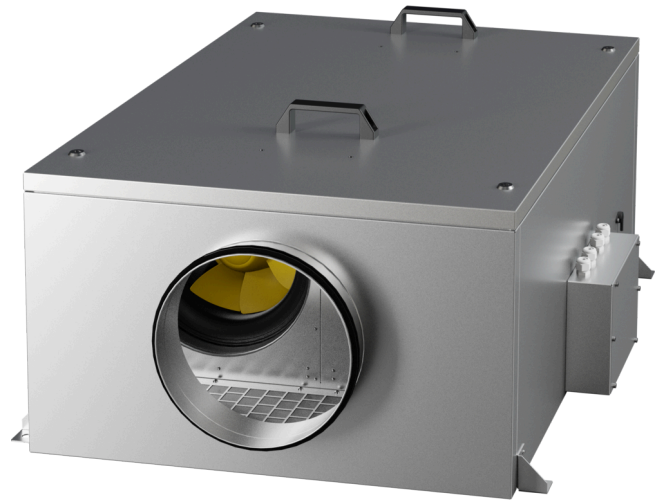


# EM DUO 250 EC 01

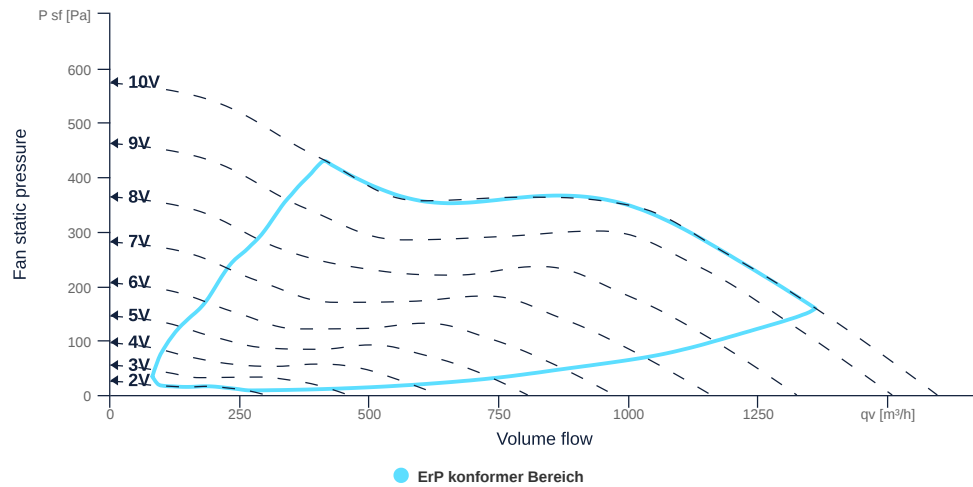
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- Efficient diagonal fan, redundant operation
- Optimally tuned and CFD-optimized aerodynamics
- Soundproof housing made of galvanized sheet steel
- High efficiency EC motor, steplessly controllable
- Built-in ETAMASTER with highest efficiency
- Conveyed medium temperature up to 40 °C in continuous operation



## FAN CURVES

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



to the product detail page

# EM DUO 250 EC 01

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## GENERAL DATA

Name	Value	Unit	Formula symbol	
Labeling		CE		
Duct size		-	WxH <sub>duct</sub>	
Pipe connection size (DN)		DN250	DN	
Rated voltage (entire device)		230	V	U <sub>rated</sub>
Phases (entire device)		1~	phase	
Electrical protection (entire device)		6 A	fuse	
Housing material		Galvanized steel	mat <sub>casing</sub>	
Impeller material		Plastic	mat <sub>impeller</sub>	
Weight		45	kg	m
Nominal air flow rate, nominal point m <sup>3</sup> /h		986.4	m <sup>3</sup> /h	q <sub>v,nom</sub>
Nominal external pressure, static		297.2	Pa	p <sub>s,nom</sub>
Fan type		Diagonal	Fan <sub>type</sub>	
Category / Installation situation		A	cat	

