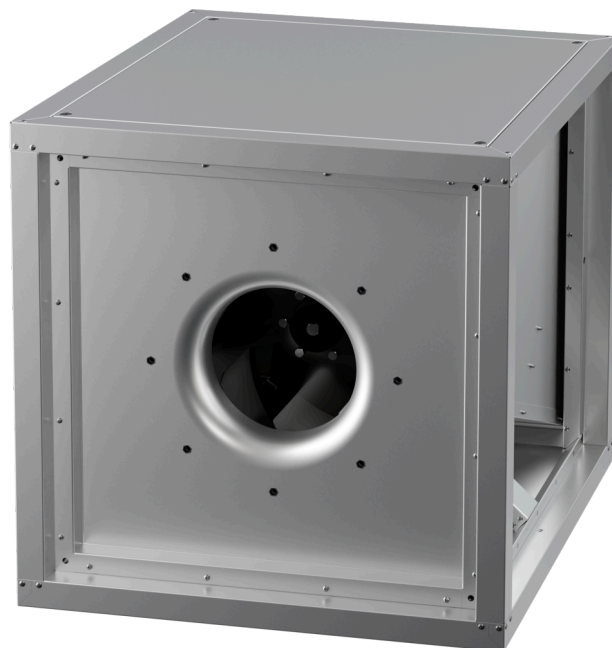


# MPC 355 D4 F4 T40

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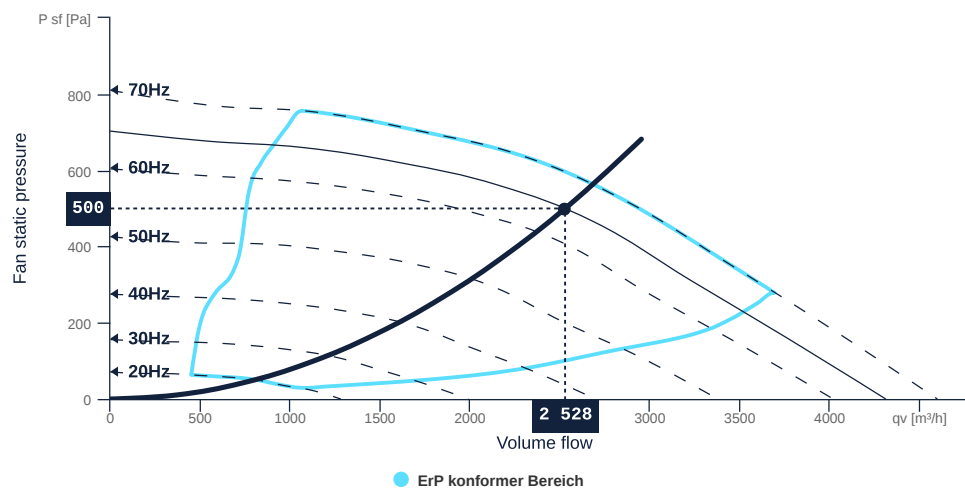
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- Backward curved centrifugal impeller
- Variable discharge direction right / left / up
- Galvanized sheet steel housing, double-walled, 25 mm mineral wool
- IE3 motor outside airflow, frequency controllable
- Smoke extract fan F400, 200 °C continuous operation, dual-use
- Housing bottom designed with integrated drain



## FAN CURVES

| Name        | Value | Unit |
|-------------|-------|------|
| Volume flow | 2528  | m³/h |
| Pressure    | 500   | Pa   |



to the product detail page

# MPC 355 D4 F4 T40

162906

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## TECHNICAL SPECIFICATIONS

| Name                                     | Value | Unit     | Formula symbol |
|------------------------------------------|-------|----------|----------------|
| Volume flow                              | 2528  | m³/h     | qVcalc         |
| Pressure                                 | 500   | Pa       | psfcalc        |
| Fan pressure                             | 503   | Pa       | pf             |
| Fan static pressure                      | 500   | Pa       | psf            |
| Current consumption Motor                | 1     | A        | Ie             |
| Current consumption Electric             | 1     | A        | Ied            |
| Electrical power consumption             | 673   | W        | Pek            |
| Electrical power consumption             | 716   | W        | Pedk           |
| Frequency                                | 64    | Hz       | frq            |
| Rotation speed                           | 1852  | 1/min    | N              |
| Total static efficiency                  | 52    | %        | etaFaPeK       |
| Total speed controlled static efficiency | 49    | %        | etaFaPedK      |
| Total efficiency                         | 52    | %        | etatPeK        |
| Total speed controlled efficiency        | 49    | %        | etatPedK       |
| SFP (entire device)                      | 958   | W/(m³/s) | sfpdevice      |
| Sound power level inlet                  | 74    | dB(A)    | LwA5           |
| Sound power level outlet                 | 81    | dB(A)    | LwA6           |
| Sound power level housing radiation      | 72    | dB(A)    | LwA2           |

