

# Trafox



LH series



Control  
transformers



FINLAND-ESTONIA-CHINA

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## 1- PHASE LOW VOLTAGE ISOLATION TRANSFORMERS, IP2X PROTECTED:

The transformers are designed to have multiple functions and technical properties.

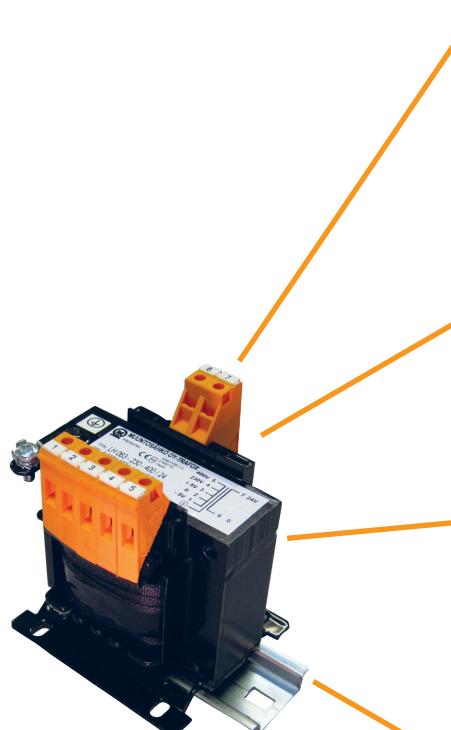
This series of transformers fulfills the most common standards, including the naval requirements. The properties are meant to satisfy even the most demanding requirements.

When designing this series of transformers, we have taken into account the need to reduce direct power losses, the indirect losses in production, storage and logistics as well as environmental aspects.

These transformers are suitable for fixed mounting in a case or for installation in electrical switchgear.

**L**OW LOSSES  
**H**IGH QUALITY

NEW TRANSFORMER SERIES  
BY TRAFOX!



### VARIOUS APPLICATIONS:

1 transformer with 2 primary windings (230V and 400V) decreases the number of storage titles and therefore the amount of storage space. The transformer's default voltage setting is always adjustable by  $\pm 5\%$ . This helps to keep the correct secondary voltage level in the installation regardless of possible cable losses or deviation of the network voltage. All transformers with a power less than 250VA meet the requirements of DNV, Lloyds Register of Shipping and Bureau Veritas.

### LOW LOAD LOSSES:

The low-loss materials enable a T60/B temperature classification. The effective manufacturing methods cause less strain on the environment. The individually packed transformers enable efficient use of storage space. The packaging materials are recyclable.

### SAFETY:

The transformers have a protective insulation around the coil of the transformer. Additionally there is the possibility of earthing the iron core. The high quality terminal blocks are integrated in the bobbin and the live conductors connected to the terminals are protected against direct contact. The coil conductors have been soldered into the connectors so that there is no need to worry about conductors breaking or becoming loose during mounting.

### EFFICIENT INSTALLATION:

Transformers with a power up to 250VA have both an integrated and sturdy DIN- rail mounting and screw mounting. The transformers' good power to weight ratio enables a small size making the installation process easier. The terminals are marked clearly. The wiring diagram next to the terminal block makes the mounting process fast and reduces possibility of mistakes during the installation. The individual packaging keep the transformers clean during storage and shipping.

### STANDARDS:

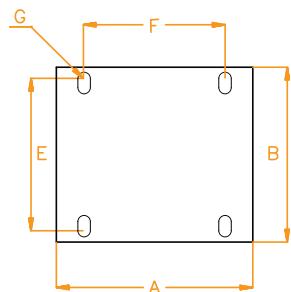
EN61558-2-6, EN61558-2-4 CE

ORDER CODE: LH40\_24  
MODEL: LH40-230-400/24

## TECHNICAL DATA

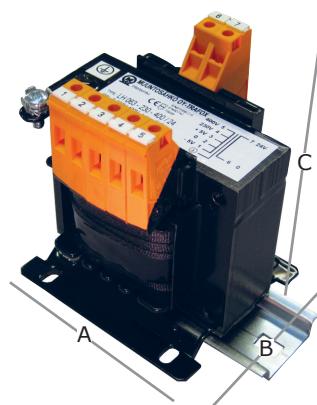
Primary winding	230/400V ±5%
Secondary winding	24V AC
Power	40VA
Frequency	50/60Hz
Protection class	IP2X
Isolation voltage	4kV AC
Insulation class	T60/B
Ambient temperature	-20...+60 °C
Standard	EN61558-2-6, CE
Mounting	Screw or DIN rail mounting

