CDR5E D... M

Three phase speed controller



Use

- **CDR5E D... M** series speed controllers are applied for air flow control of three phase fans by means of step control of motor speed. 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.

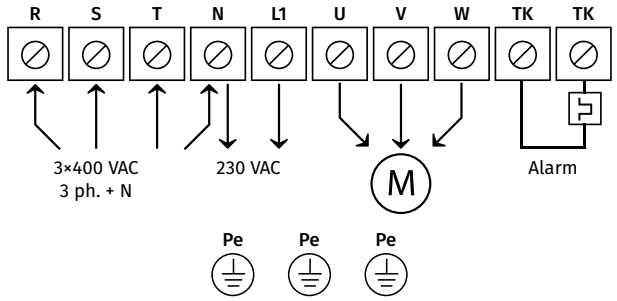
Design and control

- The controller casing is made of sheet steel. The controller has five speeds with the output power 130 V, 180 V, 230 V, 300 V, 400 V and incorporates control speed knob, light indication for operation. The controller has built-in motor overheating protection which cuts power supply in case of exceeding the set temperature threshold. After the temperature drops to the operating level the motor restarts. As an additional function, the controller has terminals (230 V, max. 2 A) for connecting external equipment (e.g. air damper actuators).

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.

Wiring diagram and connections

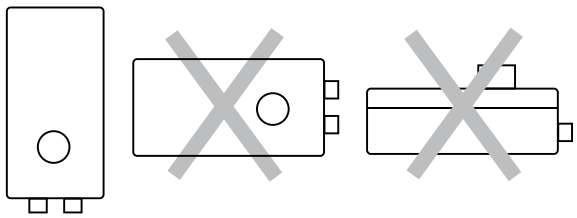


Pe: Ground terminals
R, S, T: 3×400 VAC/50–60 Hz power supply
N: Neutral
L1: Non-adjustable output, phase (230 VAC/50–60 Hz/2 A)
U, V, W: Adjustable motor output
TK: TK control for thermal protection of motors

Technical data

Parameters	CDR5E D1.5 M	CDR5E D4.0 M	CDR5E D6.0 M	CDR5E D8.0 M	CDR5E D11.0 M	CDR5E D14.0 M
Voltage [V / 50 (60) Hz]	3~400	3~400	3~400	3~400	3~400	3~400
Rated current [A]	1.5	4.0	6.0	8.0	11.0	14.0
Maximum ambient temperature [°C]	-20...+35	-20...+35	-20...+35	-20...+35	-20...+35	+5...+35
IP rating	IP54	IP54	IP54	IP54	IP54	IP44

Device operating position



Dimensions [mm]

Type	H	H1	L	L1	W
CDR5E D1.5 M	325	255	300	255	185
CDR5E D4.0 M	425	355	300	255	185
CDR5E D6.0 M	425	355	300	255	235
CDR5E D8.0 M	425	355	300	255	235
CDR5E D11.0 M	430	355	400	355	235
CDR5E D14.0 M	430	355	400	355	235

