mdexx
Magnetronic Devices

Do you require more Information?
Then please contact:
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or by fax: + 49 (0)421 5125 333

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Transformers, Power Supplies, Reactors and Filters

Program Overview 2010

More benefits – reduced costs

Transformers and power-supplies by mdexx

Our concept for your efficient power supply:

Dynamic capacity:
Control transformers with high short-time rating for contactor actuation.

Thermal load capacity:
Full nominal power at high ambient temperatures.

Optimum protection:
Primary-side protection against short circuits and overloads for fuseless assemblies with standard circuit breakers.

Worldwide acceptance:
Consistently from 0.025 to 400 kVA – almost all designs feature the approval for Canada and the USA.

Non-stabilized DC power supplies:
Thanks to their rugged design, the TAV devices feature a very high reliability. They are extremely resistant to the influence of external mains interferences and have a dampening effect on EMC. They are also suitable for the supply of capacitive loads as the connection of these consumers causes only minor voltage drops.

Environmental protection:
Application of certified environmental management system.

Easy mounting:
- Freely accessible mounting holes
- Optional easy snap-on mounting to 35 mm DIN rail: single-phase transformers from 25 to 500 VA
- Finger-safe connection terminals, doing away with end sleeves
- Spring-loaded terminal connection system for currents ≤ 24 A

Quality management:
- Certified management system in acc. with DIN EN ISO 9001:2008
- Recognition by leading original equipment manufacturers
- Environmental management system certified in acc. with DIN ISO 14001:2005

Engineering support:
You need not make endless telephone calls to obtain the data important for configuration. Everything you need is listed in the catalog, e. g.:
- Technical data
- Dimension drawings with permissible installation positions
- Derating with higher degrees of protection
- Permissible loads with different ambient temperatures and installation altitudes
- Assignment of the primaryside protective equipment with all rating classes ≤ 16 kVA and all further mains voltages ≤ 600 V
- Short-time rating of the control transformers over the complete power factor range of the load from cos 0.2 to 1

In addition:
- Fast product selection in the online catalog with configurator or technical selection help

For a save and failure-free running:

mdexx components around the converter

A present drive system, from the power line to the motor, has to meet highest requirements. The frequency converter changing the power supply voltage into a three-phase system with a variable frequency is the key element. How-ever choosing the suitable motor and the suitable frequency converter for the load cycle is not enough.

Usually reactors and filters are required for the optimal operation of the drive.

In the text at hand the suitable components around the frequency converter are included.

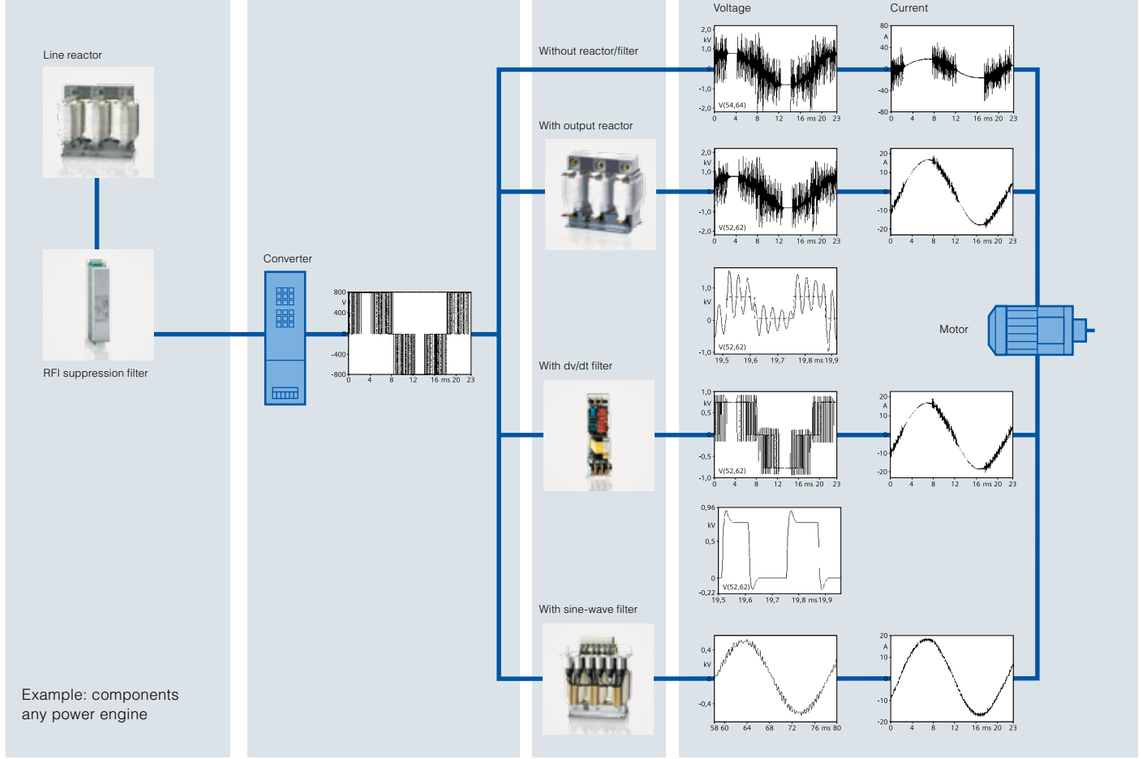
The advantages are clear:
Large range of capacity with reactor achievements of 2.000 kVA and operational currents up to 2.500A ex catalogue the suitable components for application can always be found. Standard reactors are offered for drive powers of up to 1.500 kW, standard filters up to 900 kW.

Easy Allocation
Indicating the typical drive power of the frequency converter in kW enables an easy allocation of the drive systems.

World-wide application
The reactor- and filter applications are UL recognized products.

Insulation strength
All reactors are equipped with an insulation system allowing the application with considerably higher voltages compared to the reference voltage named on the type plate.

Reliability
Our experience with reactors and filters for decades holds an intention, the availability of equipment and systems.



Example: components any power engine

First choice for optimum voltage:
mdexx transformers

Selection and ordering data

Transformers in accordance with DIN EN 60204 T.1 (VDE 0113 T.1) for universal applications, multi-voltage versions for adjustment to mains voltages worldwide.

Mdexx transformers designed as control and safety transformers in accordance with EN 61558-2-2, -2-6 or as mains, control and isolation transformers in accordance with EN 61588-2-1, -2-2, -2-4, AC 50/60 Hz, degree of protection IP00.