## SOUND DATA

| Sound power      | mid-frequency tape |    |     |     |     |      |      |      |      |       | Unit  | Formula symbol |
|------------------|--------------------|----|-----|-----|-----|------|------|------|------|-------|-------|----------------|
|                  | Σ                  | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 | 16000 |       |                |
| suction          | 74                 | 39 | 51  | 64  | 71  | 66   | 67   | 64   | 59   | 45    | dB(A) | LwA5           |
| blowout          | 81                 | 44 | 56  | 70  | 76  | 76   | 74   | 71   | 68   | 47    | dB(A) | LwA6           |
| Casing break out | 72                 | 41 | 53  | 58  | 71  | 63   | 62   | 55   | 55   | 41    | dB(A) | LwA2           |

## SOUND PRESSURE LEVEL CALCULATOR

| Name               | Value       | Unit |
|--------------------|-------------|------|
| Enveloping surface | Halphsphere |      |
| Distance           | 3           | m    |

| Sound pressure   | NR | mid-frequency tape |    |     |     |     |      |      |      |      |       | Unit  | Formula symbol |
|------------------|----|--------------------|----|-----|-----|-----|------|------|------|------|-------|-------|----------------|
|                  |    | Σ                  | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 | 16000 |       |                |
| suction          | 52 | 57                 | 22 | 34  | 47  | 53  | 48   | 49   | 46   | 41   | 27    | dB(A) | LwA5           |
| blowout          | 58 | 64                 | 26 | 39  | 52  | 58  | 59   | 56   | 53   | 51   | 30    | dB(A) | LwA6           |
| Casing break out | 52 | 55                 | 24 | 35  | 40  | 53  | 45   | 45   | 37   | 37   | 23    | dB(A) | LwA2           |



to the product detail page

# MPC 355 D4 F4 T40

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## GENERAL DATA

| Name                                      | Value            | Unit | Formula symbol          |
|-------------------------------------------|------------------|------|-------------------------|
| Labeling                                  | CE, UKCA         |      |                         |
| Duct size                                 | -                |      | WxH <sub>duct</sub>     |
| Pipe connection size (DN)                 | DN500            |      | DN                      |
| Rated voltage (entire device)             | 400              | V    | U <sub>rated</sub>      |
| Phases (entire device)                    | 3~               |      | phase                   |
| Electrical protection (entire device)     | 6 A              |      | fuse                    |
| Housing material                          | Galvanized steel |      | mat <sub>casing</sub>   |
| Impeller material                         | Coated steel     |      | mat <sub>impeller</sub> |
| Weight                                    | 63               | kg   | m                       |
| Nominal air flow rate, nominal point m³/h | 3693.6           | m³/h | q <sub>v,nom</sub>      |
| Nominal external pressure, static         | 279              | Pa   | p <sub>s,nom</sub>      |
| Fan type                                  | Radial           |      | F <sub>antype</sub>     |
| Category / Installation situation         | A                |      | cat                     |

## ERP DATA (LOT 6)

| Name                                                | Value                     | Unit | Formula symbol      |
|-----------------------------------------------------|---------------------------|------|---------------------|
| Nominal air flow rate, nominal point m³/s           | 1.03                      | m³/s | q <sub>v,nom</sub>  |
| Actual electrical input power, nominal point        | 0.72                      | kW   | P <sub>e,nom</sub>  |
| Face velocity, nominal point                        | 3.19                      | m/s  | v <sub>nom</sub>    |
| Nominal external pressure, static                   | 279                       | Pa   | p <sub>s,nom</sub>  |
| static efficiency of the extract fan, nominal point | 39.96                     | %    | η <sub>es,EHA</sub> |
| Highest external air leakage rate                   | 0.15                      | %    |                     |
| Enclosure sound level, nominal point                | 78.25                     | dba  | LWA2                |
| Rating                                              | Product is compliant 2018 |      |                     |