## MEASUREMENTS



Order code	A mm	B mm	C mm	E mm	F mm	G mm	Weight kg
LH40_24	78	80	93	60,5	56	M4	1,15

## POWER 40VA

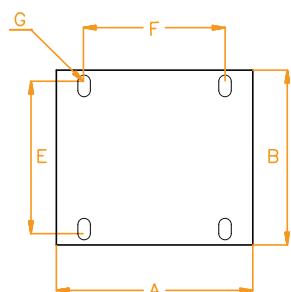


ORDER CODE: LH40\_230  
MODEL: LH40-230-400/230

## TECHNICAL DATA

Primary winding	230/400V ±5%
Secondary winding	230V AC
Power	40VA
Frequency	50/60Hz
Protection class	IP2X
Isolation voltage	4kV AC
Insulation class	T60/B
Ambient temperature	-20...+60°C
Standard	EN61558-2-4, CE
Mounting	Screw or DIN rail mounting

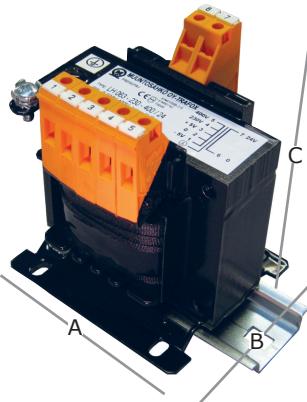
## MEASUREMENTS



Order code	A mm	B mm	C mm	E mm	F mm	G mm	Weight kg
LH40_230	78	80	93	60,5	56	M4	1,25



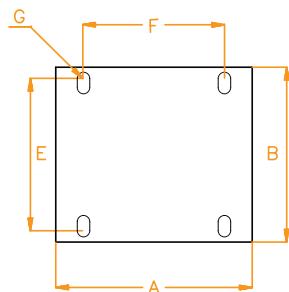
## POWER 63VA



## TECHNICAL DATA

Primary winding	230/400V ±5%
Secondary winding	24V AC
Power	63VA
Frequency	50/60Hz
Protection class	IP2X
Isolation voltage	4kV AC
Insulation class	T60/B
Ambient temperature	-20...+60°C
Standard	EN61558-2-6, CE
Mounting	Screw or DIN rail mounting

## MEASUREMENTS



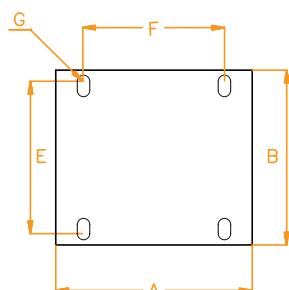
Order code	A mm	B mm	C mm	E mm	F mm	G mm	Weight kg
LH63_24	78	80	93	60,5	56	M4	1,25

ORDER CODE: LH63\_230  
MODEL: LH63-230-400/230

## TECHNICAL DATA

Primary winding	230/400V ±5%
Secondary winding	230V AC
Power	63VA
Frequency	50/60Hz
Protection class	IP2X
Isolation voltage	4kV AC
Insulation class	T60/B
Ambient temperature	-20...+60°C
Standard	EN61558-2-4, CE
Mounting	Screw or DIN rail mounting

## MEASUREMENTS



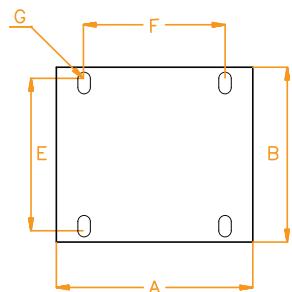
Order code	A mm	B mm	C mm	E mm	F mm	G mm	Weight kg
LH63_230	78	80	93	60,5	56	M4	1,25

ORDER CODE: LH100\_24  
MODEL: LH100-230-400/24

## TECHNICAL DATA

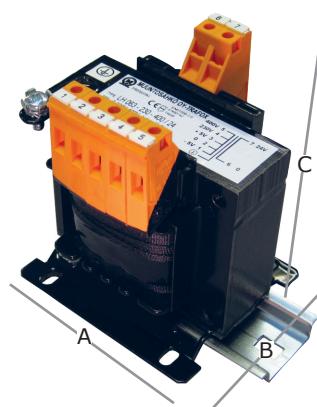
Primary winding	230/400V ±5%
Secondary winding	24V AC
Power	100VA
Frequency	50/60Hz
Protection class	IP2X
Isolation voltage	4kV AC
Insulation class	T60/B
Ambient temperature	-20...+60°C
Standard	EN61558-2-6, CE
Mounting	Screw or DIN rail mounting

## MEASUREMENTS



Order code	A mm	B mm	C mm	E mm	F mm	G mm	Weight kg
LH100_24	84	85	96	69,5	64	M4	2,04

