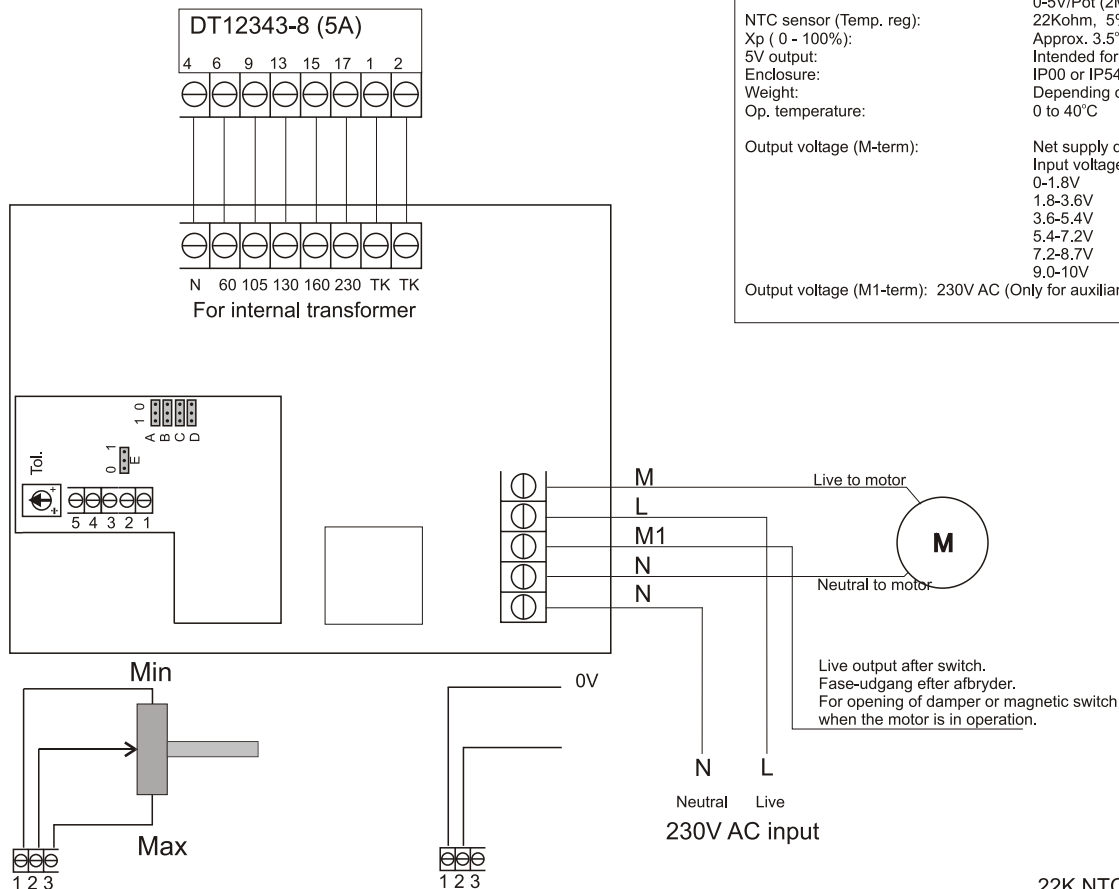


ES 516

5 Step Speed Switch 0 - 10V, potentiometer or temperature

Connection diagram:



Input signal (Impedance):	0 - 10V (9K Ohm)
	0-5V/Pot (2M Ohm)
NTC sensor (Temp. reg):	22Kohm, 5% NTC sensor. Max. 50m cable.
Xp (0 - 100%):	Approx. 3.5°C
5V output:	Intended for potentiometer. Max 2,5mA
Enclosure:	IP00 or IP54
Weight:	Depending on model
Op. temperature:	0 to 40°C
Output voltage (M-term):	Net supply depending at 230V AC
	Input voltage ±5%
	Output voltage
	0-1.8V : 0V
	1.8-3.6V : 60V
	3.6-5.4V : 105V
	5.4-7.2V : 130V
	7.2-8.7V : 160V
	9.0-10V : 230V 5A
Output voltage (M1-term):	230V AC (Only for auxiliary relay)

Technical data :

Supply:	230 V AC, 50 Hz
Mains fuse:	max. 13/16A
Load M:	5 / 10A depending on model
Load M1:	1,25A
Enclosure:	IP 00
Dimensions (HxWxD):	265 x 200 x 130 mm
Op. temperature:	0-30 °C

Description:

Stepped adjustment of motor speed with 0-5V, 0-10V, temperature or potentiometer. Intended for speed control of single phase adjustable AC motor.

Equipped with 5 speed positions. At minimum control signal, it is possible to set the motor to stop or run at a fixed low speed.

The green lamp for operation is illuminated in the 5 speed positions, and it is flashing if the motor is not powered (only if the stop function has been selected).

Live is connected to 'M1' when the motor is in operation. This function may be used to run an auxiliary relay for activation of a heating element.

Temperature adjustment is possible by connecting a 22K NTC sensor. The control signal (0-5V, 0-10V or potentiometer) will be the set point 10-30°C.

The unit is prepared for inverted operation for cold air supply.

Adjustment:

If the ES 516 unit is not used for temperature adjustment, no adjustments are required, though a number of jumper selections are still available. Please see the installation manual.

Used for temperature adjustment, the tolerance of the temperature sensor can be adjusted.

Measure the temperature at the sensor and set the control signal or the potentiometer at the same temperature. Adjust the trimmer until the unit starts or responds as desired, e.g. 125 V to the motor.

Montering:

The ES516 is intended for integration in a switchboard cupboard, and is therefore supplied without housing. The ES516 is mounted on a standard base.

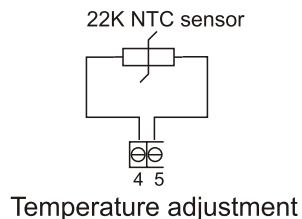
This base is mounted according to the manufacturer's recommendations to ensure correct enclosure.

Live, neutral and earth is required for the supply cable. Installation in accordance with the connection diagram. If the temperature option is not used, the terminals for the NTC sensor are left unconnected.

Jumper settings

	1	0
Jumper A :	<i>No function</i>	No function
Jumper B :	<i>Stop</i>	No stop (at low control signal)
Jumper C :	<i>Normal operation</i>	Inverted operation
Jumper D :	<i>Temp. reg.</i>	<i>Normal control</i>
Jumper E :	<i>0-10V signal</i>	Potentiometer or 0-5V signal connected

Factory settings in italic.



Used for temperature adjustment, the terminal 2 signal will always be the setpoint, irrespective of whether it is 0-5V, 0-10V or potentiometer, and correspond to 10 to 30 degrees C.

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 Drawn by: SP - JEH-PN
 Rev.: 2.0
 Manufactured by: **LS Control A/S**

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