

# TRANSFORMERS

Single-/two-phase control, isolation and safety transformers

- acc. to EN 61558
- touch protected acc. to EN 60529 (IP20)
- isolation class T 40/B

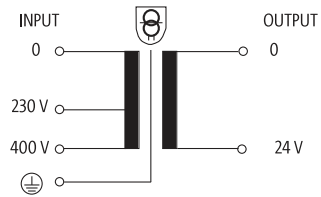
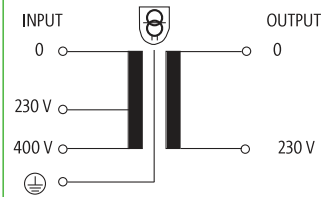
Approvals:  

**MTS**  
Input voltage 230/400 V AC  
Output voltage 230 V AC



**MTS**  
Input voltage 230/400 V AC  
Output voltage 24 V AC (SELV)

**Circuit diagram**



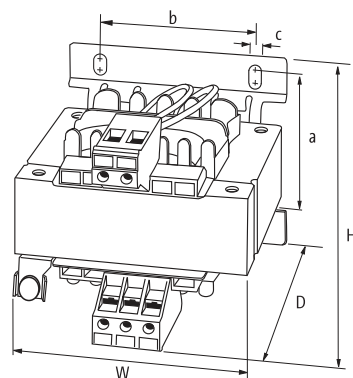
**Ordering data**

Nominal power rating	Spring clamp/screw terminals	Art.-No.	Spring clamp/screw terminals	Art.-No.
40 VA		6686346		6686340
63 VA		6686347		6686341
100 VA		<sup>1)</sup> 6686348		<sup>1)</sup> 6686342
160 VA		<sup>1)</sup> 6686349		<sup>1)</sup> 6686343
250 VA		<sup>1)</sup> 6686351		<sup>1)</sup> 6686345

**Technical data**

Input voltage	230/400 V AC	
Output voltage	230 V AC	24 V AC (SELV)
Frequency	50/60 Hz	
Standards	EN 61558-2-4 and EN 62041 category 0	EN 61558-2-6 and EN 62041 category 0
Test voltage	prim./sec.	min. 4 kV AC
Isolation class	T 40/B	
Temperature range	-20...+40 °C, no condensation	
Mounting method	long-hole mounting or DIN-rail mounting (TH35) acc. to EN 60715	

**Dimension drawing/ fixing (mm)**



	H x W x D	a x b x c	Ø	Weight
40 VA	79 x 78 x 93	56 x 56 x 4.8	4.8 x 8.4	0.8 kg
63 VA	79 x 78 x 93	56 x 56 x 4.8	4.8 x 8.4	1.15 kg
<sup>1)</sup> 100 VA	86 x 84 x 98	64.5 x 64 x 4.8	4.8 x 8.4	2.0 kg
<sup>1)</sup> 160 VA	101 x 96 x 106	86.5 x 84 x 4.8	4.8 x 8.4	2.65 kg
<sup>1)</sup> 250 VA	102 x 96 x 108	86.5 x 84 x 4.8	4.8 x 8.4	3.45 kg

**Notes**

For screw terminal connection, the item number changes from 6686... to 86... (i.e. the prefix 66 is dropped).  
Other voltages on request. <sup>1)</sup>Dimension drawing found on Murrelektronik Online-Shop [onlineshop.murrelektronik.com](http://onlineshop.murrelektronik.com)

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- isolation class T 40/B

Approvals:  

## MTS

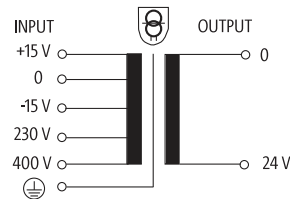
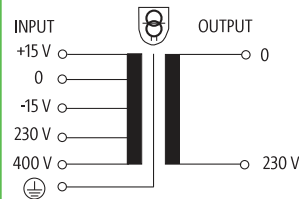
Input voltage 230/400 V AC  $\pm 15$  V AC  
Output voltage 230 V AC



## MTS

Input voltage 230/400 V AC  $\pm 15$  V AC  
Output voltage 24 V AC (SELV)