## POWER 100VA

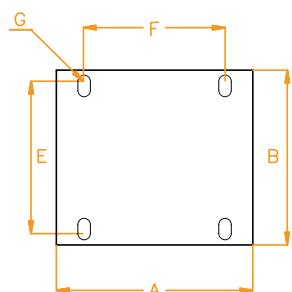


ORDER CODE: LH100\_230  
MODEL: LH100-230-400/230

## TECHNICAL DATA

Primary winding	230/400V ±5%
Secondary winding	230V AC
Power	100VA
Frequency	50/60Hz
Protection class	IP2X
Isolation voltage	4kV AC
Insulation class	T60/B
Ambient temperature	-20...+60°C
Standard	EN61558-2-4, CE
Mounting	Screw or DIN rail mounting

## MEASUREMENTS

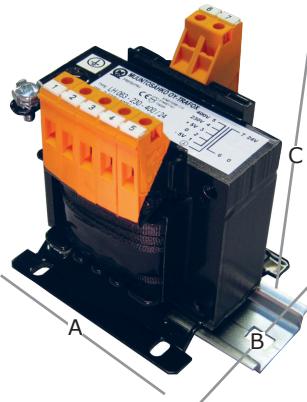


Order code	A mm	B mm	C mm	E mm	F mm	G mm	Weight kg
LH100_230	84	85	96	69,5	64	M4	2,14

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SERIES

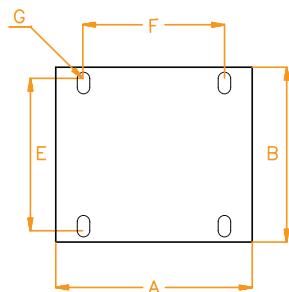
## POWER 160VA



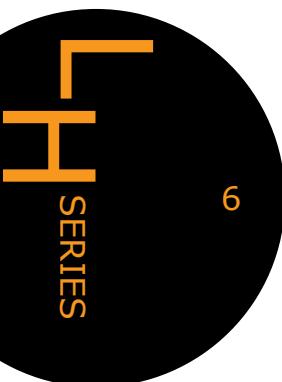
## TECHNICAL DATA

Primary winding	230/400V ±5%
Secondary winding	24V AC
Power	160VA
Frequency	50/60Hz
Protection class	IP2X
Isolation voltage	4kV AC
Insulation class	T60/B
Ambient temperature	-20...+60°C
Standard	EN61558-2-6, CE
Mounting	Screw or DIN rail mounting

## MEASUREMENTS



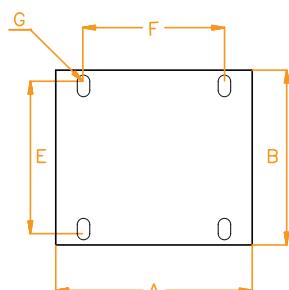
Order code	A mm	B mm	C mm	E mm	F mm	G mm	Weight kg
LH160_24	96	103	106	90	84	M4	2,83

ORDER CODE: LH160\_230  
MODEL: LH160-230-400/230

## TECHNICAL DATA

Primary winding	230/400V ±5%
Secondary winding	230V AC
Power	160VA
Frequency	50/60Hz
Protection class	IP2X
Isolation voltage	4kV AC
Insulation class	T60/B
Ambient temperature	-20...+60°C
Standard	EN61558-2-4, CE
Mounting	Screw or DIN rail mounting

## MEASUREMENTS



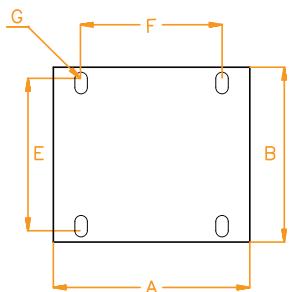
Order code	A mm	B mm	C mm	E mm	F mm	G mm	Weight kg
LH160_230	96	103	106	90	84	M4	2,93

ORDER CODE: LH250\_24  
MODEL: LH250-230-400/24

## TECHNICAL DATA

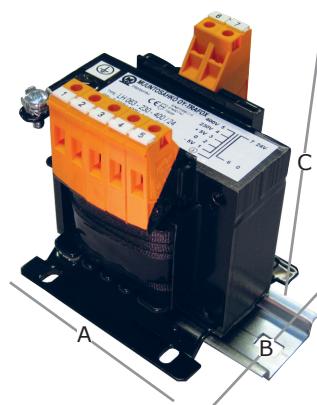
Primary winding	230/400V ±5%
Secondary winding	24V AC
Power	250VA
Frequency	50/60Hz
Protection class	IP2X
Isolation voltage	4kV AC
Insulation class	T60/B
Ambient temperature	-20...+60°C
Standard	EN61558-2-6, CE
Mounting	Screw or DIN rail mounting

