CDR5E E... TP

Single phase speed controller



Use

- **CDR5E E... TP** series speed controllers are applied for air flow control of single phase fans by means of motor step speed control. The controllers have five speeds.
- Speed is set by means of rotating the control knob at the casing front panel to one of five available fixed positions.
- Several fans can be controlled synchronously in case their total consumption current does not exceed the maximum permissible value of the controller current.

Design and control

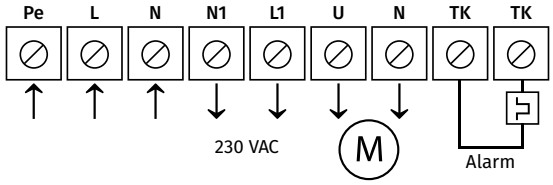
- The controller casing is made of flame-retardant thermoplastic. The controller has five speeds with the output voltage 110 V – 140 V – 170 V – 190 V – 230 V. 80 V output is available, but not connected by default. It is possible to change the output voltages by changing the internal wiring. The controller is equipped with a speed control knob, an operation indication lamp. The integral motor protection device is included which cuts the supply voltage to the fan if the thermal contact in the fan motor is activated. After the temperature drops to the operating level the motor restarts.
- The controller has the following supplementary functions: terminals of 230 V, max. 2 A for connection and controlling such external equipment as actuator driven air dampers.

Mounting

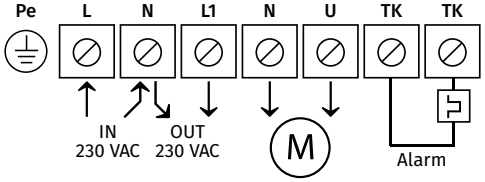
- The controller is designed for indoor mounting. Installation shall be performed with respect to the free air recirculation for inner circuit cooling. The controller is for vertical installation. Do not install the controller above the heaters and in bad air convection areas.

Controller wiring diagram

CDR5E E1.5 TP



CDR5E E3.5 TP, CDR5E E5.0 TP, CDR5E E7.5 TP

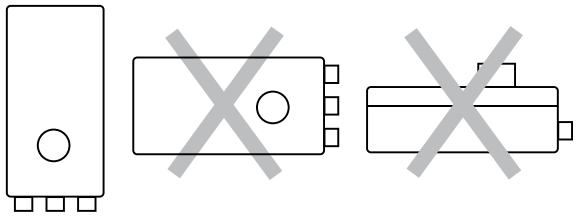


Pe: Ground terminal
L: Power (230 VAC/50-60 Hz)
N: Power, neutral
N1: Non-adjustable output, neutral
L1: Non-adjustable output
U: Adjustable motor output, phase
N: Adjustable motor output, neutral
TK: TK control for thermal protection of motors

Technical data

Parameters	CDR5E E1.5 TP	CDR5E E3.5 TP	CDR5E E5.0 TP	CDR5E E7.5 TP
Voltage [V / 50 (60) Hz]	1~230	1~230	1~230	1~230
Rated current [A]	1.5	3.5	5.0	7.5
Overall dimensions LxWxH [mm]	205x115x100	255x170x140	255x170x140	305x200x140
Maximum ambient temperature [°C]	-20...+35	-20...+35	-20...+35	-20...+35
Protection rating	IP54	IP54	IP54	IP54

Device operating position



Dimensions [mm]

Type	A	B	C	D	E
CDR5E E1.5 TP	115	205	100	98	140
CDR5E E3.5 TP	170	255	140	155	194
CDR5E E5.0 TP	170	255	140	155	194
CDR5E E7.5 TP	200	305	140	183	236

