Low-losses isolation transformers IP-23

Galvanic isolation transformers with reduced losses and high efficiency.

Series REDLOSS is the most economical solution in the long term and helps to save electrical energy in a significant way.

Higher electrical efficiency means heat losses reduction and therefore, increases reliability and service life of the transformer.

REDLOSS transformer operating service resulting in much lower losses than a conventional transformer, this implies an important reduction of exploitation costs and quick payback of the difference price.

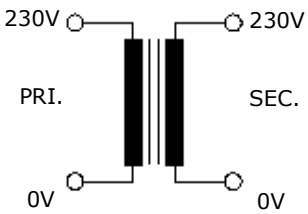
Suitable for renewable energy facilities in compliance with electric supply company requirements.

In metal enclosure IP23 protection degree, resin polyester-epoxy powder coated with excellent physical - mechanical and anti - corrosive properties. Type II enclosure includes wheels.

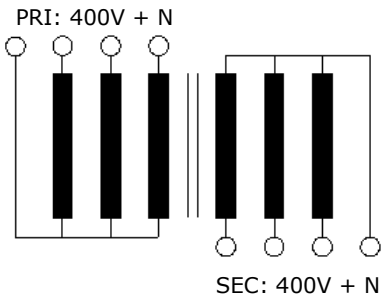
Technical characteristics

Power rating	1 ÷ 100 kVA
Input voltage Output voltage	230 V (Serie RLM) 230 V
Input voltage Output voltage	3 x 400 V + N (Serie RLT) 3 x 400 V + N
Frequency	50/60 Hz
Ambient temp.	30 ºC
Insulation class	F (155 ºC)
Protection degree	IP-23
Safety class	Class I
Test voltage	3 kV
Standard	**(RLM Series)** Power rating ≤ 25 kVA: IEC/UNE-EN 61558-1 Power rating > 25 kVA: IEC/UNE-EN 60076-11 **(RLT Series)** Power rating ≤ 40 kVA: IEC/UNE-EN 61558-1 Power rating > 40 kVA: IEC/UNE-EN 60076-11

Electrical diagram RLM single phase



Electrical diagram RLT three phase – YNyn0



Example of energy saving between REDLOSS and standard three phase transformer, over 8760 working hours per year and full load.

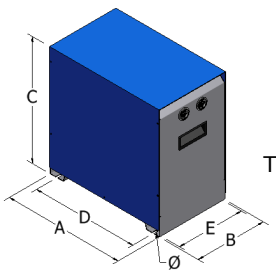
Rating **kVA**	Standard transformer Losses **W**	REDLOSS transformer Losses **W**	Losses (difference) **W**	Energy saving/year **kWh**	Yearly savings *(0,12 **€/kWh**)*
10	460	309	151	1.323	159 €
50	1.546	916	630	5.519	662 €
100	2.354	1.522	832	7.288	875 €

INCREASES:
- Efficiency
- Environmental protection
- Service life

REDUCES:
- Losses
- Energy consumption
- Heating

- For general use, select the power according to the load and power factor:

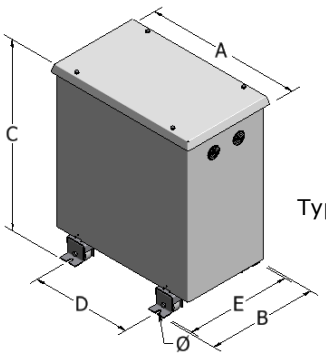
Series RLM: **kW = V x I / 1000**
Series RLT: **kW = √3 x V x I / 1000**
kVA = kW / Cos φ



Type I

Series RLM Single phase

Rating **kVA**	Reference	Effic.	Dimensions **mm**						Weight **kg**	Type
			A	B	C	D	E	Ø		
1	RLM01	95%	300	185	305	265	165	7	15,2	I
2	RLM02	95,5%	370	225	375	325	205	7	21,9	I
3	RLM03	96%	370	225	375	325	205	7	30,6	I
4	RLM04	96,5%	370	225	375	325	205	7	37,3	I
5	RLM05	97%	475	345	520	320	320	10	46	II
6	RLM06	97,3%	475	345	520	320	320	10	54,6	II
8	RLM08	97,6%	545	385	615	350	360	10	68	II
10	RLM10	97,8%	545	385	615	350	360	10	81,3	II

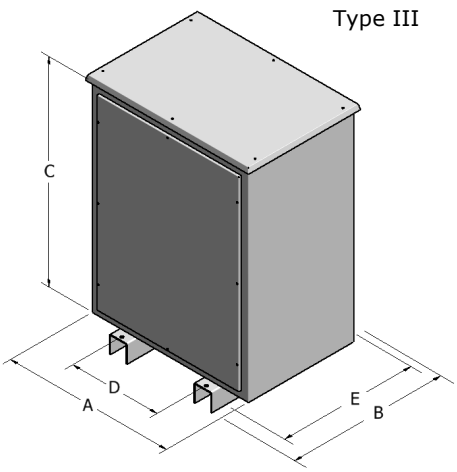


Type

Series RLT Three phase

Rating **kVA**	Reference	Effic.	Dimensions **mm**						Weight **kg**	Type
			A	B	C	D	E	Ø		
10	RLT010	97%	475	345	520	320	320	10	82	II
15	RLT015	97,3%	545	385	615	350	360	10	122	II
20	RLT020	97,6%	615	425	690	400	400	10	148	II
25	RLT025	97,9%	615	425	690	400	400	10	174	II
30	RLT030	98%	615	425	690	400	400	10	210	II
40	RLT040	98,1%	775	575	940	400	550	10	239	II
50	RLT050	98,2%	775	575	940	400	550	10	288	II
63	RLT063	98,3%	775	575	940	400	550	10	338	II
80	RLT080	98,4%	775	575	940	400	550	10	395	II
100	RLT100	98,5%	930	710	1275	480	670	16	487	III

Type III



* Other features, power, voltage, etc., on request.
* Torytrans reserves the right to modify the information in any time and without prior notice.
* Also available on IP-00 (open construction without enclosure) on request.