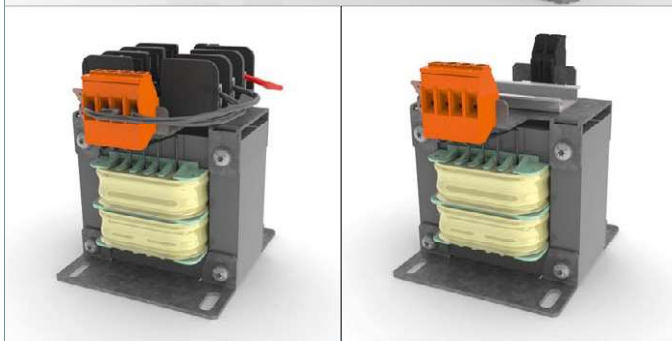
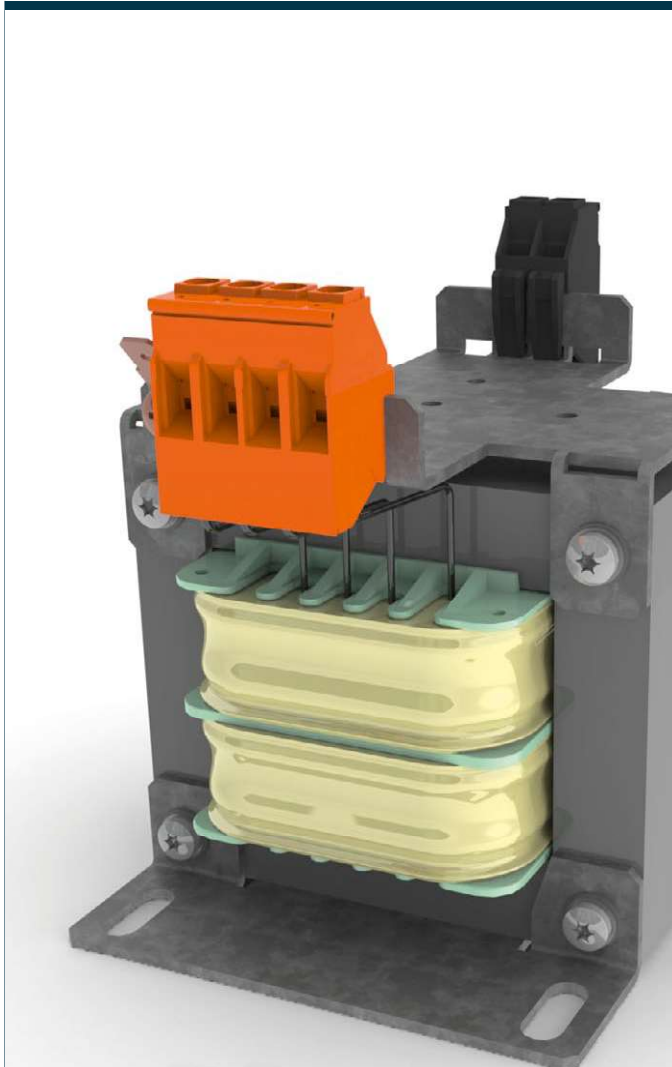


# Separating transformer CT



## General Data

Rated input voltage 2 x 240 V or 600 V
Rated output voltage 24 V, 120 V
Rated power 50 - 2500 VA
Insulation class B
Maximum ambient temperature 40 °C
Efficiency up to 95 %
Degree of protection IP 00

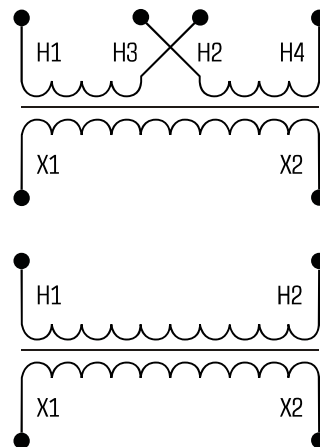
## Advantages

Fused versions available
Versions with DIN rail for additional components available
Contact protected screw connection terminals
Jumpers included for primary voltage selection
Impregnated for max. protection
Up to 2500 VA

## Applications

As a control transformer for the electrical isolation of the input and output sides. The construction of the transformer to supply control systems according to VDE 0113 is designed.

## Sample application



## Standards



Separating transformer  
to: EN 61558 part 1 with part 2-1, UL 5085-1/-2;2;2, CSA 22.2 No. 66

## Approvals



EN 61558, UL 5085-1/-2, CSA 22.2 No 66



## Separating transformer CT



1.1

Electrical data	Typ	CT-005-048-12-0	CT-005-048-12-1	CT-005-048-12-2	CT-005-048-24-0	CT-005-048-24-1	CT-005-048-24-2
<b>Special features</b>							
Characteristics	-	Fused version	with DIN rail for additional components	-	Fused version	with DIN rail for additional components	
<b>Input</b>							
Rated input voltage	2 x 240 Vac	2 x 240 Vac	2 x 240 Vac	2 x 240 Vac	2 x 240 Vac	2 x 240 Vac	2 x 240 Vac
Rated input current	2 x 0,13 Aac	2 x 0,13 Aac	2 x 0,13 Aac	2 x 0,13 Aac	2 x 0,13 Aac	2 x 0,13 Aac	2 x 0,13 Aac
Frequency Range	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz
<b>Output</b>							
Rated output voltage	120 Vac	120 Vac	120 Vac	24 Vac	24 Vac	24 Vac	24 Vac
Rated Power	50 VA	50 VA	50 VA	50 VA	50 VA	50 VA	50 VA
No-load voltage (app. x factor)	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Efficiency	81.0 %	81.0 %	81.0 %	81.0 %	81.0 %	81.0 %	81.0 %
<b>Standards</b>							
Classification	Separating transformer	Separating transformer	Separating transformer	Separating transformer	Separating transformer	Separating transformer	Separating transformer
<b>Approvals</b>							
Approvals	cURus	cURus	cURus	cURus	cURus	cURus	cURus
<b>Environment</b>							
Type of cooling	self-cooling	self-cooling	self-cooling	self-cooling	self-cooling	self-cooling	self-cooling
Ambient temperature	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C
<b>Safety and protection</b>							
Type	Open type	Open type	Open type	Open type	Open type	Open type	Open type
Insulation class	B, class 130	B, class 130	B, class 130	B, class 130	B, class 130	B, class 130	B, class 130
Protection index	IP 00	IP 00	IP 00	IP 00	IP 00	IP 00	IP 00
Safety class (prepared)	I	I	I	I	I	I	I
Short circuit strength	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof
Core	EI 66/34,7	EI 66/34,7	EI 66/34,7	EI 66/34,7	EI 66/34,7	EI 66/34,7	EI 66/34,7

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## Separating transformer CT



Typ	CT-005-060-12-0	CT-005-060-12-1	CT-005-060-12-2	CT-005-060-24-0	CT-005-060-24-1	CT-005-060-24-2
<b>Electrical data</b>						
<b>Special features</b>						
Characteristics	-	Fused version	with DIN rail for additional components	-	Fused version	with DIN rail for additional components
<b>Input</b>						
Rated input voltage	600 Vac	600 Vac	600 Vac	600 Vac	600 Vac	600 Vac
Rated input current	0,10 Aac	0,10 Aac	0,10 Aac	0,10 Aac	0,10 Aac	0,10 Aac
Frequency Range	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz
<b>Output</b>						
Rated output voltage	120 Vac	120 Vac	120 Vac	24 Vac	24 Vac	24 Vac
Rated Power	50 VA	50 VA	50 VA	50 VA	50 VA	50 VA
No-load voltage (app. x factor)	1.13	1.13	1.13	1.13	1.13	1.13
Efficiency	81.0 %	81.0 %	81.0 %	81.0 %	81.0 %	81.0 %
<b>Standards</b>						
Classification	Separating transformer	Separating transformer	Separating transformer	Separating transformer	Separating transformer	Separating transformer
<b>Approvals</b>						
Approvals	cURus	cURus	cURus	cURus	cURus	cURus
<b>Environment</b>						
Type of cooling	self-cooling	self-cooling	self-cooling	self-cooling	self-cooling	self-cooling
Ambient temperature	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C
<b>Safety and protection</b>						
Type	Open type	Open type	Open type	Open type	Open type	Open type
Insulation class	B, class 130	B, class 130	B, class 130	B, class 130	B, class 130	B, class 130
Protection index	IP 00	IP 00	IP 00	IP 00	IP 00	IP 00
Safety class (prepared)	I	I	I	I	I	I
Short circuit strength	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof
Core	EI 66/34,7	EI 66/34,7	EI 66/34,7	EI 66/34,7	EI 66/34,7	EI 66/34,7



## Separating transformer CT



1.1

Electrical data	Typ	CT-007-048-12-0	CT-007-048-12-1	CT-007-048-12-2	CT-007-048-24-0	CT-007-048-24-1	CT-007-048-24-2
<b>Special features</b>							
Characteristics	-	Fused version	with DIN rail for additional components	-	Fused version	with DIN rail for additional components	
<b>Input</b>							
Rated input voltage	2 x 240 Vac	2 x 240 Vac	2 x 240 Vac	2 x 240 Vac	2 x 240 Vac	2 x 240 Vac	2 x 240 Vac
Rated input current	2 x 0,19 Aac	2 x 0,19 Aac	2 x 0,19 Aac	2 x 0,19 Aac	2 x 0,19 Aac	2 x 0,19 Aac	2 x 0,19 Aac
Frequency Range	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz
<b>Output</b>							
Rated output voltage	120 Vac	120 Vac	120 Vac	24 Vac	24 Vac	24 Vac	24 Vac
Rated Power	75 VA	75 VA	75 VA	75 VA	75 VA	75 VA	75 VA
No-load voltage (app. x factor)	1.16	1.16	1.16	1.16	1.16	1.16	1.16
Efficiency	82,0 %	82,0 %	82,0 %	82,0 %	82,0 %	82,0 %	82,0 %
<b>Standards</b>							
Classification	Separating transformer	Separating transformer	Separating transformer	Separating transformer	Separating transformer	Separating transformer	Separating transformer
<b>Approvals</b>							
Approvals	cURus	cURus	cURus	cURus	cURus	cURus	cURus
<b>Environment</b>							
Type of cooling	self-cooling	self-cooling	self-cooling	self-cooling	self-cooling	self-cooling	self-cooling
Ambient temperature	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C
<b>Safety and protection</b>							
Type	Open type	Open type	Open type	Open type	Open type	Open type	Open type
Insulation class	B, class 130	B, class 130	B, class 130	B, class 130	B, class 130	B, class 130	B, class 130
Protection index	IP 00	IP 00	IP 00	IP 00	IP 00	IP 00	IP 00
Safety class (prepared)	I	I	I	I	I	I	I
Short circuit strength	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof
Core	EI 78/27,5	EI 78/27,5	EI 78/27,5	EI 78/27,5	EI 78/27,5	EI 78/27,5	EI 78/27,5

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## Separating transformer CT



Typ	CT-007-060-12-0	CT-007-060-12-1	CT-007-060-12-2	CT-007-060-24-0	CT-007-060-24-1	CT-007-060-24-2
<b>Electrical data</b>						
<b>Special features</b>						
Characteristics	-	Fused version	with DIN rail for additional components	-	Fused version	with DIN rail for additional components
<b>Input</b>						
Rated input voltage	600 Vac	600 Vac	600 Vac	600 Vac	600 Vac	600 Vac
Rated input current	0,15 Aac	0,15 Aac	0,15 Aac	0,15 Aac	0,15 Aac	0,15 Aac
Frequency Range	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz
<b>Output</b>						
Rated output voltage	120 Vac	120 Vac	120 Vac	24 Vac	24 Vac	24 Vac
Rated Power	75 VA	75 VA	75 VA	75 VA	75 VA	75 VA
No-load voltage (app. x factor)	1.16	1.16	1.16	1.16	1.16	1.16
Efficiency	82,0 %	82,0 %	82,0 %	82,0 %	82,0 %	82,0 %
<b>Standards</b>						
Classification	Separating transformer	Separating transformer	Separating transformer	Separating transformer	Separating transformer	Separating transformer
<b>Approvals</b>						
Approvals	cURus	cURus	cURus	cURus	cURus	cURus
<b>Environment</b>						
Type of cooling	self-cooling	self-cooling	self-cooling	self-cooling	self-cooling	self-cooling
Ambient temperature	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C
<b>Safety and protection</b>						
Type	Open type	Open type	Open type	Open type	Open type	Open type
Insulation class	B, class 130	B, class 130	B, class 130	B, class 130	B, class 130	B, class 130
Protection index	IP 00	IP 00	IP 00	IP 00	IP 00	IP 00
Safety class (prepared)	I	I	I	I	I	I
Short circuit strength	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof
Core	EI 78/27,5	EI 78/27,5	EI 78/27,5	EI 78/27,5	EI 78/27,5	EI 78/27,5



## Separating transformer CT



1.1

Electrical data	Typ	CT-010-048-12-0	CT-010-048-12-1	CT-010-048-12-2	CT-010-048-24-0	CT-010-048-24-1	CT-010-048-24-2
<b>Special features</b>							
Characteristics	-	Fused version	with DIN rail for additional components	-	Fused version	with DIN rail for additional components	
<b>Input</b>							
Rated input voltage	2 x 240 Vac	2 x 240 Vac	2 x 240 Vac	22 x 240 Vac	2 x 240 Vac	2 x 240 Vac	
Rated input current	2 x 0,25 Aac	2 x 0,25 Aac	2 x 0,25 Aac	2 x 0,25 Aac	2 x 0,25 Aac	2 x 0,25 Aac	
Frequency Range	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	
<b>Output</b>							
Rated output voltage	120 Vac	120 Vac	120 Vac	24 Vac	24 Vac	24 Vac	
Rated Power	100 VA	100 VA	100 VA	100 VA	100 VA	100 VA	
No-load voltage (app. x factor)	1.13	1.13	1.13	1.13	1.13	1.13	
Efficiency	84,0 %	84,0 %	84,0 %	84,0 %	84,0 %	84,0 %	
<b>Standards</b>							
Classification	Separating transformer	Separating transformer	Separating transformer	Separating transformer	Separating transformer	Separating transformer	
<b>Approvals</b>							
Approvals	cURus	cURus	cURus	cURus	cURus	cURus	
<b>Environment</b>							
Type of cooling	self-cooling	self-cooling	self-cooling	self-cooling	self-cooling	self-cooling	
Ambient temperature	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C	
<b>Safety and protection</b>							
Type	Open type	Open type	Open type	Open type	Open type	Open type	
Insulation class	B, class 130	B, class 130	B, class 130	B, class 130	B, class 130	B, class 130	
Protection index	IP 00	IP 00	IP 00	IP 00	IP 00	IP 00	
Safety class (prepared)	I	I	I	I	I	I	
Short circuit strength	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	
Core	EI 78/36,5	EI 78/36,5	EI 78/36,5	EI 78/36,5	EI 78/36,5	EI 78/36,5	

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## Separating transformer CT



Typ	CT-010-060-12-0	CT-010-060-12-1	CT-010-060-12-2	CT-010-060-24-0	CT-010-060-24-1	CT-010-060-24-2
<b>Special features</b>						
Characteristics	-	Fused version	with DIN rail for additional components	-	Fused version	with DIN rail for additional components
<b>Input</b>						
Rated input voltage	600 Vac	600 Vac	600 Vac	600 Vac	600 Vac	600 Vac
Rated input current	0,2 Aac	0,2 Aac	0,2 Aac	0,2 Aac	0,2 Aac	0,2 Aac
Frequency Range	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz
<b>Output</b>						
Rated output voltage	120 Vac	120 Vac	120 Vac	24 Vac	24 Vac	24 Vac
Rated Power	100 VA	100 VA	100 VA	100 VA	100 VA	100 VA
No-load voltage (app. x factor)	1.13	1.13	1.13	1.13	1.13	1.13
Efficiency	84,0 %	84,0 %	84,0 %	84,0 %	84,0 %	84,0 %
<b>Standards</b>						
Classification	Separating transformer	Separating transformer	Separating transformer	Separating transformer	Separating transformer	Separating transformer
<b>Approvals</b>						
Approvals	cURus	cURus	cURus	cURus	cURus	cURus
<b>Environment</b>						
Type of cooling	self-cooling	self-cooling	self-cooling	self-cooling	self-cooling	self-cooling
Ambient temperature	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C
<b>Safety and protection</b>						
Type	Open type	Open type	Open type	Open type	Open type	Open type
Insulation class	B, class 130	B, class 130	B, class 130	B, class 130	B, class 130	B, class 130
Protection index	IP 00	IP 00	IP 00	IP 00	IP 00	IP 00
Safety class (prepared)	I	I	I	I	I	I
Short circuit strength	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof
Core	EI 78/36,5	EI 78/36,5	EI 78/36,5	EI 78/36,5	EI 78/36,5	EI 78/36,5



## Separating transformer CT



1.1

Electrical data	Typ	CT-015-048-12-0	CT-015-048-12-1	CT-015-048-12-2	CT-015-048-24-0	CT-015-048-24-1	CT-015-048-24-2
<b>Special features</b>							
Characteristics	-	Fused version	with DIN rail for additional components	-	Fused version	with DIN rail for additional components	
<b>Input</b>							
Rated input voltage	2 x 240 Vac	2 x 240 Vac	2 x 240 Vac	2 x 240 Vac	2 x 240 Vac	2 x 240 Vac	2 x 240 Vac
Rated input current	2 x 0,36 Aac	2 x 0,36 Aac	2 x 0,36 Aac	2 x 0,36 Aac	2 x 0,36 Aac	2 x 0,36 Aac	2 x 0,36 Aac
Frequency Range	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz
<b>Output</b>							
Rated output voltage	120 Vac	120 Vac	120 Vac	24 Vac	24 Vac	24 Vac	24 Vac
Rated Power	150 VA	150 VA	150 VA	150 VA	150 VA	150 VA	150 VA
No-load voltage (app. x factor)	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Efficiency	86,0 %	86,0 %	86,0 %	86,0 %	86,0 %	86,0 %	86,0 %
<b>Standards</b>							
Classification	Separating transformer	Separating transformer	Separating transformer	Separating transformer	Separating transformer	Separating transformer	Separating transformer
<b>Approvals</b>							
Approvals	cURus	cURus	cURus	cURus	cURus	cURus	cURus
<b>Environment</b>							
Type of cooling	self-cooling	self-cooling	self-cooling	self-cooling	self-cooling	self-cooling	self-cooling
Ambient temperature	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C
<b>Safety and protection</b>							
Type	Open type	Open type	Open type	Open type	Open type	Open type	Open type
Insulation class	B, class 130	B, class 130	B, class 130	B, class 130	B, class 130	B, class 130	B, class 130
Protection index	IP 00	IP 00	IP 00	IP 00	IP 00	IP 00	IP 00
Safety class (prepared)	I	I	I	I	I	I	I
Short circuit strength	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof
Core	EI 96/35,7	EI 96/35,7	EI 96/35,7	EI 96/35,7	EI 96/35,7	EI 96/35,7	EI 96/35,7

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## Separating transformer CT



Typ	CT-015-060-12-0	CT-015-060-12-1	CT-015-060-12-2	CT-015-060-24-0	CT-015-060-24-1	CT-015-060-24-2
<b>Electrical data</b>						
<b>Special features</b>						
Characteristics	-	Fused version	with DIN rail for additional components	-	Fused version	with DIN rail for additional components
<b>Input</b>						
Rated input voltage	600 Vac	600 Vac	600 Vac	600 Vac	600 Vac	600 Vac
Rated input current	0,29 Aac	0,29 Aac	0,29 Aac	0,29 Aac	0,29 Aac	0,29 Aac
Frequency Range	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz
<b>Output</b>						
Rated output voltage	120 Vac	120 Vac	120 Vac	24 Vac	24 Vac	24 Vac
Rated Power	150 VA	150 VA	150 VA	150 VA	150 VA	150 VA
No-load voltage (app. x factor)	1.10	1.10	1.10	1.10	1.10	1.10
Efficiency	86,0 %	86,0 %	86,0 %	86,0 %	86,0 %	86,0 %
<b>Standards</b>						
Classification	Separating transformer	Separating transformer	Separating transformer	Separating transformer	Separating transformer	Separating transformer
<b>Approvals</b>						
Approvals	cURus	cURus	cURus	cURus	cURus	cURus
<b>Environment</b>						
Type of cooling	self-cooling	self-cooling	self-cooling	self-cooling	self-cooling	self-cooling
Ambient temperature	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C
<b>Safety and protection</b>						
Type	Open type	Open type	Open type	Open type	Open type	Open type
Insulation class	B, class 130	B, class 130	B, class 130	B, class 130	B, class 130	B, class 130
Protection index	IP 00	IP 00	IP 00	IP 00	IP 00	IP 00
Safety class (prepared)	I	I	I	I	I	I
Short circuit strength	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof
Core	EI 96/35,7	EI 96/35,7	EI 96/35,7	EI 96/35,7	EI 96/35,7	EI 96/35,7



## Separating transformer CT



1.1

Type		CT-020-048-12-0	CT-020-048-12-1	CT-020-048-12-2	CT-020-048-24-0	CT-020-048-24-1	CT-020-048-24-2
Electrical data	Special features						
	Characteristics	-	Fused version	with DIN rail for additional components	-	Fused version	with DIN rail for additional components
	Input						
	Rated input voltage	2 x 240 Vac	2 x 240 Vac	2 x 240 Vac	2 x 240 Vac	2 x 240 Vac	2 x 240 Vac
	Rated input current	2 x 0,47 Aac	2 x 0,47 Aac	2 x 0,47 Aac	2 x 0,47 Aac	2 x 0,47 Aac	2 x 0,47 Aac
	Frequency Range	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz
	Output						
	Rated output voltage	120 Vac	120 Vac	120 Vac	24 Vac	24 Vac	24 Vac
	Rated Power	200 VA	200 VA	200 VA	200 VA	200 VA	200 VA
	No-load voltage (app. x factor)	1.09	1.09	1.09	1.09	1.09	1.09
Efficiency	88,0 %	88,0 %	88,0 %	88,0 %	88,0 %	88,0 %	
Standards							
Classification	Separating transformer	Separating transformer	Separating transformer	Separating transformer	Separating transformer	Separating transformer	
Approvals							
Approvals	cURus	cURus	cURus	cURus	cURus	cURus	
Environment							
Type of cooling	self-cooling	self-cooling	self-cooling	self-cooling	self-cooling	self-cooling	
Ambient temperature	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C	
Safety and protection							
Type	Open type	Open type	Open type	Open type	Open type	Open type	
Insulation class	B, class 130	B, class 130	B, class 130	B, class 130	B, class 130	B, class 130	
Protection index	IP 00	IP 00	IP 00	IP 00	IP 00	IP 00	
Safety class (prepared)	I	I	I	I	I	I	
Short circuit strength	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	
Core	EI 96/45,7	EI 96/45,7	EI 96/45,7	EI 96/45,7	EI 96/45,7	EI 96/45,7	

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## Separating transformer CT



Typ	CT-020-060-12-0	CT-020-060-12-1	CT-020-060-12-2	CT-020-060-24-0	CT-020-060-24-1	CT-020-060-24-2
<b>Electrical data</b>						
<b>Special features</b>						
Characteristics	-	Fused version	with DIN rail for additional components	-	Fused version	with DIN rail for additional components
<b>Input</b>						
Rated input voltage	600 Vac	600 Vac	600 Vac	600 Vac	600 Vac	600 Vac
Rated input current	0,37 Aac	0,37 Aac	0,37 Aac	0,37 Aac	0,37 Aac	0,37 Aac
Frequency Range	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz
<b>Output</b>						
Rated output voltage	120 Vac	120 Vac	120 Vac	24 Vac	24 Vac	24 Vac
Rated Power	200 VA	200 VA	200 VA	200 VA	200 VA	200 VA
No-load voltage (app. x factor)	1.09	1.09	1.09	1.09	1.09	1.09
Efficiency	88,0 %	88,0 %	88,0 %	88,0 %	88,0 %	88,0 %
<b>Standards</b>						
Classification	Separating transformer	Separating transformer	Separating transformer	Separating transformer	Separating transformer	Separating transformer
<b>Approvals</b>						
Approvals	cURus	cURus	cURus	cURus	cURus	cURus
<b>Environment</b>						
Type of cooling	self-cooling	self-cooling	self-cooling	self-cooling	self-cooling	self-cooling
Ambient temperature	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C
<b>Safety and protection</b>						
Type	Open type	Open type	Open type	Open type	Open type	Open type
Insulation class	B, class 130	B, class 130	B, class 130	B, class 130	B, class 130	B, class 130
Protection index	IP 00	IP 00	IP 00	IP 00	IP 00	IP 00
Safety class (prepared)	I	I	I	I	I	I
Short circuit strength	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof
Core	EI 96/45,7	EI 96/45,7	EI 96/45,7	EI 96/45,7	EI 96/45,7	EI 96/45,7



## Separating transformer CT



Electrical data	Typ	CT-025-048-12-0	CT-025-048-12-1	CT-025-048-12-2	CT-025-048-24-0	CT-025-048-24-1	CT-025-048-24-2
<b>Special features</b>							
Characteristics	-	Fused version	with DIN rail for additional components	-	Fused version	with DIN rail for additional components	
<b>Input</b>							
Rated input voltage	2 x 240 Vac	2 x 240 Vac	2 x 240 Vac	2 x 240 Vac	2 x 240 Vac	2 x 240 Vac	2 x 240 Vac
Rated input current	2 x 0,58 Aac	2 x 0,58 Aac	2 x 0,58 Aac	2 x 0,58 Aac	2 x 0,58 Aac	2 x 0,58 Aac	2 x 0,58 Aac
Frequency Range	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz
<b>Output</b>							
Rated output voltage	120 Vac	120 Vac	120 Vac	24 Vac	24 Vac	24 Vac	24 Vac
Rated Power	250 VA	250 VA	250 VA	250 VA	250 VA	250 VA	250 VA
No-load voltage (app. x factor)	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Efficiency	89,0 %	89,0 %	89,0 %	89,0 %	89,0 %	89,0 %	89,0 %
<b>Standards</b>							
Classification	Separating transformer	Separating transformer	Separating transformer	Separating transformer	Separating transformer	Separating transformer	Separating transformer
<b>Approvals</b>							
Approvals	cURus	cURus	cURus	cURus	cURus	cURus	cURus
<b>Environment</b>							
Type of cooling	self-cooling	self-cooling	self-cooling	self-cooling	self-cooling	self-cooling	self-cooling
Ambient temperature	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C
<b>Safety and protection</b>							
Type	Open type	Open type	Open type	Open type	Open type	Open type	Open type
Insulation class	B, class 130	B, class 130	B, class 130	B, class 130	B, class 130	B, class 130	B, class 130
Protection index	IP 00	IP 00	IP 00	IP 00	IP 00	IP 00	IP 00
Safety class (prepared)	I	I	I	I	I	I	I
Short circuit strength	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof
Core	EI 96/59,7	EI 96/59,7	EI 96/59,7	EI 96/59,7	EI 96/59,7	EI 96/59,7	EI 96/59,7

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## Separating transformer CT



Typ	CT-025-060-12-0	CT-025-060-12-1	CT-025-060-12-2	CT-025-060-24-0	CT-025-060-24-1	CT-025-060-24-2
<b>Electrical data</b>						
Special features						
Characteristics	-	Fused version	with DIN rail for additional components	-	Fused version	with DIN rail for additional components
Input						
Rated input voltage	600 Vac	600 Vac	600 Vac	600 Vac	600 Vac	600 Vac
Rated input current	0,47 Aac	0,47 Aac	0,47 Aac	0,47 Aac	0,47 Aac	0,47 Aac
Frequency Range	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz
Output						
Rated output voltage	120 Vac	120 Vac	120 Vac	24 Vac	24 Vac	24 Vac
Rated Power	250 VA	250 VA	250 VA	250 VA	250 VA	250 VA
No-load voltage (app. x factor)	1.07	1.07	1.07	1.07	1.07	1.07
Efficiency	89,0 %	89,0 %	89,0 %	89,0 %	89,0 %	89,0 %
Standards						
Classification	Separating transformer	Separating transformer	Separating transformer	Separating transformer	Separating transformer	Separating transformer
Approvals						
Approvals	cURus	cURus	cURus	cURus	cURus	cURus
Environment						
Type of cooling	self-cooling	self-cooling	self-cooling	self-cooling	self-cooling	self-cooling
Ambient temperature	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C
Safety and protection						
Type	Open type	Open type	Open type	Open type	Open type	Open type
Insulation class	B, class 130	B, class 130	B, class 130	B, class 130	B, class 130	B, class 130
Protection index	IP 00	IP 00	IP 00	IP 00	IP 00	IP 00
Safety class (prepared)	I	I	I	I	I	I
Short circuit strength	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof
Core	EI 96/59,7	EI 96/59,7	EI 96/59,7	EI 96/59,7	EI 96/59,7	EI 96/59,7