### Circuit diagram



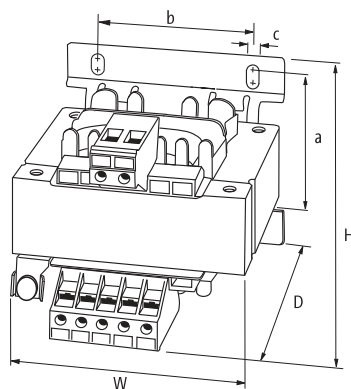
### Ordering data

Nominal power rating	Art.-No.	Art.-No.
40 VA	6686366	6686360
63 VA	6686367	6686361
100 VA	6686368	6686362
160 VA	6686369	6686363
250 VA	6686371	6686365

### Technical data

Input voltage	230/400 V AC $\pm 15$ V AC	
Output voltage	230 V AC	24 V AC (SELV)
Frequency	50/60 Hz	
Standards	EN 61558-2-4 and EN 62041 category 0	EN 61558-2-6 and EN 62041 category 0
Test voltage prim./sec.	min. 4 kV AC	
Isolation class	T 40/B	
Temperature range	-20...+40 °C, no condensation	
Mounting method	long-hole mounting or DIN-rail mounting (TH35) acc. to EN 60715	

### Dimension drawing/ fixing (mm)



	H x W x D	a x b x c	Ø	Weight
40 VA	79 x 78 x 93	56 x 56 x 4.8	4.8 x 8.4	0.8 kg
63 VA	79 x 78 x 93	56 x 56 x 4.8	4.8 x 8.4	1.15 kg
100 VA	86 x 84 x 98	64.5 x 64 x 4.8	4.8 x 8.4	2.0 kg
160 VA	101 x 96 x 106	86.5 x 84 x 4.8	4.8 x 8.4	2.65 kg
250 VA	102 x 96 x 108	86.5 x 84 x 4.8	4.8 x 8.4	3.45 kg

### Notes

For screw terminal connection, the item number changes from 6686... to 86... (i.e. the prefix 66 is dropped).  
Other voltages on request.

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- acc. to EN 61558
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- isolation class T 40/B

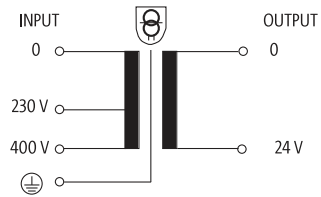
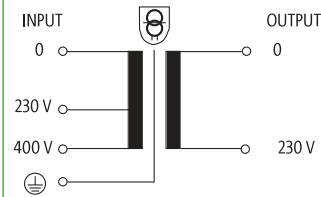
Approvals:  

**MST**  
Input voltage 230/400 V AC  
Output voltage 230 V AC



**MST**  
Input voltage 230/400 V AC  
Output voltage 24 V AC (SELV)

### Circuit diagram

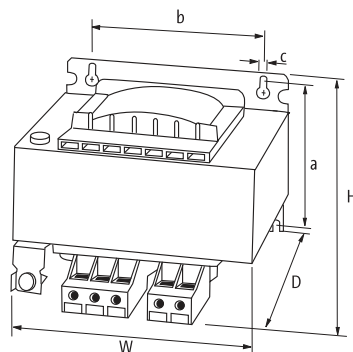


Ordering data	Art.-No.	Art.-No.
Nominal power rating	Spring clamp/screw terminals	Spring clamp/screw terminals
320 VA	6686306	6686326
400 VA	6686307	6686327
500 VA	6686308	86328
630 VA	6686309	86329
800 VA	6686310	86330
1000 VA	6686311	86331

### Technical data

Input voltage	230/400 V AC	
Output voltage	230 V AC	24 V AC (SELV)
Frequency	50/60 Hz	
Standards	EN 61558-2-4 and EN 62041 category 0	EN 61558-2-6 and EN 62041 category 0
Test voltage prim./sec.	min. 4 kV AC	
Isolation class	T 40/B	
Temperature range	-20...+40 °C, no condensation	
Mounting method	key-hole mounting	