## MAXIMAL DATA

| Name                            | Value | Unit  | Formula symbol        |
|---------------------------------|-------|-------|-----------------------|
| Max. power consumption (device) | 793   | W     | P <sub>ed, max</sub>  |
| Max. operating current (device) | 1.37  | A     | I <sub>ed, max</sub>  |
| Max. speed                      | 2060  | 1/min | n <sub>max</sub>      |
| Max. stat. efficiency           | 52.9  | %     | η <sub>es</sub>       |
| Max. fan efficiency             | 53.2  | %     | η <sub>e</sub>        |
| Max. flowrate                   | 4590  | m³/h  | q <sub>v, max</sub>   |
| Max. stat pressure              | 810   | Pa    | p <sub>sf, max</sub>  |
| Max. medium temperature         | 200   | °C    | T <sub>m, max</sub>   |
| Max. environment temperature    | 60    | °C    | T <sub>amb, max</sub> |
| Min. environment temperature    | -20   | °C    | T <sub>amb, min</sub> |



to the product detail page

# MPC 355 D4 F4 T40

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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                 |
| Rotation direction          |          | right                |       | rotation                |
| Isolation class             |          | ISO F                |       | ISOclass                |
| Protection class            |          | IP55                 |       | IPmotor                 |
| Is pole-changeable          |          | No                   |       | polexch                 |
| Type of power supply        |          | AC 3~                |       | pwrsupmotor             |
| Number of poles (1)         |          | 4.000000             |       | num polesw1             |
| Connection                  | $\Delta$ | Y                    |       | wiringw1                |
| Connection (wiring 2)       | Y        |                      |       | wiringw2                |
| Rated voltage               | 230      | 460                  | V     | U <sub>rated, f1</sub>  |
| Rated voltage (wiring 2)    | 400      |                      | V     | U <sub>rated, f2</sub>  |
| Rated current               | 2.14     | 1.09                 | A     | I <sub>rated, f1</sub>  |
| Rated current (wiring 2)    | 1.23     |                      | A     | I <sub>rated, f2</sub>  |
| Shaft power                 | 550      | 550                  | W     | P <sub>out, f1</sub>    |
| Shaft power (wiring 2)      | 550      |                      | W     | P <sub>out, f2</sub>    |
| Speed                       | 1420     | 1720                 | 1/min | n <sub>f1</sub>         |
| Speed (wiring 2)            | 1420     |                      | 1/min | n <sub>f2</sub>         |
| Starting current            | 14.1     | 7.96                 | A     | I <sub>start, f1</sub>  |
| Starting current (wiring 2) | 8.12     |                      | A     | I <sub>start, f2</sub>  |
| Efficiency                  | 80.8     | 81.5                 | %     | $\eta$ <sub>m, f1</sub> |
| Efficiency (wiring 2)       | 80.8     |                      | %     | $\eta$ <sub>m, f2</sub> |
| Efficiency class            | IE3      | IE3                  |       | IE <sub>motor</sub>     |
| Min. temperature            | -20      | -20                  | °C    | T <sub>motor, min</sub> |
| Cos Phi                     | 0.800000 | 0.780000             |       | cos $\varphi$           |
| UL-Certification motor      |          | UL recognized        |       | ULcert                  |

## SMOKE EXTRACT DATA

| Name                           | Value       | Unit | Formula symbol      |
|--------------------------------|-------------|------|---------------------|
| Maximum resistance temperature | 400         | °C   | T <sub>fire</sub>   |
| Maximum resistance time        | 120.000000  |      | t <sub>fire</sub>   |
| Fire resistance class          | F 400 (120) |      | F <sub>class</sub>  |
| Snow load class                | -           |      | SL <sub>class</sub> |



