

EC centrifugal fans / Modules

backward curved, with integrated electronics, Ø 355



- **Material:** stator and electronics housing made of die-cast aluminium, rotor made of sheet steel (enamelled in black), impeller made of sheet aluminium, galvanised sheet metal parts
- **Technical features:** control input 0-10 VDC / PWM, RS485 ebmBUS, alarm relay, integrated PID control, voltage supply for sensor, input for sensor 0-10 V respectively 4-20 mA, 0-10 V output for slave, PFC (passive), soft start, line undervoltage detection, phase failure detection, motor current limitation, over-temperature protected electronics and motor, locked-rotor protection
- **Type of protection:** IP 54 according to DIN VDE 0470, part 1 (EN 60 529) category 2
- **Approvals:** UL, CSA, VDE, CE, CCC and GOST are applied for
- **Mounting position:** at will

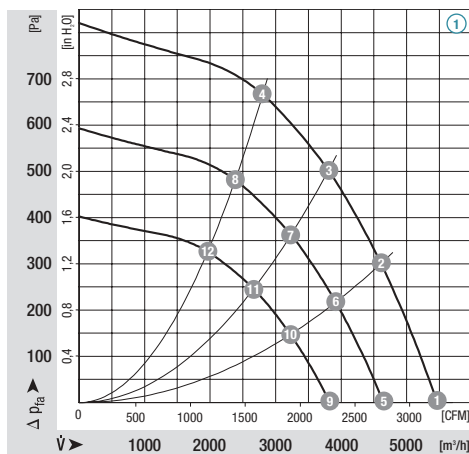
ebm-papst • Muldingen

| Nominal data | | Characteristic | Voltage range | Frequency | Speed/rpm | Max. power input | Max. current draw | Perm. amb. temp. | Mass |
|------------------|-----------|----------------|---------------|-------------------|-----------|------------------|-------------------|------------------|------|
| Type | Motor | 3~ VAC | Hz | min ⁻¹ | W | A | °C | kg | |
| R3G 355-AT56 -01 | M3G112-EA | ① | 380-480 | 50/60 | 2200 | 1000 | 1.9 | -25..+50 | 9.1 |
| K3G 355-AT56 -02 | M3G112-EA | ① | 380-480 | 50/60 | 2200 | 1000 | 1.9 | -25..+50 | 17.0 |
| K3G 355-AT56 -01 | M3G112-EA | ① | 380-480 | 50/60 | 2200 | 1000 | 1.9 | -25..+50 | 19.0 |

subject to alterations

| | n | P ₁ | I | Lp _A | η _{HL} | n | P ₁ | I | Lp _A | η _{HL} | |
|-----|----------------------|----------------|-----|-----------------|-----------------|----------------------|----------------|-----|-----------------|-----------------|-----|
| | [min ⁻¹] | [W] | [A] | [dBA] | [%] | [min ⁻¹] | [W] | [A] | [dBA] | [%] | |
| ① ① | 2200 | 739 | 1,4 | 83 | --- | ① ⑨ | 1540 | 253 | 0,5 | 73 | --- |
| ① ② | 2200 | 932 | 1,7 | 80 | 58 | ① ⑩ | 1540 | 320 | 0,6 | 70 | 58 |
| ① ③ | 2200 | 996 | 1,9 | 77 | 67 | ① ⑪ | 1540 | 342 | 0,6 | 67 | 67 |
| ① ④ | 2200 | 957 | 1,8 | 77 | 64 | ① ⑫ | 1540 | 328 | 0,6 | 65 | 64 |
| ① ⑤ | 1870 | 454 | 0,9 | 78 | --- | | | | | | |
| ① ⑥ | 1870 | 572 | 1,1 | 75 | 58 | | | | | | |
| ① ⑦ | 1870 | 612 | 1,1 | 72 | 67 | | | | | | |
| ① ⑧ | 1870 | 587 | 1,1 | 71 | 64 | | | | | | |