### Dimension drawing/ fixing (mm)



	H x W x D	a x b x c	Ø	Weight
320 VA	92.2 x 120 x 122.4	74.4 x 90 x 5.8	5.8 x 10	4.15 kg
400 VA	104.2 x 120 x 122.4	86.5 x 90 x 5.8	5.8 x 10	5.15 kg
500 VA	108 x 135 x 133.6	87 x 104 x 5.8	5.8 x 10	6.5 kg
630 VA	112.5 x 150 x 144.6	90.6 x 122 x 7.0	7.0 x 11	7.7 kg
Art.-No. 86310	129.4 x 150 x 144.6	107.5 x 122 x 7.0	7.0 x 11	10.1 kg
Art.-No. 86330	136.3 x 150 x 149.1	107.5 x 122 x 7.0	7.0 x 11	10.1 kg
Art.-No. 86311	128 x 174 x 160	102 x 135 x 7.0	7.0 x 11	12.3 kg
Art.-No. 86331	133.3 x 174 x 165	102 x 135 x 7.0	7.0 x 11	12.3 kg

### Notes

For screw terminal connection, the item number changes from 6686... to 86... (i.e. the prefix 66 is dropped).  
Other voltages on request.

# TRANSFORMERS

## Single-/two-phase control and isolation transformers

- acc. to EN 61558
- touch protected acc. to EN 60529 (IP20)
- isolation class T 60/B

Approvals:  

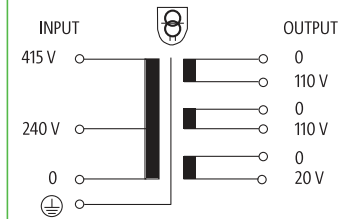
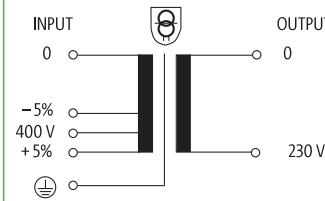
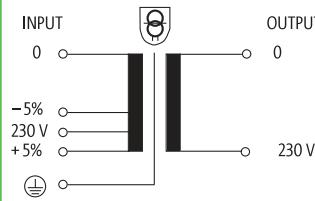
**MET**  
Input voltage 230 V AC  $\pm 5\%$   
Output voltage 230 V AC



**MET**  
Input voltage 400 V AC  $\pm 5\%$   
Output voltage 230 V AC

**MET**  
Input voltage 240/415 V AC  
Output voltage 110/240 V AC

### Circuit diagram



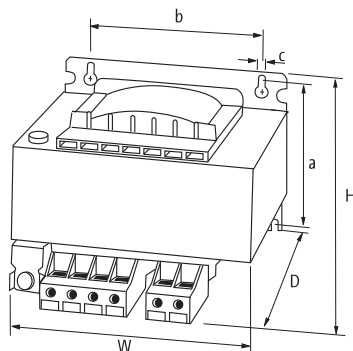
### Ordering data

Nominal power rating	Art.-No.	Art.-No.	Art.-No.
500 VA	6686020	6686021	6686025
630 VA	6686030	6686031	6686035
800 VA	6686040	6686041	6686045
1000 VA	6686050	6686051	6686055
1500 VA	6686060	6686061	

### Technical data

Input voltage	230 V AC $\pm 5\%$	400 V AC $\pm 5\%$	240/415 V AC
Output voltage	230 V AC	230 V AC	110/240 V AC
Frequency	50/60 Hz		
Standards	EN 61558-2-4 and EN 62041 category 0		
Test voltage	min. 4 kV AC		
Isolation class	T 60/B		
Temperature range	-20...+60 °C, no condensation		
Mounting method	key-hole mounting		

### Dimension drawing/ fixing (mm)



	H x W x D	a x b x c	Ø	Weight
500 VA	112.6 x 150 x 146	90 x 122 x 7	7 x 11	6.8 kg
Art.-No. 86025	112.6 x 150 x 170	90 x 122 x 7	7 x 11	6.8 kg
630 VA	129 x 150 x 148	107.5 x 122 x 7	7 x 11	8.2 kg
Art.-No. 86031	130 x 150 x 146	107.5 x 122 x 7	7 x 11	8.2 kg
800 VA	118 x 175 x 160	92 x 135 x 7	7 x 11	11.2 kg
Art.-No. 86045	118 x 174 x 148	92 x 135 x 7	7 x 11	11.2 kg
1000 VA	138 x 174 x 160	111.5 x 135 x 7	7 x 11	14.8 kg
1500 VA	168 x 174 x 162	141.5 x 135 x 7	7 x 11	21 kg

### Notes

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Other voltages on request.

