

## AEPS-230-24-10 Power Supply for comfort ventilation systems

### Features

- 230 V power supply
- 24 VAC / 10VA nominal output voltage
- Master-Slave or parallel configuration of actuators
- Power indication LED
- RJ12 socket for configuration of actuators
- IP40
- Up to 3 VAV controllers simultaneously connectable.
- Suitable for wall mounting



### Applications

The power supply AEPS-230-24-10 provides 10 VA 24 VAC power to VAV controllers, actuators and room controllers or positioning devices.

### VAV applications

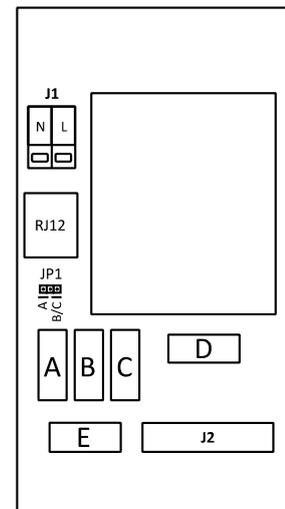
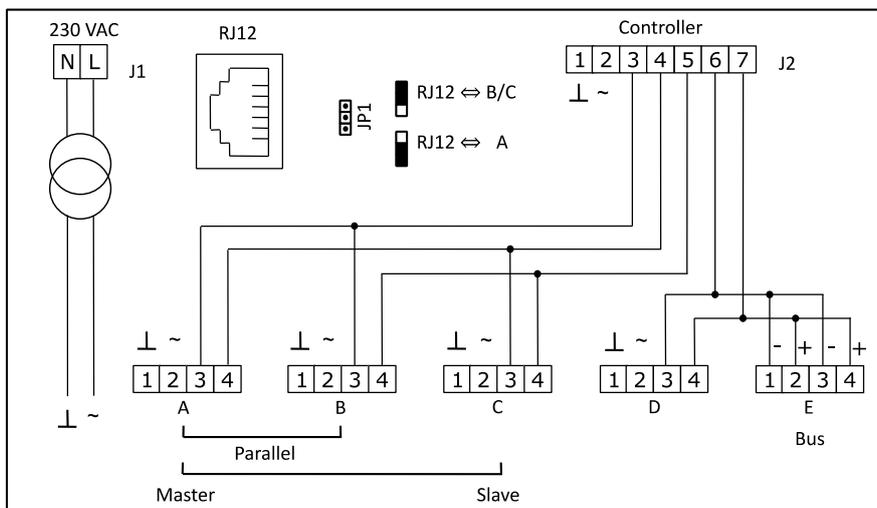
Master-slave / parallel circuits can be done by simply plugging in the actuator plug to the appropriate connector. A RJ12 plug allows connection of the actuators programming tool for configuration of programmable actuators.

The power supply unit has been designed to prevent plugging in B and C simultaneously in order to prevent possible shorting.

### Types and Ordering

| Product name   | Product No. | Description                                                                    |
|----------------|-------------|--------------------------------------------------------------------------------|
| AEPS-230-24-10 | 40-50 0019  | Power supply 230 V to 24 V with 10 VA output for VAV controllers and actuators |

### Wiring diagram



### Connection description

|           |                                                                                                                                                                                                                                                                                       |
|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| J1        | <b>Supply 230 V</b>                                                                                                                                                                                                                                                                   |
| J2        | <b>Control unit / control signal</b><br>1 = 24 VAC ⊥<br>2 = 24 VAC ~<br>3 = 2...10 VDC control signal for drive A and B<br>4 = Feedback signal from A as well as control signal for C<br>5 = Feedback signal from B or C<br>6 = Control signal drive D<br>7 = Feedback signal drive D |
| RJ12      | <b>Programming device</b><br>JP1 - B/C = RJ12 Connected to Actuator B or C<br>JP1 - A = RJ12 Connected to Actuator A                                                                                                                                                                  |
| A,B,C,(D) | <b>Actuators</b> - drive, VAV controllers<br>1 = 24 V ⊥<br>2 = 24 V ~<br>3 = 2...10 V control signal<br>4 = Feedback signal                                                                                                                                                           |

