

Electronic ballasts for fluorescent lamps



14 - 80 W 220-240V 50-60Hz

- Smallest available quality ballast
- Standard & sidemount possibilities
- Optimal lamp operation
- Low power losses
- Long lifetime
- Green values
- High power factor



A2 BAT

Lamp type	Wattage	No. of lamps	Ballast	EEI	Connection	Dimensions	Weight	Circuit power	Mains current	Lamp power
						(no.)				
T5 ¹⁾	14	1	EL1x14-35ngn5	A2 BAT	1	1	127	15.5	0.08-0.06	13.7
	14	2	EL2x14-35ngn5	A2 BAT	2	2	204	31	0.16-0.15	13.7
	14	3	EL3/4x14ngn5	A2	5	2	204	46	0.22-0.19	13.7
	14	4	EL3/4x14ngn5	A2	6	2	204	62	0.29-0.26	13.7
	21	1	EL1x14-35ngn5	A2 BAT	1	1	127	23	0.12-0.10	20.7
	21	2	EL2x14-35ngn5	A2 BAT	2	2	204	45	0.22-0.19	20.7
	24	1	EL1x24ngn5 ²⁾	A2	1	1	130	25	0.12-0.11	22.5
	24	2	EL2x24ngn5 ²⁾	A2 BAT	3	2	193	49	0.24-0.21	22.5
	24	3	EL3/4x24ngn5	A2 BAT	5	2	208	73	0.34-0.30	22.5
	24	4	EL3/4x24ngn5	A2 BAT	6	2	208	97	0.44-0.40	22.5
	28	1	EL1x14-35ngn5	A2 BAT	1	1	127	30	0.15-0.12	27.8
	28	2	EL2x14-35ngn5	A2 BAT	2	2	204	60	0.29-0.25	27.8
	35	1	EL1x14-35ngn5	A2 BAT	1	1	127	38	0.18-0.16	34.7
	35	2	EL2x14-35ngn5	A2 BAT	2	2	204	75	0.35-0.31	34.7
	39	1	EL1x39/36ngn5 ²⁾	A2 BAT	1	1	130	42	0.19-0.18	38
	39	2	EL2x39/36ngn5 ²⁾	A2 BAT	3	2	195	81	0.36-0.32	38
	49	1	EL1x49ngn5	A2 BAT	1	1	130	55	0.25-0.23	49.3
	49	2	EL2x49ngn5	A2 BAT	2	2	211	105	0.50-0.45	49.3
	54	1	EL1x54ngn5	A2 BAT	1	1	130	58	0.26-0.24	53.8
	54	2	EL2x54ngn5	A2 BAT	3	2	206	115	0.53-0.48	53.8
80	1	EL1x80ngn5	A2 BAT	1	2	192	86	0.42-0.36	80	
80	2	EL2x80ngn5	A2 BAT	4	3	300	170	0.80-0.73	80	
TC-L	24	1	EL1x24ngn5 ²⁾	A2	1	1	130	25	0.12-0.11	22.5
	24	2	EL2x24ngn5 ²⁾	A2 BAT	3	2	193	49	0.24-0.21	22.5
	24	3	EL3/4x24ngn5 ²⁾	A2 BAT	5	2	208	73	0.34-0.30	22.5
	24	4	EL3/4x24ngn5 ²⁾	A2 BAT	6	2	208	97	0.44-0.40	22.5
	36	1	EL1x39/36ngn5 ²⁾	A2	1	1	130	35	0.16-0.15	32
	36	2	EL2x39/36ngn5 ²⁾	A2 BAT	3	2	195	69	0.32-0.29	32
	55	1	EL1x55ngn5 ²⁾	A2 BAT	1	2	195	60	0.28-0.24	55
	55	2	EL2x55ngn5 ²⁾	A2 BAT	3	3	240	118	0.54-0.49	55
	80	1	EL1x80ngn5	A2 BAT	1	2	192	86	0.42-0.36	80
	80	2	EL2x80ngn5	A2 BAT	4	3	300	170	0.80-0.73	80