## ERP DATA (LOT 6)

Name	Value	Unit	Formula symbol	
Nominal air flow rate, nominal point m <sup>3</sup> /s		0.27	m <sup>3</sup> /s	q <sub>v,nom</sub>
Actual electrical input power, nominal point		0.16	kW	P <sub>e,nom</sub>
Face velocity, nominal point		5.6	m/s	v <sub>nom</sub>
Nominal external pressure, static		297.2	Pa	p <sub>s,nom</sub>
supply air fan static efficiency, nominal point		49.3	%	η <sub>es,SUP</sub>
Highest external air leakage rate		0.4	%	
Enclosure sound level, nominal point		61	dB(A)	L <sub>WA2</sub>
Rating		Product is compliant 2018		

## MAXIMAL DATA

Name	Value		Unit	Formula symbol
	50 Hz	60 Hz		
Max. power consumption (device)	189	189	W	P <sub>ed,max</sub>
Max. operating current (device)	1.6	1.6	A	I <sub>ed,max</sub>
Max. speed	3390	3390	1/min	n <sub>max</sub>
Max. stat. efficiency	48.6	48.6	%	η <sub>es</sub>
Max. fan efficiency	51.2	51.2	%	η <sub>e</sub>
Max. flowrate	1595	1595	m <sup>3</sup> /h	q <sub>v,max</sub>
Max. stat pressure	570	570	Pa	p <sub>st,max</sub>
Max. medium temperature	40	40	°C	T <sub>m,max</sub>
Max. environment temperature	40	40	°C	T <sub>amb,max</sub>
Min. environment temperature	-30	-30	°C	T <sub>amb,min</sub>



to the product detail page

# EM DUO 250 EC 01

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## MOTOR DATA

Name	Value		Unit	Formula symbol
	50 Hz	60 Hz		
Rated frequency (device)		50		f
Motor type		EC		phase
Control type		stepless-controlled		ctrltype
Installation type		ORM (Out)		install
Rotation direction		right		rotation
Isolation class		ISO F		ISOclass
Motor-protection		TEC		protectmotor
Protection class		IP30		IPmotor
Is pole-changeable		No		polexch
Type of power supply		AC 1~		pwrsupmotor
Rated voltage	230	230	V	U <sub>rated, f1</sub>
Rated current	1.39	1.39	A	I <sub>rated, f1</sub>
Shaft power	193	193	W	P <sub>out, f1</sub>
Speed	3255	3255	1/min	n <sub>f1</sub>
Min. temperature	-30	-30	°C	T <sub>motor, min</sub>
UL-Certification motor		None		ULcert