TAM: ta 40 °C/B, TAT: ta 55 °C/H

Single-phase			**with input voltage**									
PRI			230 V ± 5%					400 V ± 5%				
SEC			**24V**	**42V**	**110V**	**2x115V**	**230V**	**24V**	**42V**	**110V**	**2x115v**	**230V**
Pn	Short-time rating [1] $P_{schortt}$	**Basic type**	**Order number supplement**									
kVA	kVA											
0,025		TAM2342-	4TN00 - 0EA0	4TV00 - 0EA0	4TJ10 - 0FA0	-	4TT10 - 0FA0	5AN00 - 0EA0	5AV00 - 0EA0	5AJ10 - 0FA0	-	5AT10 - 0FA0
0,04		TAM2642-	4TN00 - 0EA0	4TV00 - 0EA0	4TJ10 - 0FA0	-	4TT10 - 0FA0	5AN00 - 0EA0	5AV00 - 0EA0	5AJ10 - 0FA0	-	5AT10 - 0FA0
0,063	0,19	TAM3242-	4TN00 - 0EA0	4TV00 - 0EA0	4TJ10 - 0FA0	4TD40 - 0FA0	4TT10 - 0FA0	5AN00 - 0EA0	5AV00 - 0EA0	5AJ10 - 0FA0	5AD10 - 0FA0	5AT10 - 0FA0
0,1	0,31	TAM3442-	4TN00 - 0EA0	4TV00 - 0EA0	4TJ10 - 0FA0	4TD40 - 0FA0	4TT10 - 0FA0	5AN00 - 0EA0	5AV00 - 0EA0	5AJ10 - 0FA0	5AD10 - 0FA0	5AT10 - 0FA0
0,16	0,49	TAM3842-	4TN00 - 0EA0	4TV00 - 0EA0	4TJ10 - 0FA0	4TD40 - 0FA0	4TT10 - 0FA0	5AN00 - 0EA0	5AV00 - 0EA0	5AJ10 - 0FA0	5AD10 - 0FA0	5AT10 - 0FA0
0,25	0,85	TAM4042-	4TN00 - 0EA0	4TV00 - 0EA0	4TJ10 - 0FA0	4TD40 - 0FA0	4TT10 - 0FA0	5AN00 - 0EA0	5AV00 - 0EA0	5AJ10 - 0FA0	5AD10 - 0FA0	5AT10 - 0FA0
0,315	1,12	TAM4342-	4TN00 - 0EA0	4TV00 - 0EA0	4TJ10 - 0FA0	4TD40 - 0FA0	4TT10 - 0FA0	5AN00 - 0EA0	5AV00 - 0EA0	5AJ10 - 0FA0	5AD10 - 0FA0	5AT10 - 0FA0
0,4	1,44	TAM4642-	4TN00 - 0EA0	4TV00 - 0EA0	4TJ10 - 0FA0	4TD40 - 0FA0	4TT10 - 0FA0	5AN00 - 0EA0	5AV00 - 0EA0	5AJ10 - 0FA0	5AD10 - 0FA0	5AT10 - 0FA0
0,5	2	TAM4842-	4TN00 - 0EA0	4TV00 - 0EA0	4TJ10 - 0FA0	4TD40 - 0FA0	4TT10 - 0FA0	5AN00 - 0EA0	5AV00 - 0EA0	5AJ10 - 0FA0	5AD10 - 0FA0	5AT10 - 0FA0
0,63	2,35	TAM5242-	4TN00 - 0EA0	4TV00 - 0EA0	4TJ10 - 0FA0	4TD40 - 0FA0	4TT10 - 0FA0	5AN00 - 0EA0	5AV00 - 0EA0	5AJ10 - 0FA0	5AD10 - 0FA0	5AT10 - 0FA0
0,8	3,4	TAM5542-	4TN00 - 0EA0	4TV00 - 0EA0	4TJ10 - 0FA0	4TD40 - 0FA0	4TT10 - 0FA0	5AN00 - 0EA0	5AV00 - 0EA0	5AJ10 - 0FA0	5AD10 - 0FA0	5AT10 - 0FA0
1	5	TAM5742-	4TN00 - 0EA0	4TV00 - 0EA0	4TJ10 - 0FA0	4TD40 - 0FA0	4TT10 - 0FA0	5AN00 - 0EA0	5AV00 - 0EA0	5AJ10 - 0FA0	5AD10 - 0FA0	5AT10 - 0FA0
1,6	7,3	TAM6142-	-	-	4TJ10 - 0FA0	4TD40 - 0FA0	4TT10 - 0FA0	-	-	5AJ10 - 0FA0	5AD10 - 0FA0	5AT10 - 0FA0
2	9,7	TAM6442-	-	-	4TJ10 - 0FA0	4TD40 - 0FA0	4TT10 - 0FA0	-	-	5AJ10 - 0FA0	5AD10 - 0FA0	5AT10 - 0FA0
2,5	13,3	TAM6542-	-	-	4TJ10 - 0FA0	4TD40 - 0FA0	4TT10 - 0FA0	-	-	5AJ10 - 0FA0	5AD10 - 0FA0	5AT10 - 0FA0
4	16	TAT3032-	-	-	4TJ10 - 0FA0	4TD40 - 0FA0	4TT10 - 0FA0	-	-	5AJ10 - 0FA0	5AD10 - 0FA0	5AT10 - 0FA0
5	18,5	TAT3612-	-	-	4TJ10 - 0FA0	4TD40 - 0FA0	4TT10 - 0FA0	-	-	5AJ10 - 0FA0	5AD10 - 0FA0	5AT10 - 0FA0
6,3	22,5	TAT3632-	-	-	4TJ10 - 0FA0	4TD40 - 0FA0	4TT10 - 0FA0	-	-	5AJ10 - 0FA0	5AD10 - 0FA0	5AT10 - 0FA0
8	28,5	TAT3912-	-	-	4TJ10 - 0FA0	4TD40 - 0FA0	4TT10 - 0FA0	-	-	5AJ10 - 0FA0	5AD10 - 0FA0	5AT10 - 0FA0
10	30	TAT3932-	-	-	4TJ10 - 0FA0	4TD40 - 0FA0	4TT10 - 0FA0	-	-	5AJ10 - 0FA0	5AD10 - 0FA0	5AT10 - 0FA0

[1] With cos φ= 0,5 und U_2 = 0,95 x U_{2N}

For further products with other power and voltage values and degrees of protection, please refer to technical information in catalog Transformers, Power Supplies, Reactors, Filter or the internet www.mdexx.com

Single-phase			**with input voltage**				**in Euro-voltage design**		**in multi-voltage design**			
PRI			440 V ±5%		500 V ±5%		400/230 V ±15 V		550-525-500-480-460-440-415-400-380-230-208 V		600-575-550-525-500-480-460-440-415-400-240-230 V	
SEC			**24V**	**230V**	**24V**	**230V**	**24V**	**2x115V**	**24V**	**2x115V**	**24V**	**2x115V**
Pn	Short-time rating [1] $P_{schortt}$	**Basic type**	**Order number supplement**									
kVA	kVA											
0,025		TAM2342-	5CN00-0EA0	-	5FN00-0EA0	5FT10 - 0FA0	-	-	-	-	-	-
0,04		TAM2342-	5CN00-0EA0	-	5FN00-0EA0	5FT10 - 0FA0	-	-	-	-	-	-
0,063	0,19	TAM3242-	5CN00-0EA0	5CT10 - 0FA0	5FN00-0EA0	5FT10 - 0FA0	8JN00 - 0EA0	8JD40 - 0FA0	8DN00 - 0EA0	8DD40 - 0FA0	8EN00 - 0EA0	8ED40 - 0FA0
0,1	0,31	TAM3442-	5CN00-0EA0	5CT10 - 0FA0	5FN00-0EA0	5FT10 - 0FA0	8JN00 - 0EA0	8JD40 - 0FA0	8DN00 - 0EA0	8DD40 - 0FA0	8EN00 - 0EA0	8ED40 - 0FA0
0,16	0,49	TAM3842-	5CN00-0EA0	5CT10 - 0FA0	5FN00-0EA0	5FT10 - 0FA0	8JN00 - 0EA0	8JD40 - 0FA0	8DN00 - 0EA0	8DD40 - 0FA0	8EN00 - 0EA0	8ED40 - 0FA0
0,25	0,85	TAM4042-	5CN00-0EA0	5CT10 - 0FA0	5FN00-0EA0	5FT10 - 0FA0	8JN00 - 0EA0	8JD40 - 0FA0	8DN00 - 0EA0	8DD40 - 0FA0	8EN00 - 0EA0	8ED40 - 0FA0
0,315	1,12	TAM4342-	5CN00-0EA0	5CT10 - 0FA0	5FN00-0EA0	5FT10 - 0FA0	8JN00 - 0EA0	8JD40 - 0FA0	8DN00 - 0EA0	8DD40 - 0FA0	8EN00 - 0EA0	8ED40 - 0FA0
0,4	1,44	TAM4642-	5CN00-0EA0	5CT10 - 0FA0	5FN00-0EA0	5FT10 - 0FA0	8JN00 - 0EA0	8JD40 - 0FA0	8DN00 - 0EA0	8DD40 - 0FA0	8EN00 - 0EA0	8ED40 - 0FA0
0,5	2	TAM4842-	5CN00-0EA0	5CT10 - 0FA0	5FN00-0EA0	5FT10 - 0FA0	8JN00 - 0EA0	8JD40 - 0FA0	8DN00 - 0EA0	8DD40 - 0FA0	8EN00 - 0EA0	8ED40 - 0FA0
0,63	2,35	TAM5242-	5CN00-0EA0	5CT10 - 0FA0	5FN00-0EA0	5FT10 - 0FA0	8JN00 - 0EA0	8JD40 - 0FA0	8DN00 - 0EA0	8DD40 - 0FA0	8EN00 - 0EA0	8ED40 - 0FA0
0,8	3,4	TAM5542-	5CN00-0EA0	5CT10 - 0FA0	5FN00-0EA0	5FT10 - 0FA0	8JN00 - 0EA0	8JD40 - 0FA0	8DN00 - 0EA0	8DD40 - 0FA0	8EN00 - 0EA0	8ED40 - 0FA0
1	5	TAM5742-	5CN00-0EA0	5CT10 - 0FA0	5FN00-0EA0	5FT10 - 0FA0	8JN00 - 0EA0	8JD40 - 0FA0	8DN00 - 0EA0	8DD40 - 0FA0	8EN00 - 0EA0	8ED40 - 0FA0
1,6	7,3	TAM6142-	-	5CT10 - 0FA0	-	5FT10 - 0FA0	-	8JD40 - 0FA0	-	8DD40 - 0FA0	-	8ED40 - 0FA0
2	9,7	TAM6442-	-	5CT10 - 0FA0	-	5FT10 - 0FA0	-	8JD40 - 0FA0	-	8DD40 - 0FA0	-	8ED40 - 0FA0
2,5	13,3	TAM6542-	-	5CT10 - 0FA0	-	5FT10 - 0FA0	-	8JD40 - 0FA0	-	8DD40 - 0FA0	-	8ED40 - 0FA0
4	16	TAT3032-	-	5CT10 - 0FA0		5CT10 - 0FA0	-	8JD40 - 0FA0	-	8DD40 - 0FA0	-	8ED40 - 0FA0
5	18,5	TAT3612-	-	5CT10 - 0FA0	-	5FT10 - 0FA0	-	8JD40 - 0FA0	-	8DD40 - 0FA0	-	8ED40 - 0FA0
6,3	22,5	TAT3632-	-	5CT10 - 0FA0	-	5FT10 - 0FA0	-	8JD40 - 0FA0	-	8DD40 - 0FA0	-	8ED40 - 0FA0
8	28,5	TAT3912-	-	5CT10 - 0FA0	-	5FT10 - 0FA0	-	8JD40 - 0FA0	-	8DD40 - 0FA0	-	8ED40 - 0FA0
10	30	TAT3932-	-	5CT10 - 0FA0	-	5FT10 - 0FA0	-	8JD40 - 0FA0	-	8DD40 - 0FA0	-	8ED40 - 0FA0