## Separating transformer CT



1.1

Electrical data	Typ	CT-030-048-12-0	CT-030-048-12-1	CT-030-048-12-2	CT-030-048-24-0	CT-030-048-24-1	CT-030-048-24-2
<b>Special features</b>							
Characteristics	-	Fused version	with DIN rail for additional components	-	Fused version	with DIN rail for additional components	
<b>Input</b>							
Rated input voltage	2 x 240 Vac	2 x 240 Vac	2 x 240 Vac	2 x 240 Vac	2 x 240 Vac	2 x 240 Vac	2 x 240 Vac
Rated input current	2 x 0,70 Aac	2 x 0,70 Aac	2 x 0,70 Aac	2 x 0,70 Aac	2 x 0,70 Aac	2 x 0,70 Aac	2 x 0,70 Aac
Frequency Range	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz
<b>Output</b>							
Rated output voltage	120 Vac	120 Vac	120 Vac	24 Vac	24 Vac	24 Vac	24 Vac
Rated Power	300 VA	300 VA	300 VA	300 VA	300 VA	300 VA	300 VA
No-load voltage (app. x factor)	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Efficiency	89,0 %	89,0 %	89,0 %	89,0 %	89,0 %	89,0 %	89,0 %
<b>Standards</b>							
Classification	Separating transformer	Separating transformer	Separating transformer	Separating transformer	Separating transformer	Separating transformer	Separating transformer
<b>Approvals</b>							
Approvals	cURus	cURus	cURus	cURus	cURus	cURus	cURus
<b>Environment</b>							
Type of cooling	self-cooling	self-cooling	self-cooling	self-cooling	self-cooling	self-cooling	self-cooling
Ambient temperature	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C
<b>Safety and protection</b>							
Type	Open type	Open type	Open type	Open type	Open type	Open type	Open type
Insulation class	B, class 130	B, class 130	B, class 130	B, class 130	B, class 130	B, class 130	B, class 130
Protection index	IP 00	IP 00	IP 00	IP 00	IP 00	IP 00	IP 00
Safety class (prepared)	I	I	I	I	I	I	I
Short circuit strength	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof
Core	EI 120/41,7	EI 120/41,7	EI 120/41,7	EI 120/41,7	EI 120/41,7	EI 120/41,7	EI 120/41,7

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## Separating transformer CT



Typ	CT-030-060-12-0	CT-030-060-12-1	CT-030-060-12-2	CT-030-060-24-0	CT-030-060-24-1	CT-030-060-24-2
<b>Electrical data</b>						
Special features						
Characteristics	-	Fused version	with DIN rail for additional components	-	Fused version	with DIN rail for additional components
Input						
Rated input voltage	600 Vac	600 Vac	600 Vac	600 Vac	600 Vac	600 Vac
Rated input current	0,55 Aac	0,55 Aac	0,55 Aac	0,55 Aac	0,55 Aac	0,55 Aac
Frequency Range	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz
Output						
Rated output voltage	120 Vac	120 Vac	120 Vac	24 Vac	24 Vac	24 Vac
Rated Power	300 VA	300 VA	300 VA	300 VA	300 VA	300 VA
No-load voltage (app. x factor)	1.08	1.08	1.08	1.08	1.08	1.08
Efficiency	89,0 %	89,0 %	89,0 %	89,0 %	89,0 %	89,0 %
Standards						
Classification	Separating transformer	Separating transformer	Separating transformer	Separating transformer	Separating transformer	Separating transformer
Approvals						
Approvals	cURus	cURus	cURus	cURus	cURus	cURus
Environment						
Type of cooling	self-cooling	self-cooling	self-cooling	self-cooling	self-cooling	self-cooling
Ambient temperature	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C
Safety and protection						
Type	Open type	Open type	Open type	Open type	Open type	Open type
Insulation class	B, class 130	B, class 130	B, class 130	B, class 130	B, class 130	B, class 130
Protection index	IP 00	IP 00	IP 00	IP 00	IP 00	IP 00
Safety class (prepared)	I	I	I	I	I	I
Short circuit strength	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof
Core	EI 120/41,7	EI 120/41,7	EI 120/41,7	EI 120/41,7	EI 120/41,7	EI 120/41,7



## Separating transformer CT



1.1

Electrical data	Typ	CT-035-048-12-0	CT-035-048-12-1	CT-035-048-12-2	CT-035-048-24-0	CT-035-048-24-1	CT-035-048-24-2
<b>Special features</b>							
Characteristics	-	Fused version	with DIN rail for additional components	-	Fused version	with DIN rail for additional components	
<b>Input</b>							
Rated input voltage	2 x 240 Vac	2 x 240 Vac	2 x 240 Vac	2 x 240 Vac	2 x 240 Vac	2 x 240 Vac	2 x 240 Vac
Rated input current	2 x 0,81 Aac	2 x 0,81 Aac	2 x 0,81 Aac	2 x 0,81 Aac	2 x 0,81 Aac	2 x 0,81 Aac	2 x 0,81 Aac
Frequency Range	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz
<b>Output</b>							
Rated output voltage	120 Vac	120 Vac	120 Vac	24 Vac	24 Vac	24 Vac	24 Vac
Rated Power	350 VA	350 VA	350 VA	350 VA	350 VA	350 VA	350 VA
No-load voltage (app. x factor)	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Efficiency	91.0 %	91.0 %	91.0 %	91.0 %	91.0 %	91.0 %	91.0 %
<b>Standards</b>							
Classification	Separating transformer	Separating transformer	Separating transformer	Separating transformer	Separating transformer	Separating transformer	Separating transformer
<b>Approvals</b>							
Approvals	cURus	cURus	cURus	cURus	cURus	cURus	cURus
<b>Environment</b>							
Type of cooling	self-cooling	self-cooling	self-cooling	self-cooling	self-cooling	self-cooling	self-cooling
Ambient temperature	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C
<b>Safety and protection</b>							
Type	Open type	Open type	Open type	Open type	Open type	Open type	Open type
Insulation class	B, class 130	B, class 130	B, class 130	B, class 130	B, class 130	B, class 130	B, class 130
Protection index	IP 00	IP 00	IP 00	IP 00	IP 00	IP 00	IP 00
Safety class (prepared)	I	I	I	I	I	I	I
Short circuit strength	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof
Core	EI 120/50,7	EI 120/50,7	EI 120/50,7	EI 120/50,7	EI 120/50,7	EI 120/50,7	EI 120/50,7

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## Separating transformer CT



Typ	CT-035-060-12-0	CT-035-060-12-1	CT-035-060-12-2	CT-035-060-24-0	CT-035-060-24-1	CT-035-060-24-2
<b>Special features</b>						
Characteristics	-	Fused version	with DIN rail for additional components	-	Fused version	with DIN rail for additional components
<b>Input</b>						
Rated input voltage	600 Vac	600 Vac	600 Vac	600 Vac	600 Vac	600 Vac
Rated input current	0,65 Aac	0,65 Aac	0,65 Aac	0,65 Aac	0,65 Aac	0,65 Aac
Frequency Range	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz
<b>Output</b>						
Rated output voltage	120 Vac	120 Vac	120 Vac	24 Vac	24 Vac	24 Vac
Rated Power	350 VA	350 VA	350 VA	350 VA	350 VA	350 VA
No-load voltage (app. x factor)	1.07	1.07	1.07	1.07	1.07	1.07
Efficiency	91.0 %	91.0 %	91.0 %	91.0 %	91.0 %	91.0 %
<b>Standards</b>						
Classification	Separating transformer	Separating transformer	Separating transformer	Separating transformer	Separating transformer	Separating transformer
<b>Approvals</b>						
Approvals	cURus	cURus	cURus	cURus	cURus	cURus
<b>Environment</b>						
Type of cooling	self-cooling	self-cooling	self-cooling	self-cooling	self-cooling	self-cooling
Ambient temperature	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C
<b>Safety and protection</b>						
Type	Open type	Open type	Open type	Open type	Open type	Open type
Insulation class	B, class 130	B, class 130	B, class 130	B, class 130	B, class 130	B, class 130
Protection index	IP 00	IP 00	IP 00	IP 00	IP 00	IP 00
Safety class (prepared)	I	I	I	I	I	I
Short circuit strength	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof
Core	EI 120/50,7	EI 120/50,7	EI 120/50,7	EI 120/50,7	EI 120/50,7	EI 120/50,7



## Separating transformer CT



1.1

Electrical data	Typ	CT-050-048-12-0	CT-050-048-12-1	CT-050-048-12-2	CT-050-060-12-0	CT-050-060-12-1	CT-050-060-12-2
<b>Special features</b>							
Characteristics	-	Fused version	with DIN rail for additional components	-	Fused version	with DIN rail for additional components	
<b>Input</b>							
Rated input voltage	2 x 240 Vac	2 x 240 Vac	2 x 240 Vac	600 Vac	600 Vac	600 Vac	
Rated input current	2 x 1,13 Aac	2 x 1,13 Aac	2 x 1,13 Aac	0,91 Aac	0,91 Aac	0,91 Aac	
Frequency Range	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	
<b>Output</b>							
Rated output voltage	120 Vac	120 Vac	120 Vac	120 Vac	120 Vac	120 Vac	
Rated Power	500 VA	500 VA	500 VA	500 VA	500 VA	500 VA	
No-load voltage (app. x factor)	1.06	1.06	1.06	1.06	1.06	1.06	
Efficiency	91.0 %	91.0 %	91.0 %	91.0 %	91.0 %	91.0 %	
<b>Standards</b>							
Classification	Separating transformer	Separating transformer	Separating transformer	Separating transformer	Separating transformer	Separating transformer	Separating transformer
<b>Approvals</b>							
Approvals	cURus	cURus	cURus	cURus	cURus	cURus	cURus
<b>Environment</b>							
Type of cooling	self-cooling	self-cooling	self-cooling	self-cooling	self-cooling	self-cooling	self-cooling
Ambient temperature	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C
<b>Safety and protection</b>							
Type	Open type	Open type	Open type	Open type	Open type	Open type	Open type
Insulation class	B, class 130	B, class 130	B, class 130	B, class 130	B, class 130	B, class 130	B, class 130
Protection index	IP 00	IP 00	IP 00	IP 00	IP 00	IP 00	IP 00
Safety class (prepared)	I	I	I	I	I	I	I
Short circuit strength	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof
Core	EI 120/73,7	EI 120/73,7	EI 120/73,7	EI 120/73,7	EI 120/73,7	EI 120/73,7	EI 120/73,7

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## Separating transformer CT



Typ	CT-075-048-12-0	CT-075-048-12-1	CT-075-048-12-2	CT-075-060-12-0	CT-075-060-12-1	CT-075-060-12-2
<b>Electrical data</b>						
<b>Special features</b>						
Characteristics	-	Fused version	with DIN rail for additional components	-	Fused version	with DIN rail for additional components
<b>Input</b>						
Rated input voltage	2 x 240 Vac	2 x 240 Vac	2 x 240 Vac	600 Vac	600 Vac	600 Vac
Rated input current	2 x 1,69 Aac	2 x 1,69 Aac	2 x 1,69 Aac	2 x 1,35 Aac	2 x 1,35 Aac	2 x 1,35 Aac
Frequency Range	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz
<b>Output</b>						
Rated output voltage	120 Vac	120 Vac	120 Vac	120 Vac	120 Vac	120 Vac
Rated Power	750 VA	750 VA	750 VA	750 VA	750 VA	750 VA
No-load voltage (app. x factor)	1.05	1.05	1.05	1.05	1.05	1.05
Efficiency	93.0 %	93.0 %	93.0 %	93.0 %	93.0 %	93.0 %
<b>Standards</b>						
Classification	Separating transformer	Separating transformer	Separating transformer	Separating transformer	Separating transformer	Separating transformer
<b>Approvals</b>						
Approvals	cURus	cURus	cURus	cURus	cURus	cURus
<b>Environment</b>						
Type of cooling	self-cooling	self-cooling	self-cooling	self-cooling	self-cooling	self-cooling
Ambient temperature	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C
<b>Safety and protection</b>						
Type	Open type	Open type	Open type	Open type	Open type	Open type
Insulation class	B, class 130	B, class 130	B, class 130	B, class 130	B, class 130	B, class 130
Protection index	IP 00	IP 00	IP 00	IP 00	IP 00	IP 00
Safety class (prepared)	I	I	I	I	I	I
Short circuit strength	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof
Core	EI 150N/66,6	EI 150N/66,6	EI 150N/66,6	EI 150N/66,6	EI 150N/66,6	EI 150N/66,6



## Separating transformer CT



Typ	CT-100-048-12-0	CT-100-048-12-1	CT-100-048-12-2	CT-100-060-12-0	CT-100-060-12-1	CT-100-060-12-2
<b>Special features</b>						
Characteristics	-	Fused version	with DIN rail for additional components	-	Fused version	with DIN rail for additional components
<b>Input</b>						
Rated input voltage	2 x 240 Vac	2 x 240 Vac	2 x 240 Vac	600 Vac	600 Vac	600 Vac
Rated input current	2 x 2,3 Aac	2 x 2,3 Aac	2 x 2,3 Aac	1,8 Aac	1,8 Aac	1,8 Aac
Frequency Range	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz
<b>Output</b>						
Rated output voltage	120 Vac	120 Vac	120 Vac	120 Vac	120 Vac	120 Vac
Rated Power	1000 VA	1000 VA	1000 VA	1000 VA	1000 VA	1000 VA
No-load voltage (app. x factor)	1.05	1.05	1.05	1.05	1.05	1.05
Efficiency	93.0 %	93.0 %	93.0 %	93.0 %	93.0 %	93.0 %
<b>Standards</b>						
Classification	Separating transformer	Separating transformer	Separating transformer	Separating transformer	Separating transformer	Separating transformer
<b>Approvals</b>						
Approvals	cURus	cURus	cURus	cURus	cURus	cURus
<b>Environment</b>						
Type of cooling	self-cooling	self-cooling	self-cooling	self-cooling	self-cooling	self-cooling
Ambient temperature	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C
<b>Safety and protection</b>						
Type	Open type	Open type	Open type	Open type	Open type	Open type
Insulation class	B, class 130	B, class 130	B, class 130	B, class 130	B, class 130	B, class 130
Protection index	IP 00	IP 00	IP 00	IP 00	IP 00	IP 00
Safety class (prepared)	I	I	I	I	I	I
Short circuit strength	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof
Core	EI 174/52	EI 174/52	EI 174/52	EI 174/52	EI 174/52	EI 174/52

Electrical data

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## Separating transformer CT



Typ	CT-150-048-12-0	CT-150-048-12-1	CT-150-048-12-2	CT-150-060-12-0	CT-150-060-12-1	CT-150-060-12-2
<b>Electrical data</b>						
Special features						
Characteristics	-	Fused version	with DIN rail for additional components	-	Fused version	with DIN rail for additional components
Input						
Rated input voltage	2 x 240 Vac	2 x 240 Vac	2 x 240 Vac	600 Vac	600 Vac	600 Vac
Rated input current	2 x 3,3 Aac	2 x 3,3 Aac	2 x 3,3 Aac	2,6 Aac	2,6 Aac	2,6 Aac
Frequency Range	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz
Output						
Rated output voltage	120 Vac	120 Vac	120 Vac	120 Vac	120 Vac	120 Vac
Rated Power	1500 VA	1500 VA	1500 VA	1500 VA	1500 VA	1500 VA
No-load voltage (app. x factor)	1.04	1.04	1.04	1.04	1.04	1.04
Efficiency	94,0 %	94,0 %	94,0 %	94,0 %	94,0 %	94,0 %
Standards						
Classification	Separating transformer	Separating transformer	Separating transformer	Separating transformer	Separating transformer	Separating transformer
Approvals						
Approvals	cURus	cURus	cURus	cURus	cURus	cURus
Environment						
Type of cooling	self-cooling	self-cooling	self-cooling	self-cooling	self-cooling	self-cooling
Ambient temperature	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C
Safety and protection						
Type	Open type	Open type	Open type	Open type	Open type	Open type
Insulation class	B, class 130	B, class 130	B, class 130	B, class 130	B, class 130	B, class 130
Protection index	IP 00	IP 00	IP 00	IP 00	IP 00	IP 00
Safety class (prepared)	I	I	I	I	I	I
Short circuit strength	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof
Core	EI 192/66	EI 192/66	EI 192/66	EI 192/66	EI 192/66	EI 192/66



## Separating transformer CT



1.1

Typ	CT-200-048-12-0	CT-200-048-12-1	CT-200-048-12-2	CT-200-060-12-0	CT-200-060-12-1	CT-200-060-12-2
<b>Special features</b>						
Characteristics	-	Fused version	with DIN rail for additional components	-	Fused version	with DIN rail for additional components
<b>Input</b>						
Rated input voltage	2 x 240 Vac	2 x 240 Vac	2 x 240 Vac	600 Vac	600 Vac	600 Vac
Rated input current	2 x 4,3 Aac	2 x 4,3 Aac	2 x 4,3 Aac	3,4 Aac	3,4 Aac	3,4 Aac
Frequency Range	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz
<b>Output</b>						
Rated output voltage	120 Vac	120 Vac	120 Vac	120 Vac	120 Vac	120 Vac
Rated Power	2000 VA	2000 VA	2000 VA	2000 VA	2000 VA	2000 VA
No-load voltage (app. x factor)	1.03	1.03	1.03	1.03	1.03	1.03
Efficiency	95,0 %	95,0 %	95,0 %	95,0 %	95,0 %	95,0 %
<b>Standards</b>						
Classification	Separating transformer	Separating transformer	Separating transformer	Separating transformer	Separating transformer	Separating transformer
<b>Approvals</b>						
Approvals	cURus	cURus	cURus	cURus	cURus	cURus
<b>Environment</b>						
Type of cooling	self-cooling	self-cooling	self-cooling	self-cooling	self-cooling	self-cooling
Ambient temperature	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C
<b>Safety and protection</b>						
Type	Open type	Open type	Open type	Open type	Open type	Open type
Insulation class	B, class 130	B, class 130	B, class 130	B, class 130	B, class 130	B, class 130
Protection index	IP 00	IP 00	IP 00	IP 00	IP 00	IP 00
Safety class (prepared)	I	I	I	I	I	I
Short circuit strength	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof
Core	EI 192/82	EI 192/82	EI 192/82	EI 192/82	EI 192/82	EI 192/82

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## Separating transformer CT



Typ	CT-250-048-12-0	CT-250-048-12-1	CT-250-048-12-2	CT-250-060-12-0	CT-250-060-12-1	CT-250-060-12-2
<b>Electrical data</b>						
<b>Special features</b>						
Characteristics	-	Fused version	with DIN rail for additional components	-	Fused version	with DIN rail for additional components
<b>Input</b>						
Rated input voltage	2 x 240 Vac	2 x 240 Vac	2 x 240 Vac	600 Vac	600 Vac	600 Vac
Rated input current	2 x 5,2 Aac	2 x 5,2 Aac	2 x 5,2 Aac	4,2 Aac	4,2 Aac	4,2 Aac
Frequency Range	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz
<b>Output</b>						
Rated output voltage	120 Vac	120 Vac	120 Vac	120 Vac	120 Vac	120 Vac
Rated Power	2500 VA	2500 VA	2500 VA	2500 VA	2500 VA	2500 VA
No-load voltage (app. x factor)	1.03	1.03	1.03	1.03	1.03	1.03
Efficiency	95,0 %	95,0 %	95,0 %	95,0 %	95,0 %	95,0 %
<b>Standards</b>						
Classification	Separating transformer	Separating transformer	Separating transformer	Separating transformer	Separating transformer	Separating transformer
<b>Approvals</b>						
Approvals	cURus	cURus	cURus	cURus	cURus	cURus
<b>Environment</b>						
Type of cooling	self-cooling	self-cooling	self-cooling	self-cooling	self-cooling	self-cooling
Ambient temperature	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C	max. 40 °C
<b>Safety and protection</b>						
Type	Open type	Open type	Open type	Open type	Open type	Open type
Insulation class	B, class 130	B, class 130	B, class 130	B, class 130	B, class 130	B, class 130
Protection index	IP 00	IP 00	IP 00	IP 00	IP 00	IP 00
Safety class (prepared)	I	I	I	I	I	I
Short circuit strength	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof
Core	EI 192/100	EI 192/100	EI 192/100	EI 192/100	EI 192/100	EI 192/100



## Separating transformer CT



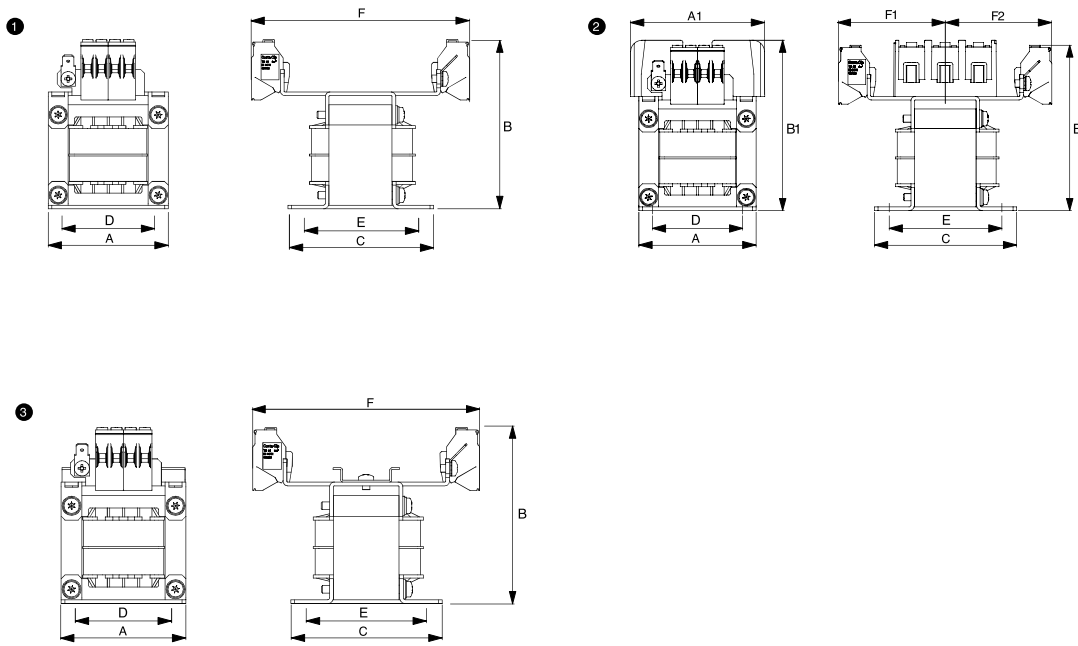
1.1

Typ	Dimension picture (in mm)											Weight
	A	A1	B	B1	C	D	E	F1	F2	F		
CT-005-048-12-0	66	-	92.7	-	80	50.8	63.5	-	-	120	1.00 kg	
CT-005-048-12-1	66	75.7	92.7	95.4	80	50.8	63.5	60	60	-	1.00 kg	
CT-005-048-12-2	66	-	92.7	-	80	50.8	63.5	-	-	120	1.00 kg	
CT-005-048-24-0	66	-	92.7	-	80	50.8	63.5	-	-	120	1.00 kg	
CT-005-048-24-1	66	75.7	92.7	95.4	80	50.8	63.5	60	60	-	1.00 kg	
CT-005-048-24-2	66	-	92.7	-	80	50.8	63.5	-	-	120	1.00 kg	

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### Dimension pictures



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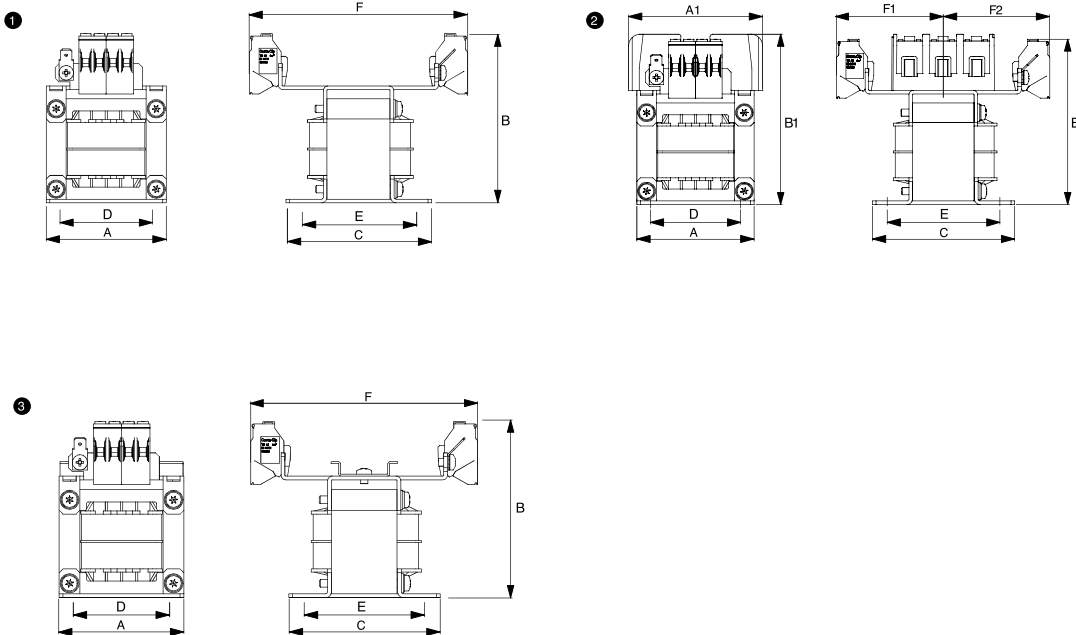


## Separating transformer CT



Typ	Dimension picture (in mm)											Weight
	A	A1	B	B1	C	D	E	F1	F2	F		
CT-005-060-12-0	66	-	92.7	-	80	50.8	63.5	-	-	120		1.00 kg
CT-005-060-12-1	66	75.7	92.7	95.4	80	50.8	63.5	60	60	-		1.00 kg
CT-005-060-12-2	66	-	92.7	-	80	50.8	63.5	-	-	120		1.00 kg
CT-005-060-24-0	66	-	92.7	-	80	50.8	63.5	-	-	120		1.00 kg
CT-005-060-24-1	66	75.7	92.7	95.4	80	50.8	63.5	60	60	-		1.00 kg
CT-005-060-24-2	66	-	92.7	-	80	50.8	63.5	-	-	120		1.00 kg