## MEASUREMENTS



Order code	A mm	B mm	C mm	E mm	F mm	G mm	Weight kg
LH250_24	96	103	106	90	84	M4	3,53

## POWER 250VA

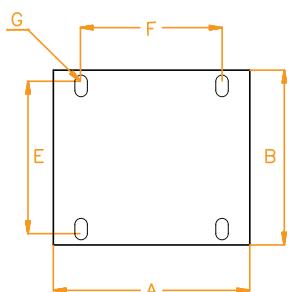


ORDER CODE: LH250\_230  
MODEL: LH250-230-400/230

## TECHNICAL DATA

Primary winding	230/400V ±5%
Secondary winding	230V AC
Power	250VA
Frequency	50/60Hz
Protection class	IP2X
Isolation voltage	4kV AC
Insulation class	T60/B
Ambient temperature	-20...+60°C
Standard	EN61558-2-4, CE
Mounting	Screw or DIN rail mounting

## MEASUREMENTS

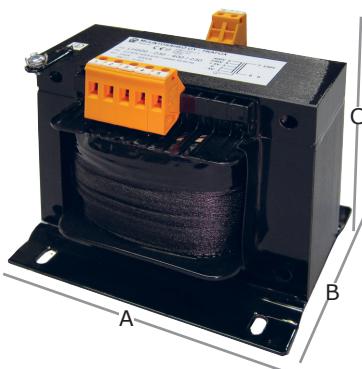


Order code	A mm	B mm	C mm	E mm	F mm	G mm	Weight kg
LH250_230	96	103	106	90	84	M4	3,63

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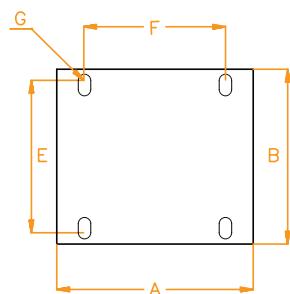
## POWER 500VA



## TECHNICAL DATA

Primary winding	230/400V ±5%
Secondary winding	24V AC
Power	500VA
Frequency	50/60Hz
Protection class	IP2X
Isolation voltage	4kV AC
Insulation class	T60/B
Ambient temperature	-20...+60°C
Standard	EN61558-2-6, CE
Installation	Screw fastening

## MEASUREMENTS



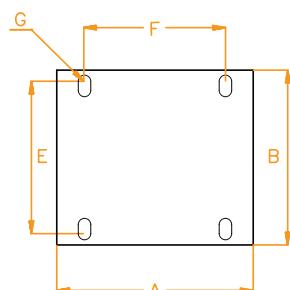
Order code	A mm	B mm	C mm	E mm	F mm	G mm	Weight kg
LH500_24	135	108	134	90,5	104	M6	6,39

ORDER CODE: LH500\_230  
MODEL: LH500-230-400/230

## TECHNICAL DATA

Primary winding	230/400V ±5%
Secondary winding	230V AC
Power	500VA
Frequency	50/60Hz
Protection class	IP2X
Isolation voltage	4kV AC
Insulation class	T60/B
Ambient temperature	-20...+60°C
Standard	EN61558-2-4, CE
Installation	Screw fastening

## MEASUREMENTS



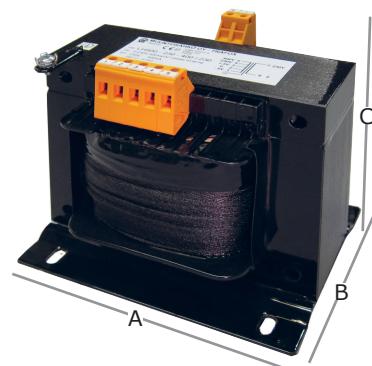
Order code	A mm	B mm	C mm	E mm	F mm	G mm	Weight kg
LH500_230	135	108	134	90,5	104	M6	6,60

ORDER CODE: LH1000\_24  
MODEL: LH1000-230-400/24

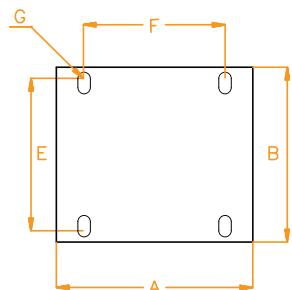
## TECHNICAL DATA

Primary winding	230/400V ±5%
Secondary winding	24V AC
Power	1000VA
Frequency	50/60Hz
Protection class	IP2X
Isolation voltage	4kV AC
Insulation class	T60/B
Ambient temperature	-20...+60°C
Standard	EN61558-2-6, CE
Installation	Screw fastening

