

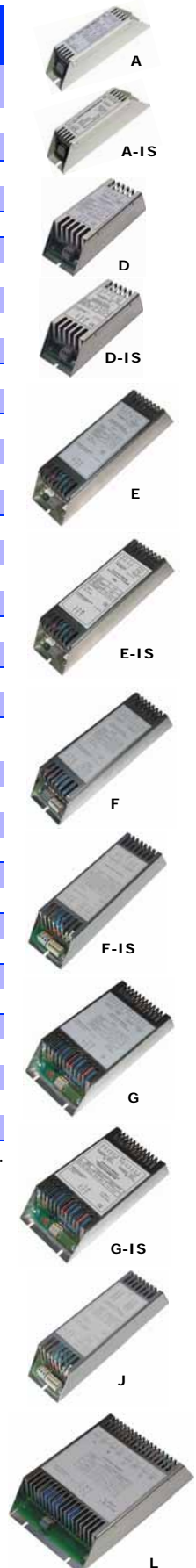


## ZED EVG - Electronic Ballasts 230V AC for Standard and High Output Germicidal Lamps Lamp-Ballast Combinations

Instant and Rapid Start Ballasts

lamp type	lamp operation	lamps per ballast	ballast model	ballast form	page no.
GPH287T5L, GPH303T5L, GPH436T5L, TUV16	rapid start	1	EVG11-20W/425mA	A	8
	instant start	1	EVG11-20W/425mA IS	A-IS	13
LTC18W/2G11, TUV18PLL	rapid start	1	EVG18W/370mA	A	8
GPH436T5L	instant start	4	EVG4x[20W]/425mA IS	J	18
G36T5, GPH793T5, GPH846T5, LTC40T5, TUV36T5	rapid start	1	S-EVG30-50W/425mA	D	9
	rapid start	2	EVG2x[30-50W]/425mA	F	11
	instant start	1	S-EVG30-50W/425mA IS	D-IS	14
	instant start	2	EVG2x[30-50W]/425mA IS	F-IS	16
TUV36, TUV36PLL	rapid start	1	S-EVG36W/440mA	D	9
	rapid start	2	EVG2x[36W]/440mA	F	11
G64T5, LTC64T5, TUV64T5	rapid start	1	S-EVG50-70W/425mA	D	9
	rapid start	2	EVG2x[50-70W]/425mA	F	11
	instant start	1	S-EVG50-70W/425mA IS	D-IS	14
	instant start	2	EVG2x[50-70W]/425mA IS	F-IS	16
GPH436T5HO(600mA), GPH846T5HO(600mA), GPH893T5HO(600mA)	rapid start	1	S-EVG50-70W/600mA	D	9
	rapid start	2	EVG2x[50-70W]/600mA	F	11
	instant start	1	S-EVG50-70W/600mA IS	D-IS	14
	instant start	2	EVG2x[50-70W]/600mA IS	F-IS	16
TUV60PLL	rapid start	1	S-EVG50-70W/670mA	D	9
	rapid start	2	EVG2x[50-70W]/670mA	F	11
TUV55	rapid start	1	S-EVG50-70W/760mA	D	9
	rapid start	2	EVG2x[50-70W]/760mA	F	11
GHO36T5, GPH436T5HO(800mA), GPH846T5HO(800mA), GPH893T5HO(800mA), LTC80T5, TUV36HO	rapid start	1	S-EVG65-80W/880mA	D	9
	rapid start	2	EVG2x[65-80W]/880mA	F	11
	instant start	1	S-EVG65-80W/880mA IS	D-IS	14
	instant start	2	EVG2x[65-80W]/880mA IS	F-IS	16
LTC75T8, TUV75	rapid start	1	S-EVG65-80W/880mA	D	9
	rapid start	2	EVG2x[65-80W]/880mA	F	11
TUV95WHOPLL	rapid start	1	S-EVG90W/950mA	D	9
	rapid start	2	EVG2x[90W]/950mA	F	11
LTC115T12, TUV115	rapid start	1	EVG100-150W/1,5A	E	10
	rapid start	2	EVG2x[100-150W]/1,5A	G	12
GHO64T5, TUV64T5HO	rapid start	1	EVG150-200W/1A	E	10
	rapid start	2	EVG2x[150-200W]/1A	G	12
	instant start	1	EVG150-200W/1A IS	E-IS	15
	instant start	2	EVG2x[150-200W]/1A IS	G-IS	17
	instant start	4	EVG4x[150W]/1A IS	L	19

Ballasts for other lamp types are available on request.





## ZED EVG - Electronic Ballasts 230V AC for Standard and High Output Germicidal Lamps Rapid Start

*small but powerful:*  
*quick lamp start - space saving*



ballast form A

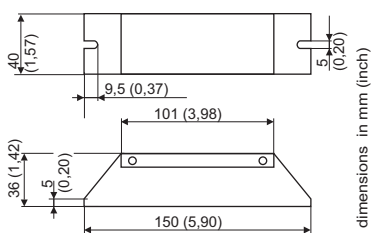
### Features

- ⇒ electronic ballast for one-lamp operation
- ⇒ to be used with four-wire lamps
- ⇒ rapid start  
for applications with less than one switch-on cycle per day  
(otherwise preheat start ballasts are recommended)
- ⇒ equipped with active power factor correction
- ⇒ lamp status indication via LED indicators
  - green LED: lamp on
  - red LED: lamp fault
- ⇒ lamp status forwarding
  - photocoupler for lamp on / lamp fault