### Dimension pictures





## Separating transformer CT



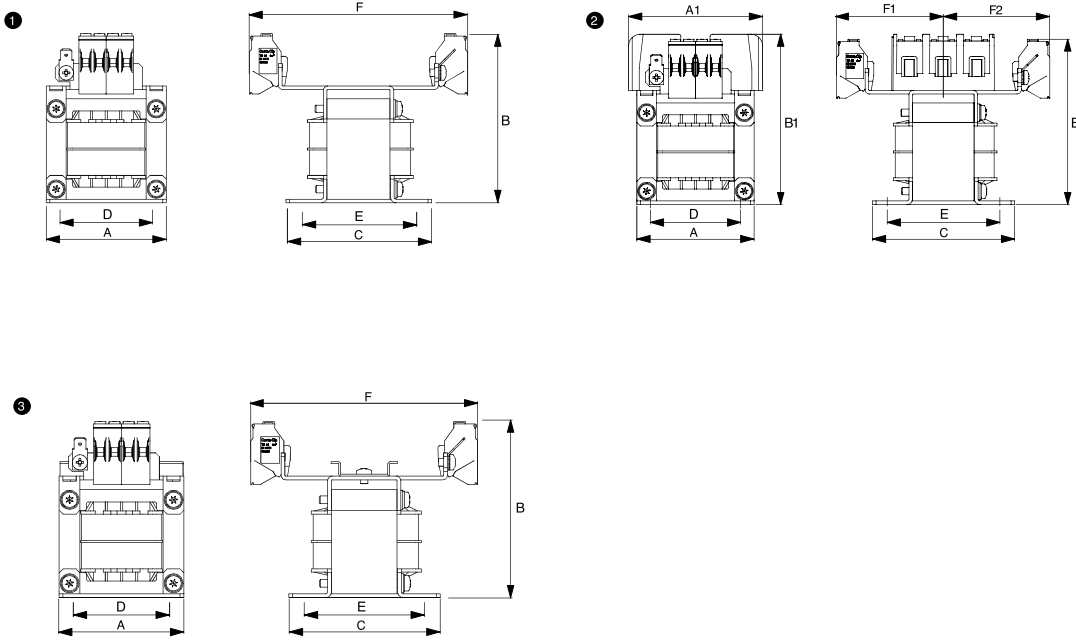
1.1

Typ	Dimension picture (in mm)											Weight
	A	A1	B	B1	C	D	E	F1	F2	F		
CT-007-048-12-0	78	-	102,7	-	79	66	63,5	-	-	112,8	1,10 kg	
CT-007-048-12-1	78	78	102,7	105,4	79	66	63,5	56,4	56,4	-	1,10 kg	
CT-007-048-12-2	78	-	102,7	-	79	66	63,5	-	-	112,8	1,10 kg	
CT-007-048-24-0	78	-	102,7	-	79	66	63,5	-	-	112,8	1,10 kg	
CT-007-048-24-1	78	78	102,7	105,4	79	66	63,5	56,4	56,4	-	1,10 kg	
CT-007-048-24-2	78	-	102,7	-	79	66	63,5	-	-	112,8	1,10 kg	

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### Dimension pictures



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4.0

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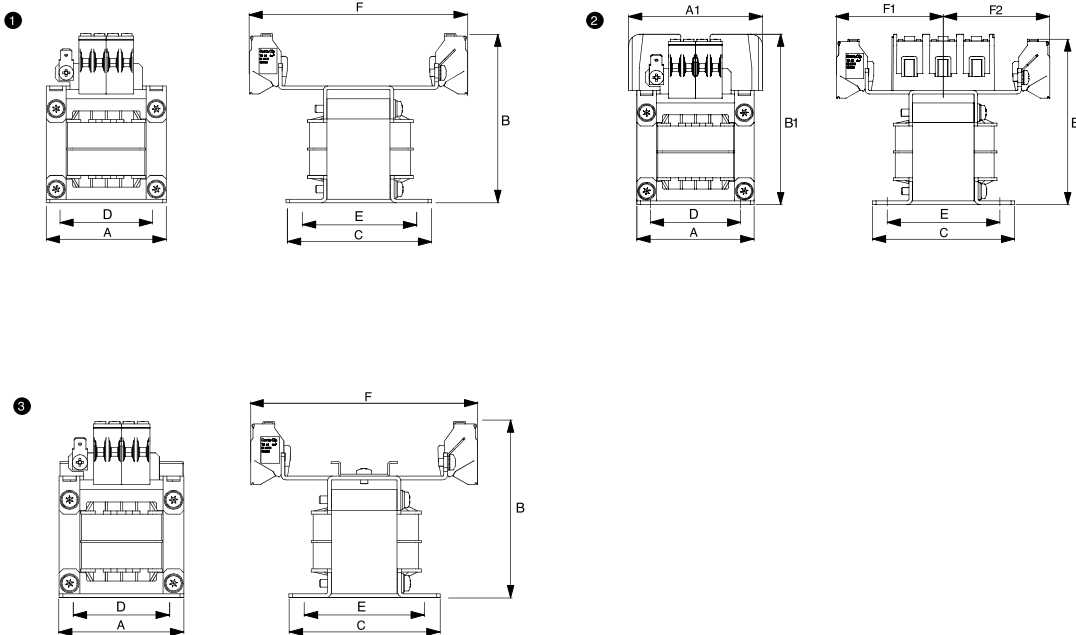


## Separating transformer CT



Typ	Dimension picture (in mm)											Weight
	A	A1	B	B1	C	D	E	F1	F2	F		
CT-007-060-12-0	78	-	102,7	-	79	66	63,5	-	-	112,8	1,10 kg	
CT-007-060-12-1	78	78	102,7	105,4	79	66	63,5	56,4	56,4	-	1,10 kg	
CT-007-060-12-2	78	-	102,7	-	79	66	63,5	-	-	112,8	1,10 kg	
CT-007-060-24-0	78	-	102,7	-	79	66	63,5	-	-	112,8	1,10 kg	
CT-007-060-24-1	78	78	102,7	105,4	79	66	63,5	56,4	56,4	-	1,10 kg	
CT-007-060-24-2	78	-	102,7	-	79	66	63,5	-	-	112,8	1,10 kg	

### Dimension pictures





## Separating transformer CT



1.1

Mechanical data

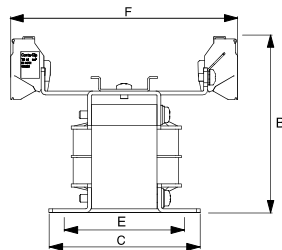
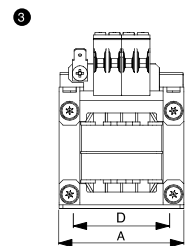
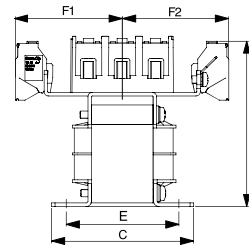
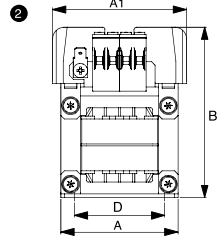
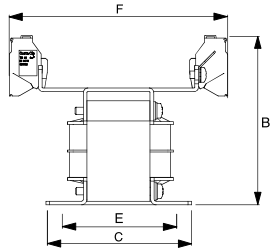
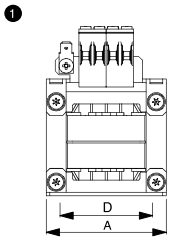
30

Typ	Dimension picture (in mm)											Weight
	A	A1	B	B1	C	D	E	F1	F2	F		
CT-010-048-12-0	78	-	102,7	-	82	66	66	-	-	121,8	1,50 kg	
CT-010-048-12-1	78	78	102,7	105,4	82	66	66	60,9	60,9	-	1,50 kg	
CT-010-048-12-2	78	-	102,7	-	82	66	66	-	-	121,8	1,50 kg	
CT-010-048-24-0	78	-	102,7	-	82	66	66	-	-	121,8	1,50 kg	
CT-010-048-24-1	78	78	102,7	105,4	82	66	66	60,9	60,9	-	1,50 kg	
CT-010-048-24-2	78	-	102,7	-	82	66	66	-	-	121,8	1,50 kg	

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### Dimension pictures



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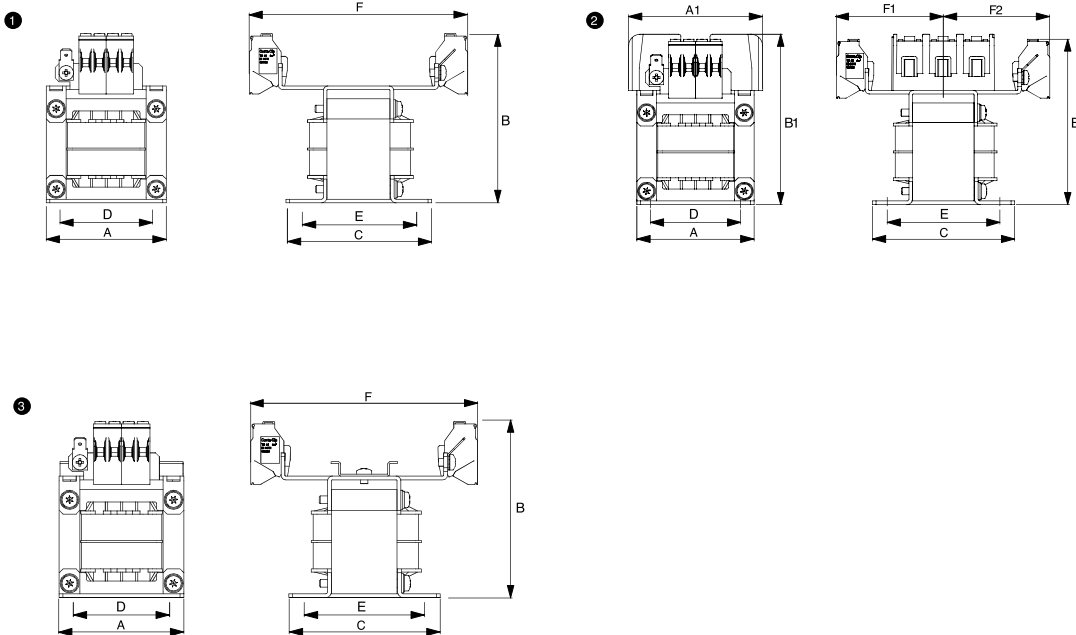


## Separating transformer CT



Typ	Dimension picture (in mm)											Weight
	A	A1	B	B1	C	D	E	F1	F2	F		
CT-010-060-12-0	78	-	102,7	-	82	66	66	-	-	121,8	1,50 kg	
CT-010-060-12-1	78	78	102,7	105,4	82	66	66	60,9	60,9	-	1,50 kg	
CT-010-060-12-2	78	-	102,7	-	82	66	66	-	-	121,8	1,50 kg	
CT-010-060-24-0	78	-	102,7	-	82	66	66	-	-	121,8	1,50 kg	
CT-010-060-24-1	78	78	102,7	105,4	82	66	66	60,9	60,9	-	1,50 kg	
CT-010-060-24-2	78	-	102,7	-	82	66	66	-	-	121,8	1,50 kg	

### Dimension pictures





## Separating transformer CT



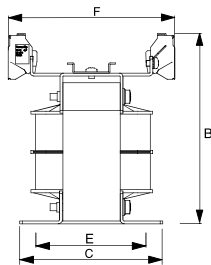
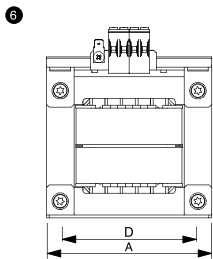
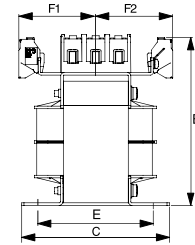
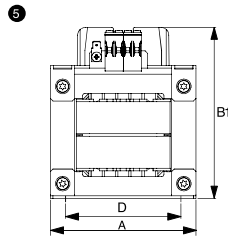
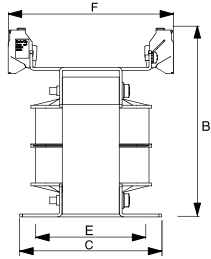
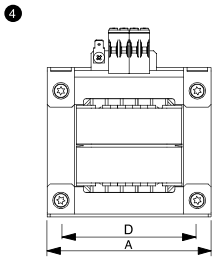
1.1

Mechanical data	Typ	Dimension picture (in mm)											Weight
		A	A1	B	B1	C	D	E	F1	F2	F		
CT-015-048-12-0	4	96	-	117.7	-	100	80	76.2	-	-	117	2.20 kg	
CT-015-048-12-1	5	96	96	117.7	120.4	100	80	76.2	58.5	58.5	-	2.20 kg	
CT-015-048-12-2	6	96	-	117.7	-	100	80	76.2	-	-	117	2.20 kg	
CT-015-048-24-0	4	96	-	117.7	-	100	80	76.2	-	-	117	2.20 kg	
CT-015-048-24-1	5	96	96	117.7	120.4	100	80	76.2	58.5	58.5	-	2.20 kg	
CT-015-048-24-2	6	96	-	117.7	-	100	80	76.2	-	-	117	2.20 kg	

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1.3

### Dimension pictures



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3.3

4.0

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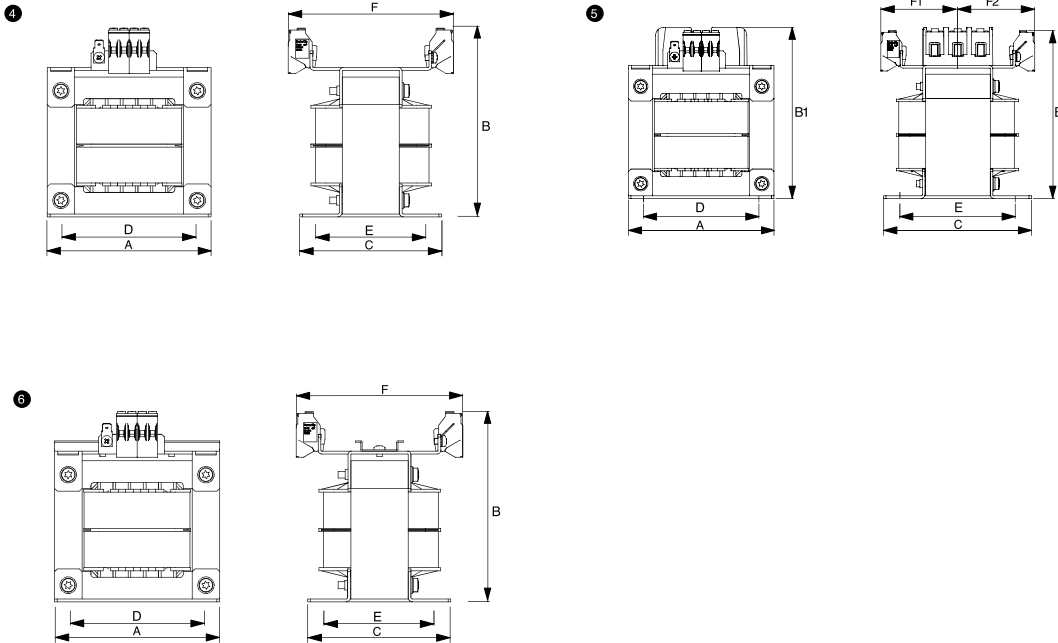


## Separating transformer CT



Mechanical data	Typ	Dimension picture (in mm)										Weight
		A	A1	B	B1	C	D	E	F1	F2	F	
CT-015-060-12-0	4	96	-	117,7	-	100	80	76,2	-	-	117	2,20 kg
CT-015-060-12-1	5	96	96	117,7	120,4	100	80	76,2	58,5	58,5	-	2,20 kg
CT-015-060-12-2	6	96	-	117,7	-	100	80	76,2	-	-	117	2,20 kg
CT-015-060-24-0	4	96	-	117,7	-	100	80	76,2	-	-	117	2,20 kg
CT-015-060-24-1	5	96	96	117,7	120,4	100	80	76,2	58,5	58,5	-	2,20 kg
CT-015-060-24-2	6	96	-	117,7	-	100	80	76,2	-	-	117	2,20 kg

### Dimension pictures





## Separating transformer CT



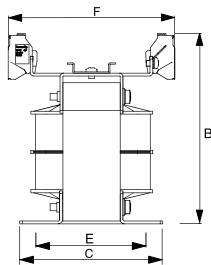
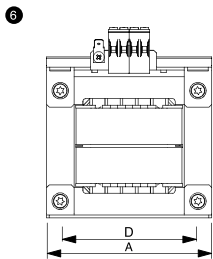
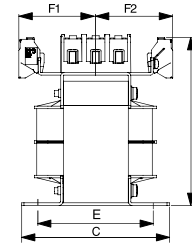
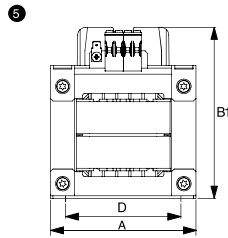
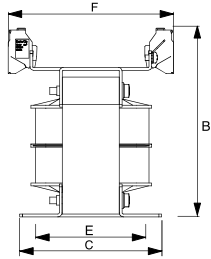
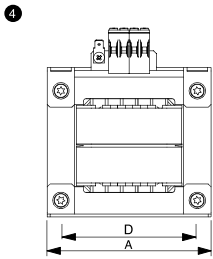
1.1

Mechanical data	Typ	Dimension picture (in mm)										Weight
		A	A1	B	B1	C	D	E	F1	F2	F	
CT-020-048-12-0	4	96	-	117,7	-	108	80	84	-	-	125	2.80 kg
CT-020-048-12-1	5	96	96	117,7	120,4	108	80	84	62,5	62,5	-	2.80 kg
CT-020-048-12-2	6	96	-	117,7	-	108	80	84	-	-	125	2.80 kg
CT-020-048-24-0	4	96	-	117,7	-	108	80	84	-	-	125	2.80 kg
CT-020-048-24-1	5	96	96	117,7	120,4	108	80	84	62,5	62,5	-	2.80 kg
CT-020-048-24-2	6	96	-	117,7	-	108	80	84	-	-	125	2.80 kg

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### Dimension pictures



2.1

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3.1

3.2

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4.0

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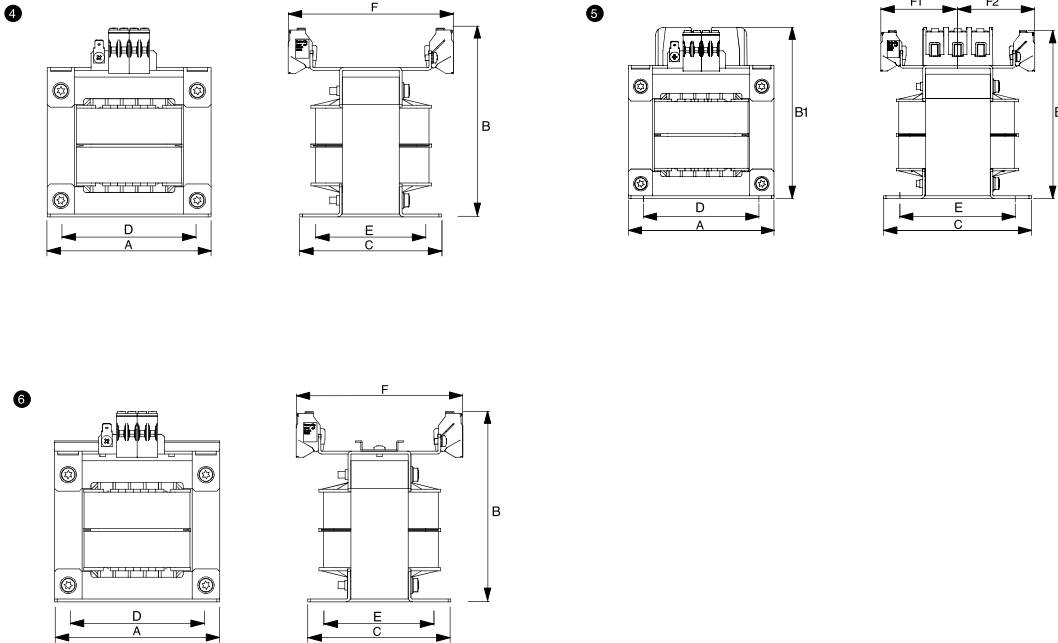


## Separating transformer CT



Mechanical data	Typ	Dimension picture (in mm)										Weight	
		A	A1	B	B1	C	D	E	F1	F2	F		
	CT-020-060-12-0	4	96	-	117,7	-	108	80	84	-	-	125	2.80 kg
	CT-020-060-12-1	5	96	96	117,7	120,4	108	80	84	62,5	62,5	-	2.80 kg
	CT-020-060-12-2	6	96	-	117,7	-	108	80	84	-	-	125	2.80 kg
	CT-020-060-24-0	4	96	-	117,7	-	108	80	84	-	-	125	2.80 kg
	CT-020-060-24-1	5	96	96	117,7	120,4	108	80	84	62,5	62,5	-	2.80 kg
	CT-020-060-24-2	6	96	-	117,7	-	108	80	84	-	-	125	2.80 kg

### Dimension pictures





## Separating transformer CT



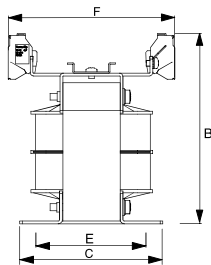
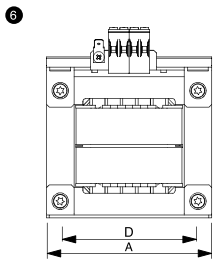
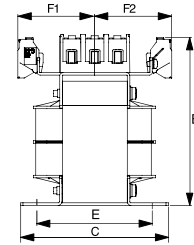
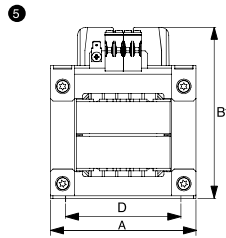
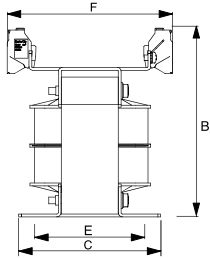
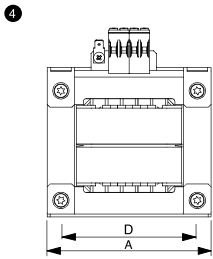
1.1

Mechanical data	Typ	Dimension picture (in mm)											Weight
		A	A1	B	B1	C	D	E	F1	F2	F		
CT-025-048-12-0	4	96	-	117,7	-	122	80	99	-	-	123	3.50 kg	
CT-025-048-12-1	5	96	96	117,7	120,4	122	80	99	61,5	61,5	-	3.50 kg	
CT-025-048-12-2	6	96	-	117,7	-	122	80	99	-	-	123	3.50 kg	
CT-025-048-24-0	4	96	-	117,7	-	122	80	99	-	-	123	3.50 kg	
CT-025-048-24-1	5	96	96	117,7	120,4	122	80	99	61,5	61,5	-	3.50 kg	
CT-025-048-24-2	6	96	-	117,7	-	122	80	99	-	-	123	3.50 kg	

1.2

1.3

### Dimension pictures



2.1

2.2

3.1

3.2

3.3

4.0

5.1

5.2

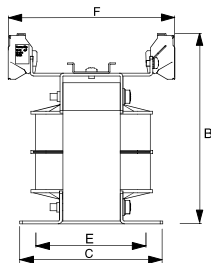
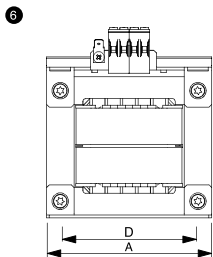
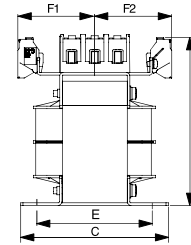
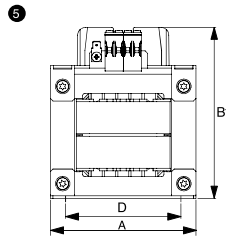
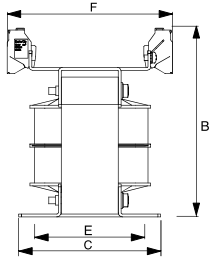
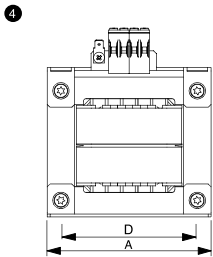


## Separating transformer CT



Mechanical data	Typ	Dimension picture (in mm)											Weight
		A	A1	B	B1	C	D	E	F1	F2	F		
	CT-025-060-12-0	4	96	-	117,7	-	122	80	99	-	-	123	3.50 kg
	CT-025-060-12-1	5	96	96	117,7	120,4	122	80	99	61,5	61,5	-	3.50 kg
	CT-025-060-12-2	6	96	-	117,7	-	122	80	99	-	-	123	3.50 kg
	CT-025-060-24-0	4	96	-	117,7	-	122	80	99	-	-	123	3.50 kg
	CT-025-060-24-1	5	96	96	117,7	120,4	122	80	99	61,5	61,5	-	3.50 kg
	CT-025-060-24-2	6	96	96	117,7	117,7	122	80	99	61,5	61,5	-	3.50 kg

### Dimension pictures





## Separating transformer CT



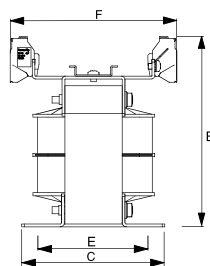
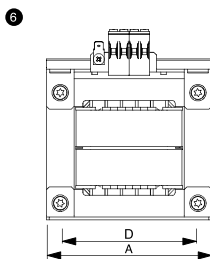
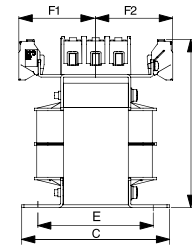
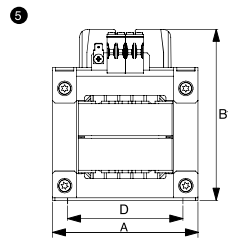
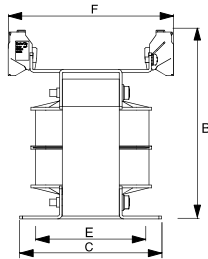
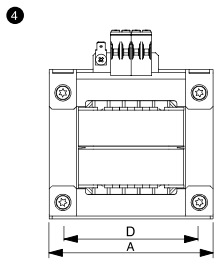
1.1

Mechanical data	Typ	Dimension picture (in mm)											Weight
		A	A1	B	B1	C	D	E	F1	F2	F		
CT-030-048-12-0	4	120	-	137,7	-	104	95	80	-	-	121	4,00 kg	
CT-030-048-12-1	5	120	120	137,7	140,4	104	95	80	60,5	60,5	-	4,00 kg	
CT-030-048-12-2	6	120	-	137,7	-	104	95	80	-	-	121	4,00 kg	
CT-030-048-24-0	4	120	-	137,7	-	104	95	80	-	-	121	4,00 kg	
CT-030-048-24-1	5	120	120	137,7	140,4	104	95	80	60,5	60,5	-	4,00 kg	
CT-030-048-24-2	6	120	-	137,7	-	104	95	80	-	-	121	4,00 kg	

1.2

1.3

### Dimension pictures



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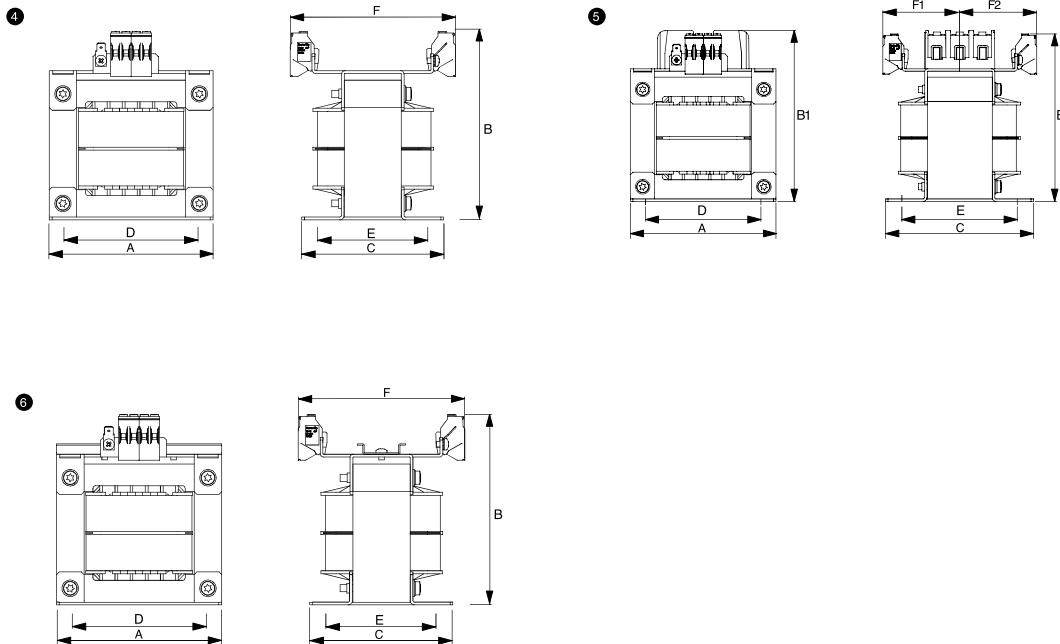


