

EC centrifugal fans and modules

backward curved, 3-D, Ø 355, RS485, ebmBUS



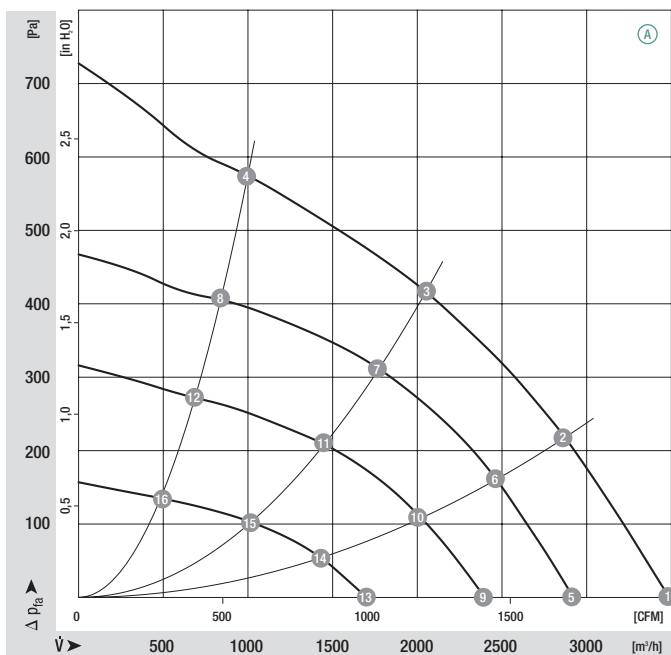
- **Material:** Support plate: Sheet aluminium, spacer profiles: Aluminium
Impeller: Sheet aluminium, laser-welded
Rotor: Coated in black
Electronics enclosure: Die-cast aluminium
- **Number of blades:** 6
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 20
- **Insulation class:** "B"
- **Mounting position:** Shaft horizontal or rotor on top; rotor on bottom on request
- **Condensate discharges:** None
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

| Nominal data | | Curve | Nominal voltage range | Frequency | Speed/rpm | Max. power input ⁽¹⁾ | Max. current draw ⁽¹⁾ | Perm. amb. temp. | Electr. connection |
|--------------|------------|-------|-----------------------|-----------|-----------|---------------------------------|----------------------------------|------------------|--------------------|
| Type | Motor | VAC | Hz | rpm | W | A | °C | p. 606 | |
| *3G 355 | M3G 084-FA | Ⓐ | 1~ 200-277 | 50/60 | 1840 | 430 | 1.90 | -25 to +40 | K2) |

subject to alterations

(1) Nominal data in operating point with maximum load and 230 VAC

Curves (established with long inlet nozzle)

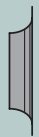


| | n [rpm] | P ₁ [W] | I [A] | Lp _A [dB(A)] | η _{HL} [%] |
|------|---------|--------------------|-------|-------------------------|---------------------|
| Ⓐ 1 | 1840 | 335 | 1.50 | 75 | — |
| Ⓐ 2 | 1790 | 405 | 1.80 | 70 | 56 |
| Ⓐ 3 | 1770 | 430 | 1.90 | 66 | 70 |
| Ⓐ 4 | 1820 | 365 | 1.60 | 67 | 58 |
| Ⓐ 5 | 1540 | 200 | 0.90 | 70 | — |
| Ⓐ 6 | 1540 | 256 | 1.10 | 66 | 56 |
| Ⓐ 7 | 1540 | 277 | 1.20 | 63 | 70 |
| Ⓐ 8 | 1540 | 235 | 1.00 | 63 | 58 |
| Ⓐ 9 | 1260 | 115 | 0.50 | 64 | — |
| Ⓐ 10 | 1260 | 150 | 0.70 | 60 | 56 |
| Ⓐ 11 | 1260 | 159 | 0.70 | 56 | 70 |
| Ⓐ 12 | 1260 | 125 | 0.50 | 57 | 58 |
| Ⓐ 13 | 890 | 55 | 0.20 | 55 | — |
| Ⓐ 14 | 890 | 67 | 0.30 | 52 | 56 |
| Ⓐ 15 | 890 | 70 | 0.30 | 49 | 70 |
| Ⓐ 16 | 890 | 59 | 0.30 | 49 | 58 |

- **Technical features:**
 - PFC (active)
 - RS485 ebmBUS
- **EMC:** Interference emission acc. to EN 61000-6-4 (industrial environment)
Interference immunity acc. to EN 61000-6-2 (industrial environment)
Harmonics acc. to DIN EN 61000-3-2/3
- **Leakage current:** < 3.5 mA acc. to EN 61800-5-1
- **Electrical connection:** Via connection lead with plug (accessory)
- **Protection class:** I
- **Product conforming to standards:** EN 61800-5-1, CE
- **Approvals:** VDE, UL, CSA, CCC, GOST are applied for
 - Operation and alarm display: Reversible voltage output 0 V / +15 V (max. 50 mA)
 - Over-temperature protected electronics / motor

