74
			NaHj 150.620*	538831	230/240, 50	B	145	120	64	1.80	70/75	0.40	EEL=A3	20	0.77/0.74
			NaHj 150.620	537763	240, 50	B	130	105	64	1.80	75	0.40	EEL=A3	20	0.74
			NaHj 150.679	526616	220, 60	B	145	120	75	2.02	65	0.42	EEL=A3	16	0.80
250	HS, HI	3.00	NaHj 250.915*	505054	230, 50	B	180	155	110	2.84	80	0.40	EEL=A3	32	1.26
			NaHj 250.340*	542349	230/240, 50	B	180	155	110	2.84	80	0.39	EEL=A3	32	1.26
			NaHj 250.340	508723	240, 50	B	180	155	110	2.84	80	0.39	EEL=A3	32	1.26

* Ballasts without CE marking for replacements or markets outside of the EU

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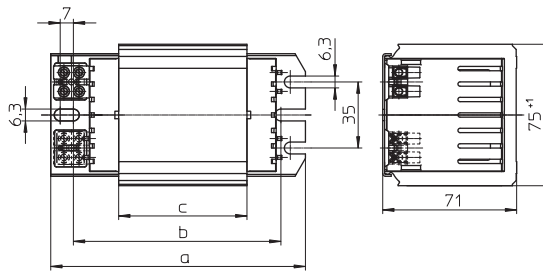
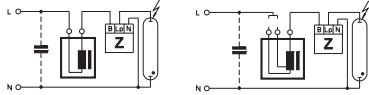
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Ballasts for HS and HI Lamps 150 to 400 W

Shape: 71x75 mm

For high pressure sodium lamps (HS), metal halide lamps (HI) and ceramic discharge lamps (C-HI)
 Vacuum-impregnated with polyester resin
 Screw terminals: 0.75–2.5 mm²
 Protection class I
 tw 130

Ballasts for pulse ignition system on request



Lamp			Ballast										Capacitor	
Output W	Type	Current A	Type	Ref. No.	Voltage AC V, Hz	a mm	b mm	c mm	Weight kg	Δt K	Power factor λ	Energy efficiency	C _p μF	I _N A
250	HS, HI	3.00	NaHJ 250.741	536147	220, 50	135	115	68	2.85	70	0.42	A2	32	1.35
			NaHJ 250.741	536148	230, 50	135	115	68	2.85	75	0.40	A2	32	1.30
			NaHJ 250.741	536149	240, 50	135	115	68	2.85	75	0.39	A2	32	1.25
			NaHJ 250.742	536150	220, 60	135	115	68	2.85	70	0.42	A2	25	1.40
400	HS, HI	4.45	NaHJ 400.743	536142	220, 50	165	145	103	4.1	70	0.45	A2	45	2.10
			NaHJ 400.743	535142	230, 50	165	145	103	4.1	75	0.44	A2	45	2.00
			NaHJ 400.743	536143	240, 50	165	145	103	4.1	75	0.40	A2	45	1.85
			NaHJ 400.744	536144	220, 60	165	145	103	4.1	70	0.44	A2	40	2.05