## Separating transformer CT



Typ	Dimension picture (in mm)											Weight
	A	A1	B	B1	C	D	E	F1	F2	F		
CT-030-060-12-0	120	-	137,7	-	104	95	80	-	-	121		4.00 kg
CT-030-060-12-1	120	120	137,7	140,4	104	95	80	60,5	60,5	-		4.00 kg
CT-030-060-12-2	120	-	137,7	-	104	95	80	-	-	121		4.00 kg
CT-030-060-24-0	120	-	137,7	-	104	95	80	-	-	121		4.00 kg
CT-030-060-24-1	120	120	137,7	140,4	104	95	80	60,5	60,5	-		4.00 kg
CT-030-060-24-2	120	-	137,7	-	104	95	80	-	-	121		4.00 kg
CT-035-048-12-0	120	-	137,7	-	122	95	95	-	-	127		5.00 kg
CT-035-048-12-1	120	120	137,7	140,4	122	95	95	63,5	63,5	-		5.00 kg
CT-035-048-12-2	120	-	137,7	-	122	95	95	-	-	127		5.00 kg

### Dimension pictures





## Separating transformer CT



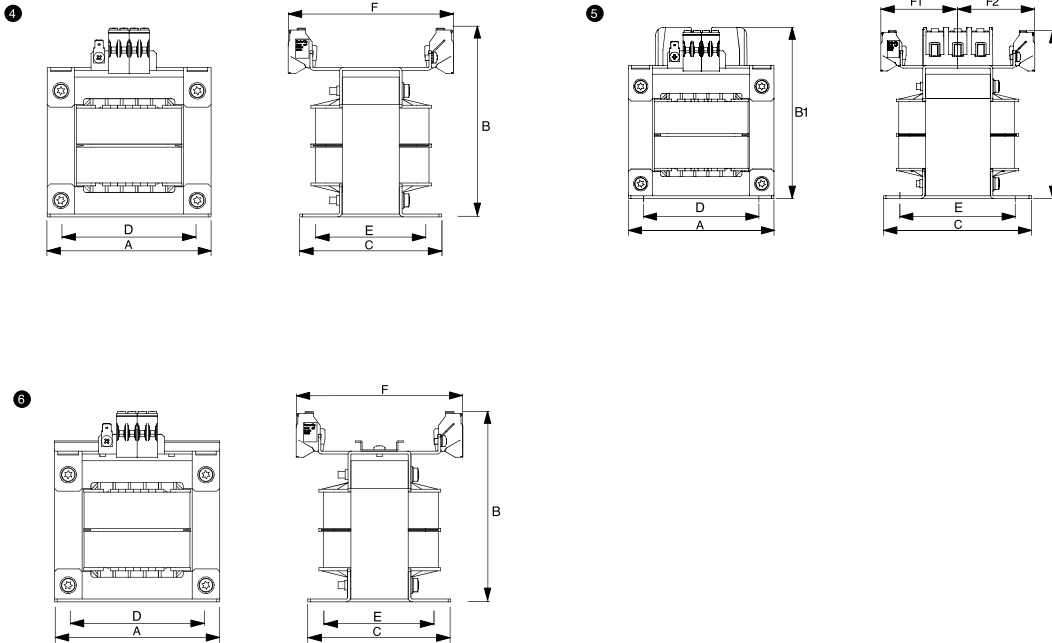
1.1

Mechanical data	Typ	Dimension picture (in mm)											Weight
		A	A1	B	B1	C	D	E	F1	F2	F		
CT-035-048-24-0	4	120	-	137,7	-	122	95	95	-	-	127	5,00 kg	
CT-035-048-24-1	5	120	120	137,7	140,4	122	95	95	63,5	63,5	-	5,00 kg	
CT-035-048-24-2	6	120	-	137,7	-	122	95	95	-	-	127	5,00 kg	
CT-035-060-12-0	4	120	-	137,7	-	122	95	95	-	-	127	5,00 kg	
CT-035-060-12-1	5	120	120	137,7	140,4	122	95	95	63,5	63,5	-	5,00 kg	
CT-035-060-12-2	6	120	-	137,7	-	122	95	95	-	-	127	5,00 kg	

1.2

1.3

### Dimension pictures



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4.0

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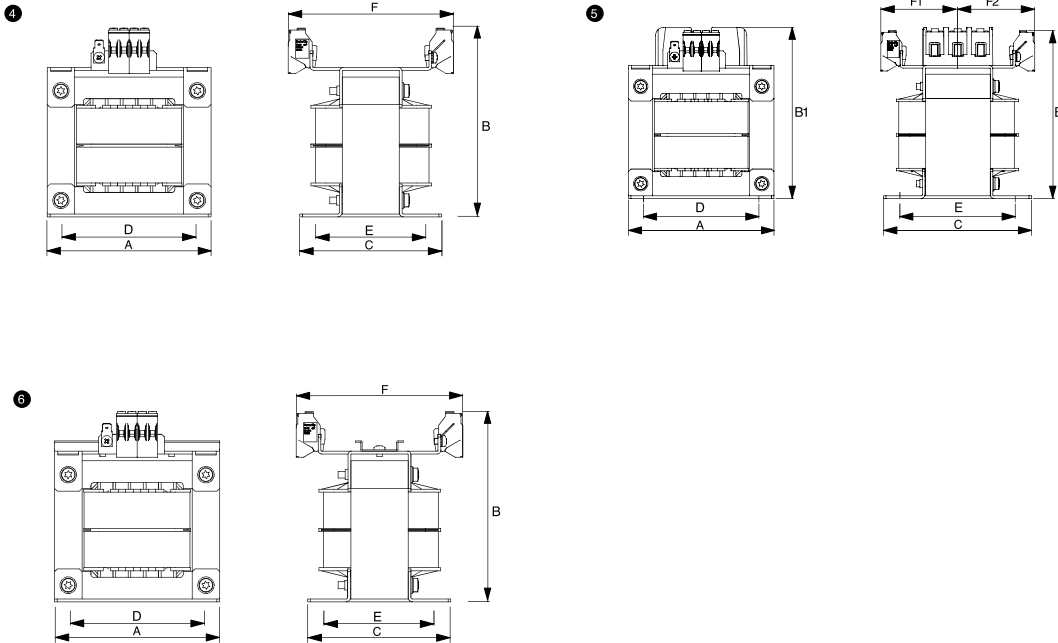


## Separating transformer CT



Mechanical data	Typ	Dimension picture (in mm)										Weight	
		A	A1	B	B1	C	D	E	F1	F2	F		
	CT-035-060-24-0	4	120	-	137,7	-	122	95	95	-	-	127	5.00 kg
	CT-035-060-24-1	5	120	120	137,7	140,4	122	95	95	63,5	63,5	-	5.00 kg
	CT-035-060-24-2	6	120	-	137,7	-	122	95	95	-	-	127	5.00 kg
	CT-050-048-12-0	4	120	-	137,7	-	145	95	114	-	-	137	6.80 kg
	CT-050-048-12-1	5	120	120	137,7	140,4	145	95	114	68,5	68,5	-	6.80 kg
	CT-050-048-12-2	6	120	-	137,7	-	145	95	114	-	-	137	6.80 kg

### Dimension pictures





## Separating transformer CT



1.1

Mechanical data

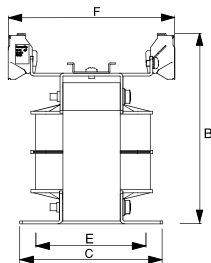
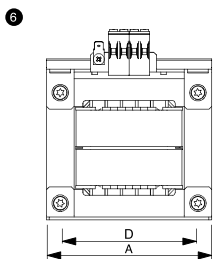
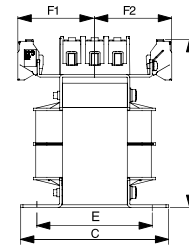
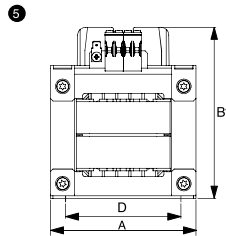
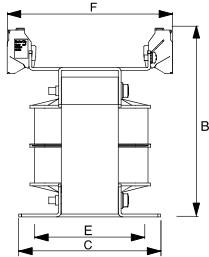
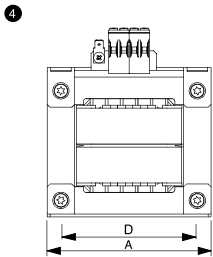
30

Typ	Dimension picture (in mm)											Weight
	A	A1	B	B1	C	D	E	F1	F2	F		
CT-050-060-12-0	120	-	137,7	-	145	95	114	-	-	137		6.80 kg
CT-050-060-12-1	120	120	137,7	140,4	145	95	114	68,5	68,5	-		6.80 kg
CT-050-060-12-2	120	-	137,7	-	145	95	114	-	-	137		6.80 kg
CT-075-048-12-0	150	-	162,7	-	140	112	109	-	-	132		9.80 kg
CT-075-048-12-1	150	150	162,7	165,4	140	112	109	66	66	-		9.80 kg
CT-075-048-12-2	150	-	162,7	-	140	112	109	-	-	132		9.80 kg

1.2

1.3

## Dimension pictures



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2.2

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4.0

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5.2



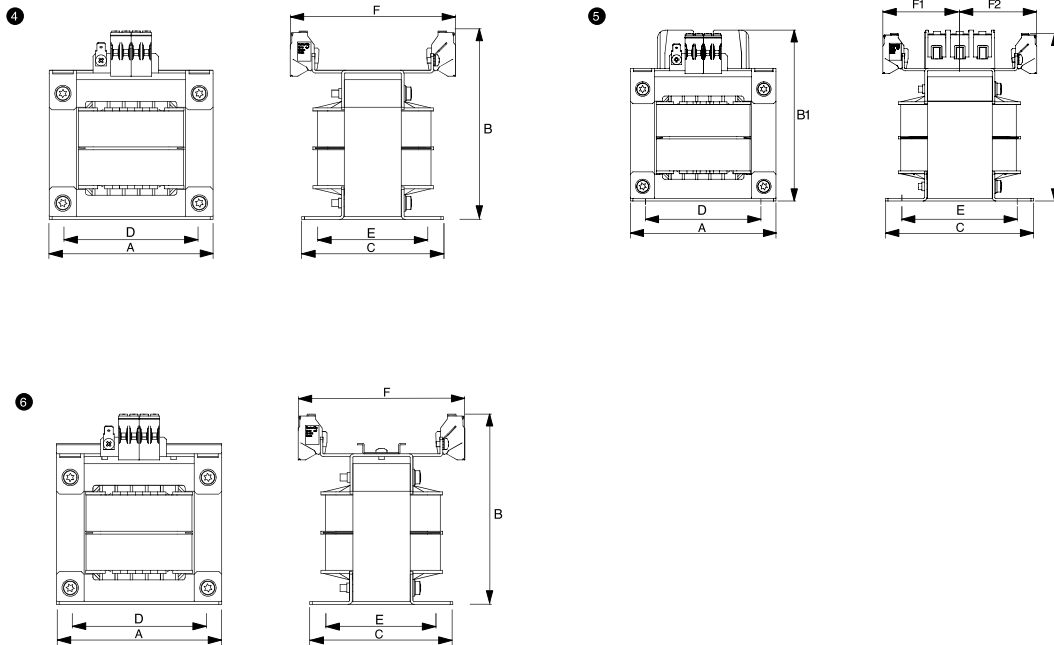


## Separating transformer CT



Typ	Dimension picture (in mm)											Weight
	A	A1	B	B1	C	D	E	F1	F2	F	F	
CT-075-060-12-0	150	-	162.7	-	140	112	109	-	-	132	9.80 kg	
CT-075-060-12-1	150	150	162.7	165.4	140	112	109	66	66	-	9.80 kg	
CT-075-060-12-2	150	-	162.7	-	140	112	109	-	-	132	9.80 kg	
CT-100-048-12-0	174	-	183.2	-	145	140	113	-	-	122	11.20 kg	
CT-100-048-12-1	174	174	183.2	185.9	145	140	113	61	61	-	11.20 kg	
CT-100-048-12-2	174	-	183.2	-	145	140	113	-	-	122	11.20 kg	
CT-100-060-12-0	174	-	183.2	-	145	140	113	-	-	122	11.20 kg	
CT-100-060-12-1	174	174	183.2	185.9	145	140	113	61	61	-	11.20 kg	

### Dimension pictures





## Separating transformer CT



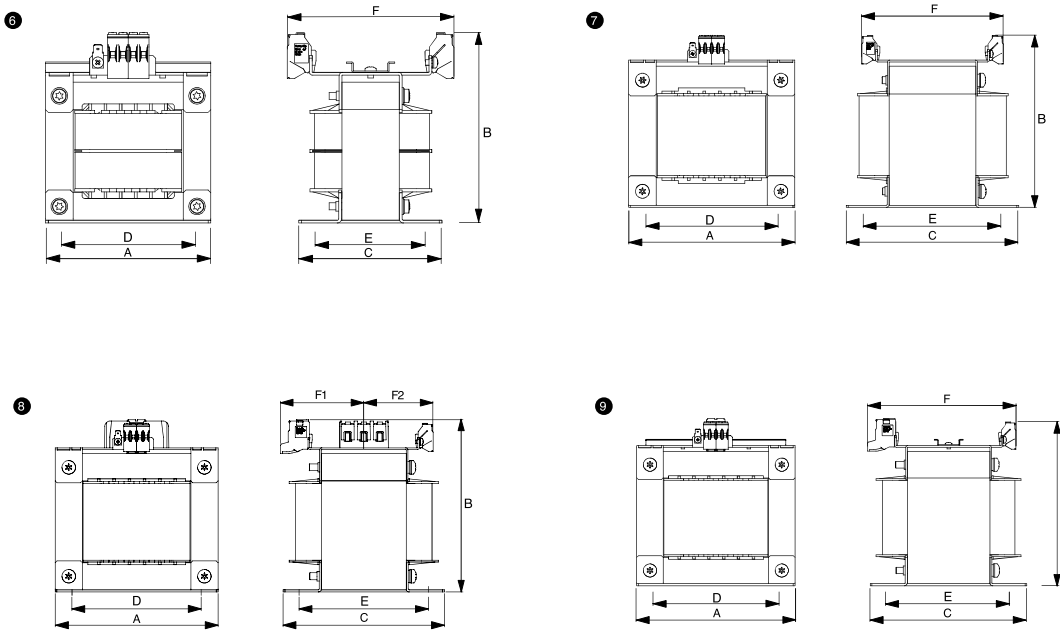
1.1

Typ	Dimension picture (in mm)											Weight
	A	A1	B	B1	C	D	E	F1	F2	F		
CT-100-060-12-2	174	-	183.2	-	145	140	113	-	-	122	11.20 kg	
CT-150-048-12-0	192	-	198.2	-	165	152.4	127	-	-	130	16.70 kg	
CT-150-048-12-1	192	192	198.2	200.9	165	152.4	127	65	65	-	16.70 kg	
CT-150-048-12-2	192	-	198.2	-	165	152.4	127	-	-	130	16.70 kg	
CT-150-060-12-0	192	-	198.2	-	165	152	127	-	-	130	16.70 kg	
CT-150-060-12-1	192	192	198.2	200.9	165	152.4	127	65	65	-	16.70 kg	

1.2

1.3

### Dimension pictures



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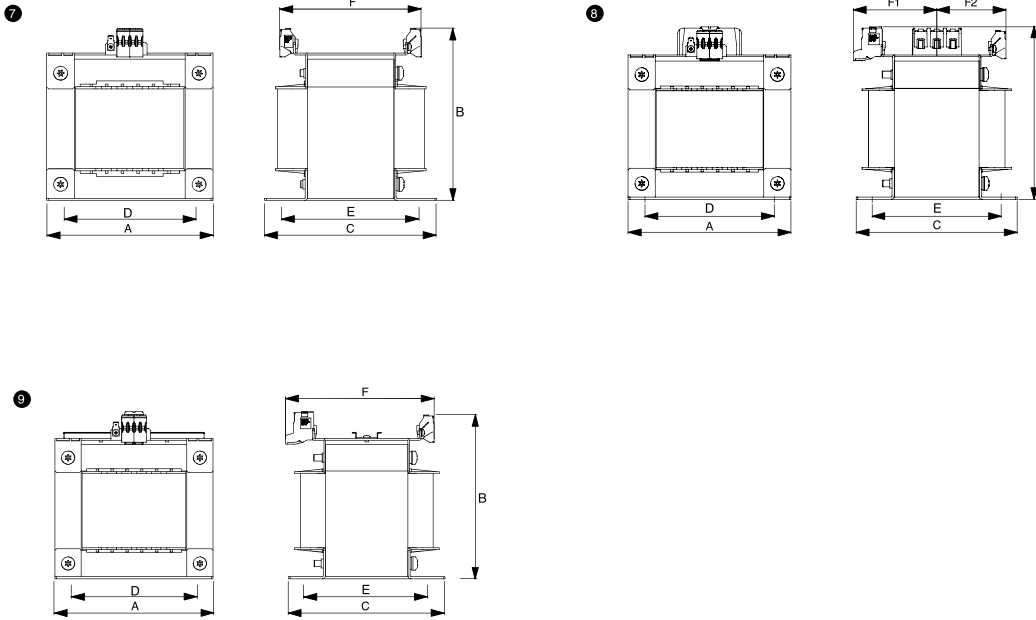


## Separating transformer CT



Mechanical data	Typ	Dimension picture (in mm)										Weight
		A	A1	B	B1	C	D	E	F1	F2	F	
CT-150-060-12-2	9	192	-	198.2	-	165	152.4	127	-	-	130	16.70 kg
CT-200-048-12-0	7	192	-	202.4	-	180	152.4	140	-	-	162.1	21.00 kg
CT-200-048-12-1	8	192	192	202.4	202.4	180	152.4	140	89.3	72.8	-	21.00 kg
CT-200-048-12-2	9	192	-	202.4	-	180	152.4	140	-	-	162.1	21.00 kg
CT-200-060-12-0	7	192	-	202.4	-	180	152.4	140	-	-	162.1	21.00 kg
CT-200-060-12-1	8	192	192	202.4	202.4	180	152.4	140	89.3	72.8	-	21.00 kg

### Dimension pictures





## Separating transformer CT



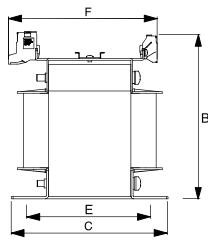
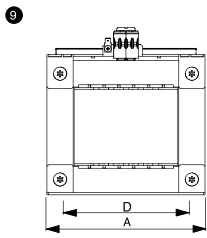
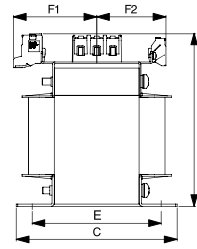
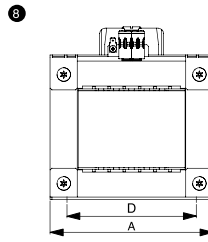
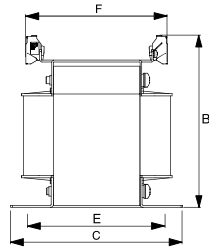
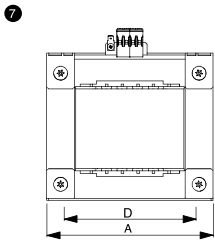
1.1

Typ	Dimension picture (in mm)											Weight
	A	A1	B	B1	C	D	E	F1	F2	F		
CT-200-060-12-2	192	-	202,4	-	180	152,4	140	-	-	162,1	21.00 kg	
CT-250-048-12-0	192	-	202,4	-	190	152,4	152,4	-	-	180,1	25.80 kg	
CT-250-048-12-1	192	192	202,4	202,4	190	152,4	152,4	98,3	81,8	-	25.80 kg	
CT-250-048-12-2	192	-	202,4	-	190	152,4	152,4	-	-	180,1	25.80 kg	
CT-250-060-12-0	192	-	202,4	-	190	152,4	152,4	-	-	180,1	25.80 kg	
CT-250-060-12-1	192	192	202,4	202,4	190	152,4	152,4	98,3	81,8	-	25.80 kg	

1.2

1.3

### Dimension pictures



2.1

2.2

3.1

3.2

3.3

4.0

5.1

5.2

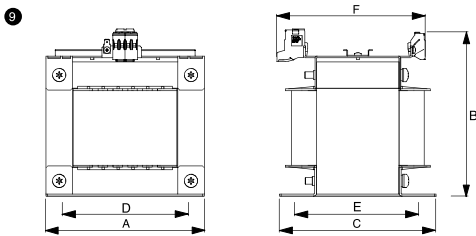


## Separating transformer CT



Mechanical data	Typ	Dimension picture (in mm)										Weight
		A	A1	B	B1	C	D	E	F1	F2	F	
CT-250-060-12-2	⑤	192	-	202.4	-	190	152.4	152.4	-	-	180.1	25.80 kg

### Dimension pictures



FAIL-SAFE transformer  
**FST**



1.1



**General Data**

Rated input voltage 230 V / 400 V
Rated output voltage 24 V / 230 V
Rated power 100 VA / 160 VA / 250 VA
Insulation class B
Max. ambient temperature 40 °C
Protection index IP 00

1.2

1.3

**Advantages**

With integrated FAIL-SAFE protection
High performance per volume thanks to compact design
Very good switch-on behaviour thanks to reduced starting currents
May be operated at 50 - 60 Hz
Very good corrosion protection and low noise thanks to vacuum impregnation
Primary side for input voltage 230 V and 400 V
100 VA and 160 VA versions for mounting with integrated DIN rail mounting in compliance with DIN 50022

2.1

2.2

**Applications**

FAIL-SAFE transformer as a control transformer for electrical isolations of the input and output sides. The transformer is designed to provide control in compliance with EN 60204

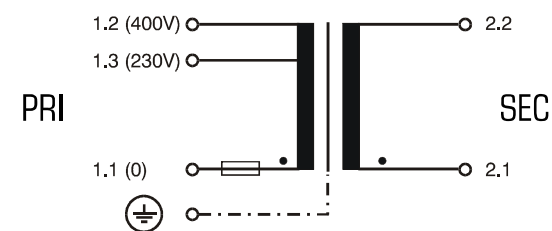
FAIL-SAFE transformer as an isolating transformer for the safe electrical isolation of the input and output sides. The transformer may be used to set up protective separation as a protective measure in accordance with VDE 0100.

FAIL-SAFE transformer as a safety transformer to secure electrical isolation of the input and output sides. By limiting the output voltage, this transformer is suitable for the construction of both SELV and PELV electrical circuits.

3.1

3.2

**Sample application**



3.3

4.0

**Standards**



FAIL-SAFE control and safety transformer to: EN 61558 part 1 with part 2-2 and part 2-6

FAIL-SAFE voltage control and isolating transformer to: EN 61558 part 1 with part 2-2 and part 2-4

**Approvals**



ENEC 10 (VDE)

5.1

5.2



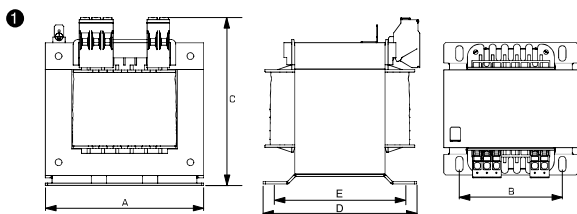
## FAIL-SAFE transformer FST

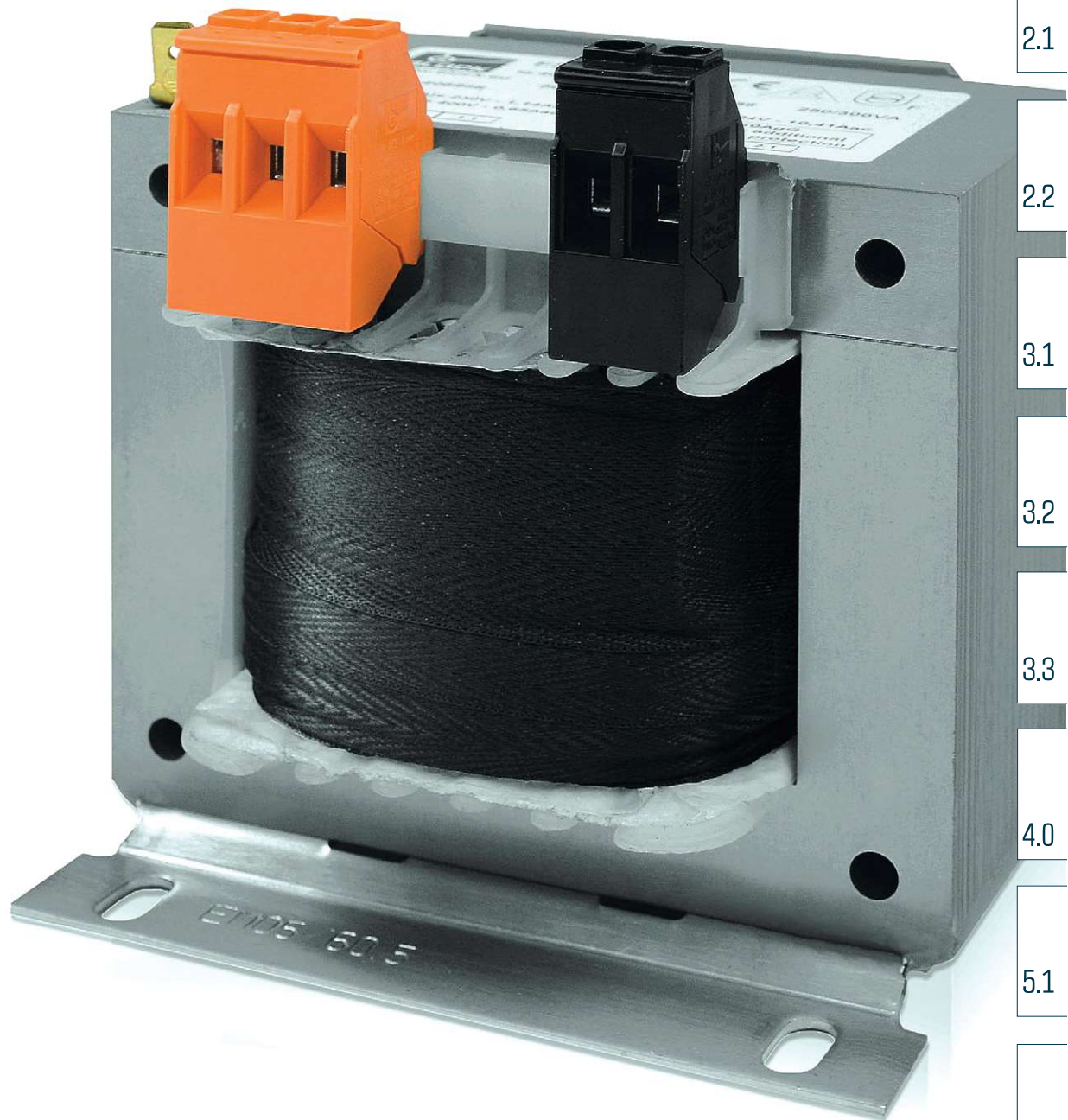


Typ	FST 100/23	FST 100/24	FST 160/23	FST 160/24	FST 250/23	FST 250/24
<b>Electrical data</b>						
<b>Input</b>						
Rated input current	0,49 A / 0,28 Aac	0,49 A / 0,28 Aac	0,77 A / 0,45 Aac	0,77 A / 0,45 Aac	1,14 A / 0,65 Aac	1,14 A / 0,65 Aac
Rated input voltage	230 Vac / 400 Vac	230 Vac / 400 Vac	230 Vac / 400 Vac	230 Vac / 400 Vac	230 Vac / 400 Vac	230 Vac / 400 Vac
Switch-on time	100%	100%	100%	100%	100%	100%
Frequency Range	50-60 Hz	50-60 Hz	50-60 Hz	50-60 Hz	50-60 Hz	50-60 Hz
<b>Output</b>						
Rated output current	0,43 Aac	4,17 Aac	0,695 Aac	6,67 Aac	1,09 Aac	10,41 Aac
Rated output voltage	230 Vac	24 Vac	230 Vac	24 V	230 Vac	24 Vac
Rated power VDE (DB cos phi=1)	100 VA	100 VA	160 VA	160 VA	250 VA	250 VA
Rated power VDE (KB cos phi=0.5)	220 VA	220 VA	320 VA	320 VA	490 VA	490 VA
Vector group	li0	li0	li0	li0	li0	li0
Power loss	14.0 W	14.0 W	20.8 W	20.8 W	27.0 W	25.5 W
<b>Standards</b>						
Classification	Control- and safety isolating transformer	Control- and safety isolating transformer	Control- and safety isolating transformer	Control- and safety isolating transformer	Control- and safety isolating transformer	Control- and safety isolating transformer
<b>Environment</b>						
Ambient temperature max.	40 °C	40 °C	40 °C	40 °C	40 °C	40 °C
Type of cooling	AN	AN	AN	AN	AN	AN
<b>Safety and protection</b>						
Protection index	IP 00	IP 00	IP 00	IP 00	IP 00	IP 00
Safety class (prepared)	I	I	I	I	I	I
Insulation class	B	B	B	B	B	B
<b>Order numbers</b>						
<b>Order Number</b>	<b>FST 100/23</b>	<b>FST 100/24</b>	<b>FST 160/23</b>	<b>FST 160/24</b>	<b>FST 250/23</b>	<b>FST 250/24</b>