## POWER 1000VA



## MEASUREMENTS



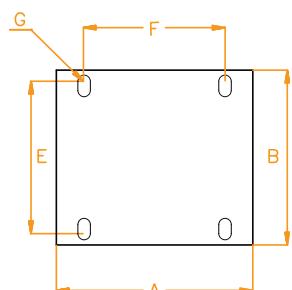
Order code	A mm	B mm	C mm	E mm	F mm	G mm	Weight kg
LH1000_24	174	128	166	109	135	M6	12,00

ORDER CODE: LH1000\_230  
MODEL: LH1000-230-400/230

## TECHNICAL DATA

Primary winding	230/400V ±5%
Secondary winding	230V AC
Power	1000VA
Frequency	50/60Hz
Protection class	IP2X
Isolation voltage	4kV AC
Insulation class	T60/B
Ambient temperature	-20...+60°C
Standard	EN61558-2-4, CE
Installation	Screw fastening

## MEASUREMENTS

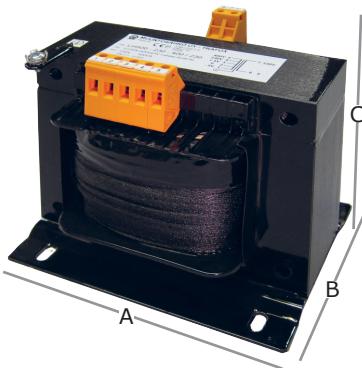


Order code	A mm	B mm	C mm	E mm	F mm	G mm	Weight kg
LH1000_230	174	128	166	109	135	M6	11,60

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SERIES

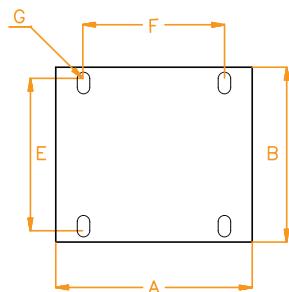
## POWER 1500VA



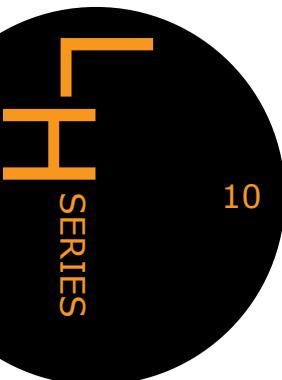
## TECHNICAL DATA

Primary winding	230/400V ±5%
Secondary winding	24V AC
Power	1500VA
Frequency	50/60Hz
Protection class	IP2X
Isolation voltage	4kV AC
Insulation class	T60/B
Ambient temperature	-20...+60°C
Standard	EN61558-2-6, CE
Installation	Screw fastening

## MEASUREMENTS



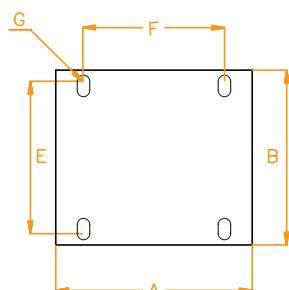
Order code	A mm	B mm	C mm	E mm	F mm	G mm	Weight kg
LH1500_24	174	147	166	129	135	M6	15,80

ORDER CODE: LH1500\_230  
MODEL: LH1500-230-400/230

## TECHNICAL DATA

Primary winding	230/400V ±5%
Secondary winding	230V AC
Power	1500VA
Frequency	50/60Hz
Protection class	IP2X
Isolation voltage	4kV AC
Insulation class	T60/B
Ambient temperature	-20...+60°C
Standard	EN61558-2-4, CE
Installation	Screw fastening

## MEASUREMENTS



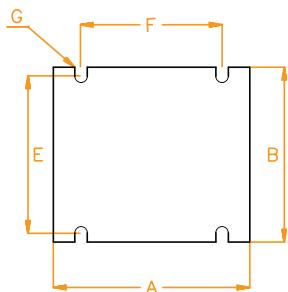
Order code	A mm	B mm	C mm	E mm	F mm	G mm	Weight kg
LH1500_230	174	147	166	129	135	M6	15,80

ORDER CODE: XHP2000\_24  
MODEL: XHP2000-230-400/24

## TECHNICAL DATA

Primary winding	230/400V ±5%
Secondary winding	24V AC
Power	2000VA
Frequency	50/60Hz
Protection class	IP2X
Isolation voltage	4kV AC
Insulation class	T40/B
Ambient temperature	-20...+40°C
Standard	EN61558-2-6, CE
Installation	Screw fastening

## MEASUREMENTS



Order code	A mm	B mm	C mm	E mm	F mm	G mm	Weight kg
XHP2000_24	210	168	261	90	124	10x17	20,00

## POWER 2000VA



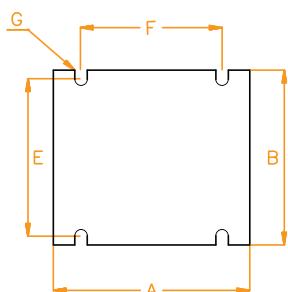
Model: XHP, 2-5kVA,  
vertical.