# TRANSFORMERS

## Single-/two-phase control and isolation transformers

- acc. to EN 61558
- touch protected acc. to EN 60529 (IP20)
- isolation class T 60/B

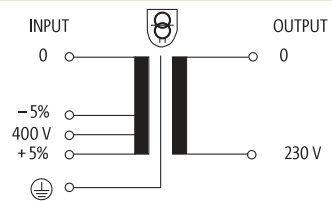
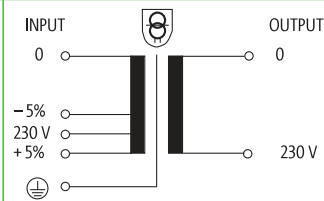
Approvals:  

**MET**  
Input voltage 230 V AC  $\pm 5\%$   
Output voltage 230 V AC



**MET**  
Input voltage 400 V AC  $\pm 5\%$   
Output voltage 230 V AC

### Circuit diagram



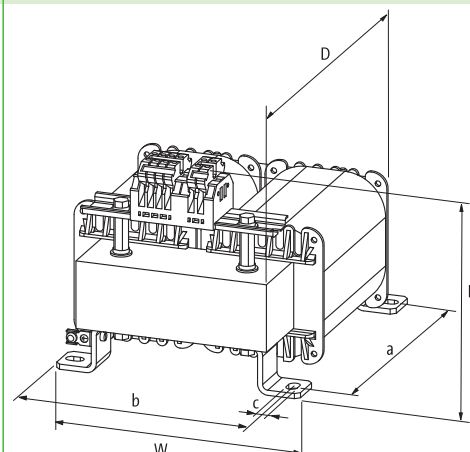
### Ordering data

	Art.-No.	Art.-No.
Nominal power rating	Spring clamp/screw terminals	Spring clamp/screw terminals
2000 VA	6686070	6686071
3000 VA	6686090	6686091
4000 VA	6686110	6686111
5000 VA	6686130	6686131

### Technical data

Input voltage	230 V AC $\pm 5\%$	400 V AC $\pm 5\%$
Output voltage	230 V AC	230 V AC
Frequency	50/60 Hz	
Standards	EN 61558-2-4 and EN 62041 category 0	
Test voltage	prim./sec.	min. 4 kV AC
Isolation class	T40/B	
Temperature range	-20...+40 °C, no condensation	
Mounting method	long-hole mounting	

### Dimension drawing/ fixing (mm)



	H x W x D	a x b x c	Ø	Weight
2000 VA	170 x 195 x 250	200 x 174 x 9	9 x 14	24 kg
3000 VA	195 x 198 x 250	200 x 174 x 9	9 x 14	30 kg
4000 VA	206 x 198 x 250	200 x 174 x 9	9 x 14	32 kg
5000 VA	225 x 198 x 250	200 x 174 x 9	9 x 14	40 kg

### Notes

For screw terminal connection, the item number changes from 6686... to 86... (i.e. the prefix 66 is dropped).  
Other voltages on request.

# TRANSFORMERS

## Single-/two-phase safety transformers

- acc. to EN 61558
- touch protected acc. to EN 60529 (IP20)
- isolation class T 60/B

Approvals:  

### MET

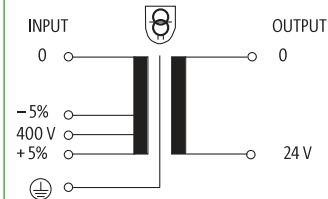
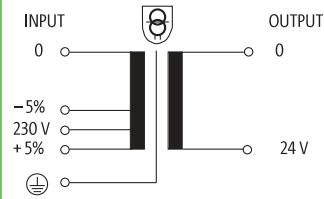
Input voltage 230 V AC  $\pm 5\%$   
Output voltage 24 V AC (SELV)



