

ETITRAFO

Transformers and power supplies

Single phase safety and
insulating transformers **728**
AC/DC power supplies **740**

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ETI
SWITCH TO
A SAFE FUTURE

ETITRAFO

Single phase safety and insulating transformers

Safety transformer:

It is an insulating transformer designed to supply circuit at a maximum of 50V (safety extra-low voltage).

Insulating transformer:

It is a transformer in which the primary and secondary windings are separated by a double or reinforced insulation, in order to limit, in the circuit supplied by the secondary winding, any risk due to accidental contacts with active parts or parts that can become active in case of an insulation fault.

Impregnation:

The transformers are completely impregnated with a inorganic resin. This operation improves the characteristics of the used materials, prevents the penetration of humidity inside the core and the windings, reduces greatly the noises caused by the vibration.

Single phase safety and insulating transformers IP00

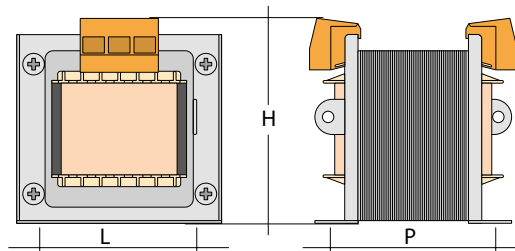
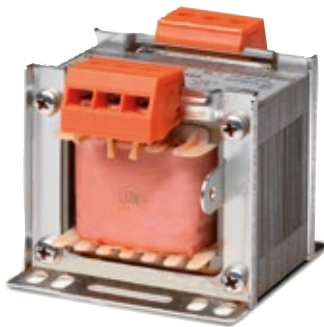
Technical data

Frequency	50 Hz
Thermal class	B & F
Losses in the core sheets	1,3 - 1,5 W/kg
Insulation voltage	4000V between coils 2000V between coils and ground
Primary voltage	230 V/50 Hz 230 V +/- 15V 50 Hz - type EURO
Standard	EN 61558-2-4
Service type	Continuous
Protection index	IP00

Features:

- /// Electrolytic copper: Class F/H
- /// Impregnated with insulating resin
- /// Admissible voltage tolerance +/- 15%

Dimensions



Technical features chart of single phase safety and insulating transformers. Thermal class B

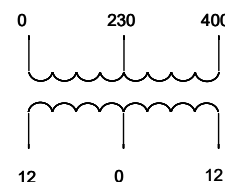
Fall secondary windings power (VA)	No-load losses ΔP (W)	Losses (short circuit) ΔP (W)	U_{cc} ($\cos \varphi=1$) (%)	Efficiency ($\cos \varphi=1$) (%)
30	2,4	3,9	9,9	79%
40	3	5,7	10	79%
50	2,9	7,1	10,6	80%
63	3,8	7,1	9,6	82%
75	4,3	9,4	9,2	82%
100	4,6	10,1	9,1	85%
150	5,7	16,2	7,5	85%
200	7,2	22	7,3	86%
250	8,9	23,7	6,5	87%
300	9,8	24	5,6	89%
400	11	27	5,3	90%
500	16,2	28,2	4,2	91%
630	18,9	43	4,3	90%
800	20	46	4,1	92%
1000	28	45	3,2	93%
1600	35	65	3,1	94%
2000	30	88	2,7	94%
2500	60	67	2,1	95%
3000	70	85	3	95%
4000	50	158	3,2	95%
5000	50	250	2,8	94%
6000	60	280	2,8	94%
8000	100	240	2,9	96%
10000	137	200	1,6	97%

Technical features chart of single phase safety and insulating transformers. Thermal class F

Fall secondary windings power (VA)	No-load losses ΔP (W)	Losses (short circuit) ΔP (W)	U_{cc} ($\cos \varphi=1$) (%)	Efficiency ($\cos \varphi=1$) (%)
40	3	7	12	75%
63	3,9	8	10,5	81%
100	4,9	11	9,5	84%
160	6,1	16,8	8,5	86%
200	7,7	23	8	85%
250	9,1	25	6,5	86%
300	10	25,4	6	88%
400	12,8	32,5	5,5	89%
500	16,5	35,5	4,8	90%
630	19,1	44,2	4,6	90%
1000	28,5	48	4,5	93%
1600	38	70	3,5	93%
2000	36	76	3,5	94%
2500	65	75	2,5	94%

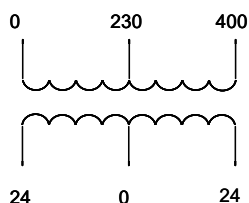
Single phase safety transformers Primary voltage 230, 400V. Secondary voltage 24V (12V-0-12V). Thermal class B

Type	Description	Code No.	Power (VA)	Dimensions LxHxP (mm)	kg	
TRANSF 1f B 12-0-12V 30VA	Single phase safety transf. 12-0-12V 30VA	003801001	30	77x77x78	1,00	1
TRANSF 1f B 12-0-12V 50VA	Single phase safety transf. 12-0-12V 50VA	003801002	50	77x77x83	1,45	1
TRANSF 1f B 12-0-12V 75VA	Single phase safety transf. 12-0-12V 75VA	003801003	75	77x77x93	1,65	1
TRANSF 1f B 12-0-12V 100VA	Single phase safety transf. 12-0-12V 100VA	003801004	100	85x85x93	1,88	1
TRANSF 1f B 12-0-12V 150VA	Single phase safety transf. 12-0-12V 150VA	003801005	150	98x95x93	2,40	1
TRANSF 1f B 12-0-12V 200VA	Single phase safety transf. 12-0-12V 200VA	003801006	200	98x95x103	2,93	1
TRANSF 1f B 12-0-12V 250VA	Single phase safety transf. 12-0-12V 250VA	003801007	250	123x108x91	3,90	1
TRANSF 1f B 12-0-12V 300VA	Single phase safety transf. 12-0-12V 300VA	003801008	300	123x108x95	4,00	1
TRANSF 1f B 12-0-12V 400VA	Single phase safety transf. 12-0-12V 400VA	003801009	400	123x108x108	5,10	1
TRANSF 1f B 12-0-12V 500VA	Single phase safety transf. 12-0-12V 500VA	003801010	500	123x130x120	7,20	1
TRANSF 1f B 12-0-12V 630VA	Single phase safety transf. 12-0-12V 630VA	003801011	630	153x130x135	8,90	1
TRANSF 1f B 12-0-12V 800VA	Single phase safety transf. 12-0-12V 800VA	003801012	800	153x130x145	11,70	1
TRANSF 1f B 12-0-12V 1000VA	Single phase safety transf. 12-0-12V 1000VA	003801013	1000	153x130x160	12,50	1
TRANSF 1f B 12-0-12V 1600VA	Single phase safety transf. 12-0-12V 1600VA	003801014	1600	195x187x150	17,00	1
TRANSF 1f B 12-0-12V 2000VA	Single phase safety transf. 12-0-12V 2000VA	003801015	2000	195x187x160	19,10	1
TRANSF 1f B 12-0-12V 2500VA	Single phase safety transf. 12-0-12V 2500VA	003801016	2500	195x187x190	23,00	1
TRANSF 1f B 12-0-12V 3000VA	Single phase safety transf. 12-0-12V 3000VA	003801017	3000	195x187x210	30,00	1
TRANSF 1f B 12-0-12V 4000VA	Single phase safety transf. 12-0-12V 4000VA	003801018	4000	240x270x270	40,00	1
TRANSF 1f B 12-0-12V 5000VA	Single phase safety transf. 12-0-12V 5000VA	003801019	5000	240x270x280	44,00	1
TRANSF 1f B 12-0-12V 6000VA	Single phase safety transf. 12-0-12V 6000VA	003801020	6000	240x270x290	46,00	1
TRANSF 1f B 12-0-12V 8000VA	Single phase safety transf. 12-0-12V 8000VA	003801021	8000	320x430x270	60,00	1
TRANSF 1f B 12-0-12V 10000VA	Single phase safety transf. 12-0-12V 10000VA	003801022	10000	320x430x280	75,00	1