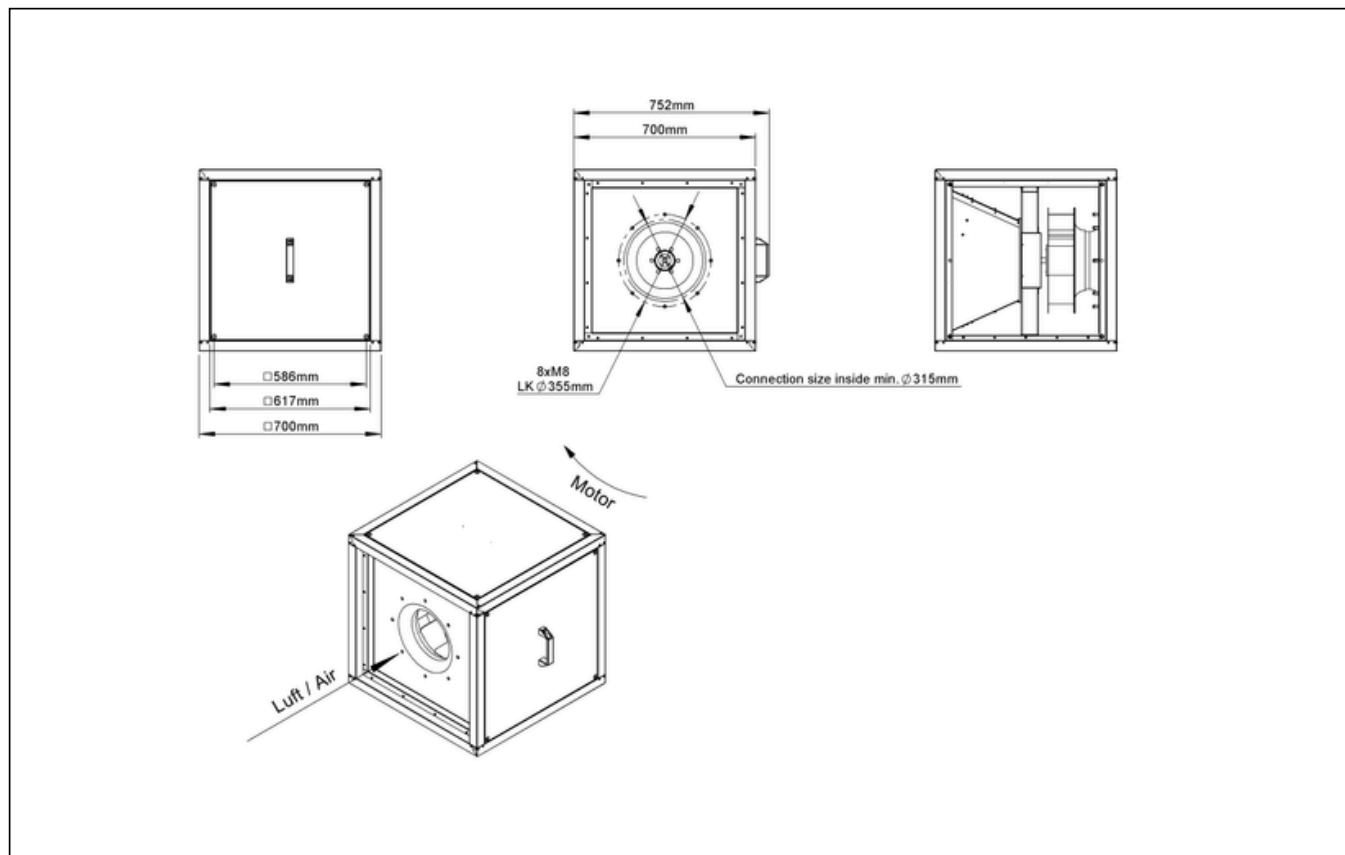
to the product detail page

# MPC 355 D4 F4 T40

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## CIRCUIT DIAGRAMS / DIMENSIONAL DRAWINGS