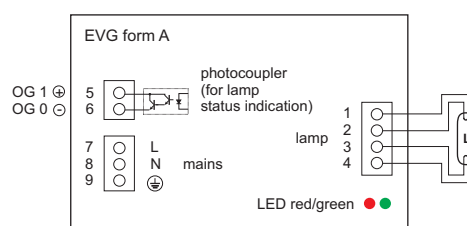
ballast name	input power [W]	input current [A]	power per lamp [W]	lamp current [A]	lamp type
EVG11-20W/425mA	up to 24	0,05 - 0,11	11-20	0,425 ± 10%	TUV16, GPH287T5L, GPH303T5L, GPH436T5L
EVG18W/370mA	20	0,08 - 0,1	17	0,370 ± 10%	LTC18W/2G11, TUV18PLL

<b>mains voltage:</b>	230V AC ± 10%
<b>mains frequency:</b>	45...65Hz
<b>efficiency:</b>	approx. 80%
<b>t<sub>c</sub>-temperature:</b>	max. 50°C
<b>ambient temperature:</b>	0...40°C
<b>status indication:</b>	operating status indicated - by LED: green = lamp on   red = lamp fault - by photocoupler (refer to 'Ballast Generals' for more information on lamp status indication via photocoupler)
<b>connection specifics:</b>	terminals 1...4, max. off-load voltage: 1.5kV <sub>pp</sub> photocoupler, max. current on OG: 5mA (open collector V <sub>OG1/0</sub> <1V ⇒ V <sub>CESAT</sub> <1V) max. cable length between ballast and lamp: 0,5m
<b>IP code:</b>	IP20
<b>mounting restrictions:</b>	upright, mains connector at bottom side, see 'Ballast Generals' for details
<b>wire gauge:</b>	0,5...1mm <sup>2</sup> ; strip length: 8mm

### Dimensions



### Wiring diagram





## ZED EVG - Electronic Ballasts 230V AC for Standard and High Output Germicidal Lamps Rapid Start

*small and smart:*

**quick lamp start - easy handling**



ballast form D

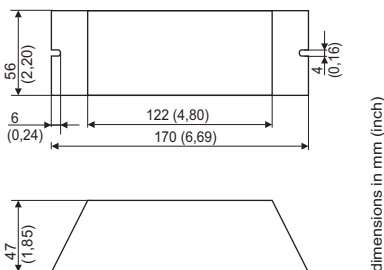
### Features

- ⇒ electronic ballast for one-lamp operation
- ⇒ to be used with four-wire lamps
- ⇒ rapid start  
for applications with less than one switch-on cycle per day  
(otherwise preheat start ballasts are recommended)
- ⇒ equipped with active power factor correction
- ⇒ lamp status indication via LED indicators
  - green LED: lamp on
  - red LED: lamp fault
- ⇒ lamp status forwarding
  - potential free relay contacts for lamp on / lamp fault

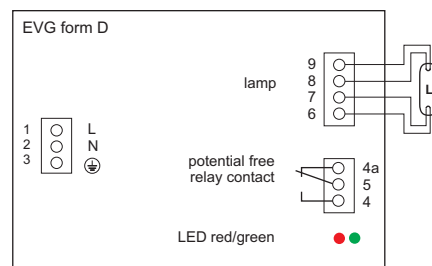
ballast name	input power [W]	input current [A]	power per lamp [W]	lamp current [A]	lamp type
S-EVG30-50W/425mA	32 - 55	0,13 - 0,26	30 - 50	0,39 - 0,42	G36T5, GPH793T5, GPH846T5, LTC40T5, TUV36T5
S-EVG50-70W/425mA	55 - 75	0,26 - 0,36	50 - 70	0,39 - 0,42	G64T5, LTC64T5, TUV64T5
S-EVG36W/440mA	40	0,16 - 0,19	36	0,44	TUV36, TUV36PLL
S-EVG50-70W/600mA	55 - 75	0,26 - 0,36	50 - 70	0,59 - 0,61	GPH436T5HO(600mA), GPH846T5HO(600mA), GPH893T5HO(600mA)
S-EVG50-70W/670mA	55 - 75	0,26 - 0,36	50 - 70	0,65 - 0,7	TUV60PLL
S-EVG50-70W/760mA	55 - 75	0,26 - 0,36	50 - 70	0,75 - 0,77	TUV55
S-EVG65-80W/880mA	70 - 85	0,28 - 0,4	65 - 80	0,85 - 0,9	GHO36T5, GPH436T5HO(800mA), GPH846T5HO(800mA), GPH893T5HO(800mA), LTC75T8, LTC80T5, TUV36HO, TUV75
S-EVG90W/950mA	100	0,4 - 0,48	90	0,95	TUV95WHOPLL

<b>mains voltage:</b>	230V AC $\pm$ 10%
<b>mains frequency:</b>	45...65Hz
<b>efficiency:</b>	> 90%
<b>t<sub>c</sub>-temperature:</b>	max. 50°C
<b>ambient temperature:</b>	0...40°C
<b>relay contacts:</b>	potential free, load: 50...500mA at 24...230V AC; 50...500mA at 5...60V DC
<b>status indication:</b>	operating status indicated - by LED: green = lamp on   red = lamp fault - by relay (refer to 'Ballast Generals' for more information on lamp status indication via relay)
<b>IP code:</b>	IP20
<b>mounting restrictions:</b>	upright, mains connector at bottom side, see 'Ballast Generals' for details
<b>wire gauge:</b>	0,5...1mm <sup>2</sup> ; strip length: 8mm

