**R6E355-AB28-11**

# AC centrifugal fan

backward-curved, single-intake

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## Nominal data

| | |
|---|---|
| **Type** | **R6E355-AB28-11** |
| **Motor** | **M6E074-DF** |

| | | | |
|---|---|---|---|
| Phase | | 1~ | 1~ |
| Nominal voltage | VAC | 230 | 230 |
| Frequency | Hz | 50 | 60 |
| Method of obtaining data | | fa | fa |
| Valid for approval/standard | | CE | CE |
| Speed (rpm) | $min^{-1}$ | 910 | 1000 |
| Power consumption | W | 80 | 110 |
| Current draw | A | 0.36 | 0.49 |
| Capacitor | µF | 2.5 | 2.5 |
| Capacitor voltage | VDB | 400 | 400 |
| Capacitor standard | | S2 (CE) | S2 (CE) |
| Min. back pressure | Pa | 0 | 0 |
| Min. back pressure | inH2O | 0 | 0 |
| Min. ambient temperature | °C | -25 | -25 |
| Max. ambient temperature | °C | 60 | 50 |

ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change

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## Technical description

| | |
|---|---|
| **Weight** | 4.2 kg |
| **Fan size** | 355 mm |
| **Impeller material** | PA plastic |
| **Number of blades** | 6 |
| **Direction of rotation** | Clockwise, viewed toward rotor |
| **Degree of protection** | IP20 |
| **Insulation class** | "B" |
| **Moisture (F) / Environmental (H) protection class** | H0 - dry environment |
| **Max. permitted ambient temp. for motor (transport/storage)** | + 80 °C |
| **Min. permitted ambient temp. for motor (transport/storage)** | - 40 °C |
| **Installation position** | Any |
| **Condensation drainage holes** | None, open rotor |
| **Mode** | S1 |
| **Motor bearing** | Ball bearing |
| **Speed levels** | 5 |
| **Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)** | < 0.75 mA |
| **Motor protection** | Thermal overload protector (TOP) internally connected |
| **With cable** | Variable |
| **Protection class** | I (with customer connection of protective earth) |
| **Conformity with standards** | EN 60335-1; CE |
| **Approval** | CCC; CSA C22.2 No. 100; UL 1004-1 |