### MET

Input voltage 400 V AC  $\pm 5\%$   
Output voltage 24 V AC (SELV)

### Circuit diagram

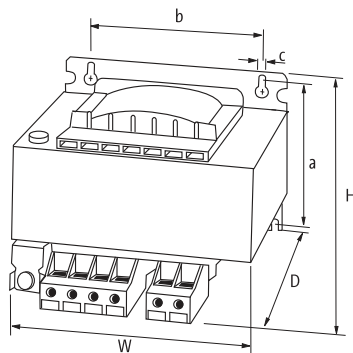


Ordering data	Art.-No.	Art.-No.
Nominal power rating		
500 VA	86023	86024
630 VA	86033	86034
800 VA	86043	86044
1000 VA	86053	86054

### Technical data

Input voltage	230 V AC $\pm 5\%$	400 V AC $\pm 5\%$
Output voltage	24 V AC (SELV)	
Frequency	50/60 Hz	
Standards	EN 61558-2-6 and EN 62041 category 0	
Test voltage	prim./sec.	min. 4 kV AC
Isolation class	T 60/B	
Temperature range	-20...+60 °C, no condensation	
Mounting method	key-hole mounting	

### Dimension drawing/ fixing (mm)



	H x W x D	a x b x c	Ø	Weight
500 VA	112.6 x 150 x 146	90 x 122 x 7	7 x 11	6.8 kg
630 VA	129 x 150 x 148	107.5 x 122 x 7	7 x 11	8.2 kg
800 VA	117 x 174 x 160	92 x 135 x 7	7 x 11	11.2 kg
1000 VA	137 x 174 x 160	111.5 x 135 x 7	7 x 11	14.8 kg

### Notes

Other voltages on request.

# TRANSFORMERS

Single-/two-phase control, isolation and safety transformers

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- touch protected acc. to EN 60529 (IP20)
- isolation class T 60/B

Approvals:



## MTL

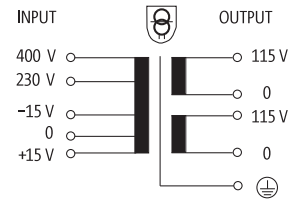
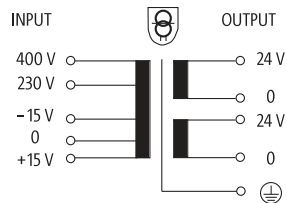
Input voltage 230/400 V AC  $\pm 15$  V AC  
Output voltage 24 V AC or 48 V AC (SELV)



## MTL

Input voltage 230/400 V AC  $\pm 15$  V AC  
Output voltage 115 V AC or 230 V AC

### Circuit diagram



### Ordering data

	Art.-No.	Art.-No.
Nominal power rating		
25 VA	86450	86470
40 VA	<b>86451</b>	<b>86471</b>
63 VA	<b>86452</b>	<b>86472</b>
100 VA	<b>86453</b>	<b>86473</b>
160 VA	<b>86454</b>	<b>86474</b>
250 VA	<b>86455</b>	<b>86475</b>
320 VA	86456	86476

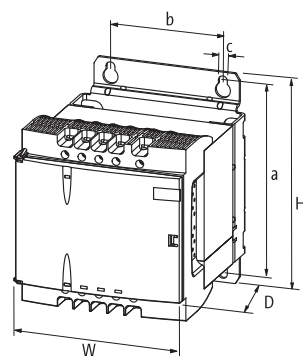
### Accessories

	Art.-No.
Label plate	quantity: 10 pieces 89661
Jumper	quantity: 10 pieces 89660

### Technical data

Input voltage	230/400 V AC $\pm 15$ V AC	
Output voltage	1 x 48 V AC, or 1 x 24 V AC, or 2 x 24 V AC	1 x 230 V AC, or 1 x 115 V AC, or 2 x 115 V AC
Frequency	50/60 Hz	
Standards	EN 61558-2-4, EN 61558-2-6 and EN 62041 category 0	EN 61558-2-4 and EN 62041 category 0
Test voltage prim./sec.	min. 4 kV AC	
Isolation class	T 60/B	
Temperature range	-20...+60 °C, no condensation	
Mounting method	DIN-rail mounting (TH35-15) EN 60715 (up to 160 VA) or key-hole mounting	