### Dimensions



### Wiring diagram





## ZED EVG - Electronic Ballasts 230V AC for Standard and High Output Germicidal Lamps Rapid Start

*established and proven:*  
quick lamp start - easy handling



ballast form E

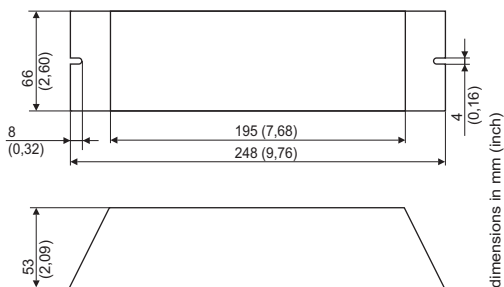
### Features

- ⇒ electronic ballast for one-lamp operation
- ⇒ to be used with four-wire lamps
- ⇒ rapid start  
for applications with less than one switch-on cycle per day  
(otherwise preheat start ballasts are recommended)
- ⇒ equipped with active power factor correction
- ⇒ lamp status indication via LED indicators
  - green LED: lamp on
  - red LED: lamp fault
- ⇒ lamp status forwarding
  - potential free relay contacts for lamp on / lamp fault

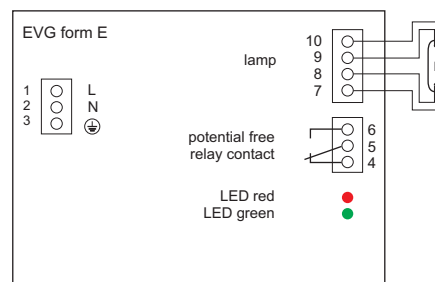
ballast name	input power [W]	input current [A]	power per lamp [W]	lamp current [A]	lamp type
EVG150-200W/1A	160 – 220	0,65 - 1,0	150 - 200	0,8 – 1	GHO64T5, TUV64T5HO
EVG100-150W/1,5A	110 - 160	0,43 - 0,77	100 - 150	1,4 - 1,5	LTC115T12, TUV115

<b>mains voltage:</b>	230V AC ± 10%
<b>mains frequency:</b>	45...65Hz
<b>efficiency:</b>	> 90%
<b>t<sub>c</sub>-temperature:</b>	max. 50°C
<b>ambient temperature:</b>	0...40°C
<b>relay contacts:</b>	potential free, load: 50...500mA at 24...230V AC; 50...500mA at 5...60V DC
<b>status indication:</b>	operating status indicated - by LED: green = lamp on   red = lamp fault - by relay (refer to 'Ballast Generals' for more information on lamp status indication via relay)
<b>IP code:</b>	IP20
<b>mounting restrictions:</b>	upright, mains connector at bottom side, see 'Ballast Generals' for details
<b>wire gauge:</b>	0,75...1,5mm <sup>2</sup> ; strip length: 10...12mm

### Dimensions



### Wiring diagram





## ZED EVG - Electronic Ballasts 230V AC for Standard and High Output Germicidal Lamps Rapid Start

*established and proven:*  
**quick lamp start - easy handling**



ballast form F

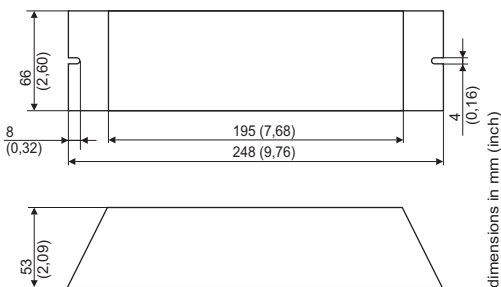
**Features**

- ⇒ electronic ballast for two-lamp operation
  - ballasts are operating even with only one lamp connected
- ⇒ to be used with four-wire lamps
- ⇒ rapid start for applications with less than one switch-on cycle per day (otherwise preheat start ballasts are recommended)
- ⇒ equipped with active power factor correction
- ⇒ lamp status indication via LED indicators
  - green LED: lamp on
  - red LED: lamp fault
- ⇒ lamp status forwarding
  - potential free relay contacts for lamp on / lamp fault

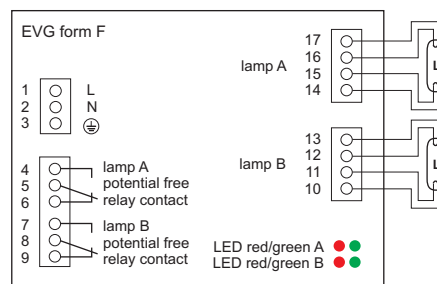
ballast name	input power [W]	input current [A]	power per lamp [W]	lamp current [A]	lamp type
EVG2x[30-50W]/425mA	up to 110	0,25 - 0,53	30 - 50	0,39 - 0,42	G36T5, GPH793T5, GPH846T5, LTC40T5, TUV36T5
EVG2x[50-70W]/425mA	up to 150	0,43 - 0,72	50 - 70	0,39 - 0,42	G64T5, LTC64T5, TUV64T5
EVG2x[36W]/440mA	up to 80	0,32 - 0,38	36	0,44	TUV36, TUV36PLL
EVG2x[50-70W]/600mA	up to 150	0,43 - 0,72	50 - 70	0,59 - 0,61	GPH436T5HO(600mA), GPH846T5HO(600mA), GPH893T5HO(600mA)
EVG2x[50-70W]/670mA	up to 150	0,43 - 0,72	50 - 70	0,65 - 0,7	TUV60PLL
EVG2x[50-70W]/760mA	up to 150	0,43 - 0,72	50 - 70	0,75 - 0,77	TUV55
EVG2x[65-80W]/880mA	up to 170	0,55 - 0,8	65 - 80	0,85 - 0,9	GHO36T5, GPH436T5HO(800mA), GPH846T5HO(800mA), GPH893T5HO(800mA), LTC75T8, LTC80T5, TUV36HO, TUV75
EVG2x[90W]/950mA	up to 200	0,8 - 0,97	90	0,95	TUV95WHOPLL