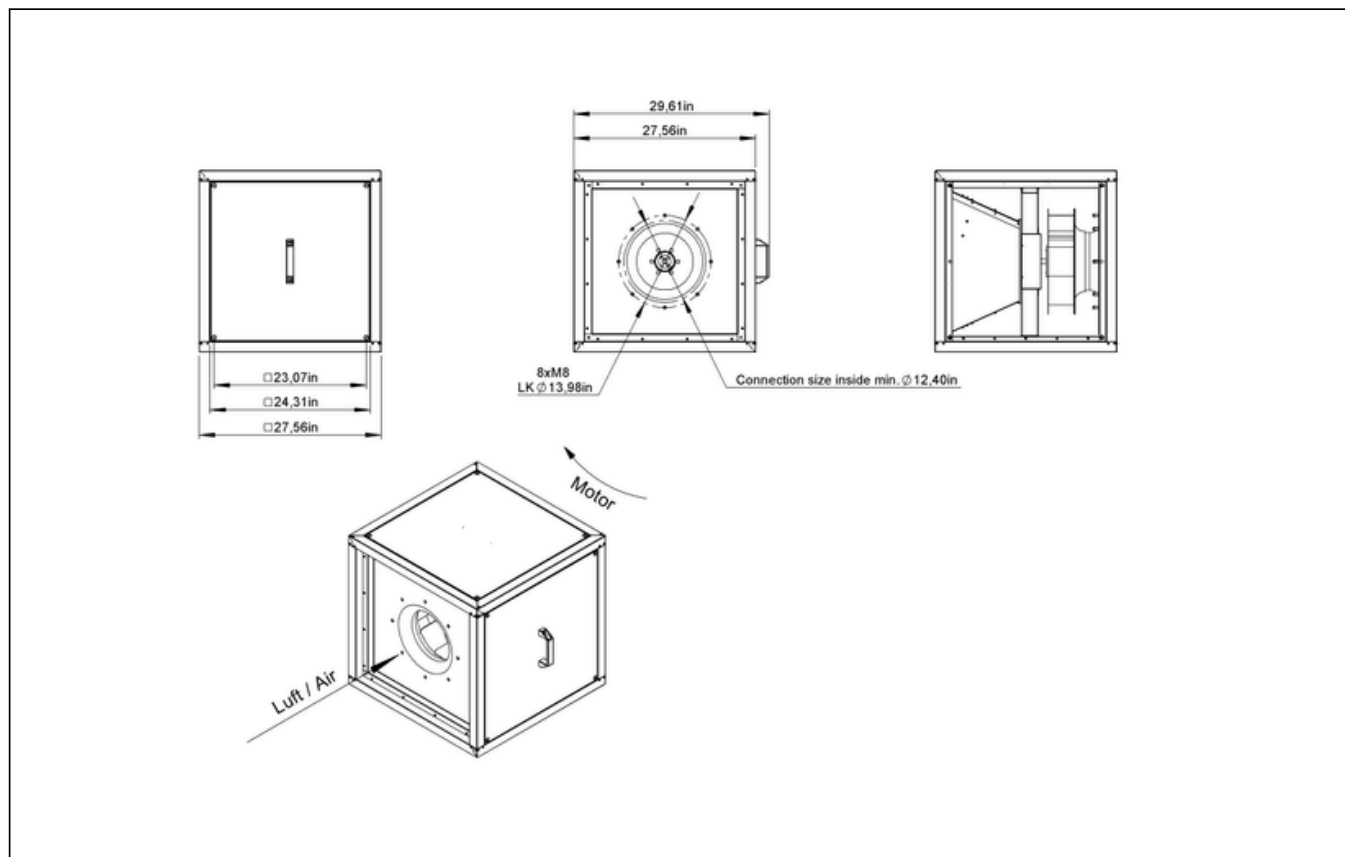


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# MPC 355 D4 F4 T40

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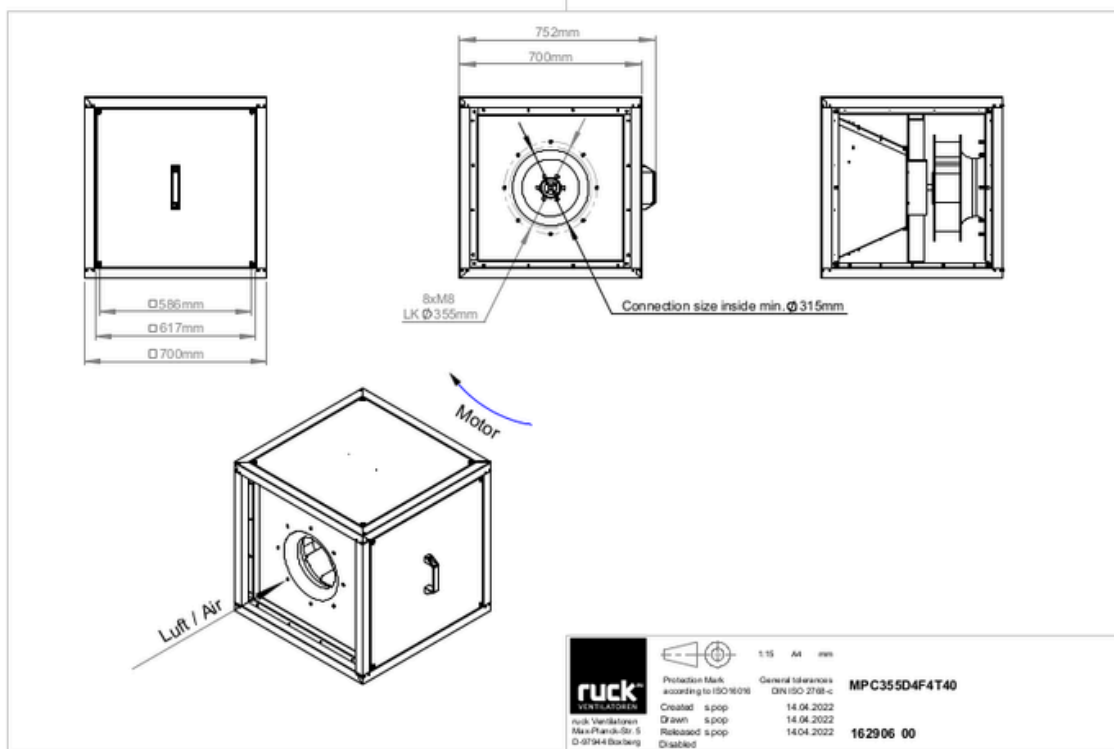