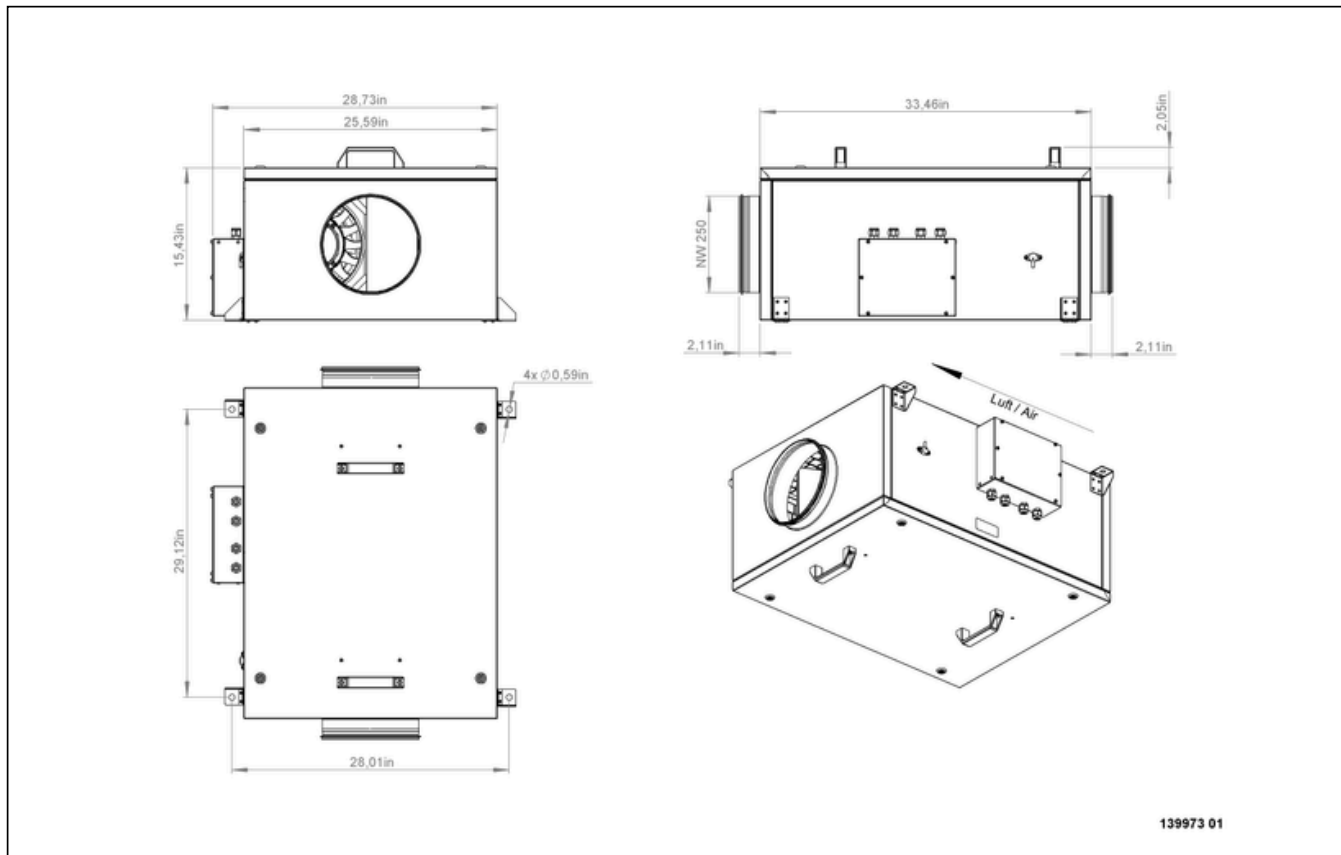


to the product detail page

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