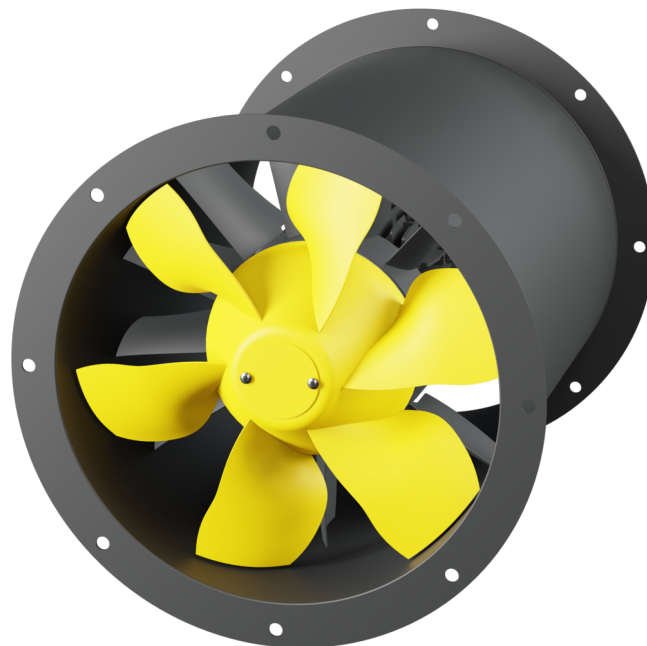


# AL 315 D2 01

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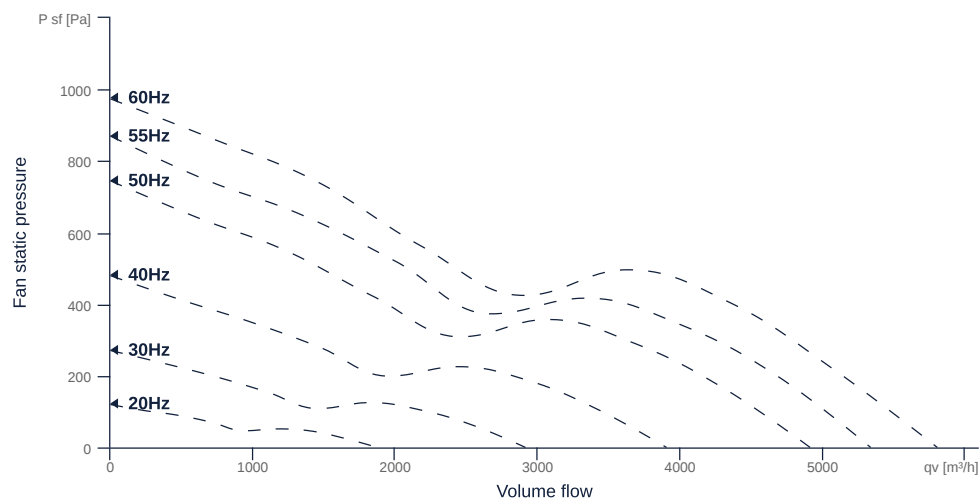
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- Innovative, high-efficiency axial fan
- Optimally tuned, CFD-optimized aerodynamics
- Housing weight optimized, powder coated
- Efficient IE3 motor, frequency controllable
- Conveyed medium temperature up to 60 °C in continuous operation
- Exceeds current ErP regulation by 15 - 20%



## FAN CURVES

| Name        | Value | Unit |
|-------------|-------|------|
| Volume flow | 0     | m³/h |
| Pressure    | 0     | Pa   |