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# MPC 355 D4 F4 T40

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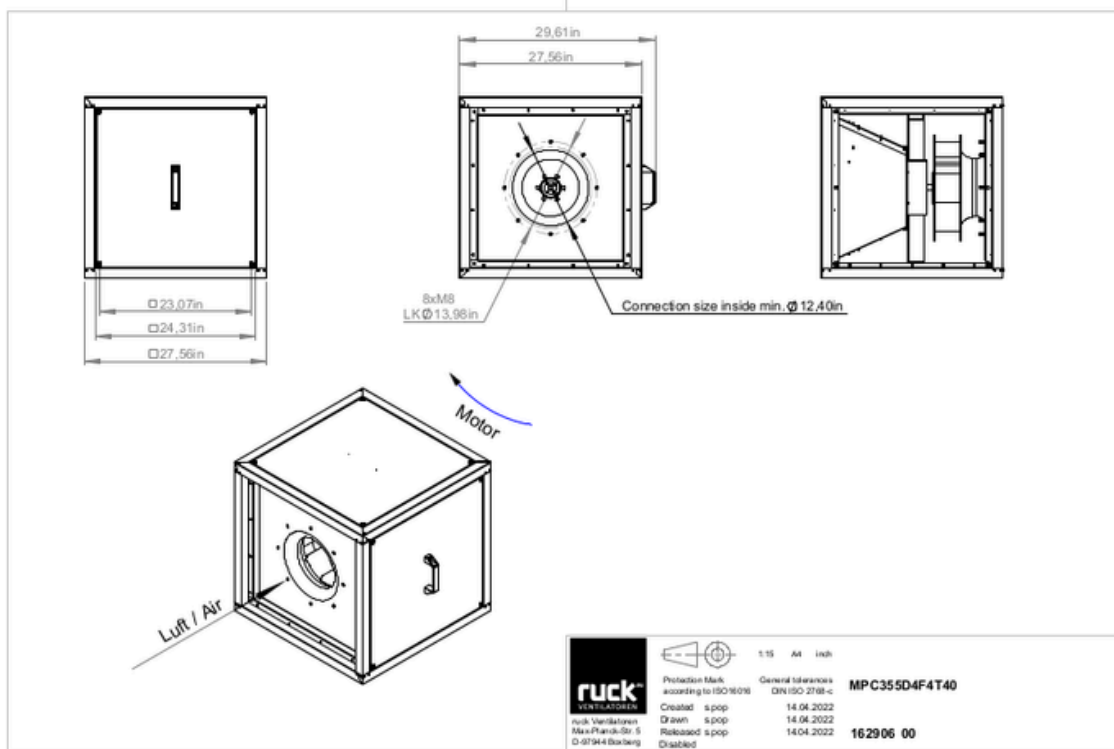