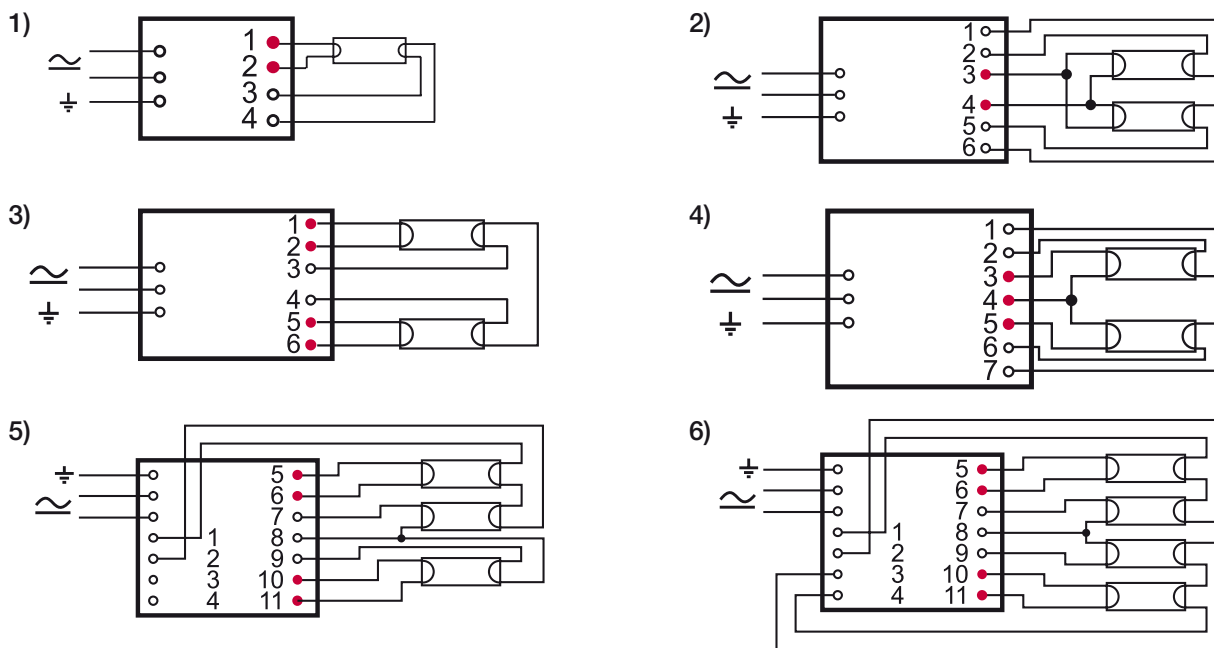
1) Also suitable for T5 eco-lamps

2) Preliminary information

Note: See page 2 for connection diagrams, dimensions and additional characteristics.

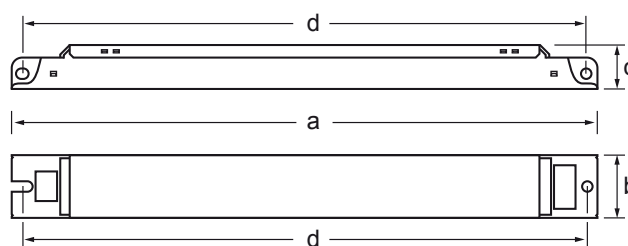
Connections

NOTE: All wiring to the connectors marked with a red dot (hot wires) should be as short as possible.



1	EL1x14-35ngn5, EL1x24ngn5, EL1x39/36ngn5, EL1x49ngn5, EL1x54ngn5, EL1x55ngn5
2	EL2x14-35ngn5, EL2x49ngn5
3	EL2x24ngn5, EL2x39/36ngn5, EL2x54ngn5, EL2x55ngn5
4	EL2x80ngn5
5	EL3/4x14ngn5, EL3/4x24ngn5
6	EL3/4x14ngn5, EL3/4x24ngn5

Dimensions	1	2	3
Lenght 'a' (mm)	190	280	360
Width 'b' (mm)	30	30	30
Height 'c' (mm)	21	21	21
'd' (mm)	180	270	350



Characteristics

Max.temperature at tc point	75 °C *
Ambient temperature range	-20...+50 °C
Storage temperature range	-40...+80 °C
Maximum relative humidity	no condensation
Number of starts per lamp	> 50 000
AC Range	198-264 VAC
DC range (starting voltage >198VDC)	176-280 VDC
Over voltage duration	320 VAC, 1 h
Power factor (at maximum), typical	0.98
Earth leakage current	< 0.4 mA
Maximum working voltage (Uout)	400 V
Lifetime (90% survival)	60 000 h, at tc
Max length of ballast to lamp wiring	2 m
Ignition time, typical	~1 s

General and safety requirements	EN61347-2-3
Additional safety requirements for AC/DC supplied ballasts acc. to	EN61347-2-3 Annex J
Performance requirements	EN60929
Lamp life acc. to	EN60081
Mains current harmonics, acc. to	EN61000-3-2
Radio Frequency Interference, acc. to	EN55015
Immunity standard, acc.to	EN61547
Vibration test	EN60068-2-64 test Fh
Bump test	EN60068-2-29 test Eb
Thermal protection class	EN61347, C5e
Type of starting	preheat (warm start)
EBLF (Emergency Ballast Lumen Factor)	>0,3
BLF (Ballast Lumen Factor)	~1
Type of starting	Preheat (warm start)

*) 70 °C EL3/4x14ngn5