A = Intake  
 B = Exhaust parallel  
 C = Exhaust slave

|   |            |
|---|------------|
| E | <b>Bus</b> |
|   | 1 = -      |
|   | 2 = +      |
|   | 3 = -      |
|   | 4 = +      |

**Application variants**

| Function          | Plug A           | Plug B     | Plug C         | Plug D           | Plug E |
|-------------------|------------------|------------|----------------|------------------|--------|
| Master / Slave    | Master-actuator  | -          | Slave-actuator | -                | -      |
| Parallel          | Actuator 1       | Actuator 2 | -              | -                | -      |
| Single drive      | -                | Actuator 1 | -              | -                | -      |
| Heating / cooling | Heating actuator | -          | -              | Cooling actuator | -      |
| Communication     | -                | -          | -              | -                | Bus    |

**Technical specification**
**Safety advice**

The power supply may not be used in connection with devices which can serve health, directly or indirectly or life-saving purposes or may cause the actual danger to persons and property.

|                       |                                                                                                                                              |                                                                                                |                                       |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------|
| <b>Power supply</b>   | Operating voltage                                                                                                                            | 210...250 VAC, 50/60 Hz                                                                        |                                       |
|                       | Max. power                                                                                                                                   | 10 VA                                                                                          |                                       |
|                       | Electrical connection                                                                                                                        | Terminal connectors, wire 2x 1...2.5 mm <sup>2</sup>                                           |                                       |
| <b>Outputs</b>        | Nominal voltage                                                                                                                              | 20...27 VAC                                                                                    |                                       |
|                       | Connections                                                                                                                                  |                                                                                                |                                       |
|                       | Drive and VAV-controllers<br>Control<br>Configuration                                                                                        | Plug 4 x 0.34...1,5 mm <sup>2</sup><br>Screw terminals: 7 x 0.34...2.5 mm <sup>2</sup><br>RJ12 |                                       |
| <b>Environment</b>    | Operation                                                                                                                                    | To IEC 721-3-3                                                                                 |                                       |
|                       | Climatic conditions                                                                                                                          | Class 3K5                                                                                      |                                       |
|                       | Temperature                                                                                                                                  | -10...+40 °C (14...104 °F)                                                                     |                                       |
|                       | Humidity                                                                                                                                     | < 90% RH non-condensing                                                                        |                                       |
|                       | Transport and Storage                                                                                                                        | To IEC 721-3-2 and IEC 721-3-1                                                                 |                                       |
|                       | Climatic conditions                                                                                                                          | Class 3 K3 and class 1 K3                                                                      |                                       |
| Temperature           | -25...70 °C (-13...158 °F)                                                                                                                   |                                                                                                |                                       |
| Humidity              | < 90% RH non-condensing                                                                                                                      |                                                                                                |                                       |
| Mechanical conditions | Class 2M2                                                                                                                                    |                                                                                                |                                       |
| <b>Standards</b>      |  conform according to<br>2014/30/EU EMC<br>2014/35/EU LVD | EN 61000-6-1 / EN 61000-6-3                                                                    |                                       |
|                       | Degree of protection                                                                                                                         | IP40 (EN 60529)                                                                                |                                       |
|                       | Environment class                                                                                                                            | II (EN 60730-1)                                                                                |                                       |
|                       | Safety class                                                                                                                                 | II (IEC 60536)                                                                                 |                                       |
|                       | Overvoltage category                                                                                                                         | III (EN 60730-1)                                                                               |                                       |
|                       | <b>General</b>                                                                                                                               | Material                                                                                       | PC+ABS plastic                        |
|                       |                                                                                                                                              | Dimensions (L x B x H)                                                                         | 160 x 75 x 50 mm (6.3 x 3.0 x 2.0 in) |
|                       |                                                                                                                                              | Weight (incl. package)                                                                         | 550 g (19.4 oz)                       |

**Dimensions mm (inch)**