With Thermal Cut-out

Thermal cut-out with automatic reset

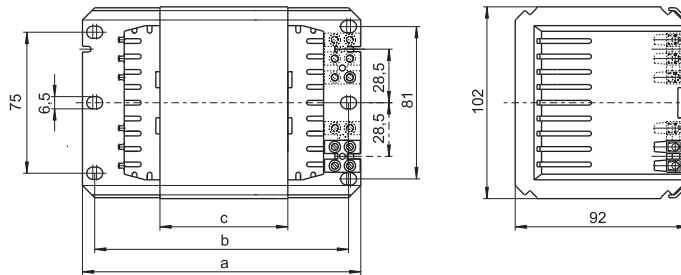
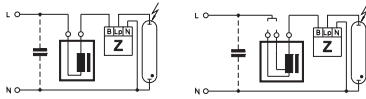
Lamp			Ballast										Capacitor	
Output W	Type	Current A	Type	Ref. No.	Voltage AC V, Hz	a mm	b mm	c mm	Weight kg	Δt K	Power factor λ	Energy efficiency	C _p μF	I _N A
150	HS, HI	1.80	NaHJ 150.216	554006	230/240, 50	135	115	68	2.85	45	0.40	A2	20	0.77
250	HS, HI	3.00	NaHJ 250.741	539274	220, 50	135	115	68	2.85	70	0.42	A2	32	1.35
			NaHJ 250.741	544210	230, 50	135	115	68	2.85	65	0.40	A2	32	1.30
			NaHJ 250.741	536151	230, 50	135	115	68	2.85	75	0.40	A2	32	1.30
			NaHJ 250.741	537726	230/240, 50	135	115	68	2.85	75	0.40	A2	32	1.30/1.25
			NaHJ 250.741	536152	240, 50	135	115	68	2.85	75	0.39	A2	32	1.25
400	HS, HI	4.45	NaHJ 400.743	548259	220, 50	165	145	103	4.1	70	0.44	A2	45	2.10
			NaHJ 400.743	536145	230, 50	165	145	103	4.1	75	0.44	A2	45	2.00
			NaHJ 400.743	538204	230, 50	165	145	103	4.1	65	0.41	A2	45	2.00
			NaHJ 400.743	539209	230/240, 50	165	145	103	4.1	75	0.41	A2	45	2.00/1.85
			NaHJ 400.743	543986	240, 50	165	145	103	4.1	70	0.40	A2	45	1.85
			NaHJ 400.743	536146	240, 50	165	145	103	4.1	75	0.40	A2	45	1.85
			NaHJ 400.744	538620	220, 60	165	145	103	4.1	70	0.44	A2	40	2.05

Ballasts for HS and HI Lamps 250 to 600 W

Shape: 92x102 mm

For high pressure sodium lamps (HS), metal halide lamps (HI) and ceramic discharge lamps (C-HI)
Vacuum-impregnated with polyester resin
Screw terminals: 0.75–2.5 mm²
Protection class I
tw 130

Ballasts for pulse ignition system on request



Lamp			Ballast										Capacitor	
Output W	Type	Current A	Type	Ref. No.	Voltage AC V, Hz	a mm	b mm	c mm	Weight kg	Δt K	Power factor λ	Energy efficiency	C _P μF	I _N A
250	HS, HI	3.00	NaHj 250.003	179743	220, 50	133	120	44	3.53	70	0.41	EEl=A3	32	1.32
			NaHj 250.727*	178771	230, 50	133	120	44	3.53	70	0.39	EEl=A3	32	1.26
			NaHj 250.727	500976	240, 50	133	120	44	3.53	70	0.39	EEl=A3	32	1.21
			NaHj 250.011	500401	220, 60	133	120	44	3.53	65	0.43	A2	25	1.35
400	HS, HI	4.45	NaHj 400.006	179740	220, 50	148	135	68	5.20	70	0.44	A2	45	2.00
			NaHj 400.006	178790	230, 50	148	135	68	5.20	70	0.44	A2	45	1.95
			NaHj 400.737	500402	240, 50	148	135	68	5.20	75	0.43	A2	45	1.90
			NaHj 400.012	500403	220, 60	148	135	68	5.20	70	0.44	A2	40	2.00
	HI	3.50	J 400.027	505782	230/240, 50	148	135	68	5.20	60	0.45	A2	35	1.64/1.59
600	HS	6.20	NaH 600.010	179742	220, 50	173	160	96	6.80	70	0.44	A2	65	2.90
			NaH 600.005	533484	230/240, 50	173	160	96	6.80	70	0.44	A2	65	2.90/2.85
			NaH 600.140	529560	220, 60	173	160	96	6.80	65	0.46	A2	55	3.00