1) With cos φ= 0,5 und U_2 = 0,95 x U_{2N}

TAM with spring-loaded terminals

TAM with screw-type / plug-type terminal

TAT horizontal variant

In every situation the correct voltage:

mdexx three phase transformers
TBU power transformers

Selection and ordering data
Power transformers accounding to DIN VDE 0532-6 for machinen and systems adjusting the mains voltage worldwide.

mdexx TBU power transformers as matching transformers according to DIN VDE 0532-6

AC 50 / 60 HZ , Protection class IP00
TBU: ta 40 ° C/H, CE

Rated output voltage Sec. U_{2N} 3 AC 208 V

		Vector group Dyn5			Vector group Yyn0			Vector group Dyn5			Vector group Yyn0		
PN	Basic type	Order number supplement			Order number supplement			Order number supplement			Order number supplement		
Rated input voltage Pri. U_{1N} 3 AC V													
kVA	**Pri**	**400 V**	**440 V**	**480 V**	**400 V**	**440 V**	**480 V**	**400 V +- 5 %**	**440 V+- 5 %**	**480 V+- 5 %**	**400 V +- 5 %**	**440 V+- 5 %**	**480 V+- 5 %**
18	TBU4332-	2AR10-2DA0	2CR10-2DA0	2ER10-2DA0	2AR10-2CA0	2CR10-2CA0	2ER10-2CA0	5AR10-2DA0	5CR10-2DA0	5ER10-2DA0	5AR10-2CA0	5CR10-2CA0	5ER10-2CA0
20	TBU4342-	2AR10-2DA0	2CR10-2DA0	2ER10-2DA0	2AR10-2CA0	2CR10-2CA0	2ER10-2CA0	5AR10-2DA0	5CR10-2DA0	5ER10-2DA0	5AR10-2CA0	5CR10-2CA0	5ER10-2CA0
22,5	TBU4352-	2AR10-2DA0	2CR10-2DA0	2ER10-2DA0	2AR10-2CA0	2CR10-2CA0	2ER10-2CA0	5AR10-2DA0	5CR10-2DA0	5ER10-2DA0	5AR10-2CA0	5CR10-2CA0	5ER10-2CA0
25	TBU4532-	2AR10-2DA0	2CR10-2DA0	2ER10-2DA0	2AR10-2CA0	2CR10-2CA0	2ER10-2CA0	5AR10-2DA0	5CR10-2DA0	5ER10-2DA0	5AR10-2CA0	5CR10-2CA0	5ER10-2CA0
28	TBU4542-	2AR10-2DA0	2CR10-2DA0	2ER10-2DA0	2AR10-2CA0	2CR10-2CA0	2ER10-2CA0	5AR10-2DA0	5CR10-2DA0	5ER10-2DA0	5AR10-2CA0	5CR10-2CA0	5ER10-2CA0
31,5	TBU4732-	2AR10-2DA0	2CR10-2DA0	2ER10-2DA0	2AR10-2CA0	2CR10-2CA0	2ER10-2CA0	5AR10-2DA0	5CR10-2DA0	5ER10-2DA0	5AR10-2CA0	5CR10-2CA0	5ER10-2CA0
35,5	TBU4742-	2AR10-2DA0	2CR10-2DA0	2ER10-2DA0	2AR10-2CA0	2CR10-2CA0	2ER10-2CA0	5AR10-2DA0	5CR10-2DA0	5ER10-2DA0	5AR10-2CA0	5CR10-2CA0	5ER10-2CA0
40	TBU4752-	2AR10-2DA0	2CR10-2DA0	2ER10-2DA0	2AR10-2CA0	2CR10-2CA0	2ER10-2CA0	5AR10-2DA0	5CR10-2DA0	5ER10-2DA0	5AR10-2CA0	5CR10-2CA0	5ER10-2CA0
45	TBU5232-	2AR10-2DA0	2CR10-2DA0	2ER10-2DA0	2AR10-2CA0	2CR10-2CA0	2ER10-2CA0	5AR10-2DA0	5CR10-2DA0	5ER10-2DA0	5AR10-2CA0	5CR10-2CA0	5ER10-2CA0
50	TBU5332-	2AR10-2DA0	2CR10-2DA0	2ER10-2DA0	2AR10-2CA0	2CR10-2CA0	2ER10-2CA0	5AR10-2DA0	5CR10-2DA0	5ER10-2DA0	5AR10-2CA0	5CR10-2CA0	5ER10-2CA0
56	TBU5342-	2AR10-2DA0	2CR10-2DA0	2ER10-2DA0	2AR10-2CA0	2CR10-2CA0	2ER10-2CA0	5AR10-2DA0	5CR10-2DA0	5ER10-2DA0	5AR10-2CA0	5CR10-2CA0	5ER10-2CA0
63	TBU5432-	2AR10-2DA0	2CR10-2DA0	2ER10-2DA0	2AR10-2CA0	2CR10-2CA0	2ER10-2CA0	5AR10-2DA0	5CR10-2DA0	5ER10-2DA0	5AR10-2CA0	5CR10-2CA0	5ER10-2CA0
71	TBU5442-	2AR10-2DA0	2CR10-2DA0	2ER10-2DA0	2AR10-2CA0	2CR10-2CA0	2ER10-2CA0	5AR10-2DA0	5CR10-2DA0	5ER10-2DA0	5AR10-2CA0	5CR10-2CA0	5ER10-2CA0
80	TBU5532-	2AR10-2DA0	2CR10-2DA0	2ER10-2DA0	2AR10-2CA0	2CR10-2CA0	2ER10-2CA0	5AR10-2DA0	5CR10-2DA0	5ER10-2DA0	5AR10-2CA0	5CR10-2CA0	5ER10-2CA0
91	TBU5632-	2AR10-2DA0	2CR10-2DA0	2ER10-2DA0	2AR10-2CA0	2CR10-2CA0	2ER10-2CA0	5AR10-2DA0	5CR10-2DA0	5ER10-2DA0	5AR10-2CA0	5CR10-2CA0	5ER10-2CA0
100	TBU5642-	2AR10-2DA0	2CR10-2DA0	2ER10-2DA0	2AR10-2CA0	2CR10-2CA0	2ER10-2CA0	5AR10-2DA0	5CR10-2DA0	5ER10-2DA0	5AR10-2CA0	5CR10-2CA0	5ER10-2CA0
112	TBU5832-	2AR10-2DA0	2CR10-2DA0	2ER10-2DA0	2AR10-2CA0	2CR10-2CA0	2ER10-2CA0	5AR10-2DA0	5CR10-2DA0	5ER10-2DA0	5AR10-2CA0	5CR10-2CA0	5ER10-2CA0
125	TBU5842-	2AR10-2DA0	2CR10-2DA0	2ER10-2DA0	2AR10-2CA0	2CR10-2CA0	2ER10-2CA0	5AR10-2DA0	5CR10-2DA0	5ER10-2DA0	5AR10-2CA0	5CR10-2CA0	5ER10-2CA0
140	TBU5852-	2AR10-2DA0	2CR10-2DA0	2ER10-2DA0	2AR10-2CA0	2CR10-2CA0	2ER10-2CA0	5AR10-2DA0	5CR10-2DA0	5ER10-2DA0	5AR10-2CA0	5CR10-2CA0	5ER10-2CA0
160	TBU5932-	2AR10-2DA0	2CR10-2DA0	2ER10-2DA0	2AR10-2CA0	2CR10-2CA0	2ER10-2CA0	5AR10-2DA0	5CR10-2DA0	5ER10-2DA0	5AR10-2CA0	5CR10-2CA0	5ER10-2CA0
180	TBU6032-	2AR10-2DA0	2CR10-2DA0	2ER10-2DA0	2AR10-2CA0	2CR10-2CA0	2ER10-2CA0	5AR10-2DA0	5CR10-2DA0	5ER10-2DA0	5AR10-2CA0	5CR10-2CA0	5ER10-2CA0