ORDER CODE: XHP2000\_230  
MODEL: XHP2000-230-400/230

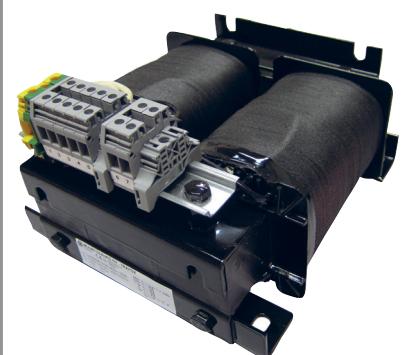
## TECHNICAL DATA

Primary winding	230/400V ±5%
Secondary winding	230V AC
Power	2000VA
Frequency	50/60Hz
Protection class	IP2X
Isolation voltage	4kV AC
Insulation class	T40/B
Ambient temperature	-20...+40°C
Standard	EN61558-2-4, CE
Installation	Screw fastening

## MEASUREMENTS

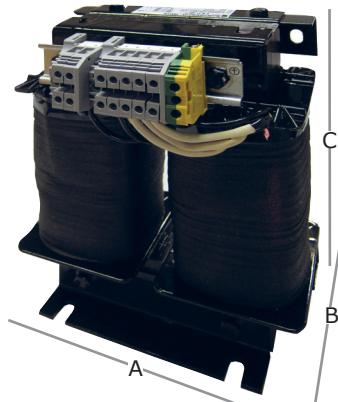


Order code	A mm	B mm	C mm	E mm	F mm	G mm	Weight kg
XHP2000_230	210	168	261	90	124	10x17	20,00



Model: XHM, 2-5kVA,  
horizontal, page 15.

## POWER 3000VA

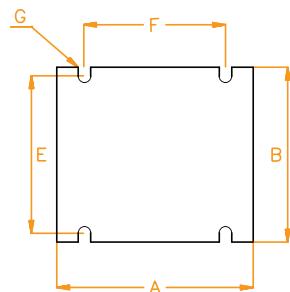


Model: XHP, 2-5kVA,  
vertical.

## TECHNICAL DATA

Primary winding	230/400V ±5%
Secondary winding	24V AC
Power	3000VA
Frequency	50/60Hz
Protection class	IP2X
Isolation voltage	4kV AC
Insulation class	T40/B
Ambient temperature	-20...+40°C
Standard	EN61558-2-6, CE
Installation	Screw fastening

## MEASUREMENTS



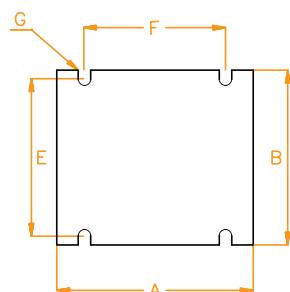
Order code	A mm	B mm	C mm	E mm	F mm	G mm	Weight kg
XHP3000_24	210	193	261	117	124	10x17	28,00

ORDER CODE: XHP3000\_230  
MODEL: XHP3000-230-400/230

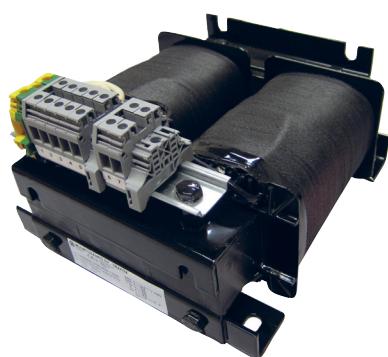
## TECHNICAL DATA

Primary winding	230/400V ±5%
Secondary winding	230V AC
Power	3000VA
Frequency	50/60Hz
Protection class	IP2X
Isolation voltage	4kV AC
Insulation class	T40/B
Ambient temperature	-20...+40°C
Standard	EN61558-2-4, CE
Installation	Screw fastening

## MEASUREMENTS



Order code	A mm	B mm	C mm	E mm	F mm	G mm	Weight kg
XHP3000_230	210	193	261	117	124	10x17	28,00



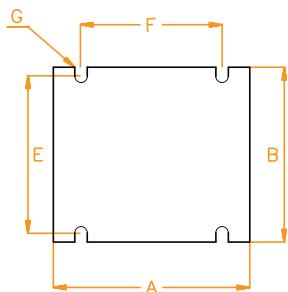
Model: XHM, 2-5kVA,  
horizontal, page 15.