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GENERAL DATA

| Name                                  | Value    | Unit | Formula symbol      |
|---------------------------------------|----------|------|---------------------|
| Labeling                              | CE, UKCA |      |                     |
| Duct size                             | -        |      | $W \times H_{duct}$ |
| Pipe connection size (DN)             | DN315    |      | DN                  |
| Rated voltage (entire device)         | 400      | V    | $U_{rated}$         |
| Phases (entire device)                | 3~       |      | phase               |
| Electrical protection (entire device) | 6 A      |      | fuse                |
| Housing material                      | Steel    |      | $mat_{casing}$      |
| Impeller material                     | Steel    |      | $mat_{impeller}$    |
| IP-protection class (entire device)   | IPX4     |      | $IP_{compl}$        |
| IP-Protection class (terminal box)    | IP55     |      | $IP_{ebox}$         |
| Weight                                | 18.5     | kg   | m                   |
| Fan type                              | Axial    |      | $Fan_{type}$        |
| Category / Installation situation     | B        |      | cat                 |

MAXIMAL DATA

| Name                            | Value | Unit  | Formula symbol |
|---------------------------------|-------|-------|----------------|
| Max. power consumption (device) | 1386  | W     | $P_{ed, max}$  |
| Max. operating current (device) | 1.9   | A     | $I_{ed, max}$  |
| Max. speed                      | 3460  | 1/min | $n_{max}$      |
| Max. stat. efficiency           | 44.7  | %     | $\eta_{es}$    |
| Max. fan efficiency             | 57.4  | %     | $\eta_e$       |
| Max. flowrate                   | 5805  | m³/h  | $Q_v, max$     |
| Max. stat pressure              | 490   | Pa    | $p_{sf, max}$  |
| Max. medium temperature         | 60    | °C    | $T_m, max$     |
| Max. environment temperature    | 60    | °C    | $T_{amb, max}$ |
| Min. environment temperature    | -20   | °C    | $T_{amb, min}$ |



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MOTOR DATA

| Name                        | Value    |                      | Unit  | Formula symbol           |
|-----------------------------|----------|----------------------|-------|--------------------------|
|                             | 50 Hz    | 60 Hz                |       |                          |
| Rated frequency (device)    |          | 50                   |       | f                        |
| Motor type                  |          | AC 3~                |       | phase                    |
| Control type                |          | frequency-controlled |       | ctrltype                 |
| Installation type           |          | IRM (In)             |       | install                  |
| Isolation class             |          | ISO F                |       | ISOclass                 |
| Protection class            |          | IP55                 |       | IPmotor                  |
| Is pole-changeable          |          | No                   |       | polexch                  |
| Type of power supply        |          | AC 3~                |       | pwsupmotor               |
| Number of poles (1)         |          | 2.000000             |       | num polesw1              |
| Connection                  | Y        | Y                    |       | wiringw1                 |
| Connection (wiring 2)       | Δ        |                      |       | wiringw2                 |
| Rated voltage               | 400      | 460                  | V     | Urated, f1               |
| Rated voltage (wiring 2)    | 230      |                      | V     | Urated, f2               |
| Rated current               | 1.63     | 1.43                 | A     | Irated, f1               |
| Rated current (wiring 2)    | 2.83     |                      | A     | Irated, f2               |
| Shaft power                 | 750      | 750                  | W     | Pout, f1                 |
| Shaft power (wiring 2)      | 750      |                      | W     | Pout, f2                 |
| Speed                       | 2870     | 3490                 | 1/min | n <sub>f1</sub>          |
| Speed (wiring 2)            | 2870     |                      | 1/min | n <sub>f2</sub>          |
| Starting current            | 12.2     | 11.4                 | A     | Istart, f1               |
| Starting current (wiring 2) | 21.3     |                      | A     | Istart, f2               |
| Efficiency                  | 81       | 81.5                 | %     | η <sub>m</sub> , f1      |
| Efficiency (wiring 2)       | 81       |                      | %     | η <sub>m</sub> , f2      |
| Efficiency class            | IE3      | IE3                  |       | IE <sub>motor</sub>      |
| Min. temperature            | -20      |                      | °C    | T <sub>motor</sub> , min |
| Cos Phi                     | 0.820000 | 0.000000             |       | cos φ                    |
| UL-Certification motor      |          | UL recognized        |       | ULcert                   |