<b>mains voltage:</b>	230V AC ± 10%
<b>mains frequency:</b>	45...65Hz
<b>efficiency:</b>	> 90%
<b>t<sub>c</sub>-temperature:</b>	max. 50°C
<b>ambient temperature:</b>	0...40°C
<b>relay contacts:</b>	potential free, load: 50...500mA at 24...230V AC; 50...500mA at 5...60V DC
<b>status indication:</b>	operating status indicated - by LED: green = lamp on   red = lamp fault - by relay (refer to 'Ballast Generals' for more information on lamp status indication via relay)
<b>IP code:</b>	IP20
<b>mounting restrictions:</b>	upright, mains connector at bottom side, see 'Ballast Generals' for details
<b>wire gauge:</b>	terminals 1-3, 10-17: 0,75...1,5mm <sup>2</sup> strip length: 10...12mm terminals 4-9: 0,5...1mm <sup>2</sup> ; strip length: 8mm

**Dimensions**



**Wiring diagram**



# ZED EVG - Electronic Ballasts 230V AC for Standard and High Output Germicidal Lamps Rapid Start

*established and proven:*  
**quick lamp start - easy handling**



ballast form G

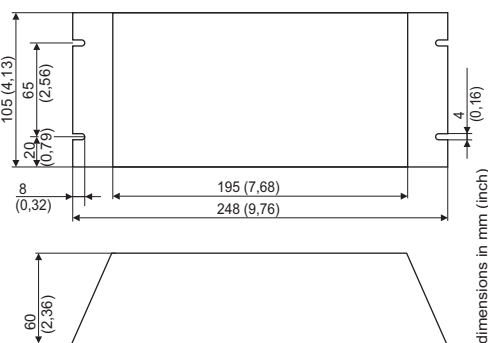
**Features**

- ⇒ electronic ballast for two-lamp operation
  - ballasts are operating even with only one lamp connected
- ⇒ to be used with four-wire lamps
- ⇒ rapid start for applications with less than one switch-on cycle per day (otherwise preheat start ballasts are recommended)
- ⇒ equipped with active power factor correction
- ⇒ lamp status indication via LED indicators
  - green LED: lamp on
  - red LED: lamp fault
- ⇒ lamp status forwarding
  - potential free relay contacts for lamp on / lamp fault

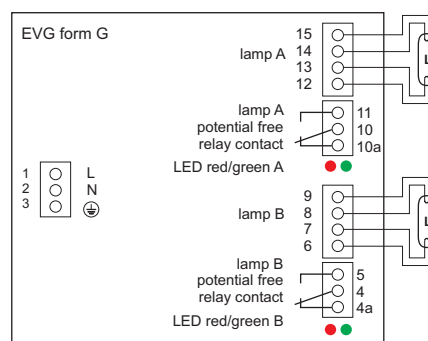
ballast name	input power [W]	input current [A]	power per lamp [W]	lamp current [A]	lamp type
EVG2x[150-200W]/1A	up to 440	1,7 - 2,1	150 - 200	0,8 - 1	GHO64T5, TUV64T5HO
EVG2x[100-150W]/1,5A	up to 300	0,87 - 1,3	100 - 150	1,4 - 1,5	LTC115T12, TUV115

<b>mains voltage:</b>	230V AC ± 10%
<b>mains frequency:</b>	45...65Hz
<b>efficiency:</b>	> 90%
<b>t<sub>c</sub>-temperature:</b>	max. 50°C
<b>ambient temperature:</b>	0...40°C
<b>relay contacts:</b>	potential free, load: 50...500mA at 24...230V AC; 50...500mA at 5...60V DC
<b>status indication:</b>	operating status indicated - by LED: green = lamp on   red = lamp fault - by relay (refer to 'Ballast Generals' for more information on lamp status indication via relay)
<b>IP code:</b>	IP20
<b>mounting restrictions:</b>	upright, mains connector at bottom side, see 'Ballast Generals' for details
<b>wire gauge:</b>	0,75...1,5mm <sup>2</sup> ; strip length: 10...12mm

**Dimensions**



**Wiring diagram**



# ZED EVG - Electronic Ballasts 230V AC for Standard and High Output Germicidal Lamps Instant Start

*small but powerful:  
quick lamp start - economic wiring*



ballast form A-IS

### Features

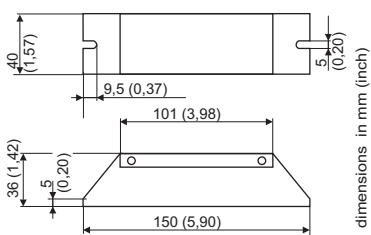
- ⇒ electronic ballast for one-lamp operation
- ⇒ to be used with two-wire lamps
- ⇒ instant start  
for applications with less than one switch-on cycle per day  
(otherwise preheat start ballasts are recommended)
- ⇒ equipped with active power factor correction
- ⇒ lamp status indication via LED indicators
  - green LED: lamp on
  - red LED: lamp fault
- ⇒ lamp status forwarding
  - photocoupler for lamp on / lamp fault

ballast name	input power [W]	input current [A]	power per lamp [W]	lamp current [A]	lamp type
EVG11-20W/425mA IS	up to 24	0,05 - 0,11	11-20	0,425 ± 10%	TUV16, GPH287T5L, GPH303T5L, GPH436T5L