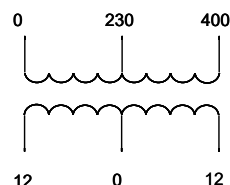
Single phase safety transformers
Primary voltage 230, 400V. Secondary voltage 48V (24V-0-24V). Thermal class B

Type	Description	Code No.	Power (VA)	Dimensions LxHxP (mm)	kg	Box
TRANSF 1fB 24-0-24V 30VA	Single phase safety transf. 24-0-24V 30VA	003801031	30	77x77x78	1,00	1
TRANSF 1fB 24-0-24V 50VA	Single phase safety transf. 24-0-24V 50VA	003801032	50	77x77x83	1,45	1
TRANSF 1fB 24-0-24V 75VA	Single phase safety transf. 24-0-24V 75VA	003801033	75	77x77x93	1,65	1
TRANSF 1fB 24-0-24V 100VA	Single phase safety transf. 24-0-24V 100VA	003801034	100	85x85x93	1,88	1
TRANSF 1fB 24-0-24V 150VA	Single phase safety transf. 24-0-24V 150VA	003801035	150	98x95x93	2,40	1
TRANSF 1fB 24-0-24V 200VA	Single phase safety transf. 24-0-24V 200VA	003801036	200	98x95x103	2,93	1
TRANSF 1fB 24-0-24V 250VA	Single phase safety transf. 24-0-24V 250VA	003801037	250	123x108x91	3,90	1
TRANSF 1fB 24-0-24V 300VA	Single phase safety transf. 24-0-24V 300VA	003801038	300	123x108x95	4,00	1
TRANSF 1fB 24-0-24V 400VA	Single phase safety transf. 24-0-24V 400VA	003801039	400	123x108x108	5,10	1
TRANSF 1fB 24-0-24V 500VA	Single phase safety transf. 24-0-24V 500VA	003801040	500	123x130x120	7,20	1
TRANSF 1fB 24-0-24V 630VA	Single phase safety transf. 24-0-24V 630VA	003801041	630	153x130x135	8,90	1
TRANSF 1fB 24-0-24V 800VA	Single phase safety transf. 24-0-24V 800VA	003801042	800	153x130x145	11,70	1
TRANSF 1fB 24-0-24V 1000VA	Single phase safety transf. 24-0-24V 1000VA	003801043	1000	153x130x160	12,50	1
TRANSF 1fB 24-0-24V 1600VA	Single phase safety transf. 24-0-24V 1600VA	003801044	1600	195x187x150	17,00	1
TRANSF 1fB 24-0-24V 2000VA	Single phase safety transf. 24-0-24V 2000VA	003801045	2000	195x187x160	19,10	1
TRANSF 1fB 24-0-24V 2500VA	Single phase safety transf. 24-0-24V 2500VA	003801046	2500	195x187x190	23,00	1
TRANSF 1fB 24-0-24V 3000VA	Single phase safety transf. 24-0-24V 3000VA	003801047	3000	195x187x210	30,00	1
TRANSF 1fB 24-0-24V 4000VA	Single phase safety transf. 24-0-24V 4000VA	003801048	4000	240x270x270	40,00	1
TRANSF 1fB 24-0-24V 5000VA	Single phase safety transf. 24-0-24V 5000VA	003801049	5000	240x270x280	44,00	1
TRANSF 1fB 24-0-24V 6000VA	Single phase safety transf. 24-0-24V 6000VA	003801050	6000	240x270x290	46,00	1
TRANSF 1fB 24-0-24V 8000VA	Single phase safety transf. 24-0-24V 8000VA	003801051	8000	320x430x270	60,00	1
TRANSF 1fB 24-0-24V 10000VA	Single phase safety transf. 24-0-24V 10000VA	003801052	10000	320x430x280	75,00	1



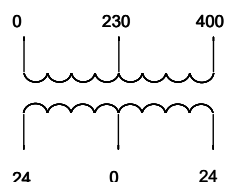
Single phase safety transformers
Primary voltage 230, 400V. Secondary voltage 24V (12V-0-12V). Thermal class F

Type	Description	Code No.	Power (VA)	Dimensions LxHxP (mm)	kg	Box
TRANSF 1f 12-0-12V 40VA	Single phase safety transf. 12-0-12V 40VA	003801121	40	77x77x78	1,00	1
TRANSF 1f 12-0-12V 63VA	Single phase safety transf. 12-0-12V 63VA	003801123	63	77x77x83	1,45	1
TRANSF 1f 12-0-12V 75VA	Single phase safety transf. 12-0-12V 75VA	003801124	75	77x77x83	1,45	1
TRANSF 1f 12-0-12V 100VA	Single phase safety transf. 12-0-12V 100VA	003801125	100	85x85x93	1,88	1
TRANSF 1f 12-0-12V 150VA	Single phase safety transf. 12-0-12V 160VA	003801126	160	98x95x93	2,44	1
TRANSF 1f 12-0-12V 200VA	Single phase safety transf. 12-0-12V 200VA	003801127	200	98x95x103	2,93	1
TRANSF 1f 12-0-12V 250VA	Single phase safety transf. 12-0-12V 250VA	003801128	250	123x108x91	3,90	1
TRANSF 1f 12-0-12V 300VA	Single phase safety transf. 12-0-12V 300VA	003801129	300	123x108x95	4,00	1
TRANSF 1f 12-0-12V 400VA	Single phase safety transf. 12-0-12V 400VA	003801130	400	123x108x108	5,10	1
TRANSF 1f 12-0-12V 500VA	Single phase safety transf. 12-0-12V 500VA	003801131	500	123x130x120	7,20	1
TRANSF 1f 12-0-12V 630VA	Single phase safety transf. 12-0-12V 630VA	003801132	630	153x130x135	8,90	1
TRANSF 1f 12-0-12V 800VA	Single phase safety transf. 12-0-12V 800VA	003801133	800	153x130x135	10,00	1
TRANSF 1f 12-0-12V 1000VA	Single phase safety transf. 12-0-12V 1000VA	003801134	1000	153x130x160	12,50	1
TRANSF 1f 12-0-12V 1600VA	Single phase safety transf. 12-0-12V 1600VA	003801135	1600	195x187x150	17,00	1
TRANSF 1f 12-0-12V 2000VA	Single phase safety transf. 12-0-12V 2000VA	003801136	2000	195x187x160	19,10	1
TRANSF 1f 12-0-12V 2500VA	Single phase safety transf. 12-0-12V 2500VA	003801137	2500	195x187x190	23,00	1



Single phase safety transformers
Primary voltage 230, 400V. Secondary voltage 48V (24V-0-24V). Thermal class F