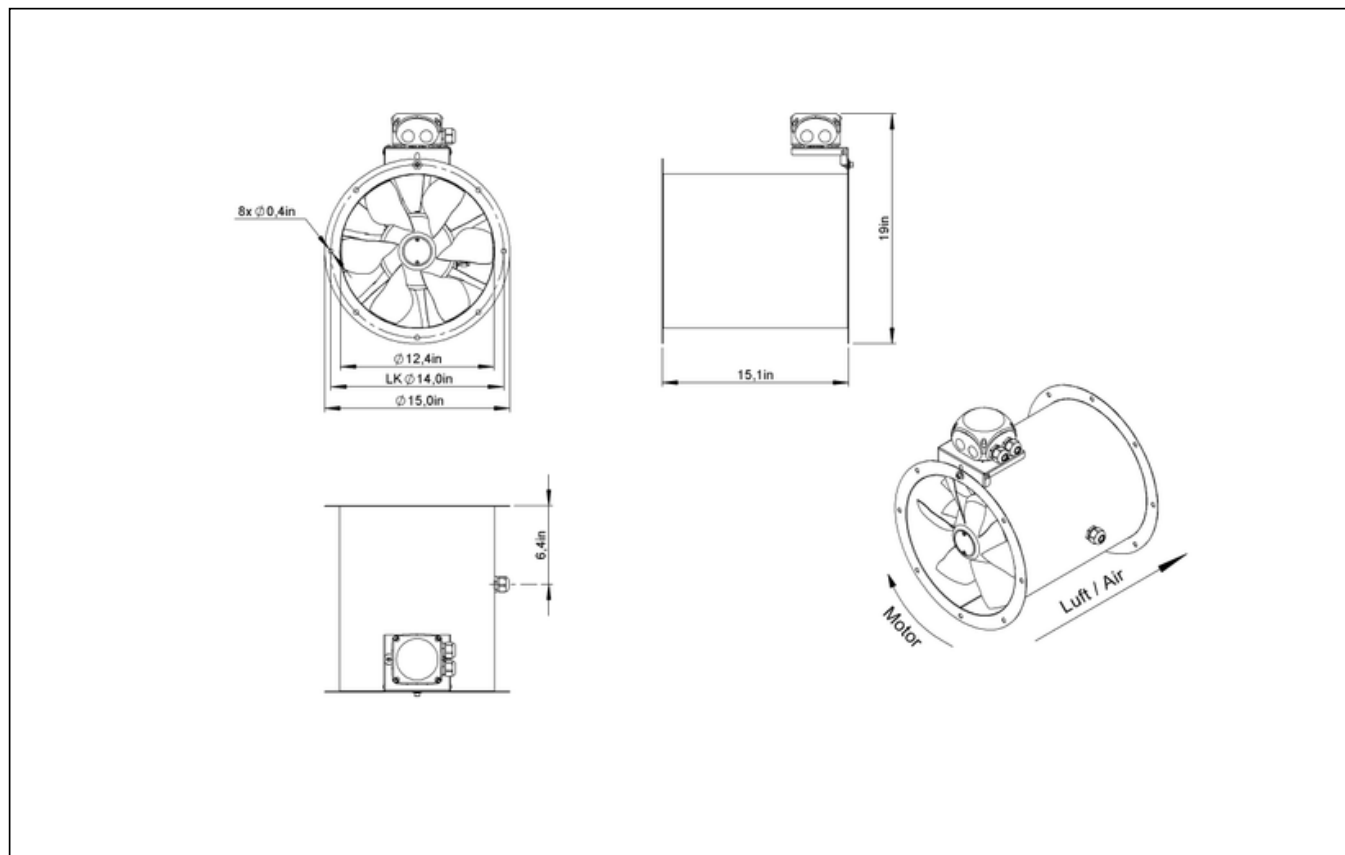
ERP DATA (LOT11)

| Name                                                      | Value | Unit  | Formula symbol            |
|-----------------------------------------------------------|-------|-------|---------------------------|
| Speed at the energy efficiency optimum                    | 3423  | 1/min | n <sub>opt</sub>          |
| Efficiency level                                          | 58.3  | %     | N                         |
| Efficiency category                                       | total |       | cat <sub>efficiency</sub> |
| Input power of the motor at the energy efficiency optimum | 1.13  | kW    | P <sub>e</sub> , opt      |
| Overall efficiency                                        | 64.3  | %     | η <sub>ges</sub>          |
| Measurement category                                      | B     |       | meas cat                  |
| Fan pressure at energy efficiency optimum                 | 542   | Pa    | p <sub>f</sub> , opt      |
| Flowrate at energy efficiency optimum                     | 4389  | m³/h  | Q <sub>v</sub> , opt      |



