

Transformers for Fan Speed Control



Safety, Installation, Operation and Maintenance Instructions

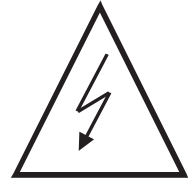
Part No. 414900

Fläkt Woods Manual Transformers for Fan Speed Control



SAFETY

THE MANUAL TRANSFORMER MAY BE INSTALLED AND CONNECTED ONLY BY A QUALIFIED ELECTRICIAN. INCORRECT INSTALLATION OR OPERATION COULD RESULT IN ELECTRIC SHOCK OR FIRE.



ENSURE POWER IS ISOLATED BEFORE OPENING THE MANUAL TRANSFORMER

Introduction

Fläkt Woods range of manual transformers provide a high quality solution to fan speed control. Manual transformers have the advantage of keeping motor noise or 'hum' to the absolute minimum and are therefore extremely useful in noise sensitive applications.

Speed control is provided in 5 steps from a selection switch on the front of the auto transformer enclosure.

Transformers are manufactured in accordance with CEI 14/4, IEC 76 and VDE 0550.

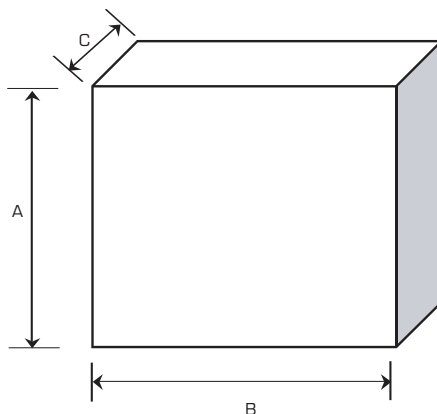
Range

Type	Number Product	Phase	Rated Current	A	B	C	D	E	Max. Weight (kg)
MT1.1.5	402008	1	1.5	205	115	100	98	140	2.1
MT1.5	423099	1	5	255	170	140	155	194	5.5
MT1.8	402009	1	8	325	300	185	255	255	8
MT1.12	402010	1	12	325	300	185	255	255	15.6

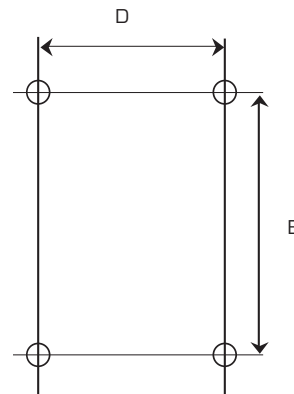
Type	I _{max} (A)	Fuse Z1 (A)
MT1.1.5	1.5	3.15
MT1.5	5.0	8.0
MT1.8	8.0	16.0
MT1.12	12.0	18.0

Type	Number Product	Phase	Rated Current	A	B	C	D	E	Max. Weight (kg)
MT3.1	402011	3	1	255	170	140	155	194	7.7
MT3.2	402012	3	2	325	300	175	255	255	12.8
MT3.7	402013	3	7	425	300	235	255	355	26

Type	I _{max} (A)
MT3.1	1.0
MT3.2	2.0
MT3.7	7.0



Overall Dimensions



Fixing Dimensions

Features

- 230 Vac or 400Vac 50 Hz
- Enclosure: Plastic or sheet steel, IP54
- Switch: 5 positions and off position
- Indicator lamp
- High current fuse
- Motor protection, by connecting thermal (overheating) contacts of the motor
- Cable glands fitted
- Maximum ambient temperature 35°C

Motor Protection

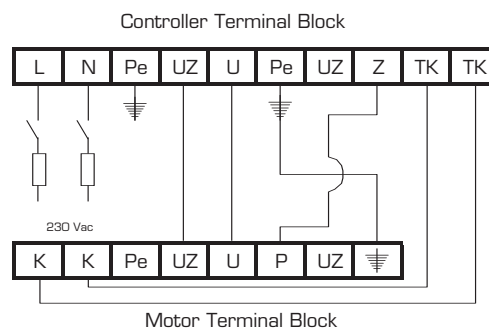
The range of auto transformers is fitted with connections for motor thermostat. All Fläkt Woods type BT, CT, PM100, PM112 motors are fitted with thermostats as standard. Other motors may be fitted with thermistors as motor protection, these are not suitable for connection to Fläkt Woods manual transformers.