Type	Description	Code No.	Power (VA)	Dimensions LxHxP (mm)	kg	
TRANSF 1f 24-0-24V 40VA	Single phase safety transf. 24-0-24V 40V	003801141	40	77x77x78	1,00	1
TRANSF 1f 24-0-24V 63VA	Single phase safety transf. 24-0-24V 63V	003801142	63	77x77x83	1,45	1
TRANSF 1f 24-0-24V 75VA	Single phase safety transf. 24-0-24V 75V	003801143	75	77x77x83	1,45	1
TRANSF 1f 24-0-24V 100VA	Single phase safety transf. 24-0-24V 100V	003801144	100	85x85x93	1,88	1
TRANSF 1f 24-0-24V 160VA	Single phase safety transf. 24-0-24V 160V	003801145	160	98x95x93	2,44	1
TRANSF 1f 24-0-24V 200VA	Single phase safety transf. 24-0-24V 200V	003801146	200	98x95 x103	2,93	1
TRANSF 1f 24-0-24V 250VA	Single phase safety transf. 24-0-24V 250V	003801147	250	123x108x91	3,90	1
TRANSF 1f 24-0-24V 300VA	Single phase safety transf. 24-0-24V 300V	003801148	300	123x108x95	4,00	1
TRANSF 1f 24-0-24V 400VA	Single phase safety transf. 24-0-24V 400V	003801149	400	123x108x108	5,10	1
TRANSF 1f 24-0-24V 500VA	Single phase safety transf. 24-0-24V 500V	003801150	500	123x130x120	7,20	1
TRANSF 1f 24-0-24V 630VA	Single phase safety transf. 24-0-24V 630V	003801151	630	153x130x135	8,90	1
TRANSF 1f 24-0-24V 1000VA	Single phase safety transf. 24-0-24V 1000V	003801152	1000	153x130x160	12,50	1
TRANSF 1f 24-0-24V 1600VA	Single phase safety transf. 24-0-24V 1600V	003801153	1600	195x187x160	17,00	1
TRANSF 1f 24-0-24V 2500VA	Single phase safety transf. 24-0-24V 2500V	003801154	2500	195x187x190	23,00	1



Single phase safety transformers
Primary voltage 230, 400V: +/- 15V. Secondary voltage 24V (12-0-12V). Thermal class F. Type EURO

Type	Description	Code No.	Power (VA)	Dimensions LxHxP (mm)	kg	
TRANSF EU 1f 12-0-12V 50VA	Single phase safety transf. +/-15V 12-0-12V 50VA	003801341	50	77x77x83	1,45	1
TRANSF EU 1f 12-0-12V 100VA	Single phase safety transf. +/-15V 12-0-12V 100VA	003801342	100	85x85x93	1,88	1
TRANSF EU 1f 12-0-12V 160VA	Single phase safety transf. +/-15V 12-0-12V 160VA	003801343	160	98x95x93	2,44	1
TRANSF EU 1f 12-0-12V 200VA	Single phase safety transf. +/-15V 12-0-12V 200VA	003801344	200	98x95x103	2,93	1
TRANSF EU 1f 12-0-12V 250VA	Single phase safety transf. +/-15V 12-0-12V 250VA	003801345	250	123x108x91	3,90	1
TRANSF EU 1f 12-0-12V 300VA	Single phase safety transf. +/-15V 12-0-12V 300VA	003801346	300	123x108x95	4,00	1
TRANSF EU 1f 12-0-12V 400VA	Single phase safety transf. +/-15V 12-0-12V 400VA	003801347	400	123x108x108	5,10	1
TRANSF EU 1f 12-0-12V 630VA	Single phase safety transf. +/-15V 12-0-12V 630VA	003801348	630	153x130x135	8,90	1
TRANSF EU 1f 12-0-12V 1000VA	Single phase safety transf. +/-15V 12-0-12V 1000VA	003801349	1000	153x130x160	12,50	1
TRANSF EU 1f 12-0-12V 1600VA	Single phase safety transf. +/-15V 12-0-12V 1600VA	003801350	1600	195x187x150	17,00	1
TRANSF EU 1f 12-0-12V 2500VA	Single phase safety transf. +/-15V 12-0-12V 2500VA	003801351	2500	195x187x190	23,00	1

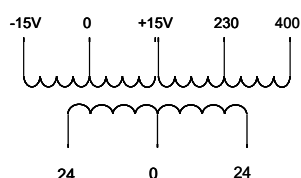


ETITRAFO / Single phase safety and insulating transformers

Single phase safety transformers

Primary voltage 230, 400V: +/- 15V. Secondary voltage 48V (24-0-24V). Thermal class F. Type EURO

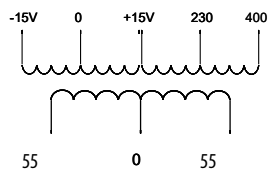
Type	Description	Code No.	Power (VA)	Dimensions LxHxP (mm)	kg	Box
TRANSF EU 1f 24-0-24V 50VA	Single phase safety trans. +/-15V 24-0-24V 50VA	003801361	50	77x77x83	1,45	1
TRANSF EU 1f 24-0-24V 100VA	Single phase safety trans. +/-15V 24-0-24V 100VA	003801362	100	85x85x93	1,88	1
TRANSF EU 1f 24-0-24V 160VA	Single phase safety trans. +/-15V 24-0-24V 160VA	003801363	160	98x95x93	2,44	1
TRANSF EU 1f 24-0-24V 200VA	Single phase safety trans. +/-15V 24-0-24V 200VA	003801364	200	98x95x103	2,93	1
TRANSF EU 1f 24-0-24V 250VA	Single phase safety trans. +/-15V 24-0-24V 250VA	003801365	250	123x108x91	3,90	1
TRANSF EU 1f 24-0-24V 300VA	Single phase safety trans. +/-15V 24-0-24V 300VA	003801366	300	123x108x95	4,00	1
TRANSF EU 1f 24-0-24V 400VA	Single phase safety trans. +/-15V 24-0-24V 400VA	003801367	400	123x108x108	5,10	1
TRANSF EU 1f 24-0-24V 630VA	Single phase safety trans. +/-15V 24-0-24V 630VA	003801368	630	153x130x135	8,90	1
TRANSF EU 1f 24-0-24V 1000VA	Single phase safety trans. +/-15V 24-0-24V 1000VA	003801369	1000	153x130x160	12,50	1
TRANSF EU 1f 24-0-24V 1600VA	Single phase safety trans. +/-15V 24-0-24V 1600VA	003801370	1600	195x187x150	17,00	1
TRANSF EU 1f 24-0-24V 2500VA	Single phase safety trans. +/-15V 24-0-24V 2500VA	003801371	2500	195x187x190	23,00	1



Single phase insulating transformers


Primary voltage 230, 400V: +/- 15V. Secondary voltage 110V (55-0-55V). Thermal class F. Type EURO