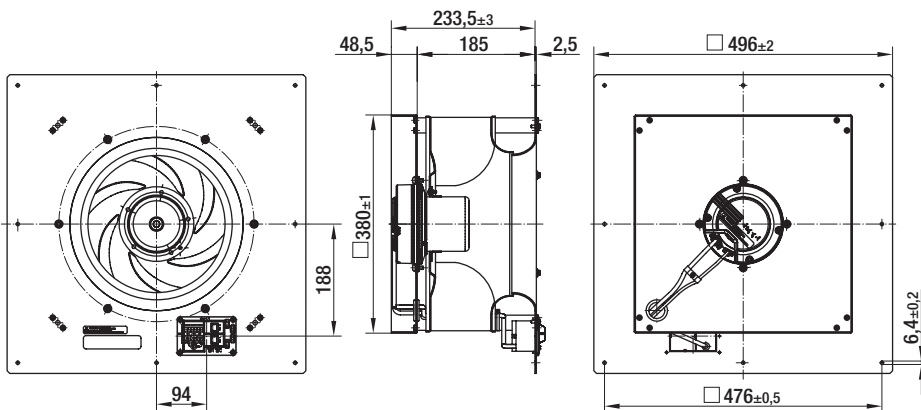
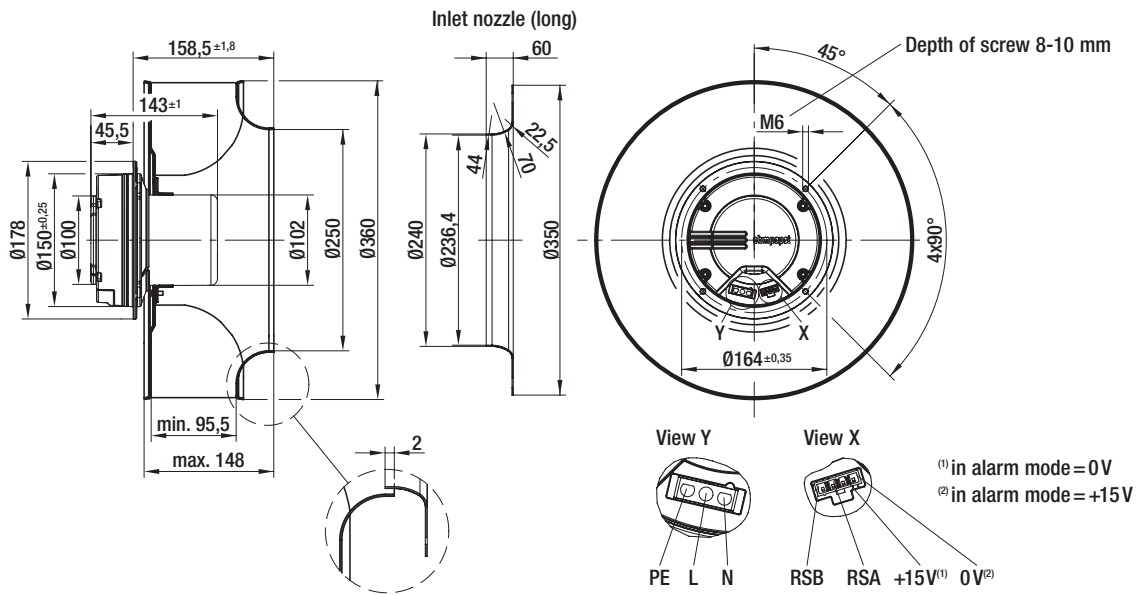


Mass of centrifugal fan



Mass of centrifugal module with support plate

| Centrifugal fan | kg | Inlet nozzle (long) | Inlet nozzle (short) | Centrifugal module with support plate | kg |
|-----------------|-----|---------------------|----------------------|---------------------------------------|-----|
| R3G 355-AM14-61 | 5.4 | 35560-2-4013 | 35561-2-4013 | K3G 355-AM14-61 | 8.7 |



K2) EC motors (size 084/112 with ebmBUS, mains-powered)



| Connector | Connection | Assignment / function |
|-----------|------------|-------------------------|
| KL1 | PE | Protective earth |
| | N | Mains 50/60 Hz, neutral |
| | L | Mains 50/60 Hz, phase |

| Connector | Connection | Assignment / function |
|-----------|------------|--------------------------------------|
| KL2 | RS B | RS485 interface for ebmBUS; RS B |
| | RS A | RS485 interface for ebmBUS; RS A |
| | +15 V | Operation: +15 V (50 mA); Alarm: 0 V |
| | 0 V | Operation: 0 V; Alarm: +15 V (50 mA) |