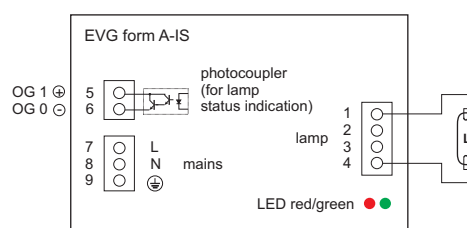
Lamp filament must be suitable for instant start operation, ask lamp manufacturer.  
If four-wire lamps are used, lamp filaments have to be shorted (see wiring diagram).

<b>mains voltage:</b>	230V AC ± 10%
<b>mains frequency:</b>	45...65Hz
<b>efficiency:</b>	approx. 85%
<b>t<sub>c</sub>-temperature:</b>	max. 50°C
<b>ambient temperature:</b>	0...40°C
<b>status indication:</b>	operating status indicated - by LED: green = lamp on   red = lamp fault - by photocoupler (refer to 'Ballast Generals' for more information on lamp status indication via photocoupler)
<b>connection specifics:</b>	terminals 1...4, max. off-load voltage: 1.5kV <sub>pp</sub> photocoupler, max. current on OG: 5mA (open collector V <sub>OG1/0</sub> <1V ⇒ V <sub>CESAT</sub> <1V) max. cable length between ballast and lamp: 0,5m
<b>IP code:</b>	IP20
<b>mounting restrictions:</b>	upright, mains connector at bottom side, see 'Ballast Generals' for details
<b>wire gauge:</b>	0,5...1mm <sup>2</sup> ; strip length: 8mm

### Dimensions



### Wiring diagram





## ZED EVG - Electronic Ballasts 230V AC for Standard and High Output Germicidal Lamps Instant Start

*small and smart:*

*quick lamp start - economic wiring*



ballast form D-IS

### Features

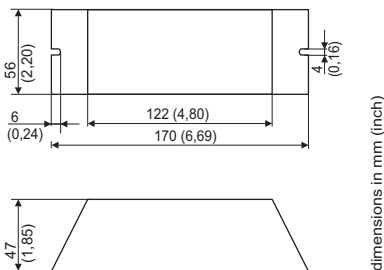
- ⇒ electronic ballast for one-lamp operation
- ⇒ to be used with two-wire lamps
- ⇒ instant start  
for applications with less than one switch-on cycle per day  
(otherwise preheat start ballasts are recommended)
- ⇒ equipped with active power factor correction
- ⇒ lamp status indication via LED indicators
  - green LED: lamp on
  - red LED: lamp fault
- ⇒ lamp status forwarding
  - potential free relay contacts for lamp on / lamp fault

ballast name	input power [W]	input current [A]	power per lamp [W]	lamp current [A]	lamp type
S-EVG30-50W/425mA IS	32 - 55	0,13 - 0,26	30 - 50	0,39 - 0,42	G36T5, GPH793T5, GPH846T5, LTC40T5, TUV36T5
S-EVG50-70W/425mA IS	55 - 75	0,26 - 0,36	50 - 70	0,39 - 0,42	G64T5, LTC64T5, TUV64T5
S-EVG50-70W/600mA IS	55 - 75	0,26 - 0,36	50 - 70	0,59 - 0,61	GPH436T5HO(600mA), GPH846T5HO(600mA), GPH893T5HO(600mA)
S-EVG65-80W/880mA IS	70 - 85	0,28 - 0,4	65 - 80	0,85 - 0,9	GHO36T5, GPH436T5HO(800mA), GPH846T5HO(800mA), GPH893T5HO(800mA), LTC80T5, TUV36HO

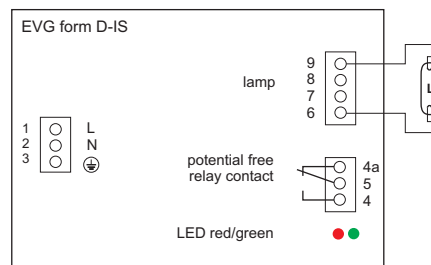
Lamp filament must be suitable for instant start operation, ask lamp manufacturer.  
If four-wire lamps are used, lamp filaments have to be shorted (see wiring diagram).

<b>mains voltage:</b>	230V AC $\pm$ 10%
<b>mains frequency:</b>	45...65Hz
<b>efficiency:</b>	> 90%
<b>t<sub>c</sub>-temperature:</b>	max. 50°C
<b>ambient temperature:</b>	0...40°C
<b>relay contacts:</b>	potential free, load: 50...500mA at 24...230V AC; 50...500mA at 5...60V DC
<b>status indication:</b>	operating status indicated - by LED: green = lamp on   red = lamp fault - by relay (refer to 'Ballast Generals' for more information on lamp status indication via relay)
<b>IP code:</b>	IP20
<b>mounting restrictions:</b>	upright, mains connector at bottom side, see 'Ballast Generals' for details
<b>wire gauge:</b>	0,5...1mm <sup>2</sup> ; strip length: 8mm