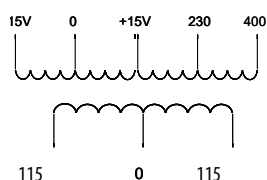
Type	Description	Code No.	Power (VA)	Dimensions LxHxP (mm)	kg	Box
TRANSF EU 1f 55-0-55V 50VA	Single phase insulating trans. +/-15V 55-0-55V 50VA	003801381	50	77x77x83	1,45	1
TRANSF EU 1f 55-0-55V 100VA	Single phase insulating trans. +/-15V 55-0-55V 100VA	003801382	100	85x85x93	1,88	1
TRANSF EU 1f 55-0-55V 160VA	Single phase insulating trans. +/-15V 55-0-55V 160VA	003801383	160	98x95x93	2,44	1
TRANSF EU 1f 55-0-55V 200VA	Single phase insulating trans. +/-15V 55-0-55V 200VA	003801384	200	98x95x103	2,93	1
TRANSF EU 1f 55-0-55V 250VA	Single phase insulating trans. +/-15V 55-0-55V 250VA	003801385	250	123x108x91	3,90	1
TRANSF EU 1f 55-0-55V 300VA	Single phase insulating trans. +/-15V 55-0-55V 300VA	003801386	300	123x108x95	4,00	1
TRANSF EU 1f 55-0-55V 400VA	Single phase insulating trans. +/-15V 55-0-55V 400VA	003801387	400	123x108x108	5,10	1
TRANSF EU 1f 55-0-55V 630VA	Single phase insulating trans. +/-15V 55-0-55V 630VA	003801388	630	153x130x135	8,90	1
TRANSF EU 1f 55-0-55V 1000VA	Single phase insulating trans. +/-15V 55-0-55V 1000VA	003801389	1000	153x130x160	12,50	1
TRANSF EU 1f 55-0-55V 1600VA	Single phase insulating trans. +/-15V 55-0-55V 1600VA	003801390	1600	195x187x150	17,00	1
TRANSF EU 1f 55-0-55V 2500VA	Single phase insulating trans. +/-15V 55-0-55V 2500VA	003801391	2500	195x187x190	23,00	1



Single phase insulating transformers

Primary voltage 230, 400V: +/- 15V. Secondary voltage 230V (115-0-115V). Thermal class F. Type EURO

Type	Description	Code No.	Power (VA)	Dimensions LxHxP (mm)	kg	
TRANSF EU 1f 115-0-115V 50VA	Single phase insulating trans. +/-15V 115-0-115V 50VA	003801401	50	77x77x83	1,45	1
TRANSF EU 1f 115-0-115V 100VA	Single phase insulating trans. +/-15V 115-0-115V 100VA	003801402	100	85x85x93	1,88	1
TRANSF EU 1f 115-0-115V 160VA	Single phase insulating trans. +/-15V 115-0-115V 160VA	003801403	160	98x95x93	2,44	1
TRANSF EU 1f 115-0-115V 200VA	Single phase insulating trans. +/-15V 115-0-115V 200VA	003801404	200	98x95x103	2,93	1
TRANSF EU 1f 115-0-115V 250VA	Single phase insulating trans. +/-15V 115-0-115V 250VA	003801405	250	123x108x91	3,90	1
TRANSF EU 1f 115-0-115V 300VA	Single phase insulating trans. +/-15V 115-0-115V 300VA	003801406	300	123x108x95	4,00	1
TRANSF EU 1f 115-0-115V 400VA	Single phase insulating trans. +/-15V 115-0-115V 400VA	003801407	400	123x108x108	5,10	1
TRANSF EU 1f 115-0-115V 630VA	Single phase insulating trans. +/-15V 115-0-115V 630VA	003801408	630	153x130x135	8,90	1
TRANSF EU 1f 115-0-115V 1000VA	Single phase insulating trans. +/-15V 115-0-115V 1000VA	003801409	1000	153x130x160	12,50	1
TRANSF EU 1f 115-0-115V 1600VA	Single phase insulating trans. +/-15V 115-0-115V 1600VA	003801410	1600	195x187x150	17,00	1
TRANSF EU 1f 115-0-115V 2500VA	Single phase insulating trans. +/-15V 115-0-115V 2500VA	003801411	2500	195x187x190	23,00	1

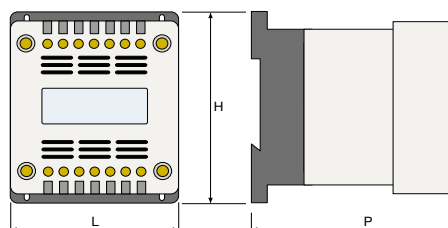


Single phase safety and insulating transformers IP20 DIN rail mounted

Technical data

Primary voltage	0 - 230V - 400V +/- 15V (50-60 Hz)
Thermal class	F
Cable section	10 mm ²
Protection	IP20
Fixing	on DIN rail
Standard	EN 61558-1
Service type	Continuous

Dimensions



Generally about transformers

The transformers must be protected against possible overloads and short circuits. Our transformers belong to the non-short-circuitproof type and so they must be protected using external fuses. Rated current of the suggested fuse is always indicated on our labels. However the protection can be also obtained using Miniature Circuit Breakers - ETIMAT. Selected protection of the input winding of the transformer must be chosen taking into account that at the starting phase of the transformer, a high value of inrush current is generated, a value that can reach 25 times the value of the input rated current, for about 10 milliseconds. Hence, time delay fuses (T or aM type) or MCB - ETIMAT having D or K characteristic must be used for a correct protection. The protection of the secondary side can be realized using fuses of F or gG type, or MCB - ETIMAT having B or C characteristic. Here below there is a table with all the suggested protection fuses for the input and output windings (all the values are in Ampere):

Technical parameters for insulating transformers. Thermal class F. Fixed on DIN rail.

Fall secondary windings power (VA)	No-load losses ΔP (W)	Losses (short circuit) ΔP (W)	Ucc ($\cos \varphi=1$) (%)	Efficiency ($\cos \varphi=1$) (%)
30	7,6	4,2	11,0	0,89
40	7,8	5,0	9,0	0,88
50	8,0	6,0	8,0	0,88
63	8,0	7,0	7,8	0,86
75	8,2	7,2	7,5	0,85
100	8,3	9,1	7,2	0,83
160	8,2	14,8	6	0,92
200	8,3	15,2	5,7	0,92
250	9,3	17	5,3	0,92
300	9,4	18,3	5,0	0,91

General rules for choosing a transformers protection

Fall secondary windings power (VA)	Rated value of aM or T fuse for secondary side protection (A)				Rated value of aM or T fuse for primary side protection (A)	
	Voltage U ₂		Voltage U ₂		Voltage U ₁	
	24V	48V	110V	220V	230V	400V
30	1,25	0,63	0,315	0,16	0,5	0,5
50	2,0	1,0	0,4	0,2	1,0	0,5
75	3,15	1,6	0,63	0,315	1,0	1,0
100	4,0	2,0	1,0	0,5	1,0	1,0
150	6,0	3,15	1,25	0,63	1,0	1,0
200	8,0	4,0	2,0	1,0	1,0	1,0
250	10,0	6,0	2,0	1,0	2,0	1,0
300	12,0	6,0	2,5	1,25	2,0	1,0
400	16,0	8,0	4,0	2,0	4,0	2,0
500	20,0	10,0	4,0	2,0	4,0	2,0
630	25,0	12,0	6,0	3,15	4,0	2,0
800	32,0	16,0	6,3	4,0	4,0	4,0
1000	40,0	20,0	10,0	5,0	10,0	6,0
1600	63,0	32,0	12,0	6,0	10,0	10,0
2500	100,0	50,0	20,0	10,0	16,0	10,0

Transformer thermal class

Thermal class	Over temperature °C
A	75
E	90
B	95
F	115
H	140

The above over temperature values are referred to an ambient temperature of 25°C

Thermal class: The transformers have some level of power loss that causes a rising in the temperature of the metallic parts and of the windings. High temperatures cause deterioration of the materials and shorten the “average life” of the transformer itself. For this reason the international standards define some thermal classes, with a maximum over temperature value for each one. The thermal classes established by EN 61558 standard are.

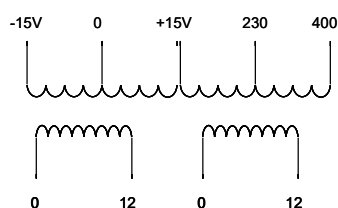
Rated power:

It is the value resulting from the rated secondary winding voltage multiplied by the rated secondary current. In case of a n-phases transformers, it is the value corresponding to n times the result of rated secondary voltage multiplied by rated secondary current. If a transformer is used in a non-continuous work cycle, its power can be lower.