For further products with other power and voltage values ambient temperature 50C/H, cULus approbation and degrees of protection, please refer to technical information in catalog Transformers, Power Supplies, Reactors, Filter or the internet www.mdexx.com

Rated output voltage Sec. U_{2N} 3 AC 400 V

		Vector group Dyn5			Vector group Yyn0			Vector group Dyn5			Vector group Yyn0		
PN	Basic type	Order number supplement			Order number supplement			Order number supplement			Order number supplement		
Rated input voltage Pri. U_{1N} 3 AC V													
kVA	**Pri**	**400 V**	**440 V**	**480 V**	**400 V**	**440 V**	**480 V**	**400 V +- 5 %**	**440 V+- 5 %**	**480 V+- 5 %**	**400 V +- 5 %**	**440 V+- 5 %**	**480 V+- 5 %**
18	TBU4332-	2AA20-2DA0	2CA20-2DA0	2EA20-2DA0	2AA20-2CA0	2CA20-2CA0	2EA20-2CA0	5AA20-2DA0	5CA20-2DA0	5EA20-2DA0	5AA20-2CA0	5CA20-2CA0	5EA20-2CA0
20	TBU4342-	2AA20-2DA0	2CA20-2DA0	2EA20-2DA0	2AA20-2CA0	2CA20-2CA0	2EA20-2CA0	5AA20-2DA0	5CA20-2DA0	5EA20-2DA0	5AA20-2CA0	5CA20-2CA0	5EA20-2CA0
22,5	TBU4352-	2AA20-2DA0	2CA20-2DA0	2EA20-2DA0	2AA20-2CA0	2CA20-2CA0	2EA20-2CA0	5AA20-2DA0	5CA20-2DA0	5EA20-2DA0	5AA20-2CA0	5CA20-2CA0	5EA20-2CA0
25	TBU4532-	2AA20-2DA0	2CA20-2DA0	2EA20-2DA0	2AA20-2CA0	2CA20-2CA0	2EA20-2CA0	5AA20-2DA0	5CA20-2DA0	5EA20-2DA0	5AA20-2CA0	5CA20-2CA0	5EA20-2CA0
28	TBU4542-	2AA20-2DA0	2CA20-2DA0	2EA20-2DA0	2AA20-2CA0	2CA20-2CA0	2EA20-2CA0	5AA20-2DA0	5CA20-2DA0	5EA20-2DA0	5AA20-2CA0	5CA20-2CA0	5EA20-2CA0
31,5	TBU4732-	2AA20-2DA0	2CA20-2DA0	2EA20-2DA0	2AA20-2CA0	2CA20-2CA0	2EA20-2CA0	5AA20-2DA0	5CA20-2DA0	5EA20-2DA0	5AA20-2CA0	5CA20-2CA0	5EA20-2CA0
35,5	TBU4742-	2AA20-2DA0	2CA20-2DA0	2EA20-2DA0	2AA20-2CA0	2CA20-2CA0	2EA20-2CA0	5AA20-2DA0	5CA20-2DA0	5EA20-2DA0	5AA20-2CA0	5CA20-2CA0	5EA20-2CA0
40	TBU4752-	2AA20-2DA0	2CA20-2DA0	2EA20-2DA0	2AA20-2CA0	2CA20-2CA0	2EA20-2CA0	5AA20-2DA0	5CA20-2DA0	5EA20-2DA0	5AA20-2CA0	5CA20-2CA0	5EA20-2CA0
45	TBU5232-	2AA20-2DA0	2CA20-2DA0	2EA20-2DA0	2AA20-2CA0	2CA20-2CA0	2EA20-2CA0	5AA20-2DA0	5CA20-2DA0	5EA20-2DA0	5AA20-2CA0	5CA20-2CA0	5EA20-2CA0
50	TBU5332-	2AA20-2DA0	2CA20-2DA0	2EA20-2DA0	2AA20-2CA0	2CA20-2CA0	2EA20-2CA0	5AA20-2DA0	5CA20-2DA0	5EA20-2DA0	5AA20-2CA0	5CA20-2CA0	5EA20-2CA0
56	TBU5342-	2AA20-2DA0	2CA20-2DA0	2EA20-2DA0	2AA20-2CA0	2CA20-2CA0	2EA20-2CA0	5AA20-2DA0	5CA20-2DA0	5EA20-2DA0	5AA20-2CA0	5CA20-2CA0	5EA20-2CA0
63	TBU5432-	2AA20-2DA0	2CA20-2DA0	2EA20-2DA0	2AA20-2CA0	2CA20-2CA0	2EA20-2CA0	5AA20-2DA0	5CA20-2DA0	5EA20-2DA0	5AA20-2CA0	5CA20-2CA0	5EA20-2CA0
71	TBU5442-	2AA20-2DA0	2CA20-2DA0	2EA20-2DA0	2AA20-2CA0	2CA20-2CA0	2EA20-2CA0	5AA20-2DA0	5CA20-2DA0	5EA20-2DA0	5AA20-2CA0	5CA20-2CA0	5EA20-2CA0
80	TBU5532-	2AA20-2DA0	2CA20-2DA0	2EA20-2DA0	2AA20-2CA0	2CA20-2CA0	2EA20-2CA0	5AA20-2DA0	5CA20-2DA0	5EA20-2DA0	5AA20-2CA0	5CA20-2CA0	5EA20-2CA0
91	TBU5632-	2AA20-2DA0	2CA20-2DA0	2EA20-2DA0	2AA20-2CA0	2CA20-2CA0	2EA20-2CA0	5AA20-2DA0	5CA20-2DA0	5EA20-2DA0	5AA20-2CA0	5CA20-2CA0	5EA20-2CA0
100	TBU5642-	2AA20-2DA0	2CA20-2DA0	2EA20-2DA0	2AA20-2CA0	2CA20-2CA0	2EA20-2CA0	5AA20-2DA0	5CA20-2DA0	5EA20-2DA0	5AA20-2CA0	5CA20-2CA0	5EA20-2CA0
112	TBU5832-	2AA20-2DA0	2CA20-2DA0	2EA20-2DA0	2AA20-2CA0	2CA20-2CA0	2EA20-2CA0	5AA20-2DA0	5CA20-2DA0	5EA20-2DA0	5AA20-2CA0	5CA20-2CA0	5EA20-2CA0
125	TBU5842-	2AA20-2DA0	2CA20-2DA0	2EA20-2DA0	2AA20-2CA0	2CA20-2CA0	2EA20-2CA0	5AA20-2DA0	5CA20-2DA0	5EA20-2DA0	5AA20-2CA0	5CA20-2CA0	5EA20-2CA0
140	TBU5852-	2AA20-2DA0	2CA20-2DA0	2EA20-2DA0	2AA20-2CA0	2CA20-2CA0	2EA20-2CA0	5AA20-2DA0	5CA20-2DA0	5EA20-2DA0	5AA20-2CA0	5CA20-2CA0	5EA20-2CA0
160	TBU5932-	2AA20-2DA0	2CA20-2DA0	2EA20-2DA0	2AA20-2CA0	2CA20-2CA0	2EA20-2CA0	5AA20-2DA0	5CA20-2DA0	5EA20-2DA0	5AA20-2CA0	5CA20-2CA0	5EA20-2CA0
180	TBU6032-	2AA20-2DA0	2CA20-2DA0	2EA20-2DA0	2AA20-2CA0	2CA20-2CA0	2EA20-2CA0	5AA20-2DA0	5CA20-2DA0	5EA20-2DA0	5AA20-2CA0	5CA20-2CA0	5EA20-2CA0

TBU power transformers in IP00

TBU power transformers in IP20/ IP23

The cULus approbation allows a worldwide use:
mdexx three phase power transformers TBU

Selection and ordering data
Power transformers accordind to DIN VDE 0532-6 and cULus approbation. Mains matching transformers acording to DIN VDE 0532-6 for voltage adjustment up to the lokal voltages.

mdexx TBU Power transformers with cULus -approbation for matching of maschines and systems.