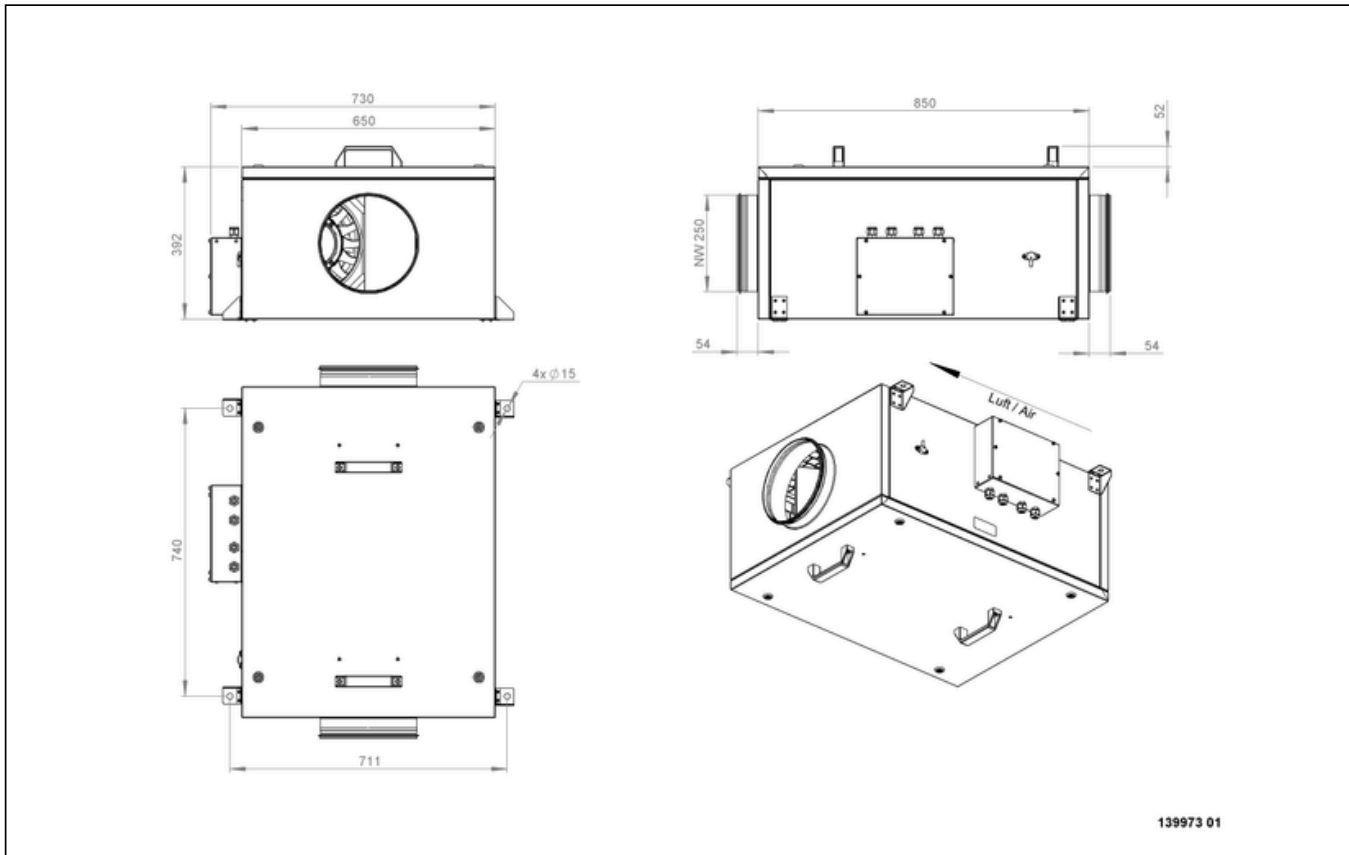
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## CIRCUIT DIAGRAMS / DIMENSIONAL DRAWINGS