Single phase safety transformers

Primary voltage 230, 400V: +/- 15V. Secondary voltage 0-12 0-12V. Thermal class B. Type EURO. DIN rail


Type	Description	Code No.	Power (VA)	Dimensions LxHxP (mm)	kg	
TRANSF 1f EU 0-12 0-12V 30VA TH	Single phase safety trans. +/-15V 0-12 0-12V 30VA	003801811	30	90 x 96 x106	1,55	1
TRANSF 1f EU 0-12 0-12V 40VA TH	Single phase safety trans. +/-15V 0-12 0-12V 40VA	003801812	40	90 x 96 x106	1,55	1
TRANSF 1f EU 0-12 0-12V 50VA TH	Single phase safety trans. +/-15V 0-12 0-12V 50VA	003801813	50	90 x 96 x106	1,60	1
TRANSF 1f EU 0-12 0-12V 63VA TH	Single phase safety trans. +/-15V 0-12 0-12V 63VA	003801814	63	90 x106 x106	1,90	1
TRANSF 1f EU 0-12 0-12V 75VA TH	Single phase safety trans. +/-15V 0-12 0-12V 75VA	003801815	75	90 x106 x106	2,00	1
TRANSF 1f EU 0-12 0-12V 100VA TH	Single phase safety trans. +/-15V 0-12 0-12V 100VA	003801816	100	90 x116 x106	2,45	1
TRANSF 1f EU 0-12 0-12V 160VA TH	Single phase safety trans. +/-15V 0-12 0-12V 160VA	003801817	160	126 x113 x135	2,85	1
TRANSF 1f EU 0-12 0-12V 200VA TH	Single phase safety trans. +/-15V 0-12 0-12V 200VA	003801818	200	126 x113 x135	4,00	1
TRANSF 1f EU 0-12 0-12V 250VA TH	Single phase safety trans. +/-15V 0-12 0-12V 250VA	003801819	250	126 x123 x135	5,00	1
TRANSF 1f EU 0-12 0-12V 300VA TH	Single phase safety trans. +/-15V 0-12 0-12V 300VA	003801820	300	126 x123 x135	5,20	1

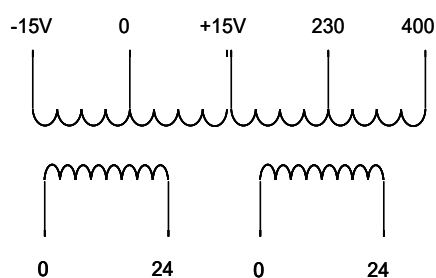


ETITRAFO / Single phase safety and insulating transformers

Single phase safety transformers


Primary voltage 230, 400V: +/- 15V. Secondary voltage 0-24 0-24V. Thermal class B. Type EURO. DIN rail

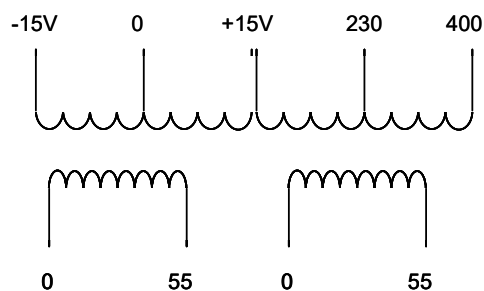
Type	Description	Code No.	Power (VA)	Dimensions LxHxP (mm)	kg	
TRANSF 1f EU 0-24 0-24V 30VA TH	Single phase safety trans. +/-15V 0-24 0-24V 30VA	003801821	30	90 x 96 x 106	1,55	1
TRANSF 1f EU 0-24 0-24V 40VA TH	Single phase safety trans. +/-15V 0-24 0-24V 40VA	003801822	40	90 x 96 x 106	1,55	1
TRANSF 1f EU 0-24 0-24V 50VA TH	Single phase safety trans. +/-15V 0-24 0-24V 50VA	003801823	50	90 x 96 x 106	1,60	1
TRANSF 1f EU 0-24 0-24V 63VA TH	Single phase safety trans. +/-15V 0-24 0-24V 63VA	003801824	63	90 x 106 x 106	1,90	1
TRANSF 1f EU 0-24 0-24V 75VA TH	Single phase safety trans. +/-15V 0-24 0-24V 75VA	003801825	75	90 x 106 x 106	2,00	1
TRANSF 1f EU 0-24 0-24V 100VA TH	Single phase safety trans. +/-15V 0-24 0-24V 100VA	003801826	100	90 x 116 x 106	2,45	1
TRANSF 1f EU 0-24 0-24V 160VA TH	Single phase safety trans. +/-15V 0-24 0-24V 160VA	003801827	160	126 x 113 x 135	2,85	1
TRANSF 1f EU 0-24 0-24V 200VA TH	Single phase safety trans. +/-15V 0-24 0-24V 200VA	003801828	200	126 x 113 x 135	4,00	1
TRANSF 1f EU 0-24 0-24V 250VA TH	Single phase safety trans. +/-15V 0-24 0-24V 250VA	003801829	250	126 x 123 x 135	5,00	1
TRANSF 1f EU 0-24 0-24V 300VA TH	Single phase safety trans. +/-15V 0-24 0-24V 300VA	003801830	300	126 x 123 x 135	5,20	1



Single phase insulating transformers

Primary voltage 230, 400V: +/- 15V. Secondary voltage 0-55 0-55V. Thermal class B. Type EURO. DIN rail

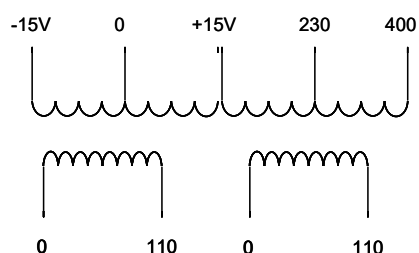
Type	Description	Code No.	Power (VA)	Dimensions LxHxP (mm)	kg	
TRANSF 1f EU 0-55 0-55V 30VA TH	Single phase insulating trans. +/-15V 0-55 0-55V 30VA	003801831	30	90 x 96 x 106	1,55	1
TRANSF 1f EU 0-55 0-55V 40VA TH	Single phase insulating trans. +/-15V 0-55 0-55V 40VA	003801832	40	90 x 96 x 106	1,55	1
TRANSF 1f EU 0-55 0-55V 50VA TH	Single phase insulating trans. +/-15V 0-55 0-55V 50VA	003801833	50	90 x 96 x 106	1,60	1
TRANSF 1f EU 0-55 0-55V 63VA TH	Single phase insulating trans. +/-15V 0-55 0-55V 63VA	003801834	63	90 x 106 x 106	1,90	1
TRANSF 1f EU 0-55 0-55V 75VA TH	Single phase insulating trans. +/-15V 0-55 0-55V 75VA	003801835	75	90 x 106 x 106	2,00	1
TRANSF 1f EU 0-55 0-55V 100VA TH	Single phase insulating trans. +/-15V 0-55 0-55V 100VA	003801836	100	90 x 116 x 106	2,45	1
TRANSF 1f EU 0-55 0-55V 160VA TH	Single phase insulating trans. +/-15V 0-55 0-55V 160VA	003801837	160	126 x 113 x 135	2,85	1
TRANSF 1f EU 0-55 0-55V 200VA TH	Single phase insulating trans. +/-15V 0-55 0-55V 200VA	003801838	200	126 x 113 x 135	4,00	1
TRANSF 1f EU 0-55 0-55V 250VA TH	Single phase insulating trans. +/-15V 0-55 0-55V 250VA	003801839	250	126 x 123 x 135	5,00	1
TRANSF 1f EU 0-55 0-55V 300VA TH	Single phase insulating trans. +/-15V 0-55 0-55V 300VA	003801840	300	126 x 123 x 135	5,20	1