AC 50 / 60 HZ, protection class IP00
TBU: ta 40 ° C/H, CE, cULus

Rated output voltage Sec. U_{2N} 3 AC 208 V

cULus Approbation													
		Vector group Dyn5			Vector group Yyn0			Vector group Dyn5			Vector group Yyn0		
PN	Basic type	Order number supplement			Order number supplement			Order number supplement			Order number supplement		
Rated input voltage Pri. U_{1N} 3 AC V													
kVA	**Pri**	**400 V**	**440 V**	**480 V**	**400 V**	**440 V**	**480 V**	**400 V +- 5 %**	**440 V+- 5 %**	**480 V+- 5 %**	**400 V +- 5 %**	**440 V+- 5 %**	**480 V+- 5 %**
18	TBU4333-	2AR10-2DA0	2CR10-2DA0	2ER10-2DA0	2AR10-2CA0	2CR10-2CA0	2ER10-2CA0	5AR10-2DA0	5AR10-2DA0	5ER10-2DA0	5AR10-2CA0	5CR10-2CA0	5ER10-2CA0
20	TBU4343-	2AR10-2DA0	2CR10-2DA0	2ER10-2DA0	2AR10-2CA0	2CR10-2CA0	2ER10-2CA0	5AR10-2DA0	5AR10-2DA0	5ER10-2DA0	5AR10-2CA0	5CR10-2CA0	5ER10-2CA0
22,5	TBU4353-	2AR10-2DA0	2CR10-2DA0	2ER10-2DA0	2AR10-2CA0	2CR10-2CA0	2ER10-2CA0	5AR10-2DA0	5AR10-2DA0	5ER10-2DA0	5AR10-2CA0	5CR10-2CA0	5ER10-2CA0
25	TBU4533-	2AR10-2DA0	2CR10-2DA0	2ER10-2DA0	2AR10-2CA0	2CR10-2CA0	2ER10-2CA0	5AR10-2DA0	5AR10-2DA0	5ER10-2DA0	5AR10-2CA0	5CR10-2CA0	5ER10-2CA0
28	TBU4543-	2AR10-2DA0	2CR10-2DA0	2ER10-2DA0	2AR10-2CA0	2CR10-2CA0	2ER10-2CA0	5AR10-2DA0	5AR10-2DA0	5ER10-2DA0	5AR10-2CA0	5CR10-2CA0	5ER10-2CA0
31,5	TBU4733-	2AR10-2DA0	2CR10-2DA0	2ER10-2DA0	2AR10-2CA0	2CR10-2CA0	2ER10-2CA0	5AR10-2DA0	5AR10-2DA0	5ER10-2DA0	5AR10-2CA0	5CR10-2CA0	5ER10-2CA0
35,5	TBU4743-	2AR10-2DA0	2CR10-2DA0	2ER10-2DA0	2AR10-2CA0	2CR10-2CA0	2ER10-2CA0	5AR10-2DA0	5AR10-2DA0	5ER10-2DA0	5AR10-2CA0	5CR10-2CA0	5ER10-2CA0
40	TBU4753-	2AR10-2DA0	2CR10-2DA0	2ER10-2DA0	2AR10-2CA0	2CR10-2CA0	2ER10-2CA0	5AR10-2DA0	5AR10-2DA0	5ER10-2DA0	5AR10-2CA0	5CR10-2CA0	5ER10-2CA0
45	TBU5233-	2AR10-2DA0	2CR10-2DA0	2ER10-2DA0	2AR10-2CA0	2CR10-2CA0	2ER10-2CA0	5AR10-2DA0	5AR10-2DA0	5ER10-2DA0	5AR10-2CA0	5CR10-2CA0	5ER10-2CA0
50	TBU5333-	2AR10-2DA0	2CR10-2DA0	2ER10-2DA0	2AR10-2CA0	2CR10-2CA0	2ER10-2CA0	5AR10-2DA0	5AR10-2DA0	5ER10-2DA0	5AR10-2CA0	5CR10-2CA0	5ER10-2CA0
56	TBU5343-	2AR10-2DA0	2CR10-2DA0	2ER10-2DA0	2AR10-2CA0	2CR10-2CA0	2ER10-2CA0	5AR10-2DA0	5AR10-2DA0	5ER10-2DA0	5AR10-2CA0	5CR10-2CA0	5ER10-2CA0
63	TBU5433-	2AR10-2DA0	2CR10-2DA0	2ER10-2DA0	2AR10-2CA0	2CR10-2CA0	2ER10-2CA0	5AR10-2DA0	5AR10-2DA0	5ER10-2DA0	5AR10-2CA0	5CR10-2CA0	5ER10-2CA0
71	TBU5443-	2AR10-2DA0	2CR10-2DA0	2ER10-2DA0	2AR10-2CA0	2CR10-2CA0	2ER10-2CA0	5AR10-2DA0	5AR10-2DA0	5ER10-2DA0	5AR10-2CA0	5CR10-2CA0	5ER10-2CA0
80	TBU5533-	2AR10-2DA0	2CR10-2DA0	2ER10-2DA0	2AR10-2CA0	2CR10-2CA0	2ER10-2CA0	5AR10-2DA0	5AR10-2DA0	5ER10-2DA0	5AR10-2CA0	5CR10-2CA0	5ER10-2CA0
91	TBU5633-	2AR10-2DA0	2CR10-2DA0	2ER10-2DA0	2AR10-2CA0	2CR10-2CA0	2ER10-2CA0	5AR10-2DA0	5AR10-2DA0	5ER10-2DA0	5AR10-2CA0	5CR10-2CA0	5ER10-2CA0
100	TBU5643-	2AR10-2DA0	2CR10-2DA0	2ER10-2DA0	2AR10-2CA0	2CR10-2CA0	2ER10-2CA0	5AR10-2DA0	5AR10-2DA0	5ER10-2DA0	5AR10-2CA0	5CR10-2CA0	5ER10-2CA0
112	TBU5833-	2AR10-2DA0	2CR10-2DA0	2ER10-2DA0	2AR10-2CA0	2CR10-2CA0	2ER10-2CA0	5AR10-2DA0	5AR10-2DA0	5ER10-2DA0	5AR10-2CA0	5CR10-2CA0	5ER10-2CA0
125	TBU5843-	2AR10-2DA0	2CR10-2DA0	2ER10-2DA0	2AR10-2CA0	2CR10-2CA0	2ER10-2CA0	5AR10-2DA0	5AR10-2DA0	5ER10-2DA0	5AR10-2CA0	5CR10-2CA0	5ER10-2CA0
140	TBU5853-	2AR10-2DA0	2CR10-2DA0	2ER10-2DA0	2AR10-2CA0	2CR10-2CA0	2ER10-2CA0	5AR10-2DA0	5AR10-2DA0	5ER10-2DA0	5AR10-2CA0	5CR10-2CA0	5ER10-2CA0
160	TBU5933-	2AR10-2DA0	2CR10-2DA0	2ER10-2DA0	2AR10-2CA0	2CR10-2CA0	2ER10-2CA0	5AR10-2DA0	5AR10-2DA0	5ER10-2DA0	5AR10-2CA0	5CR10-2CA0	5ER10-2CA0
180	TBU6033-	2AR10-2DA0	2CR10-2DA0	2ER10-2DA0	2AR10-2CA0	2CR10-2CA0	2ER10-2CA0	5AR10-2DA0	5AR10-2DA0	5ER10-2DA0	5AR10-2CA0	5CR10-2CA0	5ER10-2CA0

For further products with other power and voltage values ambient temperature 50C/H, cULus approbation and degrees of protection, please refer to technical information in catalog Transformers, Power Supplies, Reactors, Filter or the internet www.mdexx.com