### Dimensions



### Wiring diagram





## ZED EVG - Electronic Ballasts 230V AC for Standard and High Output Germicidal Lamps Instant Start

*established and proven:*  
**quick lamp start - economic wiring**



ballast form E-IS

### Features

- ⇒ electronic ballast for one-lamp operation
- ⇒ to be used with two-wire lamps
- ⇒ instant start  
for applications with less than one switch-on cycle per day  
(otherwise preheat start ballasts are recommended)
- ⇒ equipped with active power factor correction
- ⇒ lamp status indication via LED indicators
  - green LED: lamp on
  - red LED: lamp fault
- ⇒ lamp status forwarding
  - potential free relay contacts for lamp on / lamp fault

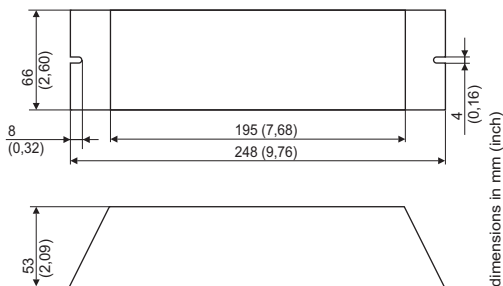
ballast name	input power [W]	input current [A]	power per lamp [W]	lamp current [A]	lamp type
EVG150-200W/1A IS	160 – 220	0,65 - 1,0	150 - 200	0,8 - 1,0	GHO64T5, TUV64T5HO

Lamp filament must be suitable for instant start operation, ask lamp manufacturer.

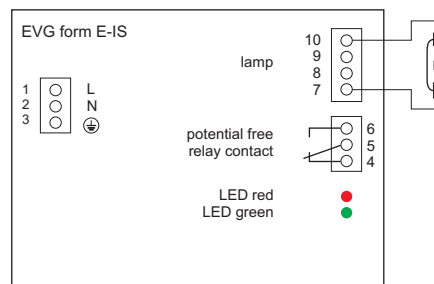
If four-wire lamps are used, lamp filaments have to be shorted (see wiring diagram).

<b>mains voltage:</b>	230V AC $\pm$ 10%
<b>mains frequency:</b>	45...65Hz
<b>efficiency:</b>	> 90%
<b>t<sub>c</sub>-temperature:</b>	max. 50°C
<b>ambient temperature:</b>	0...40°C
<b>relay contacts:</b>	potential free, load: 50...500mA at 24...230V AC; 50...500mA at 5...60V DC
<b>status indication:</b>	operating status indicated - by LED: green = lamp on   red = lamp fault - by relay (refer to 'Ballast Generals' for more information on lamp status indication via relay)
<b>IP code:</b>	IP20
<b>mounting restrictions:</b>	upright, mains connector at bottom side, see 'Ballast Generals' for details
<b>wire gauge:</b>	0,75...1,5mm <sup>2</sup> ; strip length: 10...12mm

### Dimensions



### Wiring diagram





## ZED EVG - Electronic Ballasts 230V AC for Standard and High Output Germicidal Lamps Instant Start

*established and proven:*  
**quick lamp start - economic wiring**



ballast form F-IS

### Features

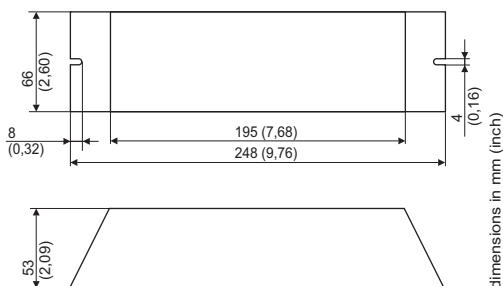
- ⇒ electronic ballast for two-lamp operation
  - ballasts are operating even with only one lamp connected
- ⇒ to be used with two-wire lamps
- ⇒ instant start  
for applications with less than one switch-on cycle per day (otherwise preheat start ballasts are recommended)
- ⇒ equipped with active power factor correction
- ⇒ lamp status indication via LED indicators
  - green LED: lamp on
  - red LED: lamp fault
- ⇒ lamp status forwarding
  - potential free relay contacts for lamp on / lamp fault

ballast name	input power [W]	input current [A]	power per lamp [W]	lamp current [A]	lamp type
EVG2x[30-50W]/425mA IS	up to 110	0,25 - 0,53	30 - 50	0,39 - 0,42	G36T5, GPH793T5, GPH846T5, LTC40T5, TUV36T5
EVG2x[50-70W]/425mA IS	up to 150	0,43 - 0,72	50 - 70	0,39 - 0,42	G64T5, TUV64T5
EVG2x[50-70W]/600mA IS	up to 150	0,43 - 0,72	50 - 70	0,59 - 0,61	GPH436T5HO(600mA), GPH846T5HO(600mA), GPH893T5HO(600mA)
EVG2x[65-80W]/880mA IS	up to 170	0,55 - 0,8	65 - 80	0,85 - 0,9	GHO36T5, GPH436T5HO(800mA), GPH846T5HO(800mA), GPH893T5HO(800mA), LTC80T5, TUV36HO

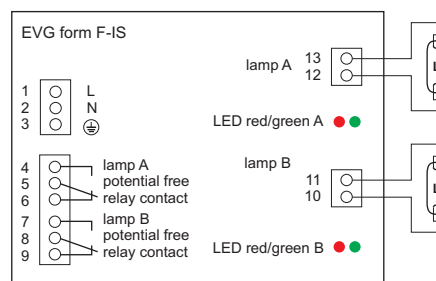
Lamp filament must be suitable for instant start operation, ask lamp manufacturer.  
If four-wire lamps are used, lamp filaments have to be shorted (see wiring diagram).