Single phase insulating transformers

Primary voltage 230, 400V: +/- 15V. Secondary voltage 0-110 0-110V. Thermal class B. Type EURO. DIN rail

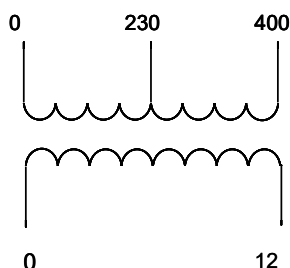
Type	Description	Code No.	Power (VA)	Dimensions LxHxP (mm)	kg	Box
TRANSF 1fEU 0-110 0-110V 30VA TH	Single phase insulating trans. +/-15V 0-110 0-110V 30VA	003801841	30	90 x 96 x106	1,55	1
TRANSF 1fEU 0-110 0-110V 40VA TH	Single phase insulating trans. +/-15V 0-110 0-110V 40VA	003801842	40	90 x 96 x106	1,55	1
TRANSF 1fEU 0-110 0-110V 50VA TH	Single phase insulating trans. +/-15V 0-110 0-110V 50VA	003801843	50	90 x 96 x106	1,60	1
TRANSF 1fEU 0-110 0-110V 63VA TH	Single phase insulating trans. +/-15V 0-110 0-110V 63VA	003801844	63	90 x106 x106	1,90	1
TRANSF 1fEU 0-110 0-110V 75VA TH	Single phase insulating trans. +/-15V 0-110 0-110V 75VA	003801845	75	90 x106 x106	2,00	1
TRANSF 1fEU 0-110 0-110V 100VA TH	Single phase insulating trans. +/-15V 0-110 0-110V 100VA	003801846	100	90 x116 x106	2,45	1
TRANSF 1fEU 0-110 0-110V 160VA TH	Single phase insulating trans. +/-15V 0-110 0-110V 160VA	003801847	160	126 x113 x135	2,85	1
TRANSF 1fEU 0-110 0-110V 200VA TH	Single phase insulating trans. +/-15V 0-110 0-110V 200VA	003801848	200	126 x113 x135	4,00	1
TRANSF 1fEU 0-110 0-110V 250VA TH	Single phase insulating trans. +/-15V 0-110 0-110V 250VA	003801849	250	126 x123 x135	5,00	1
TRANSF 1fEU 0-110 0-110V 300VA TH	Single phase insulating trans. +/-15V 0-110 0-110V 300VA	003801850	300	126 x123 x135	5,20	1



Single phase safety transformers


Primary voltage 230, 400V. Secondary voltage 0-12V. Thermal class B. DIN rail

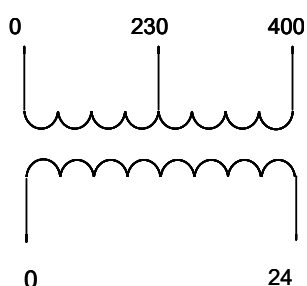
Type	Description	Code No.	Power (VA)	Dimensions LxHxP (mm)	kg	Box
TRANSF 1f0-12V 30VA TH	Single phase safety trans. 0-12V 30VA	003801851	30	90 x 96 x106	1,35	1
TRANSF 1f0-12V 40VA TH	Single phase safety trans. 0-12V 40VA	003801852	40	90 x 96 x106	1,35	1
TRANSF 1f0-12V 50VA TH	Single phase safety trans. 0-12V 50VA	003801853	50	90 x 96 x106	1,40	1
TRANSF 1f0-12V 63VA TH	Single phase safety trans. 0-12V 63VA	003801854	63	90 x106 x106	1,70	1
TRANSF 1f0-12V 75VA TH	Single phase safety trans. 0-12V 75VA	003801855	75	90 x106 x106	1,80	1
TRANSF 1f0-12V 100VA TH	Single phase safety trans. 0-12V 100VA	003801856	100	90 x116 x106	2,25	1
TRANSF 1f0-12V 160VA TH	Single phase safety trans. 0-12V 160VA	003801857	160	126 x113 x135	3,65	1
TRANSF 1f0-12V 200VA TH	Single phase safety trans. 0-12V 200VA	003801858	200	126 x113 x135	3,80	1
TRANSF 1f0-12V 250VA TH	Single phase safety trans. 0-12V 250VA	003801859	250	126 x123 x135	4,80	1
TRANSF 1f0-12V 300VA	Single phase safety trans. 0-12V 300VA	003801860	300	126 x123 x135	5,00	1



Single phase safety transformers


Primary voltage 230, 400V. Secondary voltage 0-24V. Thermal class B. DIN rail

Type	Description	Code No.	Power (VA)	Dimensions LxHxP (mm)	kg	
TRANSF 1f0-24V 30VA TH	Single phase safety trans. 0-24V 30VA	003801861	30	90 x 96 x 106	1,35	1
TRANSF 1f0-24V 40VA TH	Single phase safety trans. 0-24V 40VA	003801862	40	90 x 96 x 106	1,35	1
TRANSF 1f0-24V 50VA TH	Single phase safety trans. 0-24V 50VA	003801863	50	90 x 96 x 106	1,40	1
TRANSF 1f0-24V 63VA TH	Single phase safety trans. 0-24V 63VA	003801864	63	90 x 106 x 106	1,70	1
TRANSF 1f0-24V 75VA TH	Single phase safety trans. 0-24V 75VA	003801865	75	90 x 106 x 106	1,80	1
TRANSF 1f0-24V 100VA TH	Single phase safety trans. 0-24V 100VA	003801866	100	90 x 116 x 106	2,25	1
TRANSF 1f0-24V 160VA TH	Single phase safety trans. 0-24V 160VA	003801867	160	126 x 113 x 135	3,65	1
TRANSF 1f0-24V 200VA TH	Single phase safety trans. 0-24V 200VA	003801868	200	126 x 113 x 135	3,80	1
TRANSF 1f0-24V 250VA TH	Single phase safety trans. 0-24V 250VA	003801869	250	126 x 123 x 135	4,80	1
TRANSF 1f0-24V 300VA	Single phase safety trans. 0-24V 300VA	003801870	300	126 x 123 x 135	5,00	1



Single phase safety transformers


Primary voltage 230, 400V. Secondary voltage 0-48V. Thermal class B. DIN rail

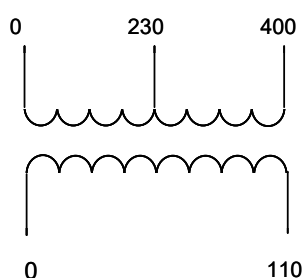
Type	Description	Code No.	Power (VA)	Dimensions LxHxP (mm)	kg	
TRANSF 1f0-48V 30VA TH	Single phase safety trans. 0-48V 30VA	003801871	30	90 x 96 x 106	1,35	1
TRANSF 1f0-48V 40VA TH	Single phase safety trans. 0-48V 40VA	003801872	40	90 x 96 x 106	1,35	1
TRANSF 1f0-48V 50VA TH	Single phase safety trans. 0-48V 50VA	003801873	50	90 x 96 x 106	1,40	1
TRANSF 1f0-48V 63VA TH	Single phase safety trans. 0-48V 63VA	003801874	63	90 x 106 x 106	1,70	1
TRANSF 1f0-48V 75VA TH	Single phase safety trans. 0-48V 75VA	003801875	75	90 x 106 x 106	1,80	1
TRANSF 1f0-48V 100VA TH	Single phase safety trans. 0-48V 100VA	003801876	100	90 x 116 x 106	2,25	1
TRANSF 1f0-48V 160VA TH	Single phase safety trans. 0-48V 160VA	003801877	160	126 x 113 x 135	3,65	1
TRANSF 1f0-48V 200VA TH	Single phase safety trans. 0-48V 200VA	003801878	200	126 x 113 x 135	3,80	1
TRANSF 1f0-48V 250VA TH	Single phase safety trans. 0-48V 250VA	003801879	250	126 x 123 x 135	4,80	1
TRANSF 1f0-48V 300VA TH	Single phase safety trans. 0-48V 300VA	003801880	300	126 x 123 x 135	5,00	1