ORDER CODE: XHP4000\_24  
MODEL: XHP4000-230-400/24

## TECHNICAL DATA

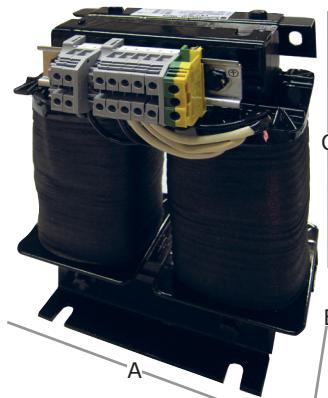
Primary winding	230/400V ±5%
Secondary winding	24V AC
Power	4000VA
Frequency	50/60Hz
Protection class	IP2X
Isolation voltage	4kV AC
Insulation class	T40/B
Ambient temperature	-20...+40°C
Standard	EN61558-2-6, CE
Installation	Screw fastening

## MEASUREMENTS



Order code	A mm	B mm	C mm	E mm	F mm	G mm	Weight kg
XHP4000_24	210	208	261	127	124	10x17	34,00

## POWER 4000VA



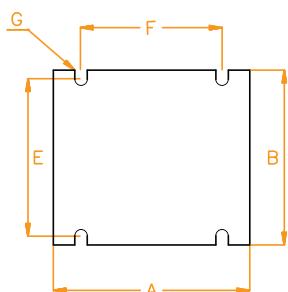
Model: XHP, 2-5kVA,  
vertical.

ORDER CODE: XHP4000\_230  
MODEL: XHP4000-230-400/230

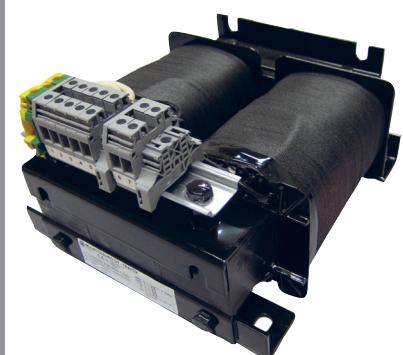
## TECHNICAL DATA

Primary winding	230/400V ±5%
Secondary winding	230V AC
Power	4000VA
Frequency	50/60Hz
Protection class	IP2X
Isolation voltage	4kV AC
Insulation class	T40/B
Ambient temperature	-20...+40°C
Standard	EN61558-2-4, CE
Installation	Screw fastening

## MEASUREMENTS

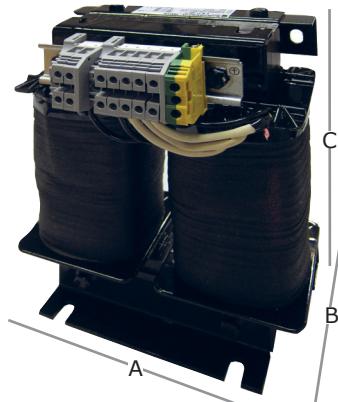


Order code	A mm	B mm	C mm	E mm	F mm	G mm	Weight kg
XHP4000_230	210	208	261	127	124	10x17	34,00



Model: XHM, 2-5kVA,  
horizontal, page 15.

## POWER 5000VA

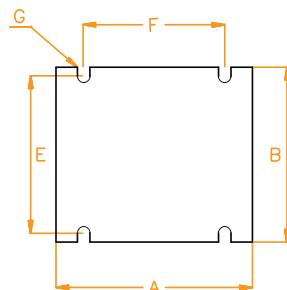


Model: XHP, 2-5kVA,  
vertical.

