

Do you require more Information?
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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. However 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

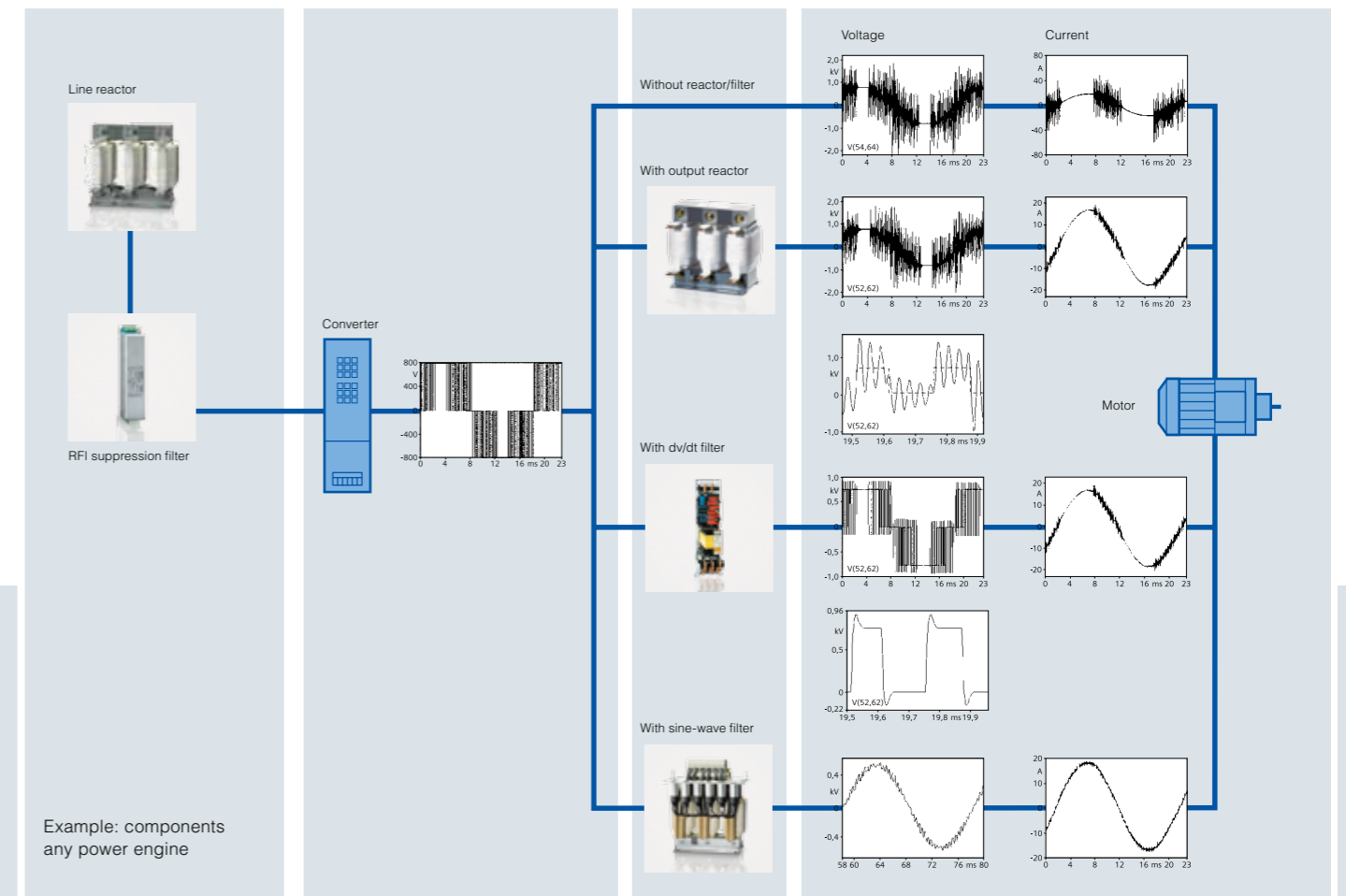
The reactor- and filter applications are UL recognized products.

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.



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 _{schott} | Basic type | | | | | | | | | | |
| kVA | kVA | Order number supplement | | | | | | | | | | |
| 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 $\cos \varphi = 0,5$ und $U_2 = 0,95 \times U_{2N}$

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 _{schott} | Basic type | | | | | | | | | | |
| kVA | kVA | Order number supplement | | | | | | | | | | |
| 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 | - | 5FT10 - 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 $\cos \varphi = 0,5$ und $U_2 = 0,95 \times U_{2N}$



TAM with spring-loaded terminals



TAM with screw-type / plug-type terminal



TAT horizontal variant