<b>mains voltage:</b>	230V AC ± 10%
<b>mains frequency:</b>	45...65Hz
<b>efficiency:</b>	> 90%
<b>t<sub>c</sub>-temperature:</b>	max. 50°C
<b>ambient temperature:</b>	0...40°C
<b>relay contacts:</b>	potential free, load: 50...500mA at 24...230V AC; 50...500mA at 5...60V DC
<b>status indication:</b>	operating status indicated - by LED: green = lamp on   red = lamp fault - by relay (refer to 'Ballast Generals' for more information on lamp status indication via relay)
<b>IP code:</b>	IP20
<b>mounting restrictions:</b>	upright, mains connector at bottom side, see 'Ballast Generals' for details
<b>wire gauge:</b>	terminals 1-3, 10-13: 0,75...1,5mm <sup>2</sup> strip length: 10...12mm terminals 4-9: 0,5...1mm <sup>2</sup> ; strip length: 8mm

### Dimensions



### Wiring diagram



## ZED EVG - Electronic Ballasts 230V AC for Standard and High Output Germicidal Lamps Instant Start

*established and proven:*  
**quick lamp start - economic wiring**



ballast form G-IS

### Features

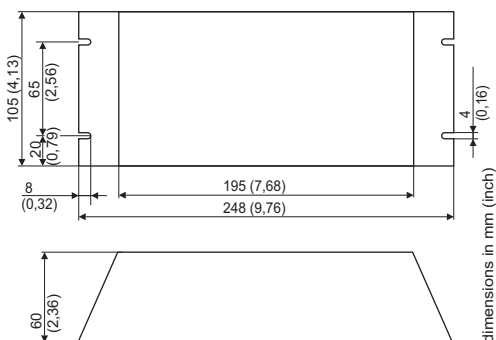
- ⇒ electronic ballast for two-lamp operation
  - ballasts are operating even with only one lamp connected
- ⇒ to be used with two-wire lamps
- ⇒ instant start for applications with less than one switch-on cycle per day (otherwise preheat start ballasts are recommended)
- ⇒ equipped with active power factor correction
- ⇒ lamp status indication via LED indicators
  - green LED: lamp on
  - red LED: lamp fault
- ⇒ lamp status forwarding
  - potential free relay contacts for lamp on / lamp fault

ballast name	input power [W]	input current [A]	power per lamp [W]	lamp current [A]	lamp type
EVG2x[150-200W]/1A IS	up to 440	1,7 - 2,1	150 - 200	0,8 - 1,0	GHO64T5, TUV64T5HO

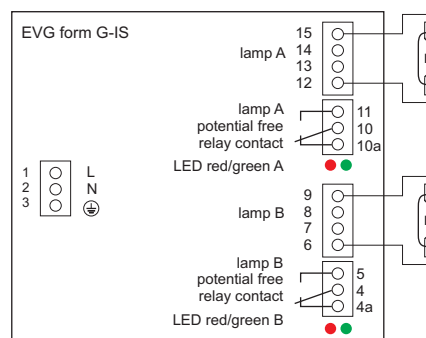
Lamp filament must be suitable for instant start operation, ask lamp manufacturer.  
If four-wire lamps are used, lamp filaments have to be shorted (see wiring diagram).

<b>mains voltage:</b>	230V AC ± 10%
<b>mains frequency:</b>	45...65Hz
<b>efficiency:</b>	> 90%
<b>t<sub>c</sub>-temperature:</b>	max. 50°C
<b>ambient temperature:</b>	0...40°C
<b>relay contacts:</b>	potential free, load: 50...500mA at 24...230V AC; 50...500mA at 5...60V DC
<b>status indication:</b>	operating status indicated - by LED: green = lamp on   red = lamp fault - by relay (refer to 'Ballast Generals' for more information on lamp status indication via relay)
<b>IP code:</b>	IP20
<b>mounting restrictions:</b>	upright, mains connector at bottom side, see 'Ballast Generals' for details
<b>wire gauge:</b>	0,75...1,5mm <sup>2</sup> ; strip length: 10...12mm

### Dimensions



### Wiring diagram





## ZED EVG - Electronic Ballasts 230V AC for Standard and High Output Germicidal Lamps Instant Start

*established and proven:*  
**quick lamp start - four lamps at once**



ballast form J

### Features

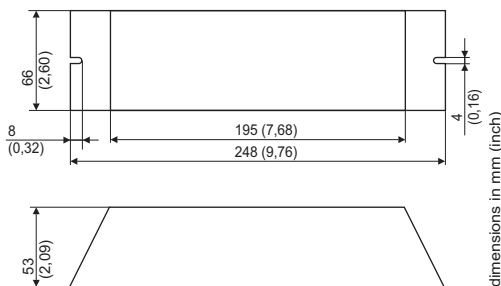
- ⇒ electronic ballast for four-lamp operation
  - ballasts are operating even with only one lamp pair (lamp 1+2 or 3+4) connected
- ⇒ to be used with two-wire lamps
- ⇒ instant start  
for applications with less than one switch-on cycle per day (otherwise preheat start ballasts are recommended)
- ⇒ equipped with active power factor correction
- ⇒ lamp status indication via LED indicators
  - green LED: lamp on
  - red LED: lamp fault
- ⇒ lamp status forwarding
  - potential free relay contacts for lamp on / lamp fault

ballast name	input power [W]	input current [A]	power per lamp [W]	lamp current [A]	lamp type
EVG4x[20W]/425mA IS	up to 85	0,33 - 0,41	20	0,42	GPH436T5L
EVG4x[40W]/425mA IS	up to 170	0,65 - 0,8	35	0,42	G36T5, GPH793T5, GPH846T5, LTC40T5, TUV36T5