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# MPC 355 D4 F4 T40

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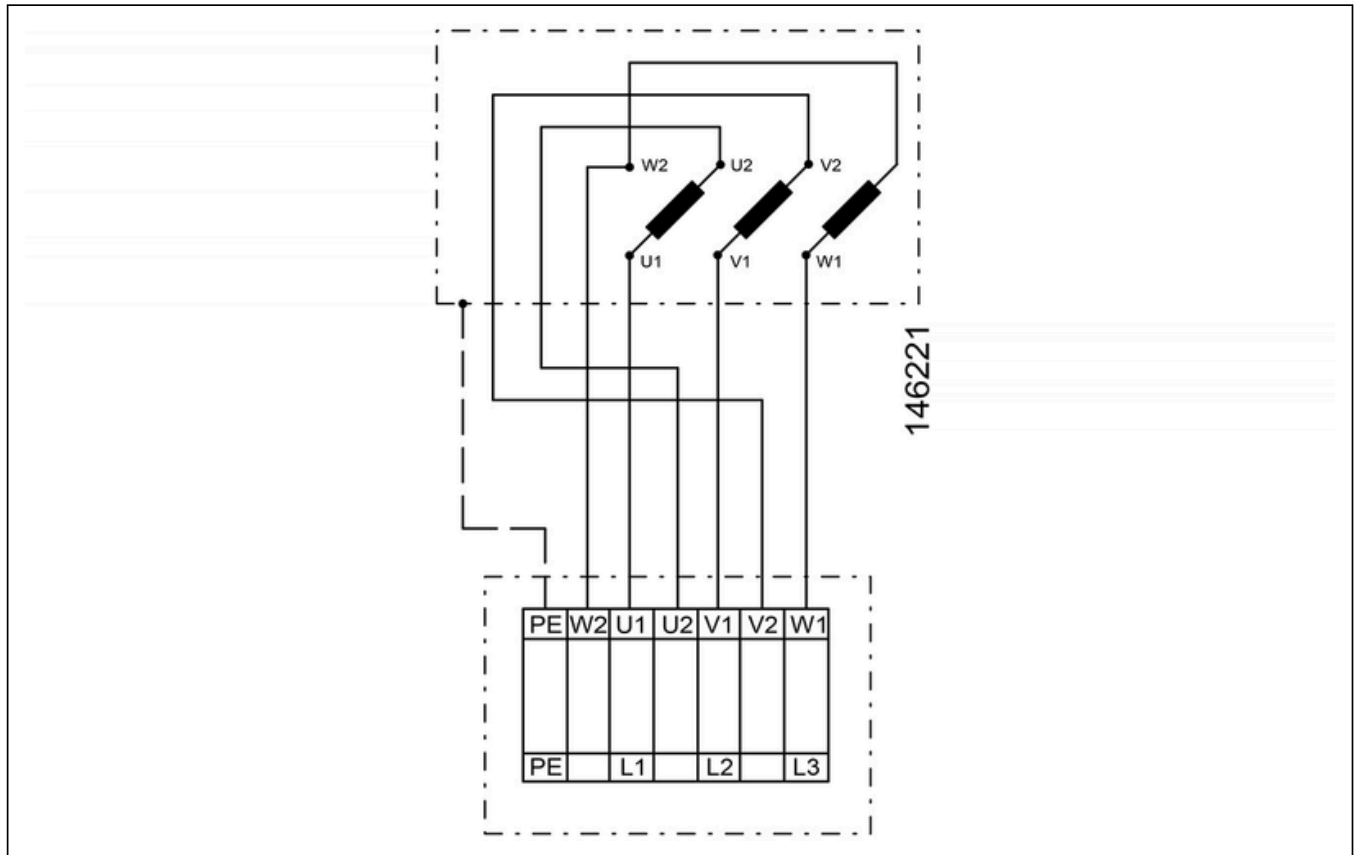


to the product detail page

# MPC 355 D4 F4 T40

162906

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to the product detail page

## MECHANICAL ACCESSORIES

USM 700 400 | 107214



- Transition spigot
- Galvanized steel sheet
- Insulated

USM 700 450 | 107240



- Transition spigot
- Galvanized steel sheet
- Insulated

USM 700 500 | 107241



- Transition spigot
- Galvanized steel sheet
- Insulated

GR MPC 02 | 123432



- Base frame für MPC
- Galvanized steel sheet

WSH MPC 02 | 123433



- Weather protection hood
- Galvanized steel sheet

UQR 700 400 01 | 139863



- Transition duct/tube
- Galvanized steel sheet
- Incl. 4 cylinder cap screws (M8 x 16 mm), 4 serrated lock washers for nominal size M8

UQR 700 450 01 | 139868



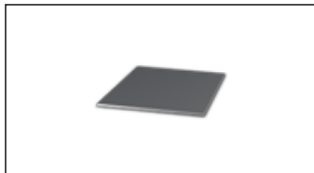
- Transition duct/tube
- Galvanized steel sheet
- Incl. 4 cylinder cap screws (M8 x 16 mm), 4 serrated lock washers for nominal size M8

UQR 700 500 01 | 139871



- Transition duct/tube
- Galvanized steel sheet
- Incl. 4 cylinder cap screws (M8 x 16 mm), 4 serrated lock washers for nominal size M8