Single phase insulating transformers


Primary voltage 230, 400V. Secondary voltage 0-110V. Thermal class B. DIN rail

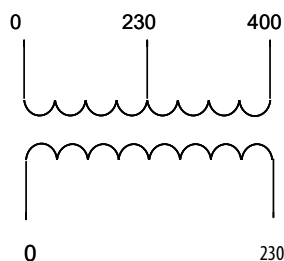
Type	Description	Code No.	Power (VA)	Dimensions LxHxP (mm)	kg	
TRANSF 1f0-110V 30VA TH	Single phase insulating trans. 0-110V 30VA	003801881	30	90 x 96 x106	1,35	1
TRANSF 1f0-110V 40VA TH	Single phase insulating trans. 0-110V 40VA	003801882	40	90 x 96 x106	1,35	1
TRANSF 1f0-110V 50VA TH	Single phase insulating trans. 0-110V 50VA	003801883	50	90 x 96 x106	1,40	1
TRANSF 1f0-110V 63VA TH	Single phase insulating trans. 0-110V 63VA	003801884	63	90 x106 x106	1,70	1
TRANSF 1f0-110V 75VA TH	Single phase insulating trans. 0-110V 75VA	003801885	75	90 x106 x106	1,80	1
TRANSF 1f0-110V 100VA TH	Single phase insulating trans. 0-110V 100VA	003801886	100	90 x116 x106	2,25	1
TRANSF 1f0-110V 160VA TH	Single phase insulating trans. 0-110V 160VA	003801887	160	126 x113 x135	3,65	1
TRANSF 1f0-110V 200VA TH	Single phase insulating trans. 0-110V 200VA	003801888	200	126 x113 x135	3,80	1
TRANSF 1f0-110V 250VA TH	Single phase insulating trans. 0-110V 250VA	003801889	250	126 x123 x135	4,80	1
TRANSF 1f0-110V 300VA TH	Single phase insulating trans. 0-110V 300VA	003801890	300	126 x123 x135	5,00	1



Single phase insulating transformers

Primary voltage 230, 400V. Secondary voltage 0-230V. Thermal class B. DIN rail

Type	Description	Code No.	Power (VA)	Dimensions LxHxP (mm)	kg	
TRANSF 1f0-230V 30VA TH	Single phase insulating trans. 0-230V 30VA	003801891	30	90 x 96 x106	1,35	1
TRANSF 1f0-230V 40VA TH	Single phase insulating trans. 0-230V 40VA	003801892	40	90 x 96 x106	1,35	1
TRANSF 1f0-230V 50VA TH	Single phase insulating trans. 0-230V 50VA	003801893	50	90 x 96 x106	1,40	1
TRANSF 1f0-230V 63VA TH	Single phase insulating trans. 0-230V 63VA	003801894	63	90 x106 x106	1,70	1
TRANSF 1f0-230V 75VA TH	Single phase insulating trans. 0-230V 75VA	003801895	75	90 x106 x106	1,80	1
TRANSF 1f0-230V 100VA TH	Single phase insulating trans. 0-230V 100VA	003801896	100	90 x116 x106	2,25	1
TRANSF 1f0-230V 160VA TH	Single phase insulating trans. 0-230V 160VA	003801897	160	126 x113 x135	3,65	1
TRANSF 1f0-230V 200VA TH	Single phase insulating trans. 0-230V 200VA	003801898	200	126 x113 x135	3,80	1
TRANSF 1f0-230V 250VA TH	Single phase insulating trans. 0-230V 250VA	003801899	250	126 x123 x135	4,80	1
TRANS 1f0-230V 300VA TH	Single phase insulating trans. 0-230V 300VA	003801900	300	126 x123 x135	5,00	1



ETITRAFO

AC/DC power supplies

AC/DC modular power supplies PS-30

Description

- galvanically separated
- AC/DC switching stabilized power supplies, 3-module size, DIN rail mounting
- PS-30-24 - stabilized power supply with fixed output voltage 24 V/30 W (1,25A)

Advantages

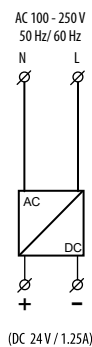
Output current is limited by electronic fuse, in case maximal current is exceeded, the device switches off and after a shot time interval it again switches on.
Indication of output voltage by green LED on front panel
Temperature protection – if temperature is exceeded, the device switches off and after cooled down, it switches on again.

Technical data

PS-30-24	
Input	
Voltage range	AC 100-250V / 50 - 60Hz
Burden without load (max)	10VA/1.5W
Burden with full load (max)	70VA / 37W
Protection	fuse T2A
Output	
Output voltage DC / max. current	24.2V/1.25A
Tolerance of output voltage	± 2%
Output indication	green LED
Wave of off-load output voltage	30mV
Wave of output voltage with max load	80mV
Time delay after connection	max. 5s
Time delay after over-load	max. 1s
Efficiency	>82%
Electronic fuse	electronic protections short-circuit, over load, over voltage (from 120% of rated output)
Other information	
Working humidity	20 .. 90% RH
Operating temperature	-20 °C ... +40 °C
Storage temperature	-25 °C ... +70 °C
Electrical strength input- output	4kV
Protection degree	IP40 device/ IP20 in-built in distribution board
Overvoltage category	II.
Pollution degree	2
Max. cable size (mm ²)	solid wire max. 1x2.5 or 2x1.5/ with sleeve max. 1x1.5
Dimensions	90 x 52 x 65 mm
Weight	158 g
Standards	EN 61204-1, EN 61204-3, EN 61204-7

PS-30: switching stabilized power supplies, version 3-module
PS-30-24 - stabilized power supply with fixed output voltage 24 V/30 W