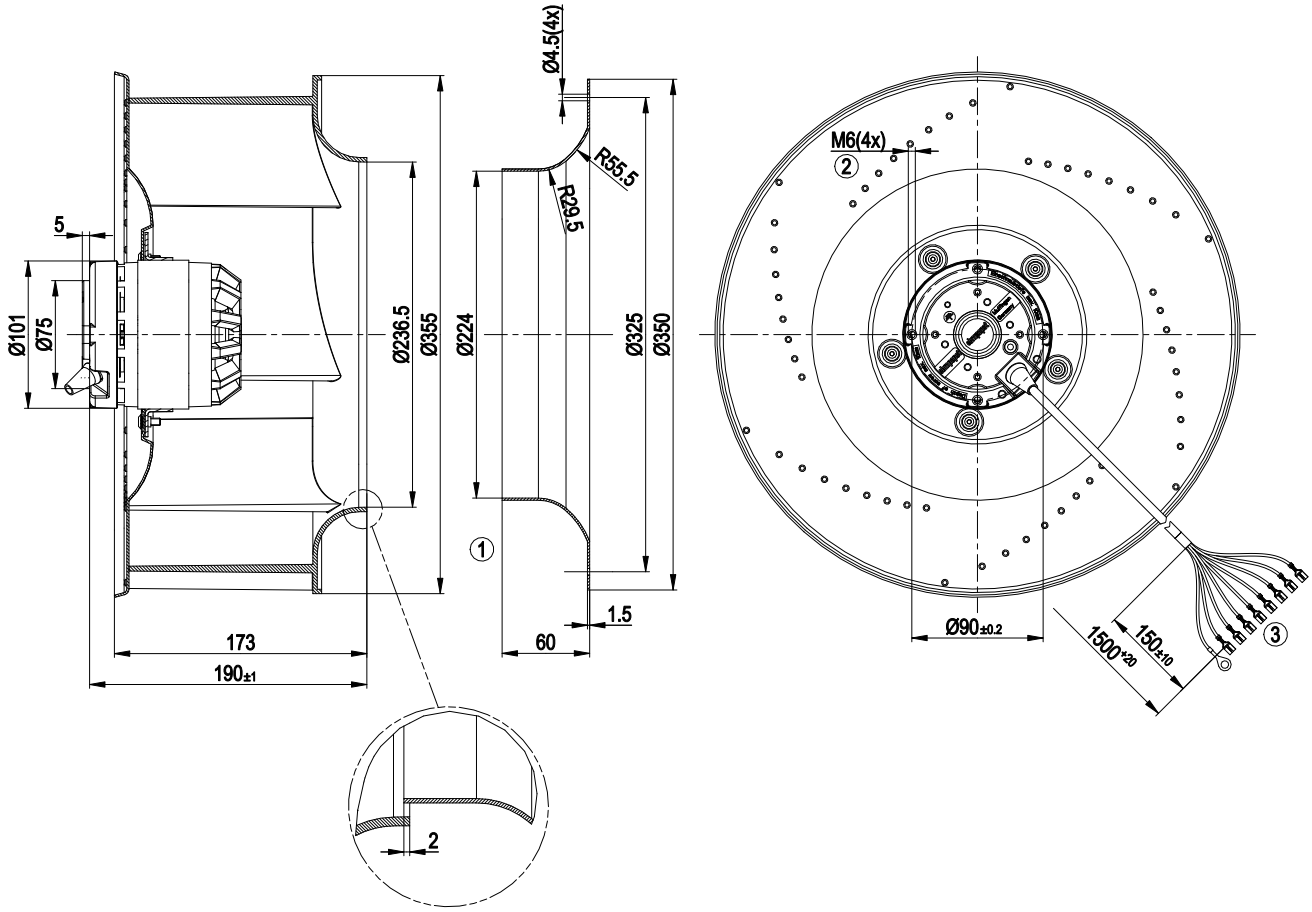


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## Product drawing




| | |
|---|---|
| 1 | Accessory part: inlet ring 51357-2-4013 not included in scope of delivery |
| 2 | Max. clearance for screw 10 mm |
| 3 | Cable PFA 9G, 8 x flat push-on receptacle AMP 2-520405-2 and 1x ring terminal 160102-2 crimped |

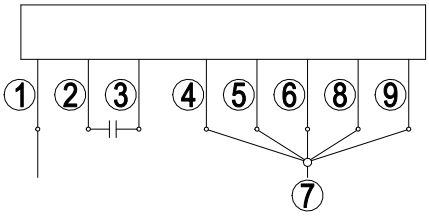


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## Connection diagram




Note: High speed (step V); low speed (step I)

| | | | | | |
|---|---|---|---|---|---|
| 1 | = N = blue | 2 | brown | 3 | yellow |
| 4 | Step I white | 5 | Step II red | 6 | Step III gray |
| 7 | L1 | 8 | Step IV orange | 9 | Step V black |

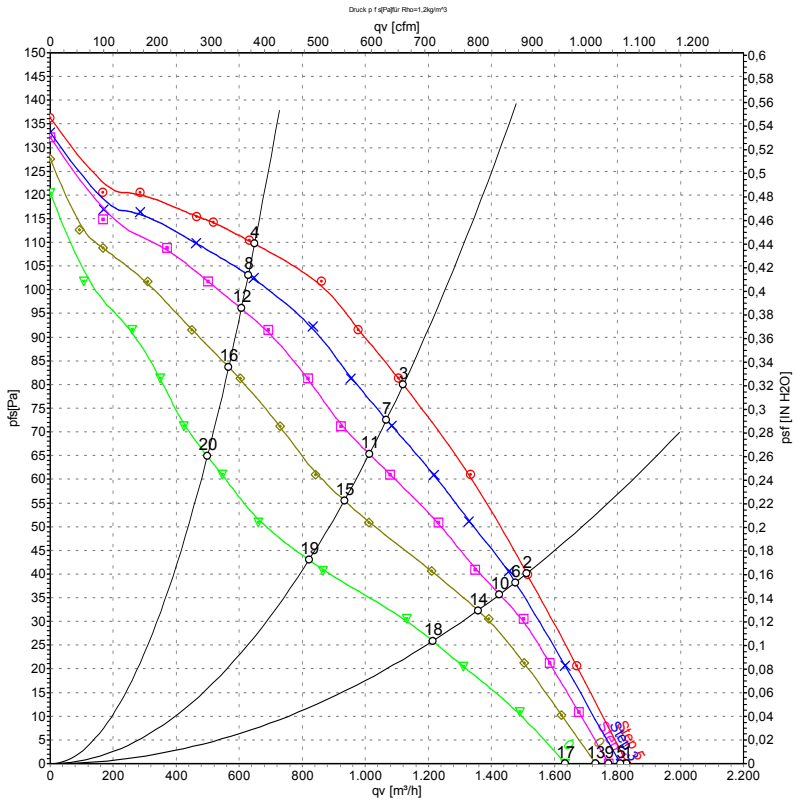


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## Curves: Air performance 50 Hz




Measurement: LU-31523-1
Measurement: LU-31526-1
Measurement: LU-31527-1
Measurement: LU-31525-1
Measurement: LU-31524-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the specified measuring conditions and may vary due to conditions of installation. For deviations from the standard configuration, the parameters have to be checked on the installed unit.