Rated output voltage Sec. U_{2N} 3 AC 400 V

cULus Approbation													
		Vector group Dyn5			Vector group Yyn0			Vector group Dyn5			Vector group Yyn0		
PN	Basic type	Order number supplement			Order number supplement			Order number supplement			Order number supplement		
Rated input voltage Pri. U_{1N} 3 AC V													
kVA	**Pri**	**400 V**	**440 V**	**480 V**	**400 V**	**440 V**	**480 V**	**400 V +- 5 %**	**440 V+- 5 %**	**480 V+- 5 %**	**400 V +- 5 %**	**440 V+- 5 %**	**480 V+- 5 %**
18	TBU4333-	2AA20-2DA0	2CA20-2DA0	2EA20-2DA0	2AA20-2CA0	2CA20-2CA0	2CA20-2CA0	5AA20-2DA0	5CA20-2DA0	5EA20-2DA0	5AA20-2CA0	5CA20-2CA0	5EA20-2CA0
20	TBU4343-	2AA20-2DA0	2CA20-2DA0	2EA20-2DA0	2AA20-2CA0	2CA20-2CA0	2CA20-2CA0	5AA20-2DA0	5CA20-2DA0	5EA20-2DA0	5AA20-2CA0	5CA20-2CA0	5EA20-2CA0
22,5	TBU4353-	2AA20-2DA0	2CA20-2DA0	2EA20-2DA0	2AA20-2CA0	2CA20-2CA0	2CA20-2CA0	5AA20-2DA0	5CA20-2DA0	5EA20-2DA0	5AA20-2CA0	5CA20-2CA0	5EA20-2CA0
25	TBU4533-	2AA20-2DA0	2CA20-2DA0	2EA20-2DA0	2AA20-2CA0	2CA20-2CA0	2CA20-2CA0	5AA20-2DA0	5CA20-2DA0	5EA20-2DA0	5AA20-2CA0	5CA20-2CA0	5EA20-2CA0
28	TBU4543-	2AA20-2DA0	2CA20-2DA0	2EA20-2DA0	2AA20-2CA0	2CA20-2CA0	2CA20-2CA0	5AA20-2DA0	5CA20-2DA0	5EA20-2DA0	5AA20-2CA0	5CA20-2CA0	5EA20-2CA0
31,5	TBU4733-	2AA20-2DA0	2CA20-2DA0	2EA20-2DA0	2AA20-2CA0	2CA20-2CA0	2CA20-2CA0	5AA20-2DA0	5CA20-2DA0	5EA20-2DA0	5AA20-2CA0	5CA20-2CA0	5EA20-2CA0
35,5	TBU4743-	2AA20-2DA0	2CA20-2DA0	2EA20-2DA0	2AA20-2CA0	2CA20-2CA0	2CA20-2CA0	5AA20-2DA0	5CA20-2DA0	5EA20-2DA0	5AA20-2CA0	5CA20-2CA0	5EA20-2CA0
40	TBU4753-	2AA20-2DA0	2CA20-2DA0	2EA20-2DA0	2AA20-2CA0	2CA20-2CA0	2CA20-2CA0	5AA20-2DA0	5CA20-2DA0	5EA20-2DA0	5AA20-2CA0	5CA20-2CA0	5EA20-2CA0
45	TBU5233-	2AA20-2DA0	2CA20-2DA0	2EA20-2DA0	2AA20-2CA0	2CA20-2CA0	2CA20-2CA0	5AA20-2DA0	5CA20-2DA0	5EA20-2DA0	5AA20-2CA0	5CA20-2CA0	5EA20-2CA0
50	TBU5333-	2AA20-2DA0	2CA20-2DA0	2EA20-2DA0	2AA20-2CA0	2CA20-2CA0	2CA20-2CA0	5AA20-2DA0	5CA20-2DA0	5EA20-2DA0	5AA20-2CA0	5CA20-2CA0	5EA20-2CA0
56	TBU5343-	2AA20-2DA0	2CA20-2DA0	2EA20-2DA0	2AA20-2CA0	2CA20-2CA0	2CA20-2CA0	5AA20-2DA0	5CA20-2DA0	5EA20-2DA0	5AA20-2CA0	5CA20-2CA0	5EA20-2CA0
63	TBU5433-	2AA20-2DA0	2CA20-2DA0	2EA20-2DA0	2AA20-2CA0	2CA20-2CA0	2CA20-2CA0	5AA20-2DA0	5CA20-2DA0	5EA20-2DA0	5AA20-2CA0	5CA20-2CA0	5EA20-2CA0
71	TBU5443-	2AA20-2DA0	2CA20-2DA0	2EA20-2DA0	2AA20-2CA0	2CA20-2CA0	2CA20-2CA0	5AA20-2DA0	5CA20-2DA0	5EA20-2DA0	5AA20-2CA0	5CA20-2CA0	5EA20-2CA0
80	TBU5533-	2AA20-2DA0	2CA20-2DA0	2EA20-2DA0	2AA20-2CA0	2CA20-2CA0	2CA20-2CA0	5AA20-2DA0	5CA20-2DA0	5EA20-2DA0	5AA20-2CA0	5CA20-2CA0	5EA20-2CA0
91	TBU5633-	2AA20-2DA0	2CA20-2DA0	2EA20-2DA0	2AA20-2CA0	2CA20-2CA0	2CA20-2CA0	5AA20-2DA0	5CA20-2DA0	5EA20-2DA0	5AA20-2CA0	5CA20-2CA0	5EA20-2CA0
100	TBU5643-	2AA20-2DA0	2CA20-2DA0	2EA20-2DA0	2AA20-2CA0	2CA20-2CA0	2CA20-2CA0	5AA20-2DA0	5CA20-2DA0	5EA20-2DA0	5AA20-2CA0	5CA20-2CA0	5EA20-2CA0
112	TBU5833-	2AA20-2DA0	2CA20-2DA0	2EA20-2DA0	2AA20-2CA0	2CA20-2CA0	2CA20-2CA0	5AA20-2DA0	5CA20-2DA0	5EA20-2DA0	5AA20-2CA0	5CA20-2CA0	5EA20-2CA0
125	TBU5843-	2AA20-2DA0	2CA20-2DA0	2EA20-2DA0	2AA20-2CA0	2CA20-2CA0	2CA20-2CA0	5AA20-2DA0	5CA20-2DA0	5EA20-2DA0	5AA20-2CA0	5CA20-2CA0	5EA20-2CA0
140	TBU5853-	2AA20-2DA0	2CA20-2DA0	2EA20-2DA0	2AA20-2CA0	2CA20-2CA0	2CA20-2CA0	5AA20-2DA0	5CA20-2DA0	5EA20-2DA0	5AA20-2CA0	5CA20-2CA0	5EA20-2CA0
160	TBU5933-	2AA20-2DA0	2CA20-2DA0	2EA20-2DA0	2AA20-2CA0	2CA20-2CA0	2CA20-2CA0	5AA20-2DA0	5CA20-2DA0	5EA20-2DA0	5AA20-2CA0	5CA20-2CA0	5EA20-2CA0
180	TBU6033-	2AA20-2DA0	2CA20-2DA0	2EA20-2DA0	2AA20-2CA0	2CA20-2CA0	2CA20-2CA0	5AA20-2DA0	5CA20-2DA0	5EA20-2DA0	5AA20-2CA0	5CA20-2CA0	5EA20-2CA0

TBU power transformers in IP00

TBU power transformers in IP20/ IP23

Transformers for the supply of medical premises

Selection and ordering data

In accordance with EN 61558-2-15
- Protection class I
- With static shield between the primary and secondary winding with isolated connection
- With thermistor transformer protection for warning in case of thermal overload (3RN trip units for PTC temperature sensors must be ordered separately)
- With center tap for isolation monitoring
- Short-circuit voltage Uz ≤ 3%, no-load current io ≤ 3%
- Inrush current max. 8 x I1N

ta 55 °C/H CE

			Single-phase
PRI			230 V
SEC			**230-115V**
P_n	Voltage rise with no-load operation U_A	**Basic type**	**Order number supplement**
kVA	%		
2,5	3,6	TAT3012-	1TA71 - 3MA0
3,15	3,6	TAT3602-	1TA71 - 3MA0
4	3,6	TAT3612-	1TA71 - 3MA0
5	3,6	TAT3902-	1TA71 - 3MA0
6,3	3,6	TAT3912-	1TA71 - 3MA0
8	3,7	TAT4302-	1TA71 - 3MA0
10	2,5	TAT4312-	1TA71 - 3MA0

TAT for supply of medical premises

Transformers in multi-voltage design

Selection and ordering data

Transformers in multi-voltage design for adjustment to various mains voltages. Designed as mains, control and isolating transformers in accordance with EN 61558-2-1, -2-2, -2-4 or as isolating and mains transformers in accordance with EN 61558-2-1, -2-4.
AC 50/60 Hz, degree of protection IP00

TAP: ta 40 °C/B
TAU: ta 55 °C/H

CE cULus

			Three-phase	
PRI			3 AC Y 500-400 V D 289-230 V	3 AC Y 520-500-480-460-440-420-400-380-360 V D 300-289-277-266-254-240-230-220-208 V
SEC			**3 AC Y 400 V/ D 230 V**	**3 AC Y 400 V/ D 230 V**
Pn	Short-time rating [1] P_{kurzz}	**Basic type**	**Order number supplement**	
kVA	kVA			
0,16		TAP1742-	8BC40 - 0HA0	-
0,25		TAP1842-	8BC40 - 0HA0	-
0,4		TAP1942-	8BC40 - 0HA0	-
0,63	1,8	TAP2042-	8BC40 - 0HA0	8CC40 - 0HA0
1	3,5	TAP2142-	8BC40 - 0HA0	8CC40 - 0HA0
1,6	6,9	TAP2542-	8BC40 - 0HA0	8CC40 - 0HA0
2,5	11	TAP2742-	8BC40 - 0HA0	8CC40 - 0HA0
4	20	TAP3042-	8BC40 - 0HA0	8CC40 - 0HA0
6,3	28	TAU3032-	8BC40 - 0HA0	8CC40 - 0HA0
8	32	TAU3612-	8BC40 - 0HA0	8CC40 - 0HA0
10	39	TAU3632-	8BC40 - 0HA0	8CC40 - 0HA0
12,5	49	TAU3912-	8BC40 - 0HA0	8CC40 - 0HA0
16	55	TAU3932-	8BC40 - 0HA0	8CC40 - 0HA0

1) With cos φ= 0,5 and U_2 = 0,95 x U_{2N}

Non-stabilized power supplies TAV9 unfiltered for the supply of general loads

Selection and ordering data

The power supplies TAV98 consist of single-phase safety transformers in accordance with EN 61558-2-6 with downstream rectifiers in bridge circuit without capacitor filtering.