Order Number	FST 100/23	FST 100/24	FST 160/23	FST 160/24	FST 250/23	FST 250/24
<b>Mechanical data</b>						
<b>Terminal and mounting</b>						
DIN rail mounting	✓	✓	✓	✓	-	-
Terminals PE	Tab connector, 6,3 x 0,8 mm	Tab connector, 6,3 x 0,8 mm	Tab connector, 6,3 x 0,8 mm	Tab connector, 6,3 x 0,8 mm	Tab connector, 6,3 x 0,8 mm	Tab connector, 6,3 x 0,8 mm
Terminals Output	Screw terminal 4 mm <sup>2</sup>	Screw terminal 4 mm <sup>2</sup>	Screw terminal 4 mm <sup>2</sup>	Screw terminal 4 mm <sup>2</sup>	Screw terminal 4 mm <sup>2</sup>	Screw terminal 4 mm <sup>2</sup>
Terminals Input	Screw terminal 4 mm <sup>2</sup>	Screw terminal 4 mm <sup>2</sup>	Screw terminal 4 mm <sup>2</sup>	Screw terminal 4 mm <sup>2</sup>	Screw terminal 4 mm <sup>2</sup>	Screw terminal 4 mm <sup>2</sup>
<b>Measures and weights</b>						
Dimension (W x H x D)	84 x 94 x 83 mm	84 x 94 x 83 mm	96 x 102 x 102 mm	96 x 102 x 102 mm	105 x 112 x 106 mm	105 x 112 x 106 mm
Core type	EI 84/43,5	EI 84/43,5	EI 96/45,7	EI 96/45,7	EI 105/60,5	EI 105/60,5
Weight	2.00 kg	2.00 kg	2.90 kg	2.90 kg	4.30 kg	4.30 kg
Cu-Weight	0.40 kg	0.40 kg	0.60 kg	0.60 kg	0.80 kg	0.80 kg
Dimension picture (in mm)	①	①	①	①	①	①
A	84	84	96	96	105	105
B	64	64	84	84	80,5	80,5
C	94	94	102	102	112	112
D	83	83	102	102	106	106
E	64	64	87	87	86	86

### Dimension pictures







# OVERVIEW

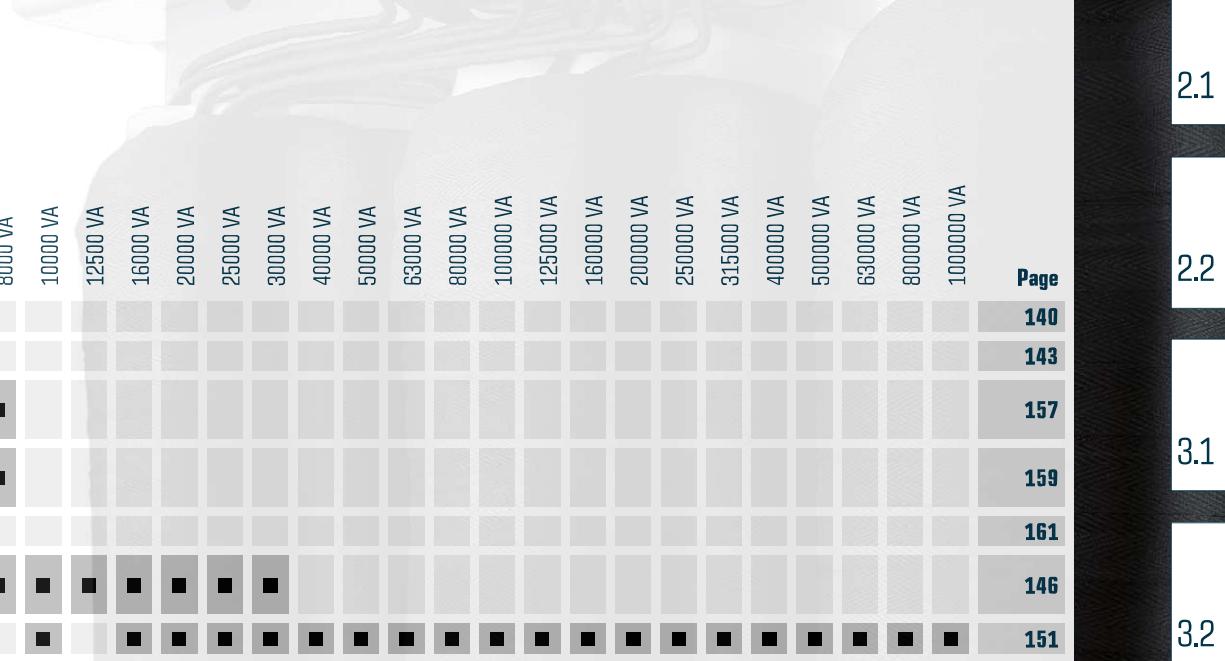
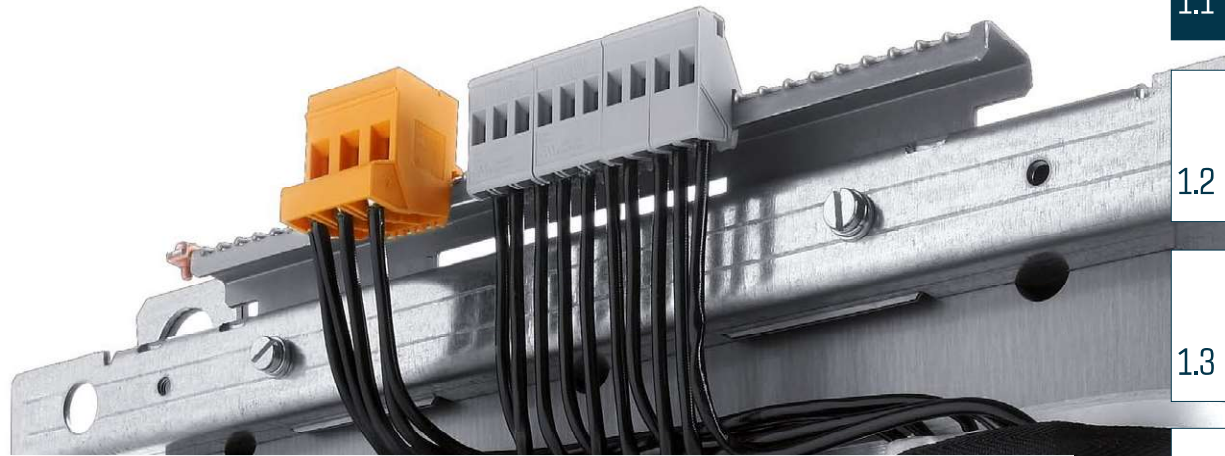
## ISOLATING TRANSFORMERS / INTERFERENCE SUPPRESSING TRANSFORMERS

### Isolating transformers

	Type	Features	Rated input voltage	Rated output voltage													
					60 VA	100 VA	160 VA	200 VA	250 VA	300 VA	500 VA	630 VA	630 VA	800 VA	1000 VA	1600 VA	
1-phase	TIM	In housing, IP 20	230 Vac	2 x 115 Vac	■	■		■		■	■			■	■		
	ETTK	Resin encapsulation, IP 67, for portable application	230 Vac	230 Vac			■		■			■	■		■	■	
	TTML	For medical rooms, horizontal	230 Vac	115 Vac and 230 Vac													
	TTMS	For medical rooms, vertical	230 Vac	115 Vac and 230 Vac													
	TTIT	For creating a monitored IT main	230 Vac	230 Vac													
3-phase	TT3	IP 00 or up to IP 23 in housing	3 x 400 Vac	3 x 400 Vac ± 5 %											■		
	TT3 Neo	IP 00, in housing possible	3 x 400 Vac	3 x 400 Vac													

### Interference suppressing transformers

	Type	Features	Rated input voltage	Rated output voltage						Page
					60 VA	100 VA	150 VA	200 VA	400 VA	
1-phase	STT	For portable application	230 Vac	230 Vac		■		■	■	<b>163</b>
	SMTT	Isolating transformer, for portable application	230 Vac	230 Vac			■			<b>165</b>



	2500 VA	3150 VA	4000 VA	5000 VA	6300 VA	8000 VA	10000 VA	12500 VA	16000 VA	20000 VA	25000 VA	30000 VA	40000 VA	50000 VA	63000 VA	80000 VA	100000 VA	125000 VA	160000 VA	200000 VA	250000 VA	315000 VA	400000 VA	500000 VA	630000 VA	800000 VA	1000000 VA	Page
																												140
	■																											143
		■	■	■	■	■																						157
		■	■	■	■	■																						159
	■																											161
	■			■	■	■	■	■	■	■	■	■																146
							■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	151



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# Isolating transformer TIM



## General Data

Rated input voltage 230 Vac
Rated output voltage 2 x 115 Vac
Rated power 60 - 1000 VA
Insulation class A or B
Maximum ambient temperature 40 °C
Efficiency up to 95 %
Degree of protection IP 20

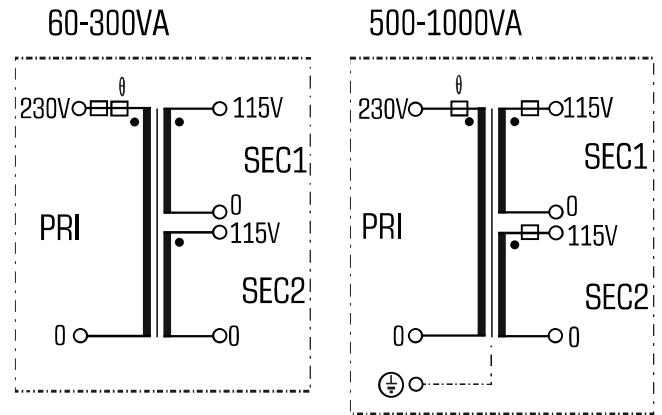
## Advantages

Safe galvanic isolation
Integrated short-circuit and overload protection
Double output voltage for series or parallel connection
Very good moisture protection and low noise thanks to XtraDenseFill resin encapsulation (up to 300 VA)
Screw terminals under cover with strain relief

## Applications

Isolating transformer for the safe electrical isolation of the input and output sides. The transformer may be used to set up protective separation as a protective measure in accordance with VDE 0100.

## Sample applications



## Standards



Isolating transformer  
to: VDE 0570 Part 2-4, DIN EN 61558-2-4, EN 61558-2-4, IEC 61558-2-4

## Approvals



VDE



## Isolating transformer TIM



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Typ	TIM 60	TIM 100	TIM 200	TIM 300	TIM 500	TIM 800
<b>Electrical data</b>						
<b>Input</b>						
Rated input voltage	230 Vac	230 Vac	230 Vac	230 Vac	230 Vac	230 Vac
Frequency range	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz
<b>Output</b>						
Rated output voltage	2 x 115 Vac	2 x 115 Vac	2 x 115 Vac	2 x 115 Vac	2 x 115 Vac	2 x 115 Vac
Rated Power	60 VA	100 VA	200 VA	300 VA	500 VA	800 VA
No-load voltage (app. x factor)	1.15	1.08	1.07	1.05	1.02	1.02
No-load loss (typ.)	3.30 W	4.90 W	7.40 W	14.00 W	18.00 W	31.00 W
Efficiency	83.5 %	87.5 %	89.5 %	91.0 %	92.0 %	94.0 %
<b>Approvals</b>						
Approvals	VDE	VDE	VDE	VDE	VDE, cURus	VDE, cURus
<b>Environment</b>						
Ambient temperature max.	40 °C	40 °C	40 °C	40 °C	40 °C	40 °C
<b>Safety and protection</b>						
Type	Resin encapsulated transformer	Resin encapsulated transformer	Resin encapsulated transformer	Resin encapsulated transformer	Encapsulated in metal housing	Encapsulated in metal housing
Insulation class	A	A	A	A	B	B
Protection index	IP 20	IP 20	IP 20	IP 20	IP 20	IP 20
Safety class	II	II	II	II	I	I
Short circuit strength	non-inherently short-circuit proof	non-inherently short-circuit proof	non-inherently short-circuit proof	non-inherently short-circuit proof	non-inherently short-circuit proof	non-inherently short-circuit proof
Test voltage	5000 Vac, 50 Hz	5000 Vac, 50 Hz	5000 Vac, 50 Hz	5000 Vac, 50 Hz	3750 Vac, 50 Hz	3750 Vac, 50 Hz
<b>Order numbers</b>						
<b>Order Number</b>	<b>TIM 60</b>	<b>TIM 100</b>	<b>TIM 200</b>	<b>TIM 300</b>	<b>TIM 500</b>	<b>TIM 800</b>

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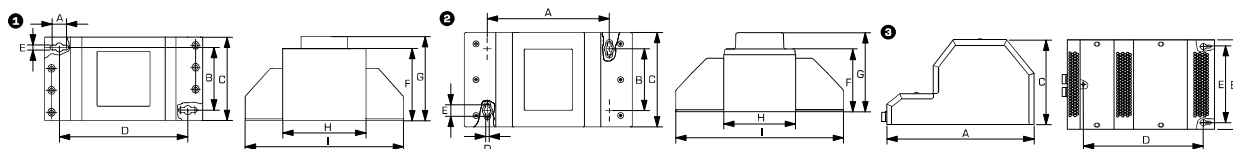
<b>Terminal and mounting</b>						
Terminals	Screw-type terminals	Screw-type terminals	Screw-type terminals	Screw-type terminals	Screw-type terminals	Screw-type terminals
Fixing method	Fixing holes in the terminal connection compartment	Fixing holes in the terminal connection compartment	Fixing holes in the terminal connection compartment	Fixing holes in the terminal connection compartment	Fixing holes in the housing	Fixing holes in the housing
<b>Measures and weights</b>						
Weight	1.55 kg	2.00 kg	3.60 kg	4.90 kg	9.10 kg	15.60 kg
Dimension picture (in mm)	1	1	2	2	3	3
A	14,2	14,2	167	167	283	283
B	58	58	76	76	176	200
C	77	77	117	117	150	166
D	135	135	4,3	4,3	245	245
E	4,3	4,3	14	14	123	148
F	65	65	77	100	-	-
G	76	76	97	117	-	-
H	90	90	97	97	-	-
I	166	166	223	223	-	-

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## Dimension pictures



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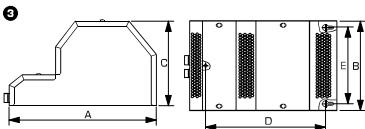
## Isolating transformer TIM



Electrical data	<b>Typ</b>	TIM 1000
	<b>Input</b>	
	Rated input voltage	230 Vac
	Frequency range	50 - 60 Hz
	<b>Output</b>	
	Rated output voltage	2 x 115 Vac
	Rated Power	1000 VA
	No-load voltage (app. x factor)	1.02
	No-load loss (typ.)	27.00 W
	Efficiency	95.0 %
	<b>Approvals</b>	
	Approvals	VDE, cULRus
	<b>Environment</b>	
	Ambient temperature max.	40 °C
<b>Safety and protection</b>		
Type	Encapsulated in metal housing	
Insulation class	B	
Protection index	IP 20	
Safety class	I	
Short circuit strength	non-inherently short-circuit proof	
Test voltage	3750 Vac, 50 Hz	
<b>Order numbers</b>		
<b>Order Number</b>	<b>TIM 1000</b>	

Mechanical data	<b>Terminal and mounting</b>	
	Terminals	Screw-type terminals
	Fixing method	Fixing holes in the housing
	<b>Measures and weights</b>	
	Weight	17.10 kg
	Dimension picture (in mm)	<b>3</b>
	A	283
	B	200
	C	166
	D	245
	E	148
F	-	
G	-	
H	-	
I	-	

### Dimension pictures



# Isolating transformer ETTK



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## General Data

Rated input voltage 230 Vac
Rated output voltage 230 Vac
Rated power 160 - 2500 VA
Insulation class A
Maximum ambient temperature 40 °C
Degree of protection IP 67

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## Advantages

Safe galvanic isolation
Integrated short-circuit and overload protection
Very good moisture protection and low noise thanks to resin encapsulation
High degree of protection
Carry handle, mains cable with safety plug, shockproof socket for portable application

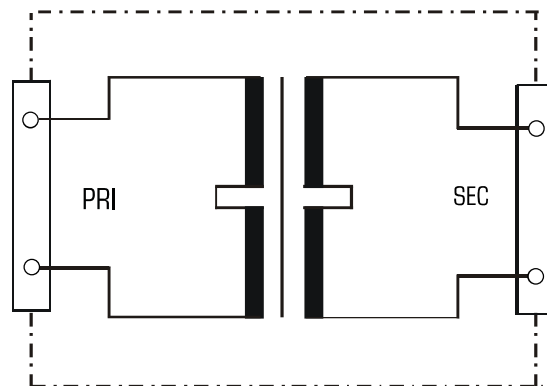
2.1

## Applications

Isolating transformer for the safe electrical isolation of the input and output sides. The transformer may be used to set up protective separation as a protective measure in accordance with VDE 0100.

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## Sample application



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## Standards

Isolating transformer  
to: VDE 0570 Part 2-4, DIN EN 61558-2-4, EN 61558-2-4, IEC 61558-2-4

## Approvals **EAC**

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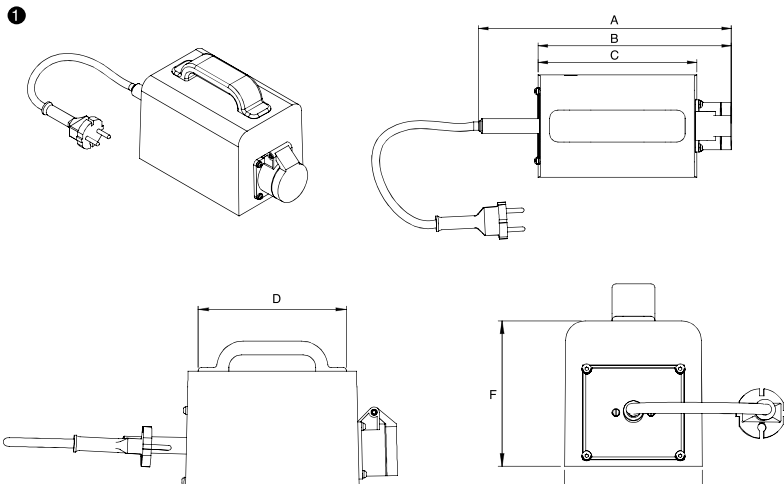
## Isolating transformer ETTK



Typ	ETTK 160	ETTK 250	ETTK 630	ETTK 1000	ETTK 1600	ETTK 2500
<b>Electrical data</b>						
<b>Input</b>						
Rated input voltage	230 Vac	230 Vac	230 Vac	230 Vac	230 Vac	230 Vac
Frequency range	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz
<b>Output</b>						
Rated output voltage	230 Vac	230 Vac	230 Vac	230 Vac	230 Vac	230 Vac
Rated Power	160 VA	250 VA	630 VA	1000 VA	1600 VA	2500 VA
<b>Environment</b>						
Ambient temperature max.	40 °C	40 °C	40 °C	40 °C	40 °C	40 °C
<b>Safety and protection</b>						
Type	Resin encapsulated transformer	Resin encapsulated transformer	Resin encapsulated transformer	Resin encapsulated transformer	Resin encapsulated transformer	Resin encapsulated transformer
Insulation class	A	A	A	A	A	A
Protection index	IP 67	IP 67	IP 67	IP 67	IP 67	IP 67
Safety class	II	II	II	II	II	II
Short circuit strength	non-inherently short-circuit proof	non-inherently short-circuit proof	non-inherently short-circuit proof	non-inherently short-circuit proof	non-inherently short-circuit proof	non-inherently short-circuit proof
Test voltage	4000 Vac, 50 Hz	4000 Vac, 50 Hz	4000 Vac, 50 Hz	4000 Vac, 50 Hz	4000 Vac, 50 Hz	4000 Vac, 50 Hz
<b>Order numbers</b>						
<b>Order Number</b>	<b>ETTK 160</b>	<b>ETTK 250</b>	<b>ETTK 630</b>	<b>ETTK 1000</b>	<b>ETTK 1600</b>	<b>ETTK 2500</b>

Typ	Terminals Input	Terminals Output	Weight	Dimension (W x H x D)	Dimension picture (in mm)						
					A	B	C	D	E	F	G
ETTK 160	Mains connecting cable with Schuko plug	Shockproof socket	5.80 kg	105 x 160 x 170 mm	255	196	168	140	105	122	-
ETTK 250	Mains connecting cable with Schuko plug	Shockproof socket	9.40 kg	120 x 185 x 200 mm	283	255	192	141	119	150	-
ETTK 630	Mains connecting cable with Schuko plug	Shockproof socket	16.40 kg	120 x 230 x 300 mm	378	320	293	198	115	190	-
ETTK 1000	Mains connecting cable with Schuko plug	Shockproof socket	21.00 kg	140 x 230 x 300 mm	385	330	298	198	138	190	-

## Dimension pictures





## Isolating transformer **ETTK**



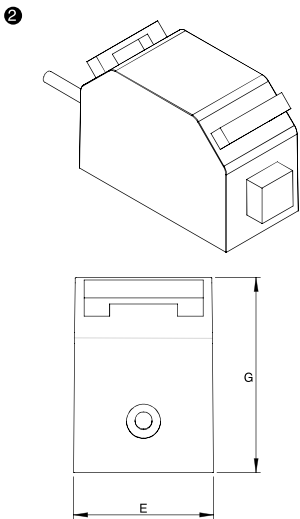
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Mechanical data	Typ	Terminals Input	Terminals Output	Weight	Dimension (W x H x D)	Dimension picture (in mm)							
						A	B	C	D	E	F	G	
	ETTK 1600	Mains connecting cable with Schuko plug	Shockproof socket	35.80 kg	170 x 225 x 340 mm	②	335	370	425	-	165	-	230
	ETTK 2500	Mains connecting cable with Schuko plug	Shockproof socket	39.00 kg	170 x 225 x 340 mm	②	335	370	425	-	165	-	230

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### Dimension pictures



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# Isolating transformer TT3



## General Data

Rated input voltage 3 x 400 Vac
Rated output voltage 3 x 400 Vac
Rated power 1000 - 30000 VA
Insulation class F
Maximum ambient temperature 50 °C
Efficiency up to 97,5 %
Degree of protection IP 00 or IP 23
Optionally adapted package for higher degrees of protection

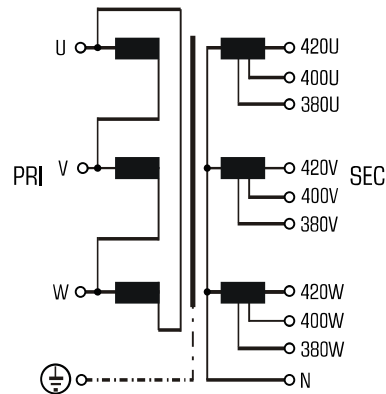
## Advantages

Safe galvanic isolation
Patented assembly technology to lower heat losses
Very good corrosion protection and low noise thanks to vacuum impregnation
Secondary side ±5 % tapings for voltage adjustment
Fixed, contact protected screw connection terminals complying with UVV BGV A3
Multifunctional fixing rails with 12 oval slots
Enlarged fixing rail for easy installation from above
Integrated crane eyes

## Applications

Isolating transformer for the safe electrical isolation of the input and output sides. The transformer may be used to set up protective separation as a protective measure in accordance with VDE 0100.