Connection



Switching power supply PS 30W

Type	I_{out} [A]	U_{out} [V]	Code No.	 g	
PS-30-24	1,25	24	002470133	160	1



Description

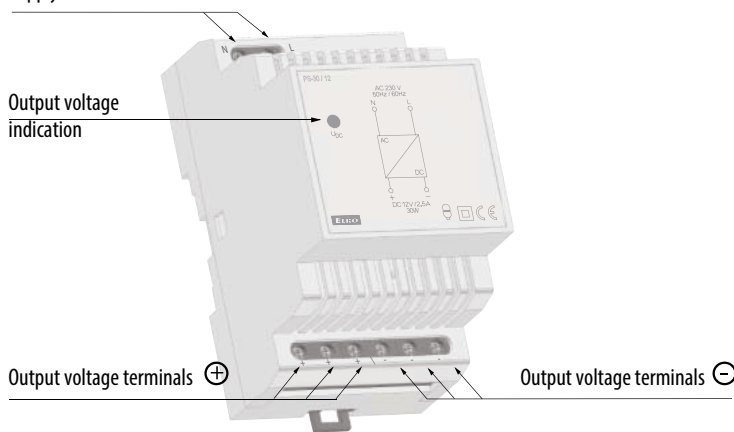
PS-30-24

Supply terminals

Output voltage indication

Output voltage terminals \oplus

Output voltage terminals \ominus





AC/DC DIN rail power supplies

<p>Description</p> <ul style="list-style-type: none"> // High efficiency up to 90% // 150% Peak load capability // 105°C long life capacitors // Metal housing, IP20 // DIN rail mounting (en50.022) 	<p>Protection:</p> <ul style="list-style-type: none"> // Short circuit // Overload // Overvoltage // Overtemperature (PS-240-24 & PS-480-24) 	<p>EU Directives - CE Marking:</p> <ul style="list-style-type: none"> > 2014/30/UE - EMC > 2014/35/UE - LVD
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Technical data

		PS-72-24	PS-120-24	PS-240-24	PS-480-24
Input					
Supply voltage AC	V AC	100 - 240			
Nominal frequency	Hz	50 - 60 (range: 47 - 63)			
Supply voltage DC	V DC	140 - 340			
Input current at 230VAC	A	0,97	0,6	1,4	2,4
In-rush current at 230VAC	A	20	25	30	50
Input overload protection T-type fuse (internal)	A	3,15	5	5	6,3
Power Factor at 230VAC	-	0,5	0,96	0,92	0,97
Output					
Output adjustable voltage DC	V DC	24 - 28 (±2%)			
Max. continuous output current	A	3	5	10	20
Max. continuous output power	W	75	120	240	480
Ripple BW 20MHz at max. load	mV	120	80	100	150
Hold-up time at rated V AC and max. load	ms	20			
Rise time at rated V AC	ms	200	60		
Parallel connection	-		✘		✓
Output overvoltage protection min. % of Vout	%	120 - 135	110 - 140	120 - 150	110 - 140
Output overload protection % of max. load	%	110 - 150			
Power good relay	%	✘	✘	✘	✓
General					
Efficiency at rated V AC	%	89,5	92	93	93
Working temperature - free convection	°C	-25 ... +70			
De-rating 2,5% In/°C	°C	> 55			
Storage temperature	°C	-40 ... +85			
Electrical Insulation	kV	3 (IN/OUT) 1,5 (IN/⊕) 0,5 (OUT/⊕)			
Over-temperature protection	-	✓			
Protection degree	IP	20			
Relative Humidity w/o cond.	RH%	90			
Altitude up to	m	2000			
Dimensions	mm	130x35x110	130x40x120	130x62x125	138x86x125

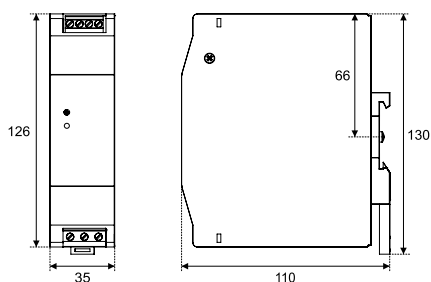
Switching power supply

Type	Iout[A]	Uout[V]	Code No.	 g	
PS-72-24	3	24-28	004656681	360	1
PS-120-24	5	24-28	004656682	540	1
PS-240-24	10	24-28	004656683	810	1
PS-480-24	20	24-28	004656684	1600	1

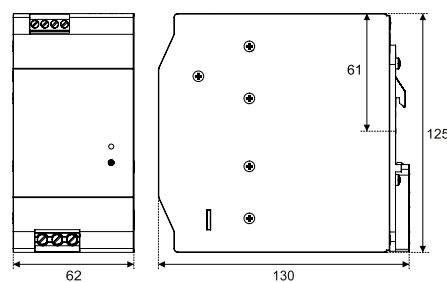


Dimensions

PS-72-24



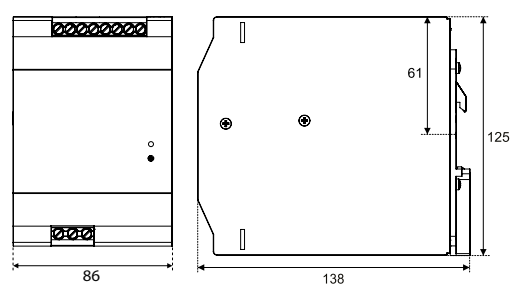
PS-240-24



PS-120-24



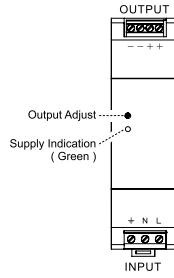
PS-480-24



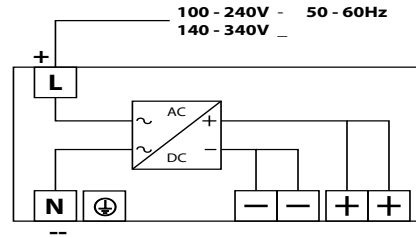
Description

Connection

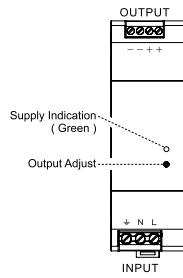
PS-72-24



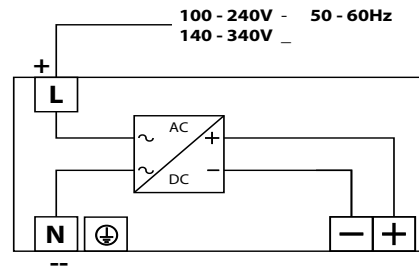
PS-72-24



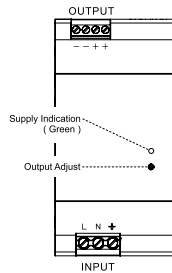
PS-120-24



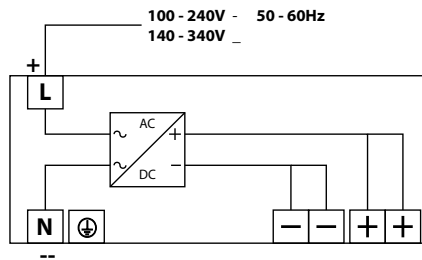
PS-120-24



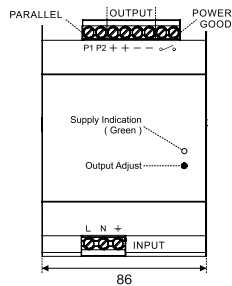
PS-240-24



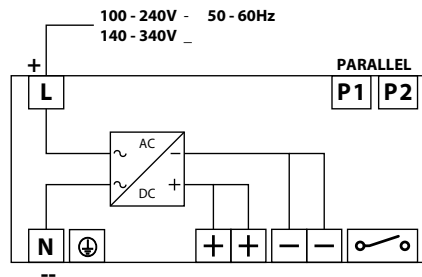
PS-240-24



PS-480-24



PS-480-24



POWER GOOD:

Relay closed: power supply (Output) is stable and within the tolerance limits.
Relay opened: power supply (Output) out of tolerance limits. Power cut off – to prevent damages on sensitive loads.

PARALLEL P1 P2:

Parallel connection of up to 10 power supplies. Connect P1s with P1s, P2s with P2s of each power supply wired in parallel (+ and – outputs in parallel). Each power supply unit must have connection to supply (Input)



Install rail: TS35/7.5 or TS35/15