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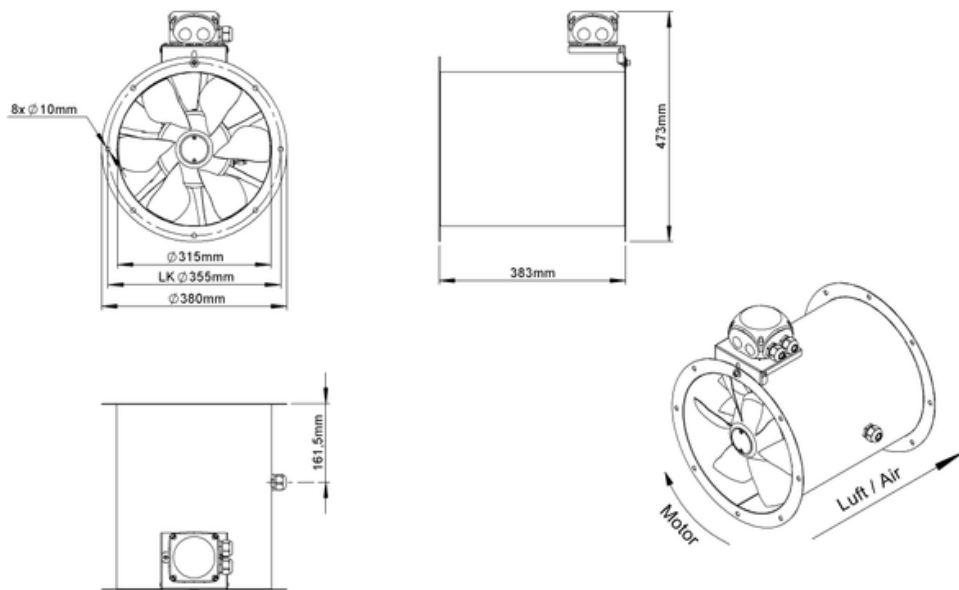
## CIRCUIT DIAGRAMS / DIMENSIONAL DRAWINGS