## Sample application



## Standards



Isolating transformer  
to: VDE 0570 Part2-4, DIN EN 61558-2-4, EN 61558-2-4, IEC 61558-2-4, UL 5085-1/-2, CSA 22.2 No.66

## Approvals



UL 5085, UL 1561, CSA 22.2 (E 103521)



## Isolating transformer TT3



Typ	TT3 1-4-4	TT3 2,5-4-4	TT3 2,5-69-4	TT3 5-4-4	TT3 6,3-4-4	TT3 8-4-4
<b>Electrical data</b>						
<b>Input</b>						
Rated input voltage	3 x 400 Vac	3 x 400 Vac	3 x 690 Vac	3 x 400 Vac	3 x 400 Vac	3 x 400 Vac
Frequency range	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz
<b>Output</b>						
Rated output voltage	3 x 400 Vac	3 x 400 Vac	3 x 400 Vac	3 x 400 Vac	3 x 400 Vac	3 x 400 Vac
Tappings Output (±)	±5 %	±5 %	±5 %	±5 %	±5 %	±5 %
Rated Power	1000 VA	2500 VA	2500 VA	5000 VA	6300 VA	8000 VA
Rated current	3 x 1.52 Aac (3 x 380 Vac) 3 x 1.44 Aac (3 x 400 Vac) 3 x 1.38 Aac (3 x 420 Vac)	3 x 3.8 Aac (3 x 380 Vac) 3 x 3.7 Aac (3 x 400 Vac) 3 x 3.5 Aac (3 x 420 Vac)	3 x 3.8 Aac (3 x 380 Vac) 3 x 3.7 Aac (3 x 400 Vac) 3 x 3.5 Aac (3 x 420 Vac)	3 x 7.6 Aac (3 x 380 Vac) 3 x 7.2 Aac (3 x 400 Vac) 3 x 6.9 Aac (3 x 420 Vac)	3 x 9.6 Aac (3 x 380 Vac) 3 x 9.1 Aac (3 x 400 Vac) 3 x 8.6 Aac (3 x 420 Vac)	3 x 12.2 Aac (3 x 380 Vac) 3 x 11.5 Aac (3 x 400 Vac) 3 x 11 Aac (3 x 420 Vac)
Short circuit voltage	6.4 %	3.7 %	3.8 %	3.6 %	2.8 %	2.2 %
Power loss	92.0 W	155.0 W	155.0 W	275.0 W	290.0 W	320.0 W
Vector group	Dyn 5	Dyn 5	Dyn 5	Dyn 5	Dyn 5	Dyn 5
Efficiency	91.5 %	94.3 %	94.3 %	94.7 %	95.5 %	96 %
<b>Approvals</b>						
Approvals	cURus	cURus	-	cURus	cURus	cURus
<b>Environment</b>						
Ambient temperature max.	50 °C	50 °C	50 °C	50 °C	50 °C	50 °C
<b>Safety and protection</b>						
Type	Open type	Open type	Open type	Open type	Open type	Open type
Insulation class	VDE=F, UL=class 155	VDE=F, UL=class 155	F (155°C)	VDE=F, UL=class 155	VDE=F, UL=class 155	VDE=F, UL=class 155
Protection index	IP 00	IP 00	IP 00	IP 00	IP 00	IP 00
Safety class (prepared)	I	I	I	I	I	I
Short circuit strength	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof
<b>Order numbers</b>						
Recommended enclosure	BGUk 20	BGE-050	BGE-050	BGE-065	BGE-065	BGE-065
<b>Order Number</b>	<b>TT3 1-4-4</b>	<b>TT3 2,5-4-4</b>	<b>TT3 2,5-69-4</b>	<b>TT3 5-4-4</b>	<b>TT3 6,3-4-4</b>	<b>TT3 8-4-4</b>

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## Isolating transformer TT3



Typ	TT3 10-4-4	TT3 10-69-4	TT3 12,5-4-4	TT3 16-4-4	TT3 20-4-4	TT3 20-69-4
<b>Electrical data</b>						
<b>Input</b>						
Rated input voltage	3 x 400 Vac	3 x 690 Vac	3 x 400 Vac	3 x 400 Vac	3 x 400 Vac	3 x 690 Vac
Frequency range	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz
<b>Output</b>						
Rated output voltage	3 x 400 Vac	3 x 400 Vac	3 x 400 Vac	3 x 400 Vac	3 x 400 Vac	3 x 400 Vac
Tappings Output (±)	±5 %	±5 %	±5 %	±5 %	±5 %	±5 %
Rated Power	10000 VA	10000 VA	12,500 VA	16000 VA	20000 VA	20000 VA
Rated current	3 x 15,1 Aac (3 x 380 Vac) 3 x 14,4 Aac (3 x 400 Vac) 3 x 13,8 Aac (3 x 420 Vac)	3 x 15,1 Aac (3 x 380 Vac) 3 x 14,4 Aac (3 x 400 Vac) 3 x 13,8 Aac (3 x 420 Vac)	3 x 19 Aac (3 x 380 Vac) 3 x 18 Aac (3 x 400 Vac) 3 x 17,2 Aac (3 x 420 Vac)	3 x 24,4 Aac (3 x 380 Vac) 3 x 23,1 Aac (3 x 400 Vac) 3 x 22 Aac (3 x 420 Vac)	3 x 30,4 Aac (3 x 380 Vac) 3 x 28,9 Aac (3 x 400 Vac) 3 x 27,5 Aac (3 x 420 Vac)	3 x 38,1 Aac (3 x 380 Vac) 3 x 36,1 Aac (3 x 400 Vac) 3 x 34,4 Aac (3 x 420 Vac)
Short circuit voltage	1,9 %	2,0 %	1,65 %	1,5 %	1,5 %	1,9 %
Power loss	350,0 W	350,0 W	380,0 W	500,0 W	525,0 W	632,0 W
Vector group	Dyn 5	Dyn 5	Dyn 5	Dyn 5	Dyn 5	Dyn 5
Efficiency	96,5 %	97,5 %	97 %	97 %	97,5 %	97,5 %
<b>Approvals</b>						
Approvals	cURus	-	cURus	cURus	cURus	-
<b>Environment</b>						
Ambient temperature max.	50 °C	50 °C	50 °C	50 °C	50 °C	50 °C
<b>Safety and protection</b>						
Type	Open type	Open type	Open type	Open type	Open type	Open type
Insulation class	VDE=F, UL=class 155	F (155°C)	VDE=F, UL=class 155	VDE=F, UL=class 155	VDE=F, UL=class 155	VDE=F, UL=class 155
Protection index	IP 00	IP 00	IP 00	IP 00	IP 00	IP 00
Safety class (prepared)	I	I	I	I	I	I
Short circuit strength	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof
<b>Order numbers</b>						
Recommended enclosure				BGE-080	BGE-080	BGE-080
<b>Order Number</b>	<b>TT3 10-4-4</b>	<b>TT3 10-69-4</b>	<b>TT3 12,5-4-4</b>	<b>TT3 16-4-4</b>	<b>TT3 20-4-4</b>	<b>TT3 20-69-4</b>



## Isolating transformer TT3



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Electrical data	Typ	TT3 25-4-4	TT3 25-69-4	TT3 30-4-4
<b>Input</b>				
Rated input voltage		3 x 400 Vac	3 x 690 Vac	3 x 400 Vac
Frequency range		50 - 60 Hz	50 - 60 Hz	50 - 60 Hz
<b>Output</b>				
Rated output voltage		3 x 400 Vac	3 x 400 Vac	3 x 400 Vac
Tappings Output (±)		±5 %	±5 %	±5 %
Rated Power		25000 VA	25000 VA	30000 VA
Rated current		3 x 38.1 Aac (3 x 380 Vac) 3 x 36.1 Aac (3 x 400 Vac) 3 x 34.4 Aac (3 x 420 Vac)	3 x 38.1 Aac (3 x 380 Vac) 3 x 36.1 Aac (3 x 400 Vac) 3 x 34.4 Aac (3 x 420 Vac)	3 x 45.7 Aac (3 x 380 Vac) 3 x 43.3 Aac (3 x 400 Vac) 3 x 41.3 Aac (3 x 420 Vac)
Short circuit voltage		1.2 %	1.2 %	1.7 %
Power loss		604.0 W	624.0 W	770.0 W
Vector group		Dyn 5	Dyn 5	Dyn 5
Efficiency		97.5 %	97.5 %	97.5 %
<b>Approvals</b>				
Approvals		cURus	-	cURus
<b>Environment</b>				
Ambient temperature max.		50 °C	50 °C	50 °C
<b>Safety and protection</b>				
Type		Open type	Open type	Open type
Insulation class		VDE=F, UL=class 155	F (155°C)	VDE=F, UL=class 155
Protection index		IP 00	IP 00	IP 00
Safety class (prepared)		I	I	I
Short circuit strength		non-short-circuit proof	non-short-circuit proof	non-short-circuit proof
<b>Order numbers</b>				
Recommended enclosure		BGE-080	BGE-080	BGE-080
<b>Order Number</b>		<b>TT3 25-4-4</b>	<b>TT3 25-69-4</b>	<b>TT3 30-4-4</b>

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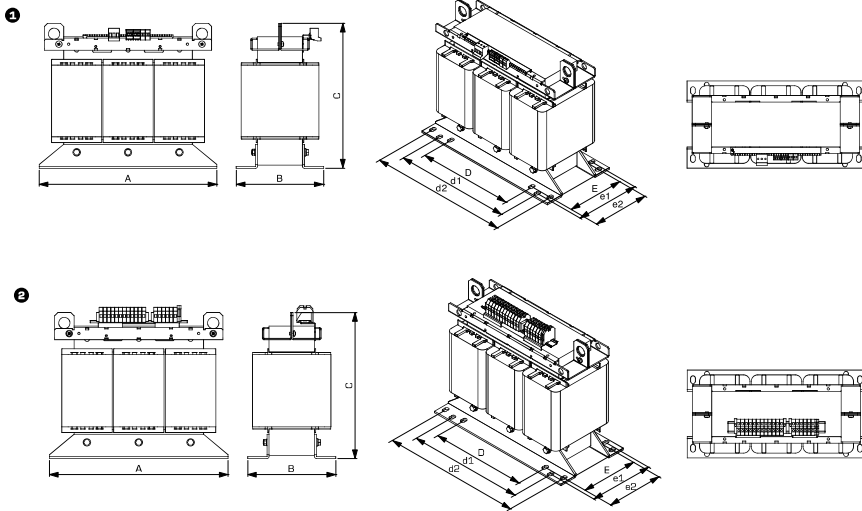


## Isolating transformer TT3



Mechanical data	Typ	Terminals	Fixing method	Fixing screws	Weight	Core type	Dimension picture (in mm)																	
								A	B	C	D	d1	d2	E	e1	e2	F	G	H	I	J	K	L	
								30																
	TT3 1-4-4	Screw-type terminal	Fixing rail	M6	15.00 kg	3UI 114/40	1	267	125	215	176	180	249	71	79	98	-	-	-	-	-	-	-	-
	TT3 2,5-4-4	Screw-type terminal	Fixing rail	M8	32.00 kg	3UI 132/72	1	315	165	250	200	215	292	102	124	126	-	-	-	-	-	-	-	-
	TT3 2,5-69-4	Screw-type terminal	Fixing rail	M8	29.00 kg	3UI 132/72	1	315	165	250	200	215	292	102	124	126	-	-	-	-	-	-	-	-
	TT3 5-4-4	Screw-type terminal	Fixing rail	M8	48.00 kg	3UI 180/63	1	410	155	355	264	310	388	125	125	115	-	-	-	-	-	-	-	-
	TT3 6,3-4-4	Screw-type terminal	Fixing rail	M8	55.00 kg	3UI 180/63	1	410	175	360	264	310	388	125	125	115	-	-	-	-	-	-	-	-
	TT3 8-4-4	Screw-type terminal	Fixing rail	M8	67.00 kg	3UI 180/78	1	410	180	360	264	310	388	140	140	130	-	-	-	-	-	-	-	-
	TT3 10-4-4	Screw-type terminal	Fixing rail	M10	87.00 kg	3UI 210/73	1	480	192	400	316	370	450	143	151	133	-	-	-	-	-	-	-	-
	TT3 10-69-4	Screw-type terminal	Fixing rail	M10	87.00 kg	3UI 240/140	1	480	192	400	316	370	450	143	151	133	-	-	-	-	-	-	-	-
	TT3 12,5-4-4	Screw-type terminal	Fixing rail	M10	115.00 kg	3UI 210/103	1	480	222	400	316	370	450	173	181	163	-	-	-	-	-	-	-	-
	TT3 16-4-4	Screw-type terminal	Fixing rail	M12	150.00 kg	3UI 240/110	1	550	267	510	356	430	516	184	210	182	-	-	-	-	-	-	-	-
	TT3 20-4-4	Screw-type terminal	Fixing rail	M12	180.00 kg	3UI 240/140	1	550	297	510	356	430	516	214	240	212	-	-	-	-	-	-	-	-
	TT3 20-69-4	Screw-type terminal	Fixing rail	M12	180.00 kg	3UI 240/140	1	550	297	510	356	430	516	214	240	212	-	-	-	-	-	-	-	-
	TT3 25-4-4	Screw-type terminal	Fixing rail	M12	205.00 kg	3UI 240/140	1	550	297	510	356	430	516	214	240	212	-	-	-	-	-	-	-	-
	TT3 25-69-4	Screw-type terminal	Fixing rail	M12	218.00 kg	3UI 240/140	1	550	300	510	356	430	516	214	240	212	-	-	-	-	-	-	-	-
	TT3 30-4-4	Screw-type terminal	Fixing rail	M12	230.00 kg	3UI 240/170	2	550	320	480	356	430	516	244	270	242	-	-	-	-	-	-	-	-

### Dimension pictures



# Isolating transformer

## TT3 Neo



1.1



### General Data

Rated input voltage 3 x 400 Vac
Rated output voltage 3 x 400 Vac
Rated power 10 kVA - 1 MVA
Insulation class F
Maximum ambient temperature 40 °C
Degree of protection IP 00

1.2

1.3

### Advantages

Safe galvanic isolation
Very good corrosion protection and low noise thanks to vacuum impregnation
Very good discharging of thermal losses by means of optimally arranged cooling channels within the coils
Integrated crane eyes
If desired, the transformers can be realised in individual voltages

2.1

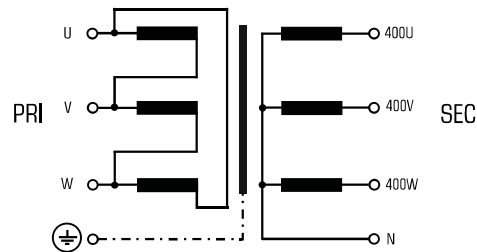
2.2

### Applications

Isolating transformer for the safe electrical isolation of the input and output sides. The transformer may be used to set up protective separation as a protective measure in accordance with VDE 0100.

3.1

### Sample application



3.2

3.3

### Standards

Isolating transformer  
to: VDE 0570 part 2-4, DIN EN 61558 part 1 with part 2-4

### Approvals

4.0

5.1

5.2



## Isolating transformer TT3 Neo



Type		TT3-A010-4040-0	TT3-A016-4040-0	TT3-A020-4040-0	TT3-A025-4040-0	TT3-A030-4040-0	TT3-A040-4040-0
Electrical data	<b>Input</b>						
	Rated input voltage	3 x 400 Vac	3 x 400 Vac	3 x 400 Vac	3 x 400 Vac	3 x 400 Vac	3 x 400 Vac
	Frequency range	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz
	<b>Output</b>						
	Rated output voltage	3 x 400 Vac	3 x 400 Vac	3 x 400 Vac	3 x 400 Vac	3 x 400 Vac	3 x 400 Vac
	Rated Power	10.000 VA	16.000 VA	20.000 VA	25.000 VA	30.000 VA	40.000 VA
	Output rated current	3 x 14,4 A	3 x 23,1 A	3 x 28,9 A	3 x 36,1 A	3 x 43,3 A	3 x 57,7 A
	Short circuit voltage	5,2 %	4,4 %	4 %	3,3 %	3,7 %	4,3 %
	Vector group	Dyn 5	Dyn 5	Dyn 5	Dyn 5	Dyn 5	Dyn 5
	<b>Environment</b>						
	Ambient temperature max.	40 °C	40 °C	40 °C	40 °C	40 °C	40 °C
	<b>Safety and protection</b>						
	Type	Open type	Open type	Open type	Open type	Open type	Open type
	Insulation class	F	F	F	F	F	F
	Protection index	IP 00	IP 00	IP 00	IP 00	IP 00	IP 00
Safety class (prepared)	I	I	I	I	I	I	
Short circuit strength	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	
<b>Order numbers</b>							
Recommended enclosure	BGE-065	BGE-080	BGE-080	BGE-080	BGE-080	BGE-085	
<b>Order Number</b>	<b>TT3-A010-4040-0</b>	<b>TT3-A016-4040-0</b>	<b>TT3-A020-4040-0</b>	<b>TT3-A025-4040-0</b>	<b>TT3-A030-4040-0</b>	<b>TT3-A040-4040-0</b>	



## Isolating transformer TT3 Neo



Type	TT3-A050-4040-0	TT3-A063-4040-0	TT3-A080-4040-0	TT3-A100-4040-0	TT3-A125-4040-0	TT3-A160-4040-0
<b>Electrical data</b>						
<b>Input</b>						
Rated input voltage	3 x 400 Vac	3 x 400 Vac	3 x 400 Vac	3 x 400 Vac	3 x 400 Vac	3 x 400 Vac
Frequency range	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz
<b>Output</b>						
Rated output voltage	3 x 400 Vac	3 x 400 Vac	3 x 400 Vac	3 x 400 Vac	3 x 400 Vac	3 x 400 Vac
Rated Power	50.000 VA	63.000 VA	80.000 VA	100.000 VA	125.000 VA	160.000 VA
Output rated current	3 x 72,1 A	3 x 90,9 A	3 x 115,4 A	3 x 144,3 A	3 x 180,4 A	3 x 230,9 A
Short circuit voltage	5,1 %	4,1 %	4,9 %	4,9 %	4,4 %	4,6 %
Vector group	Dyn 5	Dyn 5	Dyn 5	Dyn 5	Dyn 5	Dyn 5
<b>Environment</b>						
Ambient temperature max.	40 °C	40 °C	40 °C	40 °C	40 °C	40 °C
<b>Safety and protection</b>						
Type	Open type	Open type	Open type	Open type	Open type	Open type
Insulation class	F	F	F	F	F	F
Protection index	IP 00	IP 00	IP 00	IP 00	IP 00	IP 00
Safety class (prepared)	I	I	I	I	I	I
Short circuit strength	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof
<b>Order numbers</b>						
Recommended enclosure	BGE-085	BGE-085	BGE-115	BGE-115	BGE-115	BGE-130
<b>Order Number</b>	<b>TT3-A050-4040-0</b>	<b>TT3-A063-4040-0</b>	<b>TT3-A080-4040-0</b>	<b>TT3-A100-4040-0</b>	<b>TT3-A125-4040-0</b>	<b>TT3-A160-4040-0</b>

1.1

1.2

1.3

2.1

2.2

3.1

3.2

3.3

4.0

5.1

5.2





## Isolating transformer TT3 Neo



Type	TT3-A200-4040-0	TT3-A250-4040-0	TT3-A315-4040-0	TT3-A400-4040-0	TT3-A500-4040-0	TT3-A630-4040-0
<b>Electrical data</b>						
<b>Input</b>						
Rated input voltage	3 x 400 Vac	3 x 400 Vac	3 x 400 Vac	3 x 400 Vac	3 x 400 Vac	3 x 400 Vac
Frequency range	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz
<b>Output</b>						
Rated output voltage	3 x 400 Vac	3 x 400 Vac	3 x 400 Vac	3 x 400 Vac	3 x 400 Vac	3 x 400 Vac
Rated Power	200.000 VA	250.000 VA	315.000 VA	400.000 VA	500.000 VA	630.000 VA
Output rated current	3 x 288.6 A	3 x 360.7 A	3 x 454.5 A	3 x 577.2 A	3 x 721.5 A	3 x 909.1 A
Short circuit voltage	4,1 %	3,6 %	3,2 %	3,2 %	3,3 %	3 %
Vector group	Dyn 5	Dyn 5	Dyn 5	Dyn 5	Dyn 5	Dyn 5
<b>Environment</b>						
Ambient temperature max.	40 °C	40 °C	40 °C	40 °C	40 °C	40 °C
<b>Safety and protection</b>						
Type	Open type	Open type	Open type	Open type	Open type	Open type
Insulation class	F	F	F	F	F	F
Protection index	IP 00	IP 00	IP 00	IP 00	IP 00	IP 00
Safety class (prepared)	I	I	I	I	I	I
Short circuit strength	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof
<b>Order numbers</b>						
Recommended enclosure	BGE-130	BGE-130	BGE-130	BGE-150	BGE-150	BGE-150
<b>Order Number</b>	<b>TT3-A200-4040-0</b>	<b>TT3-A250-4040-0</b>	<b>TT3-A315-4040-0</b>	<b>TT3-A400-4040-0</b>	<b>TT3-A500-4040-0</b>	<b>TT3-A630-4040-0</b>



## Isolating transformer TT3 Neo



1.1

		TT3-A800-4040-0	TT3C1000-4040-0
Electrical data	Type	TT3-A800-4040-0	TT3C1000-4040-0
	Input		
	Rated input voltage	3 x 400 Vac	3 x 400 Vac
	Frequency range	50 - 60 Hz	50 - 60 Hz
	Output		
	Rated output voltage	3 x 400 Vac	3 x 400 Vac
	Rated Power	800.000 VA	1 MVA
	Output rated current	3 x 1154 A	3 x 1443 A
	Short circuit voltage	2.4 %	3 %
	Vector group	Dyn 5	Dyn 5
Environment			
Ambient temperature max.	40 °C	40 °C	
Safety and protection			
Type	Open type	Open type	
Insulation class	F	F	
Protection index	IP 00	IP 00	
Safety class (prepared)	I	I	
Short circuit strength	non-short-circuit proof	non-short-circuit proof	
Order numbers			
Recommended enclosure			
<b>Order Number</b>	<b>TT3-A800-4040-0</b>	<b>TT3C1000-4040-0</b>	

1.2

1.3

2.1

2.2

3.1

3.2

3.3

4.0

5.1

5.2

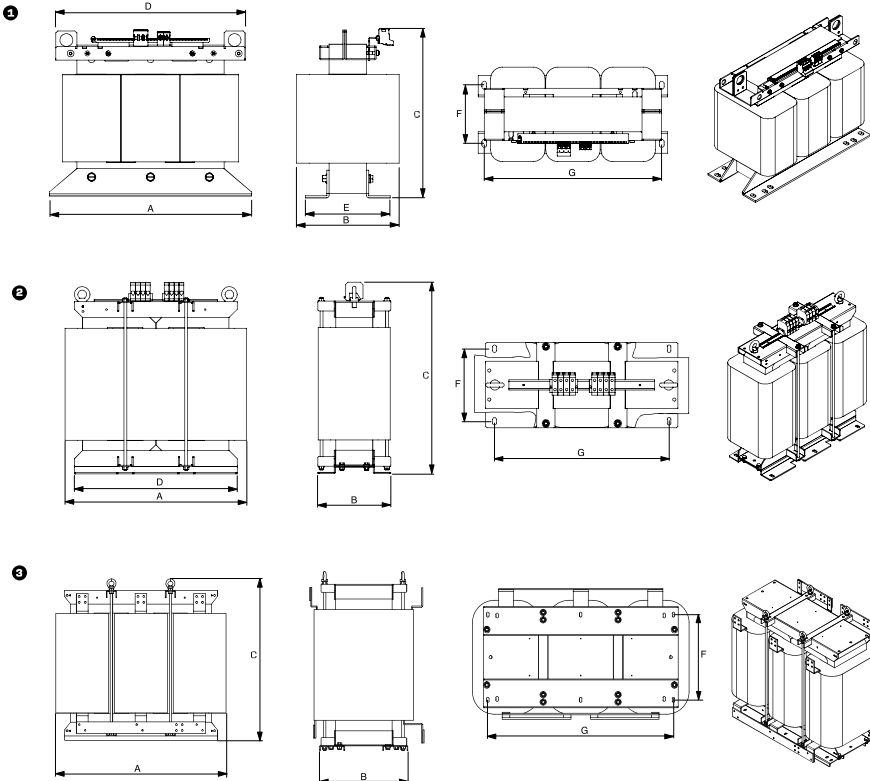


# Isolating transformer TT3 Neo



Typ	Terminals	Fixing method	Weight	Cone type	Dimension picture (in mm)	Dimensions (mm)						
						A	B	C	D	E	F	G
TT3-A010-4040-0	Screw-type terminal input 10 mm <sup>2</sup> , output 4 mm <sup>2</sup>	Fixing rail	74.00 kg	3UI 210/88	1	480	240	400	450	198	148	450
TT3-A016-4040-0	Screw-type terminal 10 mm <sup>2</sup>	Fixing rail	119.00 kg	3UI 240/110	1	552	270	460	-	-	-	-
TT3-A020-4040-0	Screw-type terminal 10 mm <sup>2</sup>	Fixing rail	122.00 kg	3UI 240/110	1	552	300	460	525	245	182	516
TT3-A025-4040-0	Screw-type terminal 10 mm <sup>2</sup>	Fixing rail	154.00 kg	3UI 240/140	1	552	300	460	-	-	-	-
TT3-A030-4040-0	Screw-type terminal 10 mm <sup>2</sup>	Fixing rail	160.00 kg	3UI 240/140	1	552	300	460	-	-	-	-
TT3-A040-4040-0	Screw-type terminal 16 mm <sup>2</sup>	Fixing rail	161.00 kg	3UC 454/110	3	550	300	550	-	-	-	-
TT3-A050-4040-0	Screw-type terminal 35 mm <sup>2</sup>	Fixing rail	192.00 kg	3UC 504/125	3	620	350	570	-	-	-	-
TT3-A063-4040-0	Screw-type terminal 35 mm <sup>2</sup>	Fixing rail	267.00 kg	3UC 504/175	3	620	380	570	-	-	-	-
TT3-A080-4040-0	Screw-type terminal 35 mm <sup>2</sup>	Fixing rail	300.00 kg	3UC 594/125	3	740	340	790	-	-	-	-
TT3-A100-4040-0	Screw-type terminal 70 mm <sup>2</sup>	Fixing rail	359.00 kg	3UC 594/150	3	740	370	790	661	-	250	600
TT3-A125-4040-0	Screw-type terminal 70 mm <sup>2</sup>	Fixing rail	410.00 kg	3UC 594/175	3	740	400	805	-	-	-	-
TT3-A160-4040-0	Screw-type terminal 150 mm <sup>2</sup>	Fixing rail	455.00 kg	3UC 719/125	3	890	360	985	-	-	-	-
TT3-A200-4040-0	Screw-type terminal 240 mm <sup>2</sup>	Fixing rail	541.00 kg	3UC 719/150	3	890	470	920	-	-	-	-
TT3-A250-4040-0	Ø11 mm busbar hole	Fixing rail	710.00 kg	3UC 814/150	3	1000	530	1040	-	-	-	-
TT3-A315-4040-0	Ø11 mm busbar hole	Fixing rail	825.00 kg	3UC 814/175	3	1000	555	1040	-	-	-	-
TT3-A400-4040-0	Ø11 mm busbar hole	Fixing rail	1068.00 kg	3UC 864/200	3	1075	580	1100	-	-	-	-
TT3-A500-4040-0	Ø13 mm busbar hole	Fixing rail	1353.00 kg	3UC 864/250	3	1075	630	1100	-	-	-	-
TT3-A630-4040-0	2x Ø13 mm busbar hole	Fixing rail	1616.00 kg	3UC 864/300	3	1075	710	1100	-	-	-	-
TT3-A800-4040-0	4x Ø13 mm busbar hole	Fixing rail	2100.00 kg	3UC 864/300	5	1170	545	1150	-	-	460	1000
TT3C1000-4040-0	4x Ø13 mm busbar hole	Fixing rail	2700.00 kg	3UC 864/300	5	1170	545	1150	-	-	460	1000

## Dimension pictures



# Isolating transformer for supply of medical rooms

## TTML



1.1



### General Data

Rated input voltage 230 Vac
Rated output voltage 115 and 230 Vac
Rated power 3150 - 8000 VA
Insulation class B
Maximum ambient temperature 40 °C
Efficiency up to 97 %
Degree of protection IP 00

1.2

1.3

### Advantages

Safe galvanic isolation
PTC resistor built into every coil to set up an external monitoring unit for protection against overload
Very good switch-on behaviour thanks to reduced starting currents
Very high efficiency
Very low short circuit voltage
Very low idle current
Very good corrosion protection and low noise thanks to BLOCKIMPEX vacuum impregnation
Contact protected screw connection terminals complying with UVV BGV A3
Low height

2.1

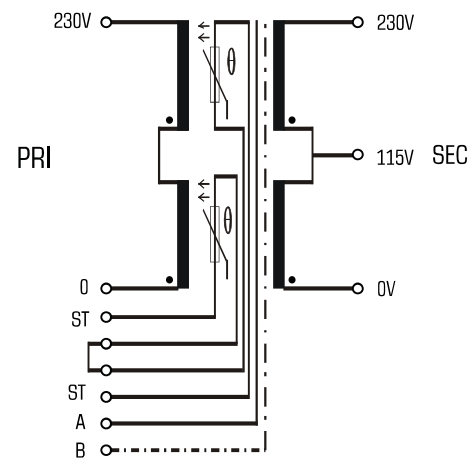
2.2

### Applications

Isolating transformer for supply of medical rooms of the User group 2.

3.1

### Sample application



3.2

3.3

4.0

### Standards



Isolating transformer for supply of medical rooms  
to: VDE 0570 Part 2-15, VDE 0100 Part 710, DIN EN 61558-2-15,  
EN 61558-2-15

### Approvals



5.1

5.2



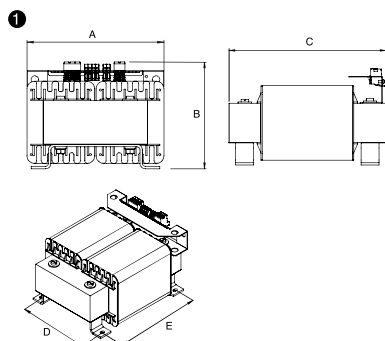
## Isolating transformer for supply of medical rooms TTML



Typ	TTML 3150/230	TTML 4000/230	TTML 5000/230	TTML 6300/230	TTML 8000/230
<b>Electrical data</b>					
<b>Input</b>					
Rated input voltage	230 Vac	230 Vac	230 Vac	230 Vac	230 Vac
Low-inrush current	≤12 x INom	≤12 x INom	≤12 x INom	≤12 x INom	≤12 x INom
Frequency range	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz
<b>Output</b>					
Rated output voltage	115 and 230 Vac	115 and 230 Vac	115 and 230 Vac	115 and 230 Vac	115 and 230 Vac
Rated Power	3150 VA	4000 VA	5000 VA	6300 VA	8000 VA
Short circuit voltage	≤3 %	≤3 %	≤3 %	≤3 %	≤3 %
No-load current	≤3 %	≤3 %	≤3 %	≤3 %	≤3 %
Efficiency	97.0 %	97.0 %	97.0 %	97.0 %	97.0 %
<b>Environment</b>					
Ambient temperature max.	40 °C	40 °C	40 °C	40 °C	40 °C
<b>Safety and protection</b>					
Type	Open type	Open type	Open type	Open type	Open type
Insulation class	B	B	B	B	B
Protection index	IP 00	IP 00	IP 00	IP 00	IP 00
Safety class (prepared)	II	II	II	II	II
Short circuit strength	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof
Test voltage	3.75 kVac	3.75 kVac	3.75 kVac	3.75 kVac	3.75 kVac
<b>Order numbers</b>					
<b>Order Number</b>	<b>TTML 3150/230</b>	<b>TTML 4000/230</b>	<b>TTML 5000/230</b>	<b>TTML 6300/230</b>	<b>TTML 8000/230</b>

Terminal and mounting	TTML 3150/230	TTML 4000/230	TTML 5000/230	TTML 6300/230	TTML 8000/230
<b>Mechanical data</b>					
<b>Terminal and mounting</b>					
Terminals	Screw-type terminal 10 mm <sup>2</sup> , Screw-type terminal 4 mm <sup>2</sup>	Screw-type terminal 10 mm <sup>2</sup> , Screw-type terminal 4 mm <sup>2</sup>	Screw-type terminal 10 mm <sup>2</sup> , Screw-type terminal 4 mm <sup>2</sup>	Screw-type terminal 10 mm <sup>2</sup> , Screw-type terminal 4 mm <sup>2</sup>	Screw-type terminal 10 mm <sup>2</sup> , Screw-type terminal 4 mm <sup>2</sup>
Fixing method	Fixing rail	Fixing rail	Fixing rail	Fixing rail	Fixing rail
Fixing screws	M8	M8	M8	M8	M8
<b>Measures and weights</b>					
Weight	50.00 kg	55.00 kg	60.00 kg	67.00 kg	75.00 kg
Dimension picture (in mm)	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>
A	245	275	275	275	275
B	200	200	210	225	240
C	300	350	350	350	350
D	204	234	234	234	234
E	240	280	280	280	280

## Dimension pictures



# Isolating transformer for supply of medical rooms TTMS



1.1



## General Data

Rated input voltage 230 Vac
Rated output voltage 115 and 230 Vac
Rated power 3150 - 8000 VA
Insulation class B
Maximum ambient temperature 40 °C
Efficiency up to 97 %
Degree of protection IP 00
Optionally adapted package for higher degrees of protection

1.2

1.3

## Advantages

Safe galvanic isolation
PTC resistor built into every coil to set up an external monitoring unit for protection against overload
Very good switch-on behaviour thanks to reduced starting currents
High efficiency
Low short-circuit voltage
Very low idle current
Very good corrosion protection and low noise thanks to vacuum impregnation
Contact protected screw connection terminals complying with UVV BGV A3
Simple mounting thanks to robust metal fixing rail with 8 oval slots

2.1

2.2

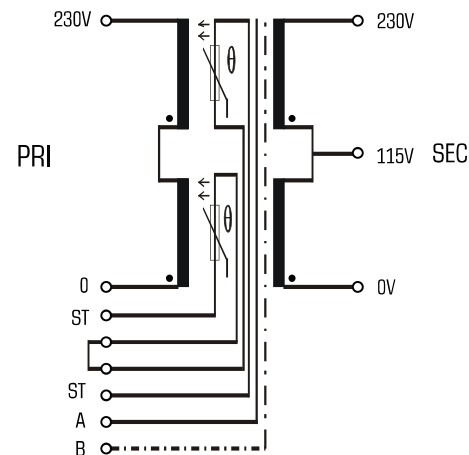
3.1

## Applications

Isolating transformer for supply of medical rooms of the user group 2.