* Ballasts without CE marking for replacements or markets outside of the EU

With Thermal Cut-out

Thermal cut-out with automatic reset

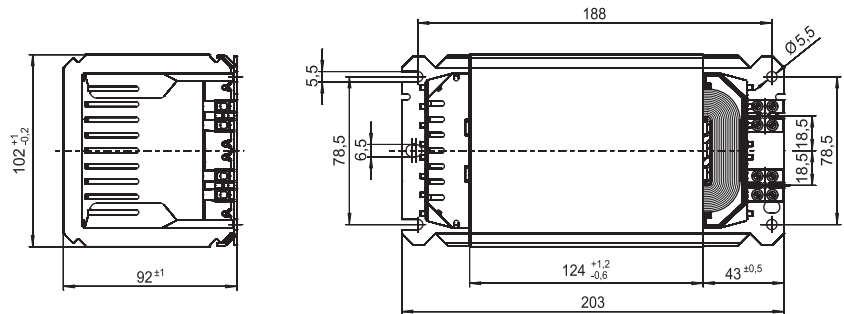
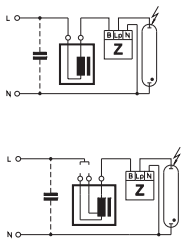
Lamp			Ballast										Capacitor	
Output W	Type	Current A	Type	Ref. No.	Voltage AC V, Hz	a mm	b mm	c mm	Weight kg	Δt K	Power factor λ	Energy efficiency	C _P μF	I _N A
250	HS, HI	3.00	NaHj 250.727*	500969	230/240, 50	133	120	44	3.53	70	0.39	EEl=A3	32	1.26/1.21
			NaHj 250.011	508744	220, 60	133	120	44	3.46	65	0.43	A2	25	1.35
400	HS, HI	4.45	NaHj 400.737	179424	230/240, 50	148	135	68	5.20	70/75	0.43	A2	45	1.95/1.90
	HI	3.50	J 400.027	509613	230/240, 50	148	135	68	5.20	60	0.45	A2	35	1.64/1.59
	HS, HI	4.45	NaHj 400.012	508741	220, 60	148	135	68	5.20	70	0.44	A2	40	2.00
600	HS	6.20	NaH 600.005	179454	230/240, 50	173	160	96	6.80	70	0.44	A2	65	2.90/2.85

* Ballasts without CE marking for replacements or markets outside of the EU

Ballasts for HS and HI Lamps 1000 W

Shape: 92x102 mm

For high pressure sodium lamps (HS) and metal halide lamps (HI)
 Vacuum-impregnated with polyester resin
 Screw terminals: 0.75–2.5 mm²
 Protection class I
 tw 130
 Ballasts for pulse ignition system on request



Lamp			Ballast										Capacitor	
Output W	Type	Current A	Type	Ref. No.	Voltage AC V, Hz	a mm	b mm	c mm	Weight kg	Δt K	Power factor λ	Energy efficiency	C _P μF	I _N A
1000	HS	10.30	NaHJ 1000.089	534487	220, 50	203	188	124	8.90	80	0.47	A2	100	5.1
	HI	9.50								70	0.51		85	5.0
1000	HS	10.30	NaHJ 1000.089	539212	220/230, 50	203	188	124	8.90	80	0.45	A2	100	5.1
	HI	9.50								70	0.49		85	5.0
1000	HS	10.30	NaHJ 1000.089	528548	230, 50	203	188	124	8.90	80	0.45	A2	100	5.1
	HI	9.50								70	0.49		85	5.0
1000	HS	10.30	NaHJ 1000.089	544787	230/240, 50	203	188	124	8.90	85	0.45	A2	100	5.1
	HI	9.50								70	0.46		85	5.0
1000	HS	10.30	NaHJ 1000.089	536140	240, 50	203	188	124	8.90	85	0.42	A2	100	4.8
	HI	9.50								75	0.46		85	4.9
1000	HS	10.30	NaHJ 1000.089	528536	220, 60	203	188	124	8.90	75	0.46	A2	100	5.1
	HI	9.50								60	0.50		85	5.0