# AL 315 D2 01

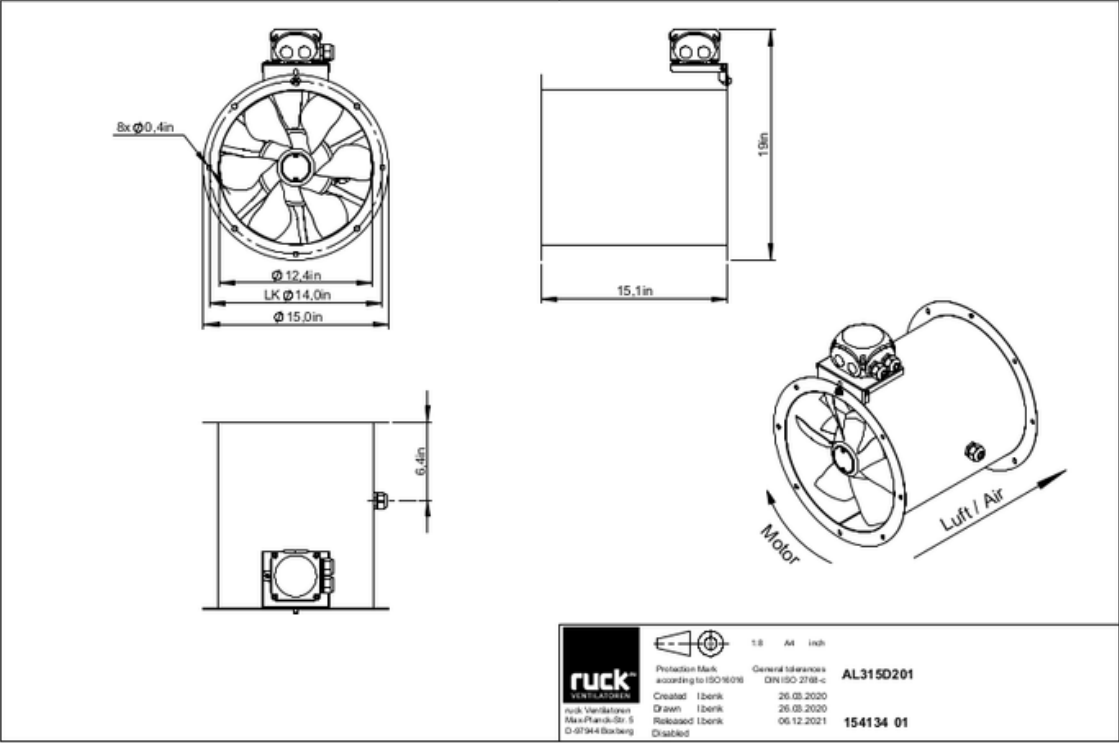
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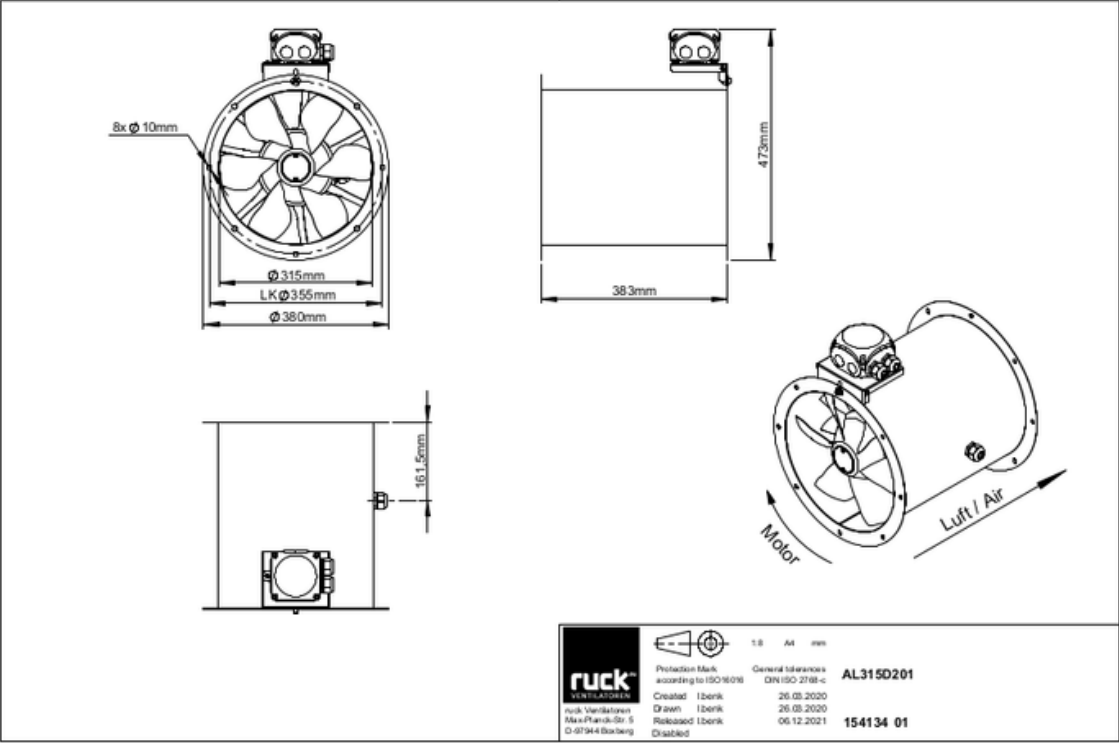