3.2

## Sample application



3.3

4.0

5.1

## Standards



Isolating transformer for supply of medical rooms  
to: VDE 0570 Part 2-15, VDE 0100 Part 710, DIN EN 61558-2-15,  
EN 61558-2-15

## Approvals



5.2



## Isolating transformer for supply of medical rooms

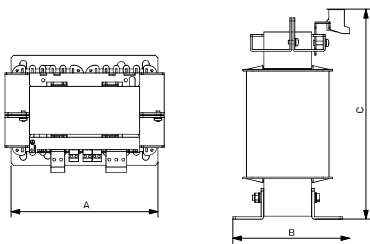
### TTMS



Typ	TTMS 3150/230	TTMS 4000/230	TTMS 5000/230	TTMS 6300/230	TTMS 8000/230
<b>Electrical data</b>					
<b>Input</b>					
Rated input voltage	230 Vac	230 Vac	230 Vac	230 Vac	230 Vac
Low-inrush current	≤12 x INom	≤12 x INom	≤12 x INom	≤12 x INom	≤12 x INom
Frequency range	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz
<b>Output</b>					
Rated output voltage	115/230 Vac	115/230 Vac	115/230 Vac	115/230 Vac	115/230 Vac
Rated Power	3.150 VA	4.000 VA	5.000 VA	6.300 VA	8.000 VA
Short circuit voltage	≤3 %	≤3 %	≤3 %	≤3 %	≤3 %
No-load current	≤3 %	≤3 %	≤3 %	≤3 %	≤3 %
Efficiency	97.0 %	97.0 %	97.0 %	97.0 %	97.0 %
<b>Environment</b>					
Ambient temperature max.	40 °C	40 °C	40 °C	40 °C	40 °C
<b>Safety and protection</b>					
Type	Open type	Open type	Open type	Open type	Open type
Insulation class	B	B	B	B	B
Protection index	IP 00	IP 00	IP 00	IP 00	IP 00
Safety class (prepared)	II	II	II	II	II
Short circuit strength	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof
Test voltage	3.75 kVac	3.75 kVac	3.75 kVac	3.75 kVac	3.75 kVac
<b>Order numbers</b>					
<b>Order Number</b>	<b>TTMS 3150/230</b>	<b>TTMS 4000/230</b>	<b>TTMS 5000/230</b>	<b>TTMS 6300/230</b>	<b>TTMS 8000/230</b>

30	Terminal and mounting	TTMS 3150/230	TTMS 4000/230	TTMS 5000/230	TTMS 6300/230	TTMS 8000/230
<b>Mechanical data</b>	Terminals	Screw-type terminal 10 mm <sup>2</sup> , Screw-type terminal 4 mm <sup>2</sup>	Screw-type terminal 10 mm <sup>2</sup> , Screw-type terminal 4 mm <sup>2</sup>	Screw-type terminal 10 mm <sup>2</sup> , Screw-type terminal 4 mm <sup>2</sup>	Screw-type terminal 10 mm <sup>2</sup> , Screw-type terminal 4 mm <sup>2</sup>	Screw-type terminal 10 mm <sup>2</sup> , Screw-type terminal 4 mm <sup>2</sup>
	Fixing screws	M8	M8	M8	M8	M8
	Fixing method	Fixing rail	Fixing rail	Fixing rail	Fixing rail	Fixing rail
<b>Measures and weights</b>						
Weight	50.00 kg	55.00 kg	60.00 kg	67.00 kg	75.00 kg	
Dimension picture (in mm)	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	
A	260	310	310	310	310	
B	195	190	200	215	230	
C	345	395	395	395	395	

## Dimension pictures



# Isolating transformer with integrated insulation monitoring

**TTIT**



## General Data

Rated input voltage 230 Vac
Rated output voltage 230 Vac
Rated power 2500 VA
Insulation class B
Maximum ambient temperature 40 °C
Efficiency up to 98 %
Degree of protection IP 54

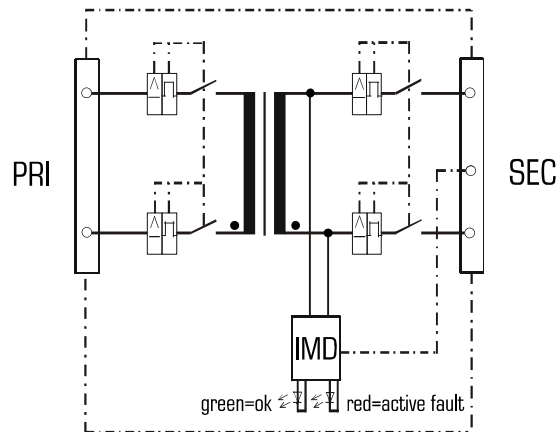
## Advantages

Safe galvanic isolation
Visual status indicator
Integrated short circuit and overload protection
Very high efficiency
Very low idle current
High insulation strength, very good moisture protection and low noise thanks to XtraDenseFill resin encapsulation
High degree of protection
Carrying handles, mains connecting lead and socket for mobile use

## Applications

Isolating transformer for mobile use for the safe electrical isolation of the input and output sides. The transformer can be used to build an IT network.

## Sample application



## Standards



Isolating transformer  
to: VDE 0570 Part 2-4, DIN EN 61558-2-4, EN 61558-2-4, IEC 61558-2-4

## Approvals







## Isolating transformer with integrated insulation monitoring

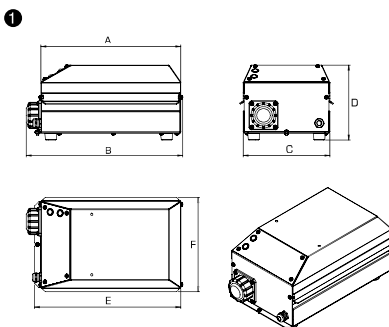
### TTIT



Electrical data	Typ	TTIT 2500
	Input	
	Rated input voltage	230 Vac
	Low-inrush current	315 A
	Frequency range	50 - 60 Hz
	Output	
	Rated output voltage	230 Vac
	Rated Power	2.500 VA
	Short circuit voltage	2.7 %
	No-load current	0.6 Adc
	Efficiency	98.0 %
	Environment	
	Ambient temperature max.	40 °C
	Safety and protection	
	Short circuit strength	short-circuit proof
	Insulation class	B
	Type	Encapsulated in metal housing
	Protection index	IP 54
	Safety class (prepared)	II
Test voltage	3.6 kVac	
Order numbers		
Order Number	TTIT 2500	

Mechanical data	Terminal and mounting	
	Terminals Input	Mains connection cable with protected contact plug
	Terminals Output	Protective contact socket
	Measures and weights	
	Weight	30.00 kg
	Dimension (W x H x D)	250 x 180 x 410 mm
	Cu-Weight	7.50 kg
	Dimension picture (in mm)	
	A	363
	B	405
	C	225
	D	195
	E	379
F	245	

## Dimension pictures



# Interference suppressing transformer STT



1.1



## General Data

Rated input voltage 230 Vac
Rated output voltage 230 Vac
Rated power 100 - 400 VA
Insulation class A
Maximum ambient temperature 40 °C
Efficiency up to 91 %
Degree of protection IP 44

1.2

1.3

## Advantages

Good attenuation against radio frequency interference and pulses
Low magnetic leakage field
Integrated short circuit and overload protection
Very good moisture protection and low noise thanks to resin encapsulation
High degree of protection
Carrying handle, mains connecting lead and socket for mobile use

2.1

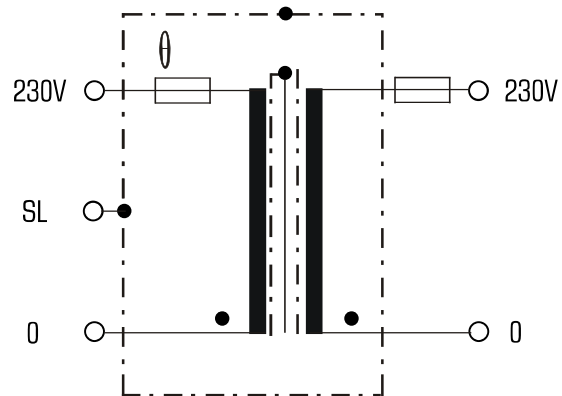
2.2

## Applications

Mains transformer complying with EN 61558-2-4 for portable application to minimize mains supply faults such as disturbing pulses and electrical noise.

3.1

## Sample application



3.2

3.3

4.0

## Standards

Mains transformer  
to: VDE 0570 Teil 2-4, DIN EN 61558-2-4, EN 61558-2-4, IEC 61558-2-4

## Approvals **EAC**

5.1

5.2



## Interference suppressing transformer STT



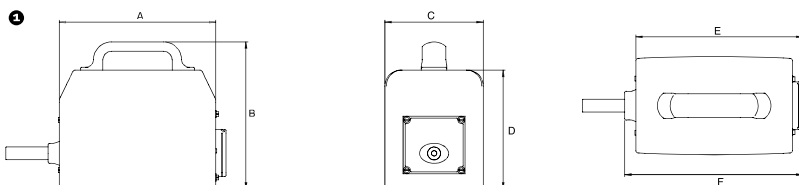
Typ	STT 100	STT 200	STT 400
<b>Electrical data</b>			
<b>Input</b>			
Rated input voltage	230 Vac	230 Vac	230 Vac
Frequency range	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz
<b>Output</b>			
Rated output voltage	230 Vac	230 Vac	230 Vac
Rated Power	100 VA	200 VA	400 VA
No-load voltage (app. x factor)	1.06	1.07	1.10
Leakage cur. (PRI-PE)	43 µA (typ.)	57 µA (typ.)	85 µA (typ.)
Leakage cur. (PRI-SEC)	16 µA (typ.)	26 µA (typ.)	41 µA (typ.)
Efficiency	89.0 %	90.0 %	92.0 %
<b>Environment</b>			
Ambient temperature max.	40 °C	40 °C	40 °C
<b>Safety and protection</b>			
Type	Enclosed	Enclosed	Enclosed
Insulation class	A	A	A
Protection index	IP 44	IP 44	IP 44
Safety class	I	I	I
Insulation res. (PRI-PE)	>10 GΩ (typ.)	>10 GΩ (typ.)	>10 GΩ (typ.)
Insulation res. (PRI-SEC)	>10 GΩ (typ.)	>10 GΩ (typ.)	>10 GΩ (typ.)
Coupling cap. (PRI-SEC)	172 pF (typ.)	262 pF (typ.)	390 pF (typ.)
Magn. 50 Hz stray f. (Encl.)	0.33 mT (typ.)	0.30 mT (typ.)	0.85 mT (typ.)
Short circuit strength	non-inherently short-circuit proof	non-inherently short-circuit proof	non-inherently short-circuit proof
Test voltage	4000 Vac, 50 Hz	4000 Vac, 50 Hz	4000 Vac, 50 Hz

Order numbers

Order Number	STT 100	STT 200	STT 400
--------------	---------	---------	---------

Terminal and mounting	STT 100	STT 200	STT 400
Terminals Input	Mains connecting cable with safety plug	Mains connecting cable with safety plug	Mains connecting cable with safety plug
Terminals Output	Protective contact socket	Protective contact socket	Protective contact socket
<b>Measures and weights</b>			
Weight	5.10 kg	8.00 kg	12.70 kg
Dimension (W x H x D)	105 x 125 x 170 mm	120 x 150 x 200 mm	120 x 175 x 300 mm
Dimension picture (in mm)	<b>1</b>	<b>1</b>	<b>1</b>
A	170	197	295
B	165	190	220
C	105	125	110
D	130	150	175
E	180	210	310
F	235	225	365

### Dimension pictures



# Interference suppressing isolating transformer

## SMTT



1.1



### General Data

Rated input voltage 230 Vac
Rated output voltage 230 Vac
Rated power 150 VA
Insulation class A
Maximum ambient temperature 40 °C
Efficiency up to 90 %
Degree of protection IP 40

1.2

1.3

### Advantages

Safe galvanic isolation
Low leakage current and high insulation resistance
Good attenuation against radio frequency interference and pulses
Low magnetic 50 Hz leakage field
Integrated short-circuit and overload protection
Very good moisture protection and low noise thanks to XtraDenseFill resin encapsulation
High degree of protection
Carry handle, mains cable with safety plug, shockproof socket for portable application

2.1

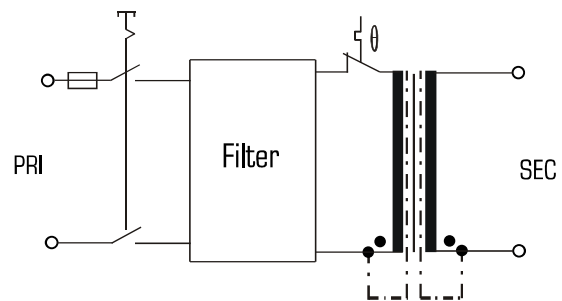
2.2

### Applications

Isolating transformer for mobile use to minimize mains supply faults such as disturbing pulses and electrical noise.

3.1

### Sample application



3.2

3.3

### Standards

Isolating transformer  
to: VDE 0570 Part 2-4, DIN EN 61558-2-4, EN 61558-2-4, IEC 61558-2-4

### Approvals **ERC**

4.0

5.1

5.2



## Interference suppressing isolating transformer

### SMTT



Electrical data	Type		SMTT 150
	Input		
	Rated input voltage	230 Vac	
	Frequency range	50 - 60 Hz	
	Active-Power input	typ. 6,5 W (running at no load)	
	Output		
	Rated output voltage	230 Vac	
	Rated Power	150 VA	
	Leakage cur. (PRI-PE)	9 µA (typ.)	
	Leakage cur. (PRI-SEC)	8 µA (typ.)	
	Efficiency	90.0 %	
	Environment		
	Ambient temperature max.	40 °C	
	Safety and protection		
	Type	Resin encapsulated transformer	
	Insulation class	A	
	Protection index	IP 40	
	Safety class	II	
	Coupling cap. (PRI-SEC)	90 pF (typ.)	
	Magn. 50 Hz stray f. (Encl.)	9.00 mT (typ.)	
	Short circuit strength	non-inherently short-circuit proof	
Test voltage	5000 Vac, 50 Hz		
Order numbers			
Order Number	SMTT 150		



## Interference suppressing isolating transformer **SMTT**



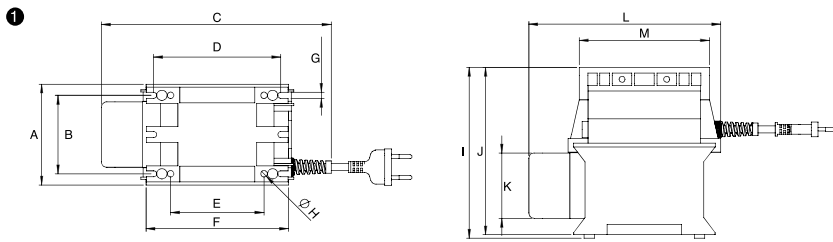
1.1

Mechanical data	Typ	Terminals Input	Terminals Output	Weight	Dimension picture (in mm)													
						A	B	C	D	E	F	G	H	I	J	K	L	M
SMTT 150		Mains connecting cable with safety plug	Protective contact socket	3.50 kg	<b>1</b>	93.5	72.5	215	117	86	131	5.5	6	160	155	60.5	180	120

1.2

1.3

### Dimension pictures



2.1

2.2

3.1

3.2

3.3

4.0

5.1

5.2

# OVERVIEW

## SAFETY ISOLATING TRANSFORMERS

### Safety isolating transformers

Type	Features	Rated input voltage	Rated output voltage	Rated output power									
				7,5 VA	10 VA	13 VA	18 VA	25 VA	28 VA	40 VA	50 VA	63 VA	
EL	Free wiring	230 Vac	2 x 6 Vac	■		■	■		■		■		
			2 x 9 Vac	■		■	■		■		■		
			2 x 12 Vac	■		■	■		■		■		
			2 x 15 Vac	■		■	■		■		■		
			2 x 18 Vac	■		■	■		■		■		
			2 x 24 Vac										
ACT	In housing, DIN rail mounting	230 Vac	24 Vac		■			■				■	
SIM	In housing, IP 20	230 Vac	2 x 12 Vac									■	
EVKE	Resin encapsulation, IP 67/68	230 Vac	24 Vac					■		■		■	
ETKEC	Resin encapsulation, for mobile use, CEE socket outlet, IP 44	230 Vac	24 Vac										

### Safety isolating transformers for halogen lamps

Type	Features	Rated input voltage	Rated output voltage	Rated output power						Page
				60 W	105 W	150 W	200 W	250 W	300 W	
HIT	Screw-type terminals, resin encapsulation	230 Vac	11,3 - 11,5 Vac	■	■	■	■	■	■	182

1.1

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1.3

2.1

2.2

3.1

3.2

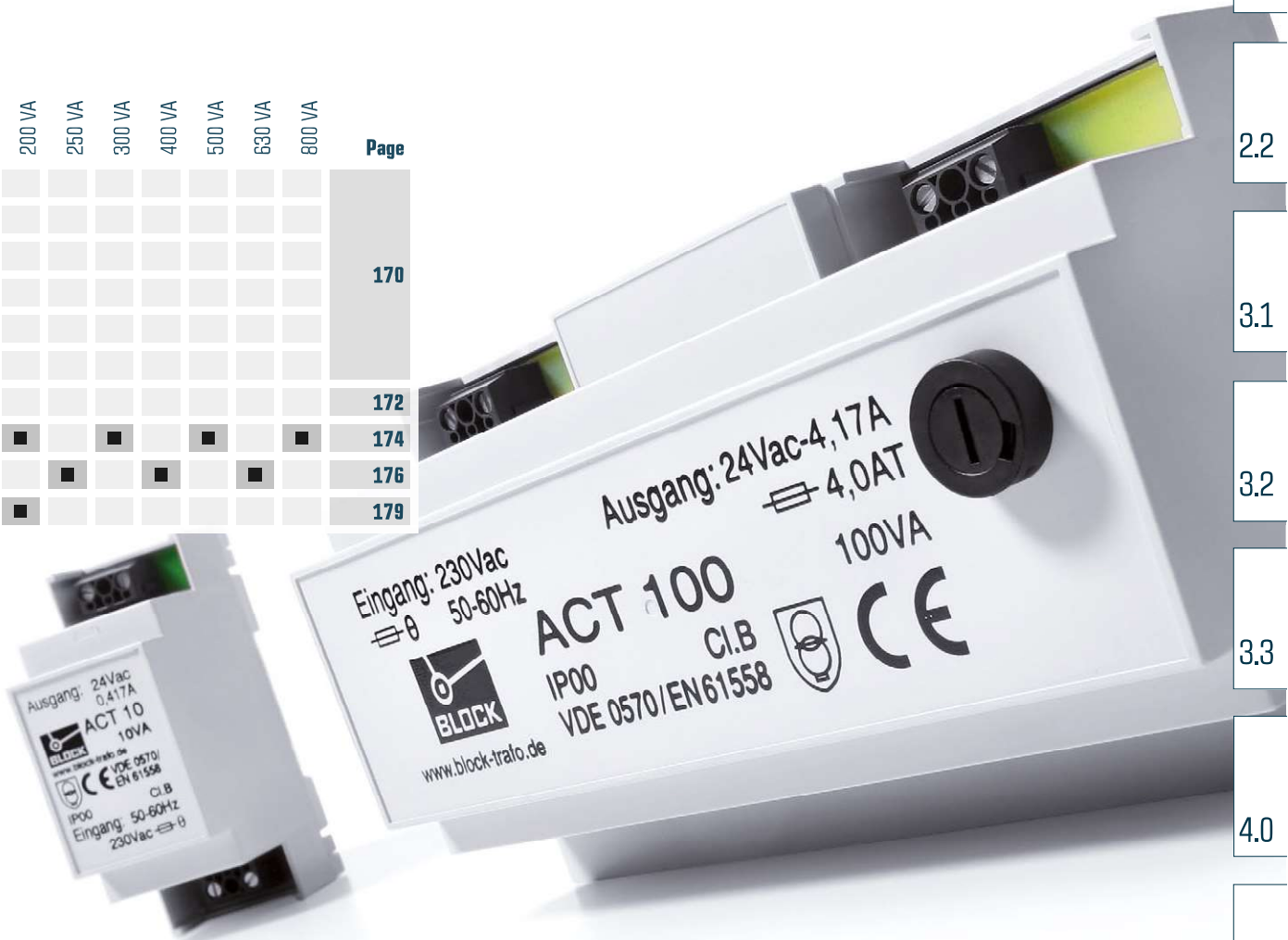
3.3

4.0

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5.2

100 VA	160 VA	200 VA	250 VA	300 VA	400 VA	500 VA	630 VA	800 VA	Page
■									170
■									
■									
■									
■									172
■		■		■		■		■	174
■	■		■		■		■		176
■		■							179





## Safety isolating transformer EL



### General Data

Rated input voltage 230 Vac
Rated output voltage 2 x 6 - 2 x 18 Vac
Rated power 7,5 - 100 VA
Insulation class E
Maximum ambient temperature 40 °C
Efficiency up to 88 %
Degree of protection IP 00

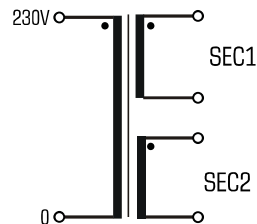
### Advantages

Solder tab for free wiring
Very good corrosion protection and low noise thanks to vacuum impregnation
Simple mounting thanks to robust metal footplate with oval slots

### Applications

Safety isolating transformer for the safe electrical isolation of the input and output sides. The transformer is suitable for creating SELV and PELV circuits because of the limit on the output voltage.

### Sample application



### Standards



Safety isolating transformer  
to: VDE 0570 Part 2-6, DIN EN 61558-2-6, EN 61558-2-6, IEC 61558-2-6

### Approvals





## Safety isolating transformer EL



1.1

Typ	EL 7,5/..	EL 13/..	EL 18/..	EL 28/..	EL 50/..	EL 100/..
<b>Electrical data</b>						
<b>Input</b>						
Rated input voltage	230 Vac	230 Vac	230 Vac	230 Vac	230 Vac	230 Vac
Frequency range	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz
<b>Output</b>						
<b>Rated output voltage: Order no.</b>	2x6 Vac: EL 7,5/6 2x9 Vac: EL 7,5/9 2x12 Vac: EL 7,5/12 2x15 Vac: EL 7,5/15 2x18 Vac: EL 7,5/18	2x6 Vac: EL 13/6 2x9 Vac: EL 13/9 2x12 Vac: EL 13/12 2x15 Vac: EL 13/15 2x18 Vac: EL 13/18	2x6 Vac: EL 18/6 2x9 Vac: EL 18/9 2x12 Vac: EL 18/12 2x15 Vac: EL 18/15 2x18 Vac: EL 18/18	2x6 Vac: EL 28/6 2x9 Vac: EL 28/9 2x12 Vac: EL 28/12 2x15 Vac: EL 28/15 2x18 Vac: EL 28/18	2x6 Vac: EL 50/6 2x9 Vac: EL 50/9 2x12 Vac: EL 50/12 2x15 Vac: EL 50/15 2x18 Vac: EL 50/18	2x9 Vac: EL 100/9 2x12 Vac: EL 100/12 2x15 Vac: EL 100/15 2x18 Vac: EL 100/18 2x24 Vac: EL 100/24
Rated Power	7,5 VA	13 VA	18 VA	28 VA	50 VA	100 VA
No-load voltage (app. x factor)	1.38	1.28	1.18	1.16	1.15	1.11
No-load loss (typ.)	2.00 W	2.20 W	2.70 W	3.10 W	3.50 W	4.70 W
Efficiency	62.0 %	67.0 %	72.0 %	77.0 %	81.0 %	88.0 %
<b>Environment</b>						
Ambient temperature max.	40 °C	40 °C	40 °C	40 °C	40 °C	40 °C
<b>Safety and protection</b>						
Type	Open type	Open type	Open type	Open type	Open type	Open type
Insulation class	E	E	E	E	E	E
Protection index	IP 00	IP 00	IP 00	IP 00	IP 00	IP 00
Safety class (prepared)	II	II	II	II	II	II
Short circuit strength	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof
Overload protection	Typ PTC 880 (Accessory - available on request)	Typ PTC 872 (Accessory - available on request)	Typ PTC 860 (Accessory - available on request)	Typ PTC 850 (Accessory - available on request)	Typ PTC 840 (Accessory - available on request)	Typ PTC 810 (Accessory - available on request)
Test voltage	4000 Vac, 50 Hz	4000 Vac, 50 Hz	4000 Vac, 50 Hz	4000 Vac, 50 Hz	4000 Vac, 50 Hz	4000 Vac, 50 Hz
<b>Order numbers</b>						
<b>Order Number</b>	<b>see rated output voltage</b>	<b>see rated output voltage</b>	<b>see rated output voltage</b>	<b>see rated output voltage</b>	<b>see rated output voltage</b>	<b>see rated output voltage</b>

1.2

1.3

2.1

2.2

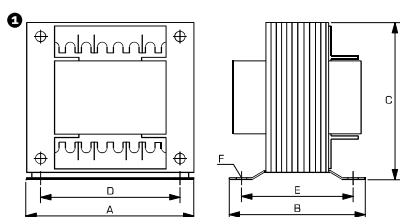
3.1

Order Number	see rated output voltage	see rated output voltage	see rated output voltage	see rated output voltage	see rated output voltage	see rated output voltage
<b>Mechanical data</b>						
<b>Terminal and mounting</b>						
Terminals	Solder tab for free wiring	Solder tab for free wiring	Solder tab for free wiring	Solder tab for free wiring	Solder tab for free wiring	Solder tab for free wiring
Fixing method	Base plate	Base plate	Base plate	Base plate	Base plate	Base plate
Fixing screws	M3	M3	M3	M3	M4	M4
<b>Measures and weights</b>						
Weight	0.26 kg	0.36 kg	0.50 kg	0.68 kg	0.97 kg	1.96 kg
Core type	EI 48/16,5	EI 54/18,8	EI 60/21	EI 60/30	EI 75/26,5	EI 84/43,5
Dimension picture (in mm)	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>
A	48	54	60	60	75	84
B	39	40	47	56	59	80
C	45	50	55	55	67	76
D	40	45	50	50	62,5	64
E	32	30	32	42	45	63,5

3.2

3.3

### Dimension pictures



4.0

5.1

5.2

## Safety isolating transformer ACT



### General Data

Rated input voltage 230 Vac
Rated output voltage 24 Vac
Rated power 10 - 100 VA
Insulation class B
Maximum ambient temperature 25 °C
Degree of protection IP 00

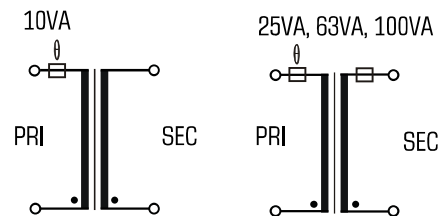
### Advantages

- Integrated short-circuit and overload protection thanks to temperature fuse in the input and fuse in the output (ACT 10 only temperature fuse)
- Permanent corrosion protection, high insulation value and maximum electrical reliability thanks to XtraDenseFill resin encapsulation
- Robust plastic housing for rail mounting, e.g. in consumer units or meter mounting boards

### Applications

Safety isolating transformer for the safe electrical isolation of the input and output sides. The transformer is suitable for creating SELV and PELV circuits because of the limit on the output voltage.