RD MPC 700 | 140093



- Rain cover for outdoor installation
- Galvanized steel sheet

WSG MPC 700 | 140748



- Weather protection grille
- Galvanized steel sheet

AS MPC 400 | 140847



- Inlet spigot
- Galvanized steel sheet

AS MPC 450 | 140852



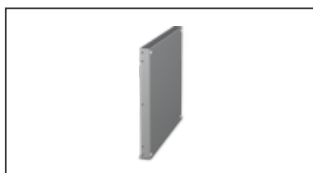
- Inlet spigot
- Galvanized steel sheet

AS MPC 500 | 140871



- Inlet spigot
- Galvanized steel sheet

UCP 700 | 142568



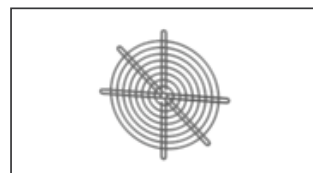
- Closed panel
- Galvanized steel sheet

RAF 315 | 154016



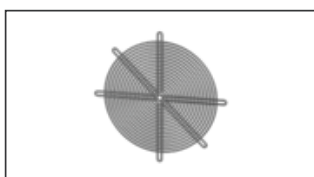
- Round flange
- Sheet steel, powder coated

SGW 315 | 154047



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

SGE 315 | 154058



- Protection grille, narrow meshed
- Steel sheet, galvanized

RVS 315 01 | 154174



- Tube connection spigot
- Sheet steel, powder coated

RAS 315 F4 | 154299



- Round spigot, flexible
- Galvanized steel sheet, silicone band

RVK 315 F4 | 154391



- Automatic tube shutter
- Sheet steel, powder coated



to the product detail page

# MPC 355 D4 F4 T40

162906

- Flange mounting
- Suitable for outdoor installation
- 400 °C/120 min. conf. DIN EN 12101-3
- For vertical installation
- Flange mounting
- F400, 75 °C continuous operation
- Flange mounting

## RVK H 315 F4 | 155674



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



to the product detail page

## ELECTRICAL ACCESSORIES

**GS 03 | 107633**



- Device switch
- $U_{max} = 400\text{ V}$ ,  $I_{max} = 25\text{ A}$
- Switching capacity  $400\text{ V } 3\sim = 7,5\text{ kW}$
- Protection class IP 55

**CON P1000 | 115259**



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

**MTP 20 | 128146**



- Potentiometer  $10\text{ k}\Omega$
- Switching contact  $1\text{ A}/250\text{ V AC} - 2,5\text{ A}/12\text{ V DC}$
- Max. ambient temperature  $50\text{ }^{\circ}\text{C}$
- VDE

**MS 01 | 140407**



- Motor protection switch with Isolator switchfunction
- $I_{max} = 400\text{ V}$ ,  $50/60\text{ Hz}$
- Max.  $0,55\text{ kW}$
- Protection class IP 55

**FU 075 18 | 141852**



- Frequency converter IP66
- Supply voltage  $230\text{ V } 1\sim 50/60\text{ Hz}$
- Output voltage  $0 - 230\text{ V } 3\sim$
- Fire mode function (smoke extract fans)

**FU 075 30 | 141874**



- Frequency converter
- Supply voltage  $400\text{ V } 3\sim 50/60\text{ Hz}$
- Output voltage  $0 - 400\text{ V } 3\sim$
- Fire mode function (smoke extract fans)

**MTP 30 | 143289**



- Stepped potentiometer  $10\text{ k}\Omega$
- Step 1 + 2 settable  $10\% - 100\% \text{ Vdc}$
- Step 3  $100\% \text{ Vdc}$
- Supply voltage  $+10\text{ Vdc}$

**MTP 40 | 147359**



- Potentiometer  $10\text{ k}\Omega$
- Connection in terminal box
- Max. ambient temperature  $50\text{ }^{\circ}\text{C}$
- PU: 20 pieces

**SEN AIR | 148641**



- Airflow and temperature transducer
- Measuring range temperature  $0\text{...}+50\text{ }^{\circ}\text{C}$
- With adjustable switching threshold (air speed)
- Measuring range air velocity up to  $20\text{ m/s}$

**MTP 50 | 168752**



- Potentiometer with multifunction output
- $230\text{ VAC } \pm 10\% / 50\text{--}60\text{ Hz}$
- Selectable output:  $1\text{--}10\text{ VDC} / 2\text{--}20\text{ mA}$  /  $10\text{--}100\% \text{ PWM}$
- Min. and max. output value adjustable



to the product detail page