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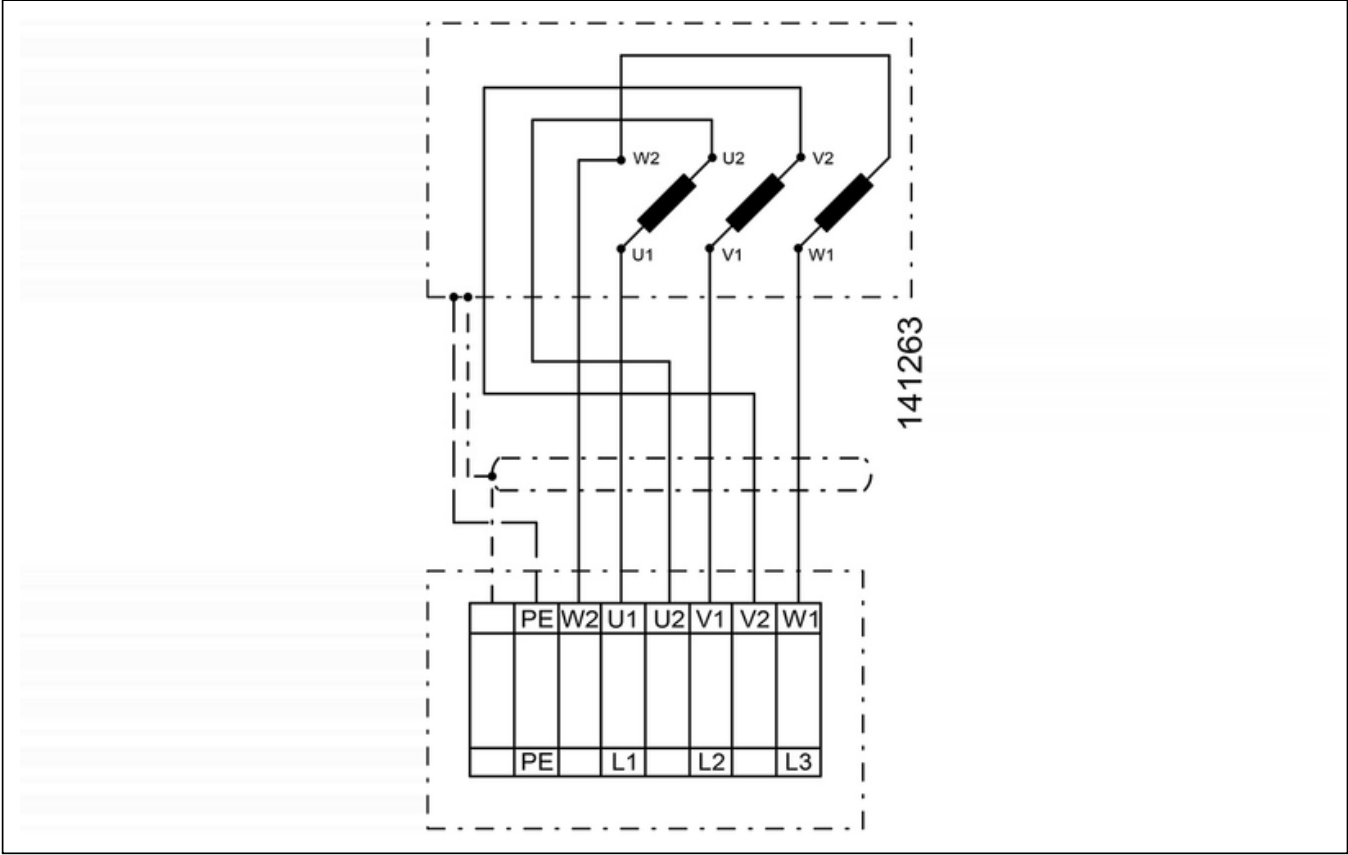
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## MECHANICAL ACCESSORIES