## Measured values

| | Stage | U | f | n | $P_e$ | I | $q_V$ | $p_{fs}$ | $q_V$ | $p_{fs}$ |
|---|---|---|---|---|---|---|---|---|---|---|
| | | V | Hz | $min^{-1}$ | W | A | $m^3/h$ | Pa | cfm | inH2O |
| 1 | 5 | 230 | 50 | 910 | 80 | 0.36 | 1830 | 0 | 1075 | 0.00 |
| 2 | 5 | 230 | 50 | 885 | 85 | 0.37 | 1510 | 40 | 890 | 0.16 |
| 3 | 5 | 230 | 50 | 845 | 90 | 0.39 | 1120 | 80 | 660 | 0.32 |
| 4 | 5 | 230 | 50 | 870 | 86 | 0.38 | 650 | 110 | 380 | 0.44 |
| 5 | 4 | 230 | 50 | 900 | 72 | 0.32 | 1810 | 0 | 1065 | 0.00 |
| 6 | 4 | 230 | 50 | 855 | 78 | 0.35 | 1475 | 39 | 870 | 0.16 |
| 7 | 4 | 230 | 50 | 810 | 83 | 0.36 | 1065 | 72 | 630 | 0.29 |
| 8 | 4 | 230 | 50 | 840 | 80 | 0.35 | 630 | 103 | 370 | 0.41 |
| 9 | 3 | 230 | 50 | 890 | 68 | 0.31 | 1775 | 0 | 1045 | 0.00 |
| 10 | 3 | 230 | 50 | 835 | 74 | 0.33 | 1425 | 36 | 840 | 0.14 |
| 11 | 3 | 230 | 50 | 770 | 78 | 0.35 | 1015 | 65 | 595 | 0.26 |
| 12 | 3 | 230 | 50 | 810 | 76 | 0.34 | 605 | 96 | 355 | 0.39 |
| 13 | 2 | 230 | 50 | 865 | 64 | 0.30 | 1730 | 0 | 1020 | 0.00 |
| 14 | 2 | 230 | 50 | 790 | 71 | 0.32 | 1360 | 32 | 800 | 0.13 |
| 15 | 2 | 230 | 50 | 710 | 75 | 0.34 | 935 | 56 | 550 | 0.22 |
| 16 | 2 | 230 | 50 | 755 | 72 | 0.33 | 565 | 84 | 335 | 0.34 |
| 17 | 1 | 230 | 50 | 820 | 60 | 0.28 | 1635 | 0 | 960 | 0.00 |
| 18 | 1 | 230 | 50 | 715 | 66 | 0.30 | 1215 | 26 | 715 | 0.10 |
| 19 | 1 | 230 | 50 | 625 | 69 | 0.31 | 820 | 43 | 485 | 0.17 |
| 20 | 1 | 230 | 50 | 665 | 68 | 0.31 | 500 | 65 | 295 | 0.26 |

U = Power supply · f = Frequency · n = Speed (rpm) · $P_e$ = Power consumption · I = Current draw · $q_V$ = Air flow · $p_{fs}$ = Pressure increase