Safety transformer in accordance with EN 61558-2-6, varistor protective circuit.

Output-side short-circuit and overload protection through installed fuse.

Ripple 48 %
ta = 50 °C/B
CE

TAV98: Single-phase				
PRI			AC 230V	AC 400V
SEC			**DC 24V**	**DC 24V**
Rated power P_{2n} (W)	**Voltage rise with no-load operation UA (%)**	**Basic type**	**Order number supplement**	
50	24	TAV9806-	4CB00 - 2N	
80	18	TAV9806-	5CB00 - 2N	
125	14	TAV9806-	6CB00 - 2N	
200	11	TAV9806-	7CB00 - 2N	
315	10	TAV9806-	8CB00 - 2N	
500	9	TAV9800-	5CB04 - 2N	
50	24	TAV9807-		0CB00 - 2N
80	18	TAV9807-		1CB00 - 2N
125	14	TAV9807-		2CB00 - 2N
200	11	TAV9807-		3CB00 - 2N
315	10	TAV9807-		4CB00 - 2N
500	9	TAV9802-		5CB00 - 2N

The power supplies TAV96 consist of three-phase safety transformers in accordance with EN 61558-2-6 with downstream rectifiers in bridge circuit without capacitor filtering.
Safety transformer in accordance with EN 61558-2-6.
Shield winding between input and output winding.
Varistor protective circuit.

Designed and approved in accordance with the VW equipment specifications.

Ripple < 5%
ta = 50 °C/B
CE

TAV96: three-phase					
PRI		Primary-side short-circuit and overload protection for the rectifier with circuit breaker		VW material No.	AC 380-400-420V
SEC					**DC 30-27-24 V**
Rated output current I_d (A)	**Voltage rise with no-load operation U_A (%)**	**Basic type (e.G. Siemens)**	**Setting value with AC 400 V (A)**		**Order number**
4	3,5	3RV10 11-0EA10	0,28	6142	TAV9604-1CB00-2N
12	3,3	3RV10 11-0JA10	0,8	6141	TAV9604-5CB00-2N
25	3,1	3RV10 11-0CA10	1,8	6145	TAV9604-2CB00-2N

Non-stabilized power supplies TAV
filtered for the supply of electronic controls

Selection and ordering data

Power supplies TAV2 and TAV4 supply non-stabilized 24 V DC on the basis of single-phase safety transformers with downstream rectifiers and capacitor filtering.
Rated output voltage U2N 24 V DC in accordance with EN 61131-2[3] and SIMATIC with input voltage +6 % to –10 % and load 0 % to 100 %. Safety transformer in accordance with EN 61558-2-6, degree of protection IP00.

TAV21, TAV23, TAV41:
TAV20, TAV22, TAV24, TAV26:

EMC in accordance with: EN 62041
TAV2 is suitable for the connection to public supply networks (residential applications) and industrial networks (industrial applications).
TAV4 is suitable for the connection to industrial networks (industrial applications).

TAV2: ta = max. 60 °C/B, TAV41: ta = 40 °C/B
TAV2: CE, cULus bei 60 °C
TAV41: CE

TAV20, TAV22, TAV26 and TAV4: Version with spring-loaded terminals listed in mdexx - catalog or the internet www.mdexx.com

TAV2, TAV4: single-phase; ripple < 5%								
PRI		AC 230 (240) V 1) AC 115 (120) V	AC 400 (415) V	AC 400 (415) V AC 230 (240) V with tapping ±15 V		AC 400 (415) V AC 230 (240) V AC 115 (120) V	
SEC		DC 24 V	DC 24 V	DC 24 V		DC 24 V	
Rated output current I_d		**Basic type**	**Order number supplement**				
60 °C/B EN 61558 DC A cULus	40 °C/H EN 61558 DC A		With integrated DIN rail connection	With integrated DIN rail connection	Screw mounting 2)	Screw mounting 2)	Screw mounting 2)	Screw mounting 2)
1	1,2	TAV2102-	2EB00 - 0A	-	-	-	-	-
2,5	3	TAV2000-	-	-	2EB00 - 0A	2EB00 - 0A	-	-
3,5	4,2	TAV2302-	2EB00 - 0A	-	-	-	-	-
5	6	TAV2200-	-	-	2EB00 - 0A	2EB00 - 0B	-	-
10	12	TAV2400-	-	-	2EB00 - 0A	2EB00 - 0B	-	-
15	18	TAV2600-	-	-	2EB00 - 0A	-	-	-
1	1,2	TAV2106-	-	2EB00 - 0A	-	-	-	-
2,5	3	TAV2001-	-	-	-	-	2EB00 - 0A	2EB00 - 0A
3,5	4,2	TAV2306-	-	2EB00 - 0A	-	-	-	-
5	6	TAV2201-	-	-	-	-	2EB00 - 0A	2EB00 - 0B
10	12	TAV2401-	-	-	-	-	2EB00 - 0A	2EB00 - 0B
15	18	TAV2601-	-	-	-	-	2EB00 - 0A	
-	1,5	TAV4101-	-	-	2EB00 - 0A	2EB00 - 0B	-	
-	3	TAV4103-	-	-	2EB00 - 0A	2EB00 - 0A	-	-
-	6	TAV4106-	-	-	2EB00 - 0A	2EB00 - 0A	-	-
-	10	TAV4110-	-	-	2EB00 - 0A	2EB00 - 0B		

1) When operated with the mains voltages stated in brackets, the upper limit for 24 V DC in accordance with EN 61131-2 with a mains voltage of +6 % is met with a basic load of 10 %. With no-load operation, 30.6 V can be reached.
2) Types TAV20, TAV41 03 and TAV41 06 are equipped with integrated DIN rail connection as a standard.
3) EN 61131-2: Equipment requirements of a power supply and interface for programmable logic controllers. For limit values for 24 V DC, refer to technical information in catalog Transformers, Power Supplies, Reactors, Filter or the internet www.mdexx.com

Selection and ordering data

Power supplies TAV3 and TAV5 supply non-stabilized 24 V DC on the basis of three-phase safety transformers with downstream rectifiers and capacitor filtering.
Rated output voltage U2N 24 V DC in accordance with EN 61131-24) and SIMATIC with input voltage +6 % to –10 % and load 0 % to 100 %. Safety transformer in accordance with EN 61558-2-6, degree of protection IP00.

TAV3, TAV5:

EMC in accordance with: EN 62041
TAV3 is suitable for the connection to public supply networks (residential applications) and industrial networks (industrial applications). TAV5 is suitable for the connection to industrial networks (industrial applications).

TAV3: ta = max. 60 °C/B, TAV51: ta = 40 °C/B
TAV30: CE, cULus bei 60 °C
TAV36, TAV38, TAV51: CE