**RVK 315 | 153873**



- Automatic tube shutter
- Sheet steel, powder coated
- For vertical installation
- Flange mounting

**RVK H 315 | 155010**



- Automatic tube shutter
- Sheet steel, powder coated
- For horizontal installation
- Flange mounting

**RAF 315 | 154016**



- Round flange
- Sheet steel, powder coated

**RVS 315 | 154174**



- Tube connection spigot
- Sheet steel, powder coated
- Suitable for outdoor installation
- Flange mounting

**RAS 315 | 154246**



- Round spigot, flexible
- Galvanized steel sheet, plastic band (PES)
- Temperature resistant up to 75 °C
- Flange mounting

**ESD 315 | 153962**



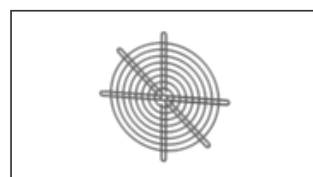
- Inlet cone
- Steel sheet, powder coated
- Flange mounting

**FAL 315 | 154805**



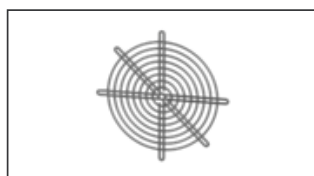
- Mounting foot
- Sheet steel, powder coated

**SGW 315 | 154047**



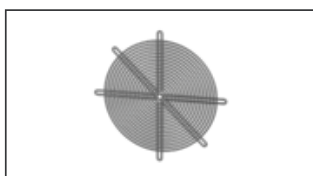
- Protection grille, wide meshed
- Steel sheet, galvanized
- Flange mounting

**SGW 355 | 154049**



- Protection grille, wide meshed
- Steel sheet, galvanized
- Flange mounting

**SGE 315 | 154058**



- Protection grille, narrow meshed
- Steel sheet, galvanized
- Flange mounting

**FSD 01 | 155498**



- Set of 4 vibration dampers
- All metal design, galvanized

**FSD 05 | 155502**



- Set of 4 vibration dampers
- Made of natural rubber, hardness 55 Shore A

**MR 315 | 165670**



- Mounting ring
- For vertical mounting
- Powder-coated sheet steel
- Flange mounting DN 315



## ELECTRICAL ACCESSORIES

**GS 02 | 105386**



- Isolator switch
- Umax = 400 V, 50/60 Hz
- Switching capacity 400 V 3~ = 5,5 kW
- Imax = 16 A

**MS 02 | 140409**



- Motor protection switch with Isolator switchfunktion
- Imax = 400 V, 50/60 Hz
- Max. 1.5 kW
- Protection class IP 55

**MTP 20 | 128146**



- Potentiometer 10 kΩ
- Switching contact 1A/250V AC - 2,5A/12V DC
- Max. ambient temperature 50 °C
- VDE

**MTP 30 | 143289**



- Stepped potentiometer 10 kΩ
- Step 1 + 2 settable 10 % - 100 % Vdc
- Step 3 100 % Vdc
- Supply voltage+10 Vdc

**SEN AIR | 148641**



- Airflow and temperature transducer
- Measuring range temperature 0...+50 °C
- With adjustable switching threshold (air speed)
- Measuring range air velocity up to 20 m/s

**CON P1000 | 115259**



- Constant pressure control
- Actual value display possible via optional control unit
- Output 0-10 V DC + FC enable + setpoint reached
- Pressure setting by means of decade switch

**FU 075 52 | 155800**



- Frequency converter
- Supply voltage 230 V 1~ 50/60 Hz
- Output voltage 0 - 230 V 3~
- Protection class IP 20, for switch cabinet

**FU 075 53 | 155801**



- Frequency converter IP66
- Supply voltage 230 V 1~ 50/60 Hz
- Output voltage 0 - 230 V 3~
- Fire mode function (smoke extract fans)

**FU 075 54 | 155802**



- Frequency converter
- Supply voltage 400 V 3~ 50/60 Hz
- Output voltage 0 - 400 V 3~
- Protection class IP 20, for switch cabinet

**FU 075 55 | 155803**



- Frequency converter
- Supply voltage 400 V 3~ 50/60 Hz
- Output voltage 0 - 400 V 3~
- Fire mode function (smoke extract fans)