### Sample application



### Standards

Safety isolating transformer  
to: VDE 0570 Part 2-6, DIN EN 61558-2-6, EN 61558-2-6, IEC 61558-2-6

### Approvals



## Safety isolating transformer **ACT**



1.1

Type	ACT 10	ACT 25	ACT 63	ACT 100
<b>Electrical data</b>				
<b>Input</b>				
Rated input voltage	230 Vac	230 Vac	230 Vac	230 Vac
Frequency range	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz
<b>Output</b>				
Rated output voltage	24 Vac	24 Vac	24 Vac	24 Vac
Rated Power	10 VA	25 VA	63 VA	100 VA
<b>Environment</b>				
Ambient temperature max.	25 °C	25 °C	25 °C	25 °C
Type of cooling	self-cooling	self-cooling	self-cooling	self-cooling
<b>Safety and protection</b>				
Type	Resin encapsulated transformer	Resin encapsulated transformer	Resin encapsulated transformer	Resin encapsulated transformer
Insulation class	B	B	B	B
Protection index	IP 00	IP 00	IP 00	IP 00
Safety class (prepared)	II	II	II	II
Short circuit strength	non-inherently short-circuit proof	non-inherently short-circuit proof	non-inherently short-circuit proof	non-inherently short-circuit proof
Test voltage	3750 Vac, 50 Hz	3750 Vac, 50 Hz	3750 Vac, 50 Hz	3750 Vac, 50 Hz
<b>Order numbers</b>				
<b>Order Number</b>	<b>ACT 10</b>	<b>ACT 25</b>	<b>ACT 63</b>	<b>ACT 100</b>

1.2

1.3

2.1

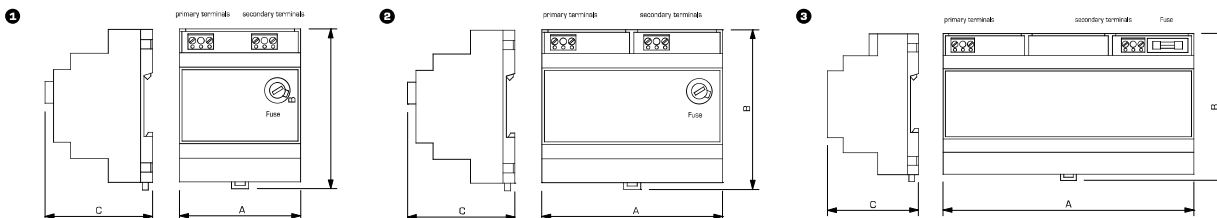
2.2

Terminal and mounting	ACT 10	ACT 25	ACT 63	ACT 100
<b>Mechanical data</b>				
Terminals	Screw-type terminal	Screw-type terminal	Screw-type terminal	Screw-type terminal
Fixing method	Panel installation on mounting rails	Panel installation on mounting rails	Panel installation on mounting rails	Panel installation on mounting rails
<b>Measures and weights</b>				
Weight	0.36 kg	0.95 kg	1.93 kg	1.93 kg
Dimension (W x H x D)	94 x 63 x 35 mm	94 x 63 x 106 mm	94 x 63 x 159 mm	94 x 63 x 159 mm
Dimension picture (in mm)	<b>1</b>	<b>2</b>	<b>3</b>	<b>3</b>
A	35	106	159	159
B	94	94	94	94
C	63	63	63	63

3.1

3.2

### Dimension pictures



3.3

4.0

5.1

5.2

# Safety isolating transformer SIM



## General Data

Rated input voltage 230 Vac
Rated output voltage 2 x 12 Vac
Rated power 60 - 800 VA
Insulation class A
Maximum ambient temperature 40 °C
Efficiency up to 95 %
Degree of protection IP 20

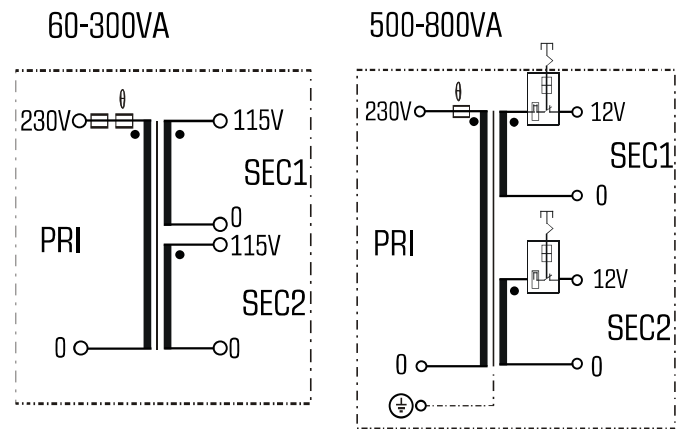
## Advantages

Integrated short-circuit and overload protection
Double output voltage for series or parallel connection
Very good moisture protection and low noise thanks to XtraDenseFill resin encapsulation (up to 300 VA)
Screw terminals under cover with strain relief

## Applications

Safety isolating transformer for the safe electrical isolation of the input and output sides. The transformer is suitable for creating SELV and PELV circuits because of the limit on the output voltage.

## Sample applications



## Standards



Safety isolating transformer  
to: VDE 0570 Part 2-6, DIN EN 61558-2-6, EN 61558-2-6, IEC 61558-2-6

## Approvals



VDE



## Safety isolating transformer SIM



1.1

Typ	SIM 60	SIM 100	SIM 200	SIM 300	SIM 500	SIM 800
<b>Electrical data</b>						
<b>Input</b>						
Rated input voltage	230 Vac	230 Vac	230 Vac	230 Vac	230 Vac	230 Vac
Frequency range	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz
<b>Output</b>						
Rated output voltage	2 x 12 Vac	2 x 12 Vac	2 x 12 Vac	2 x 12 Vac	2 x 12 Vac	2 x 12 Vac
Rated Power	60 VA	100 VA	200 VA	300 VA	500 VA	800 VA
No-load voltage (app. x factor)	1.15	1.08	1.07	1.05	1.04	1.03
No-load loss (typ.)	3.30 W	4.90 W	7.40 W	14.00 W	18.00 W	27.00 W
Efficiency	83.5 %	87.5 %	89.5 %	91.0 %	92.0 %	95.0 %
<b>Standards</b>						
Classification	Safety isolating transformer	Safety isolating transformer	Safety isolating transformer	Safety isolating transformer	Safety isolating transformer	Safety isolating transformer
<b>Approvals</b>						
Approvals	VDE	VDE	VDE	VDE	VDE, cURus	VDE, cURus
<b>Environment</b>						
Ambient temperature max.	40 °C	40 °C	40 °C	40 °C	40 °C	40 °C
<b>Safety and protection</b>						
Type	Resin encapsulated transformer	Resin encapsulated transformer	Resin encapsulated transformer	Resin encapsulated transformer	Encapsulated in metal housing	Encapsulated in metal housing
Insulation class	A	A	A	A	B	B
Protection index	IP 20	IP 20	IP 20	IP 20	IP 20	IP 20
Safety class	II	II	II	II	I	I
Short circuit strength	non-inherently short-circuit proof	non-inherently short-circuit proof	non-inherently short-circuit proof	non-inherently short-circuit proof	non-inherently short-circuit proof	non-inherently short-circuit proof
Test voltage	5000 Vac, 50 Hz	5000 Vac, 50 Hz	5000 Vac, 50 Hz	5000 Vac, 50 Hz	3750 Vac, 50 Hz	3750 Vac, 50 Hz
<b>Order numbers</b>						
<b>Order Number</b>	<b>SIM 60</b>	<b>SIM 100</b>	<b>SIM 200</b>	<b>SIM 300</b>	<b>SIM 500</b>	<b>SIM 800</b>

1.2

1.3

2.1

2.2

3.1

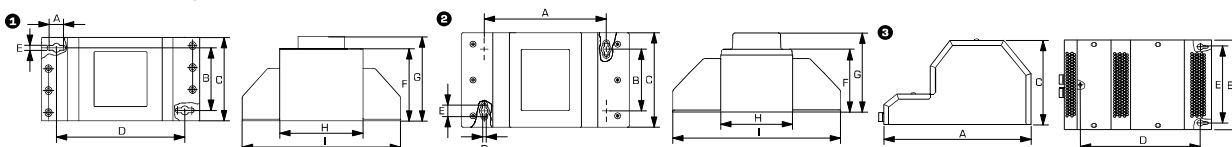
Order Number	SIM 60	SIM 100	SIM 200	SIM 300	SIM 500	SIM 800
<b>Mechanical data</b>						
<b>Terminal and mounting</b>						
Terminals	Screw-type terminal	Screw-type terminal	Screw-type terminal	Screw-type terminal	Screw-type terminal	Screw-type terminal
Fixing method	Fixing holes in the terminal connection compartment	Fixing holes in the terminal connection compartment	Fixing holes in the terminal connection compartment	Fixing holes in the terminal connection compartment	Fixing holes in housing	Fixing holes in housing
<b>Measures and weights</b>						
Weight	1.55 kg	2.00 kg	3.60 kg	4.90 kg	9.10 kg	15.60 kg
Dimension picture (in mm)	1	1	2	2	3	3
A	142	142	167	167	283	283
B	58	58	76	76	200	200
C	77	77	117	117	166	166
D	135	135	43	43	245	245
E	43	43	14	14	148	148
F	65	65	77	100	-	-
G	76	76	97	117	-	-
H	90	90	97	97	-	-
I	166	166	223	223	-	-

3.2

3.3

4.0

### Dimension pictures



5.1

5.2

## Safety isolating transformer EVKE



### General Data

Rated input voltage 230 Vac
Rated output voltage 24 Vac
Rated power 25 - 630 VA
Insulation class E
Maximum ambient temperature 40 °C
Degree of protection IP 67/68

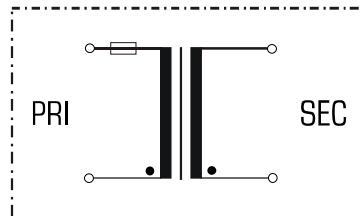
### Advantages

Integrated short-circuit and overload protection
Very good moisture protection and low noise thanks to resin encapsulation
High degree of protection
Plastic fittings on terminals

### Applications

Safety isolating transformer for the safe electrical isolation of the input and output sides. The transformer is suitable for creating SELV and PELV circuits because of the limit on the output voltage.

### Sample application



### Standards

Safety isolating transformer  
to: VDE 0570 Part 2-6, DIN EN 61558-2-6, EN 61558-2-6, IEC 61558-2-6

### Approvals



## Safety isolating transformer EVKE



1.1

Typ	EVKE 25/24	EVKE 40/24	EVKE 100/24	EVKE 160/24	EVKE 250/24	EVKE 400/24
<b>Electrical data</b>						
<b>Input</b>						
Rated input voltage	230 Vac	230 Vac	230 Vac	230 Vac	230 Vac	230 Vac
Frequency range	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz
<b>Output</b>						
Rated output voltage	24 Vac	24 Vac	24 Vac	24 Vac	24 Vac	24 Vac
Rated Power	25 VA	40 VA	100 VA	160 VA	250 VA	400 VA
<b>Environment</b>						
Ambient temperature max.	40 °C	40 °C	40 °C	40 °C	40 °C	40 °C
<b>Safety and protection</b>						
Type	Resin encapsulated transformer	Resin encapsulated transformer	Resin encapsulated transformer	Resin encapsulated transformer	Resin encapsulated transformer	Resin encapsulated transformer
Insulation class	E	E	E	E	E	E
Test voltage	3750 Vac, 50 Hz	3750 Vac, 50 Hz	3750 Vac, 50 Hz	3750 Vac, 50 Hz	3750 Vac, 50 Hz	3750 Vac, 50 Hz
Protection index	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68
Safety class	II	II	II	II	II	II
Short circuit strength	non-inherently short-circuit proof	non-inherently short-circuit proof	non-inherently short-circuit proof	non-inherently short-circuit proof	non-inherently short-circuit proof	non-inherently short-circuit proof
<b>Order numbers</b>						
<b>Order Number</b>	<b>EVKE 25/24</b>	<b>EVKE 40/24</b>	<b>EVKE 100/24</b>	<b>EVKE 160/24</b>	<b>EVKE 250/24</b>	<b>EVKE 400/24</b>

1.2

1.3

2.1

2.2

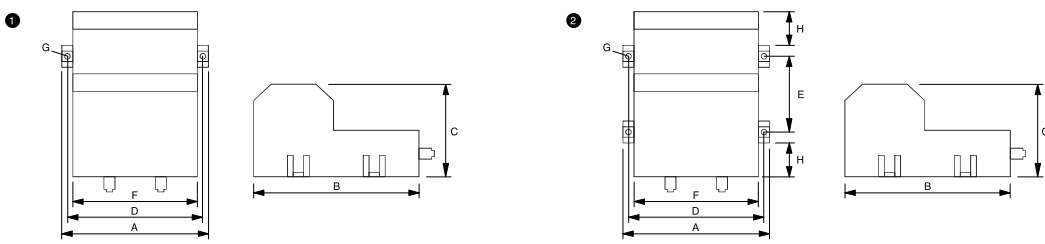
Terminal and mounting	EVKE 25/24	EVKE 40/24	EVKE 100/24	EVKE 160/24	EVKE 250/24	EVKE 400/24
Terminals	Plastic fittings on 2 x M16 terminals	Plastic fittings on 2 x M16 terminals	Plastic fittings on 2 x M16 terminals	Plastic fittings on 1 x M16, 1 x M20 terminals	Plastic fittings on 1 x M16, 1 x M20 terminals	Plastic fittings on 1 x M16, 1 x M20 terminals
Fixing method	Mounting lugs	Mounting lugs	Mounting lugs	Mounting lugs	Mounting lugs	Mounting lugs
<b>Measures and weights</b>						
Weight	0.98 kg	1.64 kg	2.80 kg	4.50 kg	6.50 kg	9.50 kg
Dimension picture (in mm)	①	①	①	①	①	②
A	106	120	145	150	150	195
B	140	150	180	190	190	255
C	68	78	90	105	105	130
D	88	102	123	125	125	172
E	-	-	-	-	-	120
F	75	89	105	108	108	155
G	6	6	6	6	6	6
H	-	-	-	-	-	30

3.1

3.2

3.3

### Dimension pictures



4.0

5.1

5.2





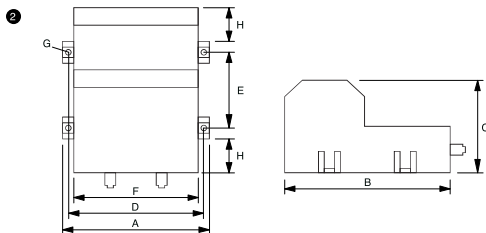
## Safety isolating transformer EVKE



Electrical data	Typ	EVKE 630/24
	Input	
	Rated input voltage	230 Vac
	Frequency range	50 - 60 Hz
	Output	
	Rated output voltage	24 Vac
	Rated Power	630 VA
	Environment	
	Ambient temperature max.	40 °C
	Safety and protection	
Type	Resin encapsulated transformer	
Insulation class	E	
Test voltage	3750 Vac, 50 Hz	
Protection index	IP 68	
Safety class	II	
Short circuit strength	non-inherently short-circuit proof	
Order numbers		
Order Number	EVKE 630/24	

Mechanical data	Terminal and mounting	
	Terminals	Plastic fittings on 1 x M20, 1 x M25 terminals
	Fixing method	Mounting lugs
	Measures and weights	
	Weight	13.00 kg
	Dimension picture (in mm)	
	A	215
	B	280
	C	150
	D	196
E	125	
F	175	
G	6	
H	40	

### Dimension pictures



# Safety isolating transformer ETKEC



1.1



## General Data

Rated input voltage 230 Vac
Rated output voltage 24 Vac
Rated power 100 - 200 VA
Insulation class E
Maximum ambient temperature 40 °C
Degree of protection IP 44

1.2

1.3

## Advantages

Integrated short circuit and overload protection
Very good moisture protection and low noise thanks to resin encapsulation
High degree of protection
Carrying handle, mains connecting lead and CEE socket for mobile use

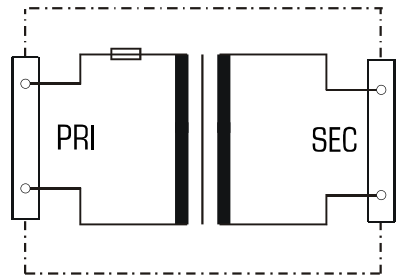
2.1

## Applications

Safety isolating transformer for the safe electrical isolation of the input and output sides. The transformer is suitable for creating SELV and PELV circuits because of the limit on the output voltage.

2.2

## Sample application



3.1

3.2

3.3

## Standards

Safety isolating transformer  
to: VDE 0570 Part 2-6, DIN EN 61558-2-6, EN 61558-2-6, IEC 61558-2-6

## Approvals

4.0

5.1

5.2



## Safety isolating transformer **ETKEC**



		ETKEC 100/24	ETKEC 200/24				
Electrical data	<b>Type</b>						
	<b>Input</b>						
	Rated input voltage	230 Vac	230 Vac				
	Frequency range	50 - 60 Hz	50 - 60 Hz				
	<b>Output</b>						
	Rated output voltage	24 Vac	24 Vac				
	Rated Power	100 VA	200 VA				
	<b>Environment</b>						
	Ambient temperature max.	40 °C	40 °C				
	<b>Safety and protection</b>						
	Type	Resin encapsulated transformer	Resin encapsulated transformer				
	Insulation class	E	E				
	Protection index	IP 44	IP 44				
	Safety class	II	II				
	Short circuit strength	non-inherently short-circuit proof	non-inherently short-circuit proof				
Test voltage	3750 Vac, 50 Hz	3750 Vac, 50 Hz					
<b>Order numbers</b>							
<b>Order Number</b>	<b>ETKEC 100/24</b>	<b>ETKEC 200/24</b>					



## Safety isolating transformer ETKEC



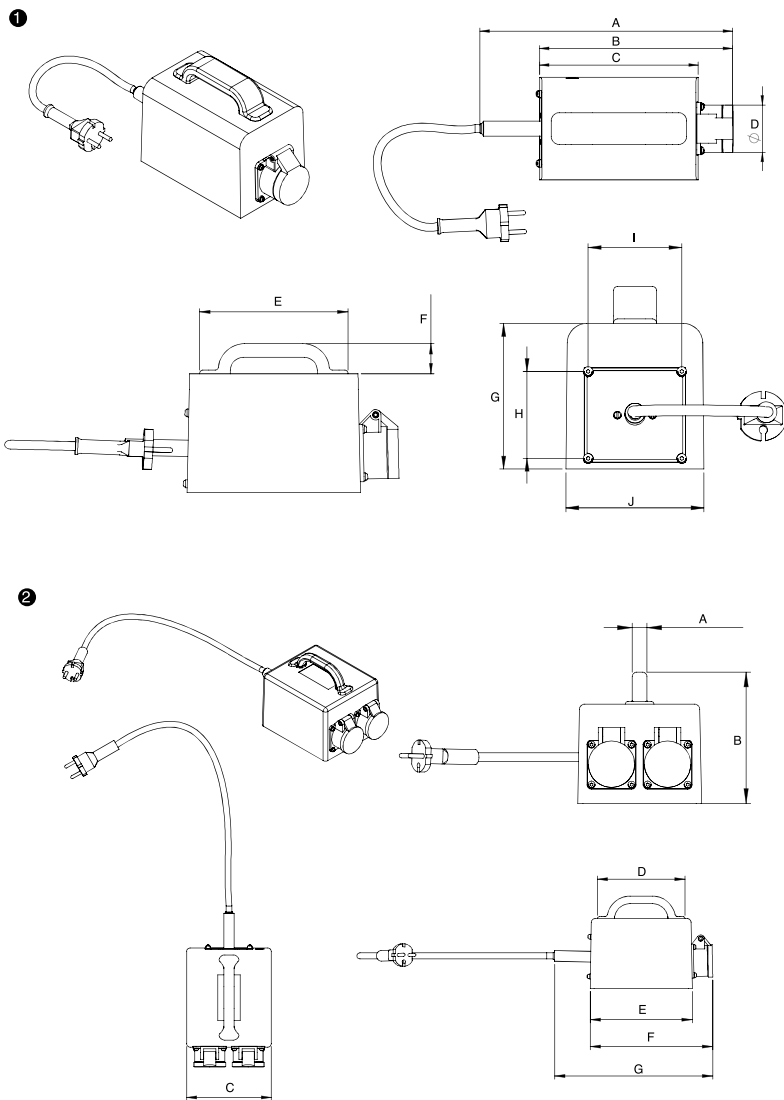
1.1

Typ	Terminals Input	Terminals Output	Weight	Dimension (W x H x D)	Dimension picture (in mm)	Dimension picture (in mm)										
						A	B	C	D	E	F	G	H	I	J	
ETKEC 100/24	Mains connecting cable with safety plug	CEE-socket	3,50 kg	110 x 120 x 265 mm	1	261	200	164	49	140	29	112	67	72	106	
ETKEC 200/24	Mains connecting cable with safety plug	2 CEE-sockets	6,70 kg	140 x 145 x 220 mm	2	16,5	147,5	139	140	163	196	253	-	-	-	

1.2

1.3

### Dimension pictures



2.1

2.2

3.1

3.2

3.3

4.0

5.1

5.2

## Safety isolating transformer for halogen lamps HIT



### General Data

Rated input voltage 230 Vac
Rated output voltage 11,3 - 11,5 Vac
Rated output 60 - 300 W
Insulation class A
Maximum ambient temperature 40 °C
Efficiency up to 92 %
Degree of protection IP 20

### Advantages

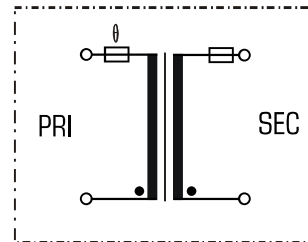
Integrated short circuit and overload protection
Very good moisture protection and low noise thanks to XtraDenseFill resin encapsulation
Screw terminals under cover with strain relief

### Applications

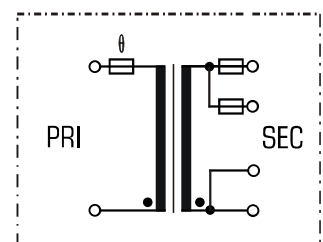
Safety isolating transformer for 12 V halogen lamps for the safe electrical isolation of the input and output sides. The transformer is suitable for creating SELV and PELV circuits because of the limit on the output voltage.

### Sample application

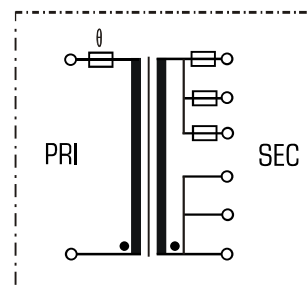
60VA, 105VA



200VA



150VA, 250VA, 300VA



Standards  

Approvals 

Safety isolating transformer for halogen lamps  
to: VDE 0570 Teil 2-6, DIN EN 61558-2-6, EN 61558-2-6, IEC 61558-2-6



## Safety isolating transformer for halogen lamps

### HIT



1.1

Typ	HIT 60	HIT 105	HIT 150	HIT 200	HIT 250	HIT 300
<b>Electrical data</b>						
<b>Input</b>						
Rated input voltage	230 Vac	230 Vac	230 Vac	230 Vac	230 Vac	230 Vac
Frequency range	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz
<b>Output</b>						
Rated output voltage	11.5 Vac	11.5 Vac	11.3 Vac	11.3 Vac	11.3 Vac	11.3 Vac
Number of SEC-Circuits	1	1	3	2	3	3
Rated current	4.80 A	8.40 A	3 x 4.00 A	2 x 8.00 A	2 x 8.00 A, 1 x 4.00 A	3 x 8.00 A
for Lamps power	60 W	105 W	150 W	200 W	250 W	300 W
Efficiency	85.5 %	87.0 %	89.0 %	90.0 %	90.0 %	92.0 %
<b>Standards</b>						
Classification	Safety isolating transformer	Safety isolating transformer	Safety isolating transformer	Safety isolating transformer	Safety isolating transformer	Safety isolating transformer
<b>Environment</b>						
Ambient temperature max.	40 °C	40 °C	40 °C	40 °C	40 °C	40 °C
<b>Safety and protection</b>						
Type	Resin encapsulated transformer	Resin encapsulated transformer	Resin encapsulated transformer	Resin encapsulated transformer	Resin encapsulated transformer	Resin encapsulated transformer
Insulation class	A	A	A	A	A	A
Protection index	IP 20	IP 20	IP 20	IP 20	IP 20	IP 20
Safety class	II	II	II	II	II	II
Short circuit strength	non-inherently short-circuit proof	non-inherently short-circuit proof	non-inherently short-circuit proof	non-inherently short-circuit proof	non-inherently short-circuit proof	non-inherently short-circuit proof
Test voltage	5000 Vac, 50 Hz	5000 Vac, 50 Hz	5000 Vac, 50 Hz	5000 Vac, 50 Hz	5000 Vac, 50 Hz	5000 Vac, 50 Hz
<b>Order numbers</b>						
<b>Order Number</b>	<b>HIT 60</b>	<b>HIT 105</b>	<b>HIT 150</b>	<b>HIT 200</b>	<b>HIT 250</b>	<b>HIT 300</b>

1.2

1.3

2.1

2.2

3.1

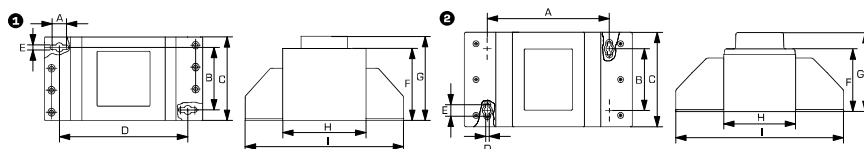
<b>3.0 Terminal and mounting</b>						
Terminals	Screw-type terminals	Screw-type terminals	Screw-type terminals	Screw-type terminals	Screw-type terminals	Screw-type terminals
Fixing method	Fixing holes in the terminal connection compartment	Fixing holes in the terminal connection compartment	Fixing holes in the terminal connection compartment	Fixing holes in the terminal connection compartment	Fixing holes in the terminal connection compartment	Fixing holes in the terminal connection compartment
<b>Measures and weights</b>						
Weight	1.42 kg	2.00 kg	3.00 kg	3.55 kg	4.20 kg	5.00 kg
Dimension picture (in mm)	<b>1</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>
A	14.2	14.2	167	167	167	167
B	58	58	76	76	76	76
C	77	77	117	117	117	117
D	135	135	4.3	4.3	4.3	4.3
E	4.3	4.3	14	14	14	14
F	65	65	77	77	100	100
G	76	76	97	97	117	117
H	90	90	97	97	97	97
I	166	166	223	223	223	223

3.2

3.3

4.0

## Dimension pictures



5.1

5.2