# EM DUO 250 EC 01

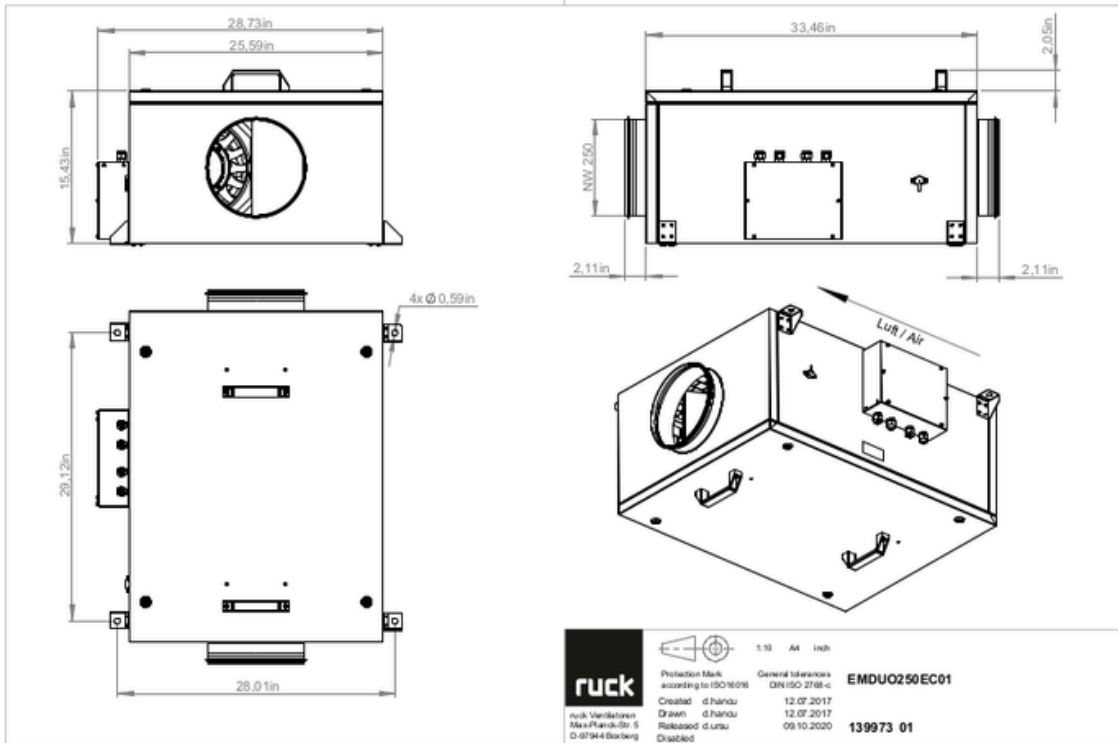
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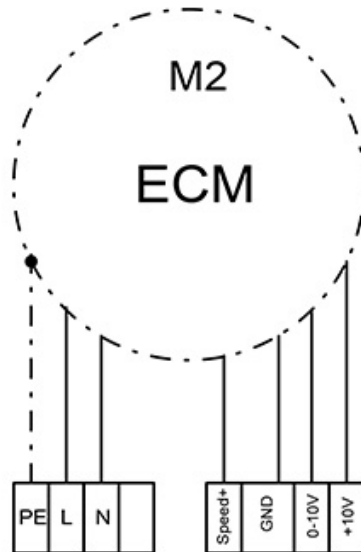
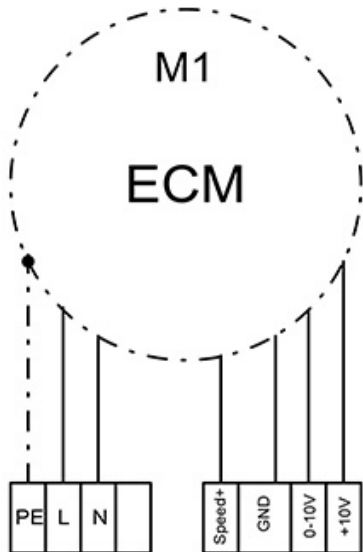
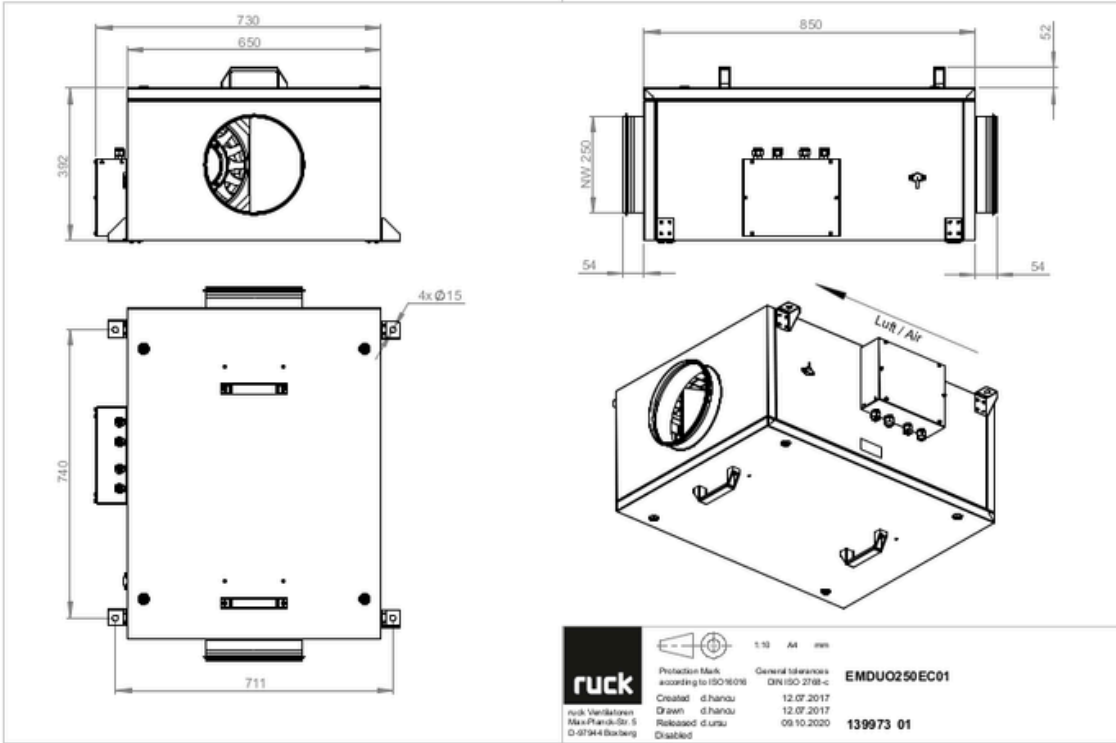
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# EM DUO 250 EC 01