TAV30 until TAV35 and TAV5: three-phase; ripple < 5%								
		SEC DC24V						**SEC DC24V**
Rated output curent Id		Order number	Rated output curent Id		Additional capacitance (Aluminium-Elektrolyt) µF			Order number
60 °C/B EN 61558 DC A cULus	40°C/B EN 61558 DC A		60 °C/B EN 61558 DC A cULus	40°C/B EN 61558 DC A		Ripple %	Backup time at U_1 = U_{1N} –10 % ms	
		PRI Y AC400 (415)V ±20%, △ AC230V±10V						**PRI Y AC400 (415)V ±20%, △ AC230V±10V**
10	12	TAV3000-2EB00-0A	10	12	100000	2	1	TAV3000-2EB00-0C
15	18	TAV3100-2EB00-0A	15	18	100000	3	0,6	TAV3100-2EB00-0C
20	24	TAV3200-2EB00-0A	20	24	100000	3	0,4	TAV3200-2EB00-0C
30	36	TAV3300-2EB00-0A	30	36	100000	4	0,7	TAV3300-2EB00-0C
40	48	TAV3400-2FB00-0A	40	48	100000	3	0,7	TAV3400-2FB00-0C
50	60	TAV3500-2FB00-0A	50	60	100000	4	0,3	TAV3500-2FB00-0C
		PRI AC 500-400(415) V						**PRI AC 500-400(415) V**
15	18	TAV3101-2EB00-0A	15	18	100000	3	0,6	TAV3101-2EB00-0C
30	36	TAV3301-2EB00-0A	30	36	100000	4	0,7	TAV3301-2EB00-0C
50	60	TAV3501-2FB00-0A	50	60	100000	4	0,3	TAV3501-2FB00-0C
		PRI AC 575 (600)-500-460 (480)-400 (415)-230 (240)-200 V						**PRI AC 575 (600)-500-460** (480)-400 (415)-230 (240)-200 V
9	11	TAV3002-2EB00-0A	9	11	100000	2	1	TAV3002-2EB00-0C
13,5	16	TAV3102-2EB00-0A	13,5	16	100000	3	0,6	TAV3102-2EB00-0C
18	21,5	TAV3202-2EB00-0A	18	21,5	100000	3	0,4	TAV3202-2EB00-0C
27	32,5	TAV3302-2EB00-0A	27	32,5	100000	4	0,7	TAV3302-2EB00-0C
36	43	TAV3402-2FB00-0A	36	43	100000	3	0,7	TAV3402-2FB00-0C
45	54	TAV3502-2FB00-0A	45	54	100000	4	0,3	TAV3502-2FB00-0C
60 °C/B EN 61558 DC A	40°C/B EN 61558 DC A		60 °C/B EN 61558 DC A	40°C/B EN 61558 DC A				
		PRI AC 500-400(415) V						**PRI AC 500-400(415) V**
80	96	TAV3601-2EB00-0A	80	96	2x100000	4	0,2	TAV3601-2EB00-0C
150	180	TAV3801-2EB00-0A	150	180	3x100000	4	0,2	TAV3801-2EB00-0C
		PRI Y AC400 (415)V ±20V						
.....	25	TAV5125-2FB00-0A						
.....	35	TAV5135-2FB00-0A						

Proven technology for increased availability:
mdexx reactors and filters for AC-drives

Application

The following allocation maps are to be understood as recommendations for the application of components around the converter. Notes regarding to operational conditions shall receive attention.

Mains reactors

Typical drive power	Max. permissible continuous thermal current	Order No.
P Antr kW	Ithmax A	
3 AC 400 V 50 Hz, uD ~ 8,8 V 4% uK [1] 3 AC 480 V 60 Hz, uD ~ 8,8 V 4% uK [1]		
400 V		
1,1	3	TEP32 01-0US00
2,2	6,3	TEP35 00-4US00
3	9,1	TEP36 00-6US00
4	11,2	TEP36 01-2US00
5,5	16	TEP37 00-3US00
7,5	18	TEP37 00-7US00
9	22,4	TEP38 01-0US00
11	28	TEP38 00-3US00
15	35,5	TEP39 00-5US00
18,5	40	TEP40 00-5US00
20	45	TEP40 01-1US00
22	50	TEU24 52-3UB00-0AA0
30	63	TEU24 52-3UC00-0AA0
37	80	TEU24 52-4UA00-0AA0
42	91	TEU25 52-2UB00-0AA0
45	100	TEU25 52-1UC00-0AA0
55	125	TEU27 52-0UC00-0AA0
75	160	TEU27 52-1UB00-0AA0
90	200	TEU27 52-2UB00-0AA0
100	224	TEU27 52-5UB00-0AA0
120	250	TEU30 52-5UC00-0AA0
132	280	TEU30 52-7UA00-0AA0
145	315	TEU30 52-3UB00-0AA0
160	355	TEU30 52-8UA00-0AA0

1) uK = Reference voltage drop at Ithmax an Un

Selection and ordering data

Mains Reactors for frequency converters.
Output reactore, Sinewave Filter
EN61558-2-20, protection category IP00
TEP:ta 40°C/B, TEU:ta 40°C/H
TEF11: 40°C/F or H (depending on manufactured size)

Mains reactors

Typical drive power	Max. permissible continuous thermal current	Order No.
P Antr kW	Ithmax A	
3 AC 400 V 50 Hz, uD ~ 4,4 V 2% uK [1] 3 AC 480 V 60 Hz, uD ~ 5,3 V 2% uK [1]		
400 V		
0,55	1,5	TEP32 00-4US00
1,1	3	TEP32 00-5US40
2,2	6,3	TEP32 00-1US00
3	9,1	TEP32 00-2US00
4	11,2	TEP34 00-1US00
5,5	16	TEP35 00-0US00
7,5	18	TEP36 00-4US00
9	22,5	TEP36 01-0US00
11	28	TEP36 00-5US00
15	35,5	TEP37 00-2US00
18,5	40	TEP37 00-5US00
20	45	TEP38 01-1US00
22	50	TEP38 00-2US00
30	63	TEP38 00-7US00
37	80	TEP39 00-2US00
42	91	TEP40 01-3US00
45	100	TEP40 00-2US00
55	125	TEP40 00-6US00
75	160	TEU24 52-2UA00-0AA0
90	200	TEU25 52-4UA00-0AA0
110	224	TEU25 52-8UA00-0AA0
120	250	TEU25 52-5UA00-0AA0
132	280	TEU27 52-0UB00-0AA0
160	315	TEU27 52-7UA00-0AA0

⚠ Notice: No liability can be assumed for the application of components into the system. The functional interaction of a converter-system with all components around the converter highly depends on the professional installation and initial operation of the components. The installation and initial operation specifications of the manufacturer must be complied with. Non-observance can cause functional disturbances to the converter-system.

Sinewave filter

Typical drive power	Max. permissible continuous thermal current	Order No.
P Antr kW	Ithmax A	
3 AC 480V + 10% 150Hz, clock frequency ≥ 4kHz ≤ 8kHz		
400 V		
1,5	4	TEF11 25-0GB
2,2	6	TEF11 25-1GB
4	10	TEF11 25-2GB
7,5	17,5	TEF11 25-3GB
11	33	TEF11 27-0GB
22	47	TEF11 27-1GB
30	62	TEF11 27-2GB
45	92	TEF11 27-3GB
75	150	TEF11 27-4GB
90	182	TEF11 27-5GB
132	250	TEF11 26-2GB

Output reactors

Typical drive power	Max. permissible continuous thermal current ≤ 4 kHz [1]	Max. permissible continuous thermal current 8 kHz	
P Antr kW	Ithmax A	Ithmax A	
3 AC 500 V ± 5% 200 Hz			
1,5	4	3,3	TEP37 06-0ES01
2,2	6	5,3	TEP37 06-0FS01
4	10	8,2	TEP38 06-0BS01
7,5	17,5	15,2	TEP38 06-0CS01
11	26	20	TEP39 11-0AS01
18,5	38	30,4	TEP40 10-0RS01
22	48	37	TEU24 52-0ED00-4BA0
30	60	54	TEU24 52-0EE00-4BA0
37	72	57,6	TEU24 52-0EF00-4BA0
45	90	63	TEU25 52-0EB00-4BA0
56	102	73	TEU25 52-0EC00-4BA0
75	150	80	TEU25 52-0ED00-4BA0

1) For clock frequencies > 4 kHz, the following formula lets you determine the current : Ithmax, depending on the clock frequency:
Ithmax f(kHz) = i4kHz - ((i4kHz - i8kHz)/4 x (8 - fclock [kHz])).

⚠ Notice to the application by output reactors and sinewave filters:

The following generic parameters apply, which must not be exceeded:
- Maximum motor cable length 200 m, shielded cable
- Maximum motor cable length 300 m, unshielded cable
- Maximum motor cable cross-sections for performance class:
- Up to 2.2 kW 1.5 mm²,
- > 2.2 kW ≤ 7.5 kW/2.5 mm²
- > 7.5 kW ≤ 11 kW/4 mm²
- > 11 kW ≤ 22 kW/10 mm²
- > 22 kW ≤ 30 kW/16 mm²
- > 30 kW ≤ 37 kW/25 mm²
- > 37 kW ≤ 50 kW/35 mm²
- > 50 kW ≤ 75 kW/70 mm²
- ≥ 75 kW/150 mm²

- Minimum clock frequency: 4 kHz
- Maximum motor frequency of output reactor: 200 Hz
- Maximum motor frequency of sinewave filter: 150 Hz

If these do not meet your requirements, customized solutions are available. For further information, please contact „mdexx GmbH“ in Bremen:
e-mail: trafo@mdexx.com

Use of drive in Ex(d) range:
If a sinewave filter is placed upstream of the Ex(d) motor at the converter, please contact us to find out more about operating conditions.


TEP


TEP


TEU


TEU


TEF 11