## TECHNICAL DATA

Primary winding	230/400V ±5%
Secondary winding	24V AC
Power	5000VA
Frequency	50/60Hz
Protection class	IP2X
Isolation voltage	4kV AC
Insulation class	T40/B
Ambient temperature	-20...+40°C
Standard	EN61558-2-6, CE
Installation	Screw fastening

## MEASUREMENTS



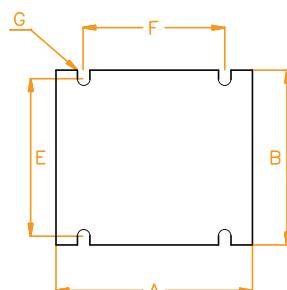
Order code	A mm	B mm	C mm	E mm	F mm	G mm	Weight kg
XHP5000_24	220	280	261	142	124	10x17	40,00

ORDER CODE: XHP5000\_230  
MODEL: XHP5000-230-400/230

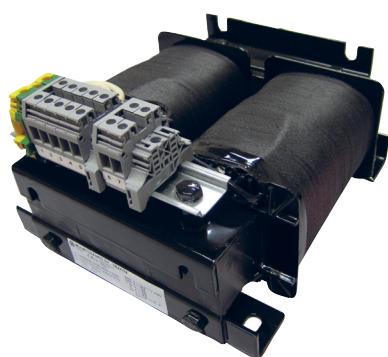
## TECHNICAL DATA

Primary winding	230/400V ±5%
Secondary winding	230V AC
Power	5000VA
Frequency	50/60Hz
Protection class	IP2X
Isolation voltage	4kV AC
Insulation class	T40/B
Ambient temperature	-20...+40°C
Standard	EN61558-2-4, CE
Installation	Screw fastening

## MEASUREMENTS



Order code	A mm	B mm	C mm	E mm	F mm	G mm	Weight kg
XHP5000_230	210	220	261	142	124	10x17	40,00



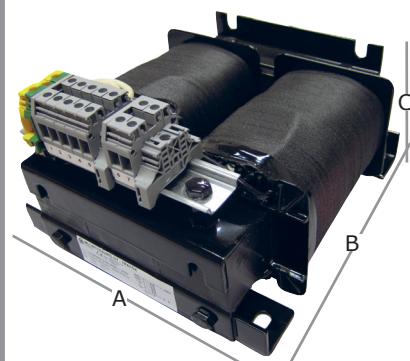
Model: XHM, 2-5kVA,  
horizontal, page 15.

ORDER CODES: XHM(2000/3000/4000/5000)\_24  
 MODELS: XHM(2000/3000/4000/5000)-230-400/24

## TECHNICAL DATA

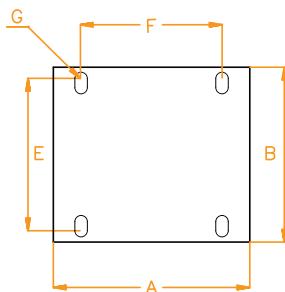
Primary winding	230/400V ±5%
Secondary winding	24V AC
Power	2000VA ... 5000VA
Frequency	50/60Hz
Protection class	IP2X
Isolation voltage	4kV AC
Insulation class	T40/B
Ambient temperature	-20...+40°C
Standard	EN61558-2-6, CE
Installation	Screw fastening

## POWER 2000...5000VA



Model: XHM, 2-5kVA,  
horizontal.

## MEASUREMENTS



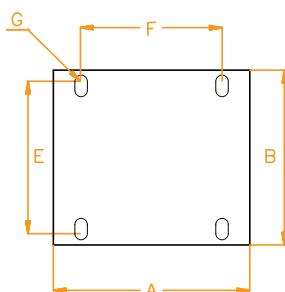
Order code	A mm	B mm	C mm	E mm	F mm	G mm	Weight kg
XHM2000_24	210	261	168	205	174	10x14	20,00
XHM3000_24	210	261	193	205	174	10x14	28,00
XHM4000_24	210	261	208	205	174	10x14	34,00
XHM5000_24	220	261	280	205	174	10x14	40,00

ORDER CODES: XHM(2000/3000/4000/5000)\_230  
 MODELS: XHM(2000/3000/4000/5000)-230-400/230

## TECHNICAL DATA

Primary winding	230/400V ±5%
Secondary winding	230V AC
Power	2000VA ... 5000VA
Frequency	50/60Hz
Protection class	IP2X
Isolation voltage	4kV AC
Insulation class	T40/B
Ambient temperature	-20...+40°C
Standard	EN61558-2-4, CE
Installation	Screw fastening

## MEASUREMENTS



Order code	A mm	B mm	C mm	E mm	F mm	G mm	Weight kg
XHM2000_230	210	261	168	205	174	10x14	20,00
XHM3000_230	210	261	193	205	174	10x14	28,00
XHM4000_230	210	261	208	205	174	10x14	34,00
XHM5000_230	210	261	256	205	174	10x14	40,00

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Ω TRAFOX EESTI OÜ

SUZHOU TRAFOX ELECTRONICS CO. LTD Ω

# Muuntosähkö

Trafox is a brand of Muuntosähkö Oy. We develop, manufacture and customise high-quality transformers, chokes, filters and Trafox Superintend® monitoring devices for a large number of applications.

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