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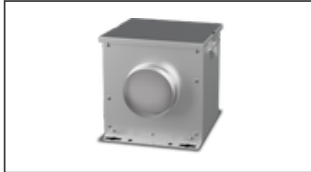
to the product detail page

# EM DUO 250 EC 01

139973

## MECHANICAL ACCESSORIES

**FV 250 | 112833**



- Air filter box with mat filter ISO Coarse 45 % (G3)
- Toggle-type fastener

**FT 250 | 112845**



- Air filter box for pocket filter
- Toggle-type fastener
- Galvanized steel sheet housing
- Without filter

**FTW 250 | 112854**



- Air filter box with pocket filter M5
- Integrated warm water heating coil
- Galvanized steel sheet housing
- Toggle-type fastener

**RSK 250D | 113488**



- Back draught shutter for tube fitting
- Galvanized steel sheet housing
- Aluminum flaps
- Integrated gasket

**VM 250 | 102651**



- Fast clamps for sound decoupling and sealing
- Galvanized steel sheet, 5 mm
- Neopren gasket
- 1 Pack = 2 pieces

**KWR 250 02 | 124066**



- Cold water cooler, uninsulated
- Version left
- Connection ND 250
- Galvanized steel sheet with condensate tray

**RSK 250 | 102686**



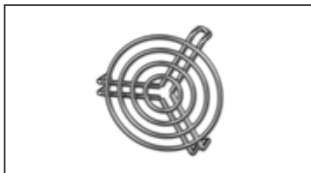
- Back draught shutter for tube fitting
- Galvanized steel sheet housing
- Aluminum flaps

**KWR 250 01 | 124065**



- Cold water cooler, uninsulated
- Version right
- Connection ND 250
- Galvanized steel sheet with condensate tray

**SG 250 01 | 169588**



- Protection grille for tube connection
- Galvanized wire

**SDS 250 | 169607**



- Rigid tube silencer
- Galvanized steel sheet
- Sound insulation packing 50 mm (mineral wool)

**SDF 250 | 169644**



- Flexible tube silencer
- Galvanized steel sheet
- Sound insulation packing 50 mm



to the product detail page



# EM DUO 250 EC 01

139973

## 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

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

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

CON P1000 | 115259



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

MTP 50 | 168752



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



to the product detail page