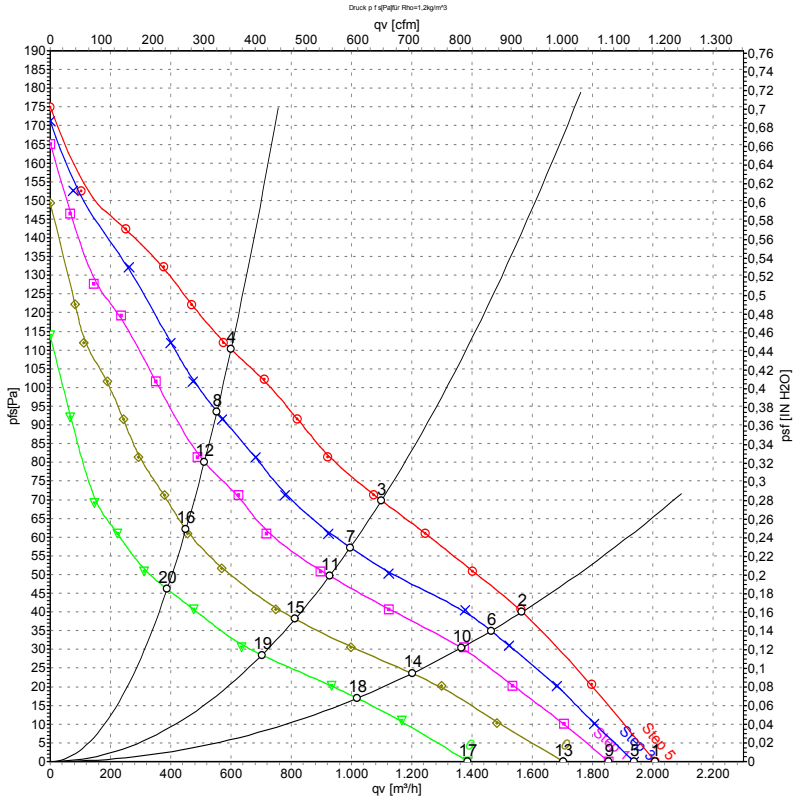


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## Curves: Air performance 60 Hz




Measurement: LU-31528-1
Measurement: LU-31529-1
Measurement: LU-31530-1
Measurement: LU-31531-1
Measurement: LU-31532-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the specified measuring conditions and may vary due to conditions of installation. For deviations from the standard configuration, the parameters have to be checked on the installed unit.

## Measured values

| | Stage | U | f | n | $P_e$ | I | $q_V$ | $p_{fs}$ | $q_V$ | $p_{fs}$ |
|---|---|---|---|---|---|---|---|---|---|---|
| | | V | Hz | $min^{-1}$ | W | A | $m^3/h$ | Pa | cfm | inH2O |
| 1 | 5 | 230 | 60 | 1000 | 110 | 0.49 | 2005 | 0 | 1180 | 0.00 |
| 2 | 5 | 230 | 60 | 905 | 110 | 0.49 | 1565 | 40 | 920 | 0.16 |
| 3 | 5 | 230 | 60 | 810 | 111 | 0.49 | 1100 | 70 | 645 | 0.28 |
| 4 | 5 | 230 | 60 | 870 | 110 | 0.48 | 600 | 110 | 355 | 0.44 |
| 5 | 4 | 230 | 60 | 970 | 98 | 0.44 | 1935 | 0 | 1140 | 0.00 |
| 6 | 4 | 230 | 60 | 840 | 100 | 0.44 | 1460 | 35 | 860 | 0.14 |
| 7 | 4 | 230 | 60 | 735 | 100 | 0.44 | 995 | 57 | 585 | 0.23 |
| 8 | 4 | 230 | 60 | 800 | 100 | 0.44 | 555 | 94 | 325 | 0.38 |
| 9 | 3 | 230 | 60 | 930 | 91 | 0.42 | 1855 | 0 | 1090 | 0.00 |
| 10 | 3 | 230 | 60 | 790 | 93 | 0.42 | 1365 | 31 | 805 | 0.12 |
| 11 | 3 | 230 | 60 | 680 | 94 | 0.42 | 925 | 50 | 545 | 0.20 |
| 12 | 3 | 230 | 60 | 735 | 93 | 0.42 | 510 | 80 | 300 | 0.32 |
| 13 | 2 | 230 | 60 | 850 | 83 | 0.39 | 1705 | 0 | 1000 | 0.00 |
| 14 | 2 | 230 | 60 | 690 | 84 | 0.38 | 1200 | 24 | 705 | 0.10 |
| 15 | 2 | 230 | 60 | 600 | 85 | 0.38 | 810 | 38 | 480 | 0.15 |
| 16 | 2 | 230 | 60 | 650 | 84 | 0.38 | 450 | 62 | 265 | 0.25 |
| 17 | 1 | 230 | 60 | 710 | 74 | 0.35 | 1385 | 0 | 815 | 0.00 |
| 18 | 1 | 230 | 60 | 595 | 74 | 0.35 | 1020 | 17 | 600 | 0.07 |
| 19 | 1 | 230 | 60 | 525 | 75 | 0.35 | 700 | 28 | 415 | 0.11 |
| 20 | 1 | 230 | 60 | 560 | 75 | 0.35 | 390 | 46 | 230 | 0.18 |

U = Power supply · f = Frequency · n = Speed (rpm) · $P_e$ = Power consumption · I = Current draw · $q_V$ = Air flow · $p_{fs}$ = Pressure increase



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