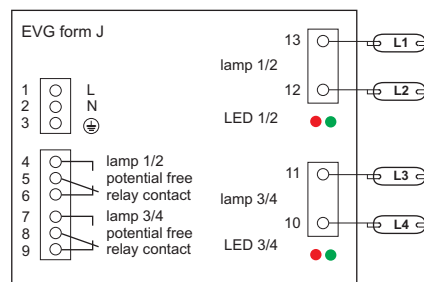
Lamp filament must be suitable for instant start operation, ask lamp manufacturer.  
If four-wire lamps are used, lamp filaments have to be shorted (see wiring diagram).

<b>mains voltage:</b>	230V AC ± 10%
<b>mains frequency:</b>	45...65Hz
<b>efficiency:</b>	> 90%
<b>t<sub>c</sub>-temperature:</b>	max. 50°C
<b>ambient temperature:</b>	0...40°C
<b>relay contacts:</b>	potential free, load: 50...500mA at 24...230V AC; 50...500mA at 5...60V DC
<b>status indication:</b>	operating status indicated - by LED: green = lamp on   red = lamp fault - by relay (refer to 'Ballast Generals' for more information on lamp status indication via relay)
<b>IP code:</b>	IP20
<b>mounting restrictions:</b>	upright, mains connector at bottom side, see 'Ballast Generals' for details
<b>wire gauge:</b>	terminals 1-3, 10-13: 0,75...1,5mm <sup>2</sup> strip length: 10...12mm terminals 4-9: 0,5...1mm <sup>2</sup> ; strip length: 8mm

### Dimensions



### Wiring diagram



# ZED EVG - Electronic Ballasts 230V AC for Standard and High Output Germicidal Lamps Instant Start

*established and proven:*  
**quick lamp start - four lamps at once**



ballast form L

### Features

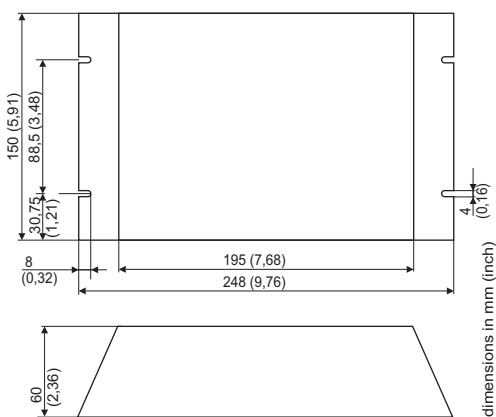
- ⇒ electronic ballast for four-lamp operation
  - ballasts are operating even with only one, two or three lamps connected
- ⇒ to be used with two-wire lamps
- ⇒ instant start  
for applications with less than one switch-on cycle per day (otherwise preheat start ballasts are recommended)
- ⇒ equipped with active power factor correction
- ⇒ lamp status indication via LED indicators
  - green LED: lamp on
  - red LED: lamp fault
- ⇒ lamp status forwarding
  - potential free relay contacts for lamp on / lamp fault

ballast name	input power [W]	input current [A]	power per lamp [W]	lamp current [A]	lamp type
EVG4x[150W]/1A IS	up to 650	2,6 - 3,1	150	0,8 - 1,0	GHO64T5, TUV64T5HO

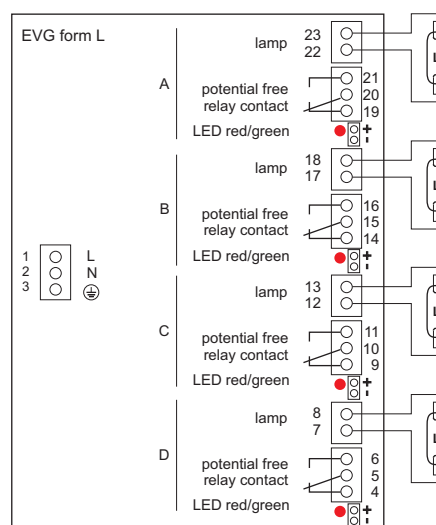
Lamp filament must be suitable for instant start operation, ask lamp manufacturer.  
If four-wire lamps are used, lamp filaments have to be shorted (see wiring diagram).

<b>mains voltage:</b>	230V AC ± 10%
<b>mains frequency:</b>	45...65Hz
<b>efficiency:</b>	> 90%
<b>t<sub>c</sub>-temperature:</b>	max. 50°C
<b>ambient temperature:</b>	0...40°C
<b>relay contacts:</b>	potential free, load: 50...500mA at 24...230V AC; 50...500mA at 5...60V DC
<b>green LED contact:</b>	for direct connection of low current type (2mA) LED (no additional resistor needed)
<b>status indication:</b>	operating status indicated - by LED: red = lamp fault   (contact for) green = lamp on - by relay (refer to 'Ballast Generals' for more information on lamp status indication via relay)
<b>IP code:</b>	IP20
<b>mounting restrictions:</b>	upright, mains connector at bottom side, see 'Ballast Generals' for details
<b>wire gauge:</b>	mains/lamps terminals: 0,75...1,5mm <sup>2</sup> ; strip length: 10...12mm relay terminals: 0,5...1mm <sup>2</sup> ; strip length: 8mm

### Dimensions



### Wiring diagram





## Notices

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