Should the motor overheat the thermostat connection is broken and the motor is stopped. The motor does not automatically restart when it cools. Once the cause of overheating is eliminated the motor can be restarted by turning the speed selection switch momentarily to the off position.

Wiring Diagrams

The manual transformer should be wired with cables of a suitable diameter for the maximum rated current. A fused isolator switch should be fitted on the input side of the transformer

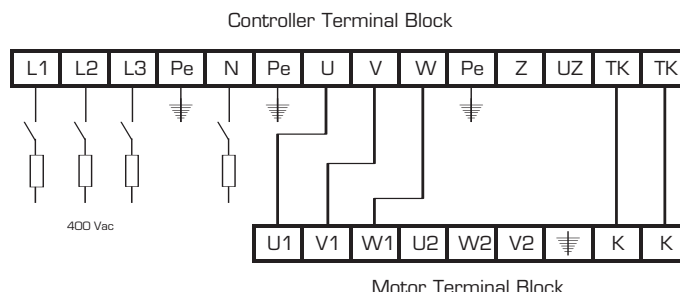
Single Phase



The single phase auto transformer is suitable for controlling motors by both two and three wire methods.

- For two wire control motor neutral supply is connected to UZ, the live supply to Z.
- For three wire control the motor leads marked U, Z, and UZ are connected to the corresponding terminals in the auto transformer. The link in the motor between terminals U and P must be removed.

Three Phase



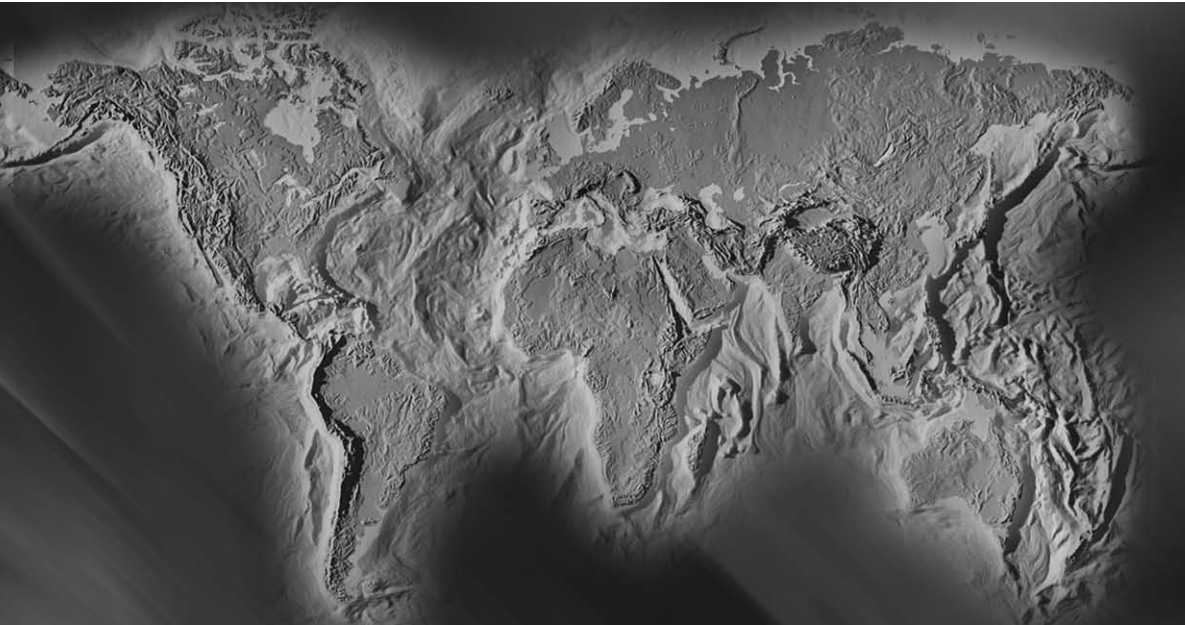
Maintenance

No regular maintenance is required when operating in normal conditions. Any dirt can be removed with a dry or damp cloth. Isolate from mains before cleaning.

Storage

Manual transformers should be stored in the original packing in a clean and dry location. Take care to avoid physical damage to the packaging.

We Bring Air to Life



Fläkt Woods Group provides a full range of products and solutions for buildings ventilation, air treatment and industrial air movement

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