

CBF 560-43

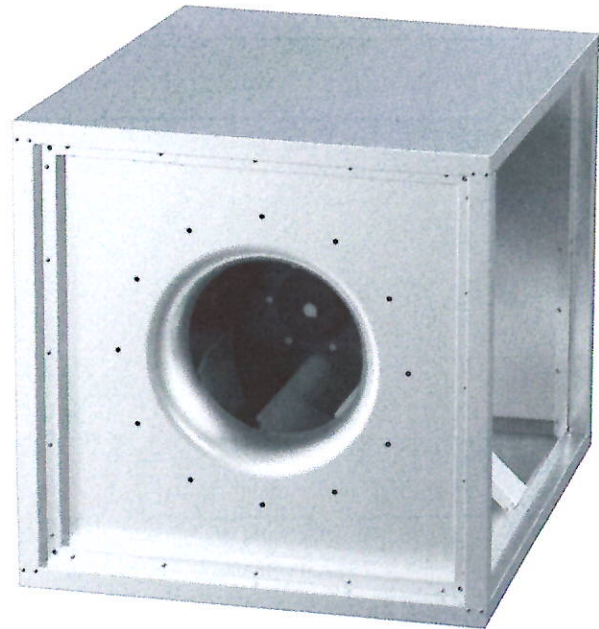
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MANSON. FRESH AIR FAN SYST (1)