### Dimension drawing/ fixing (mm)



	H x W x D	a x b x c	Ø	Weight
25 VA	108 x 87 x 98	96 x 60 x 5.5	5.5 x 9	1.14 kg
40 VA	108 x 87 x 104	96 x 60 x 5.5	5.5 x 9	1.44 kg
63 VA	108 x 87 x 116	96 x 60 x 5.5	5.5 x 9	2 kg
100 VA	108 x 87 x 139	96 x 60 x 5.5	5.5 x 9	2.86 kg
160 VA	153 x 123 x 128	136 x 82 x 6.5	6.5 x 11	4.44 kg
250 VA	153 x 123 x 142	136 x 82 x 6.5	6.5 x 11	5.66 kg
320 VA	153 x 123 x 160	136 x 82 x 6.5	6.5 x 11	7.18 kg

### Notes

Other voltages on request.

# TRANSFORMERS

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- touch protected acc. to EN 60529 (IP20)
- isolation class T 60/B

Approvals:



## MTL

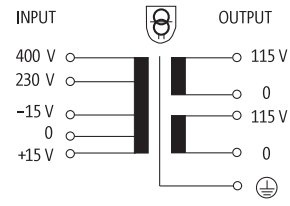
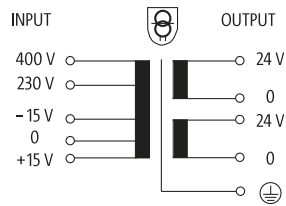
Input voltage 230/400 V AC  $\pm 15$  V AC  
Output voltage 24 V AC or 48 V AC (SELV)



## MTL

Input voltage 230/400 V AC  $\pm 15$  V AC  
Output voltage 115 V AC or 230 V AC

### Circuit diagram



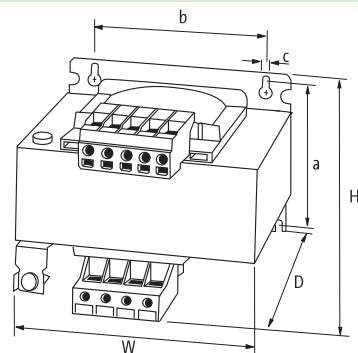
### Ordering data

Nominal power rating	Spring clamp/screw terminals	Art.-No.	Spring clamp/screw terminals	Art.-No.
400 VA		6686457		6686477
630 VA		86458		6686478
1000 VA		86459		6686479
1600 VA		86460		6686480
2500 VA		86461		6686481

### Technical data

Input voltage	230/400 V AC $\pm 15$ V AC	
Output voltage	1 x 48 V AC, or 1 x 24 V AC, or 2 x 24 V AC	1 x 230 V AC, or 1 x 115 V AC, or 2 x 115 V AC
Frequency	50/60 Hz	
Standards	EN 61558-2-4, EN 61558-2-6 and EN 62041 category 0	EN 61558-2-4 and EN 62041 category 0
Test voltage prim./sec.	min. 4 kV AC	
Isolation class	T 60/B	
Temperature range	-20...+60 °C, no condensation	
Mounting method	key-hole mounting	

### Dimension drawing/ fixing (mm)



	H x W x D	a x b x c	Ø	Weight
400 VA	112.5 x 150 x 160	90.6 x 122 x 7	7 x 11	7.58 kg
630 VA	125 x 150 x 160	90.6 x 122 x 7	7 x 11	8.04 kg
1000 VA	156 x 150 x 197	134.1 x 122 x 197	7 x 11	14.3 kg
1600 VA	108 x 87 x 139	96 x 60 x 5.5	5.5 x 9	2.86 kg
2500 VA	153 x 123 x 128	136 x 82 x 6.5	6.5 x 11	4.44 kg

### Notes

For screw terminal connection, the item number changes from 6686... to 86... (i.e. the prefix 66 is dropped).  
Other voltages on request.