Characteristics



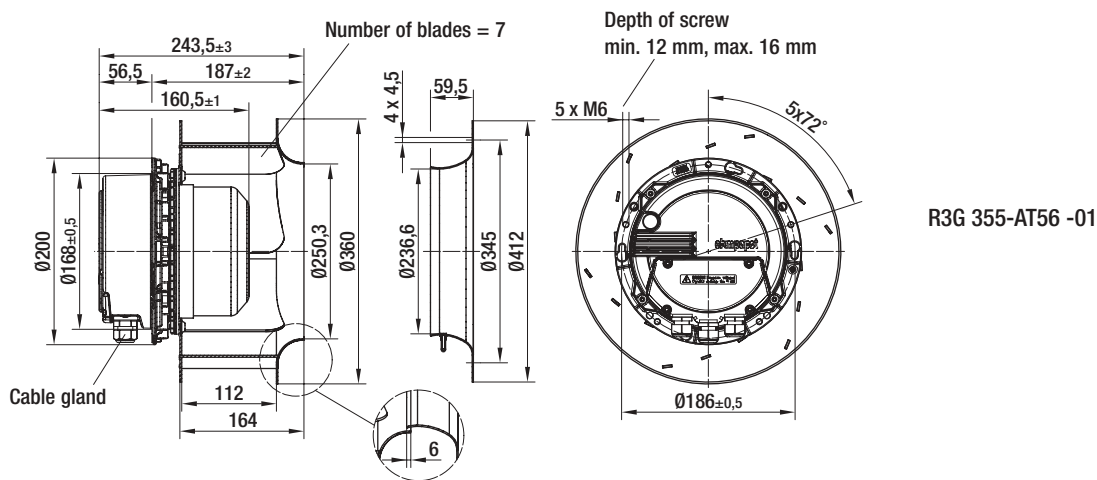
Electrical connection:



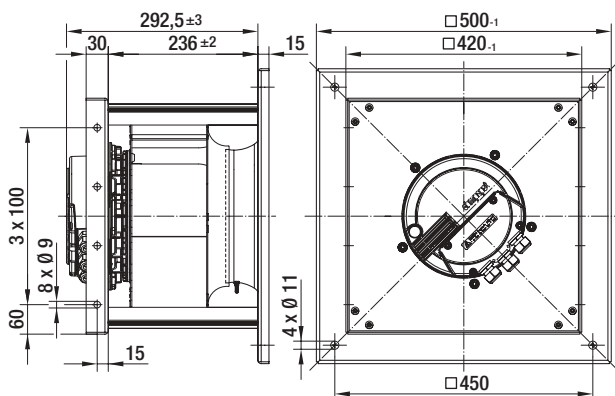
| Connector | Signal | Pin No. | Assignment / function |
|-----------|------------|---------|------------------------------|
| PE | PE | --- | Protective earth |
| KL1 | L3, L2, L1 | 1, 2, 3 | Mains; L3, L2, L1 |
| KL2 | NC | 1 | Alarm relay, normally closed |
| | COM | 2 | Alarm relay, COMMON |
| | NO | 3 | Alarm relay, normally open |

| Connector | Signal | Pin No. | Assignment / function |
|-----------|--------------|---------|---|
| KL3 | OUT | 1 | Master output 0-10 V max. 3 mA |
| | GND | 2, 8 | GND |
| | 0-10 V / PWM | 3, 7 | Control / Actual value input |
| | +10 V | 4 | Supply for external potentiometer 10 mA |
| | +20 V | 5 | Supply for external sensor 50 mA |
| | 4-20 mA | 6 | Control / Actual value input |
| | RS B | 9, 11 | RS485 interface for ebmBUS; RS B |
| | RS A | 10, 12 | RS485 interface for ebmBUS; RS A |

| Type | Inlet ring |
|------------------|---|
| R3G 355-AT56 -01 | 35540-2-4013 (with one pressure relief) |
| K3G 355-AT56 -02 | integrated |
| K3G 355-AT56 -01 | integrated |



K3G 355-AT56 -01



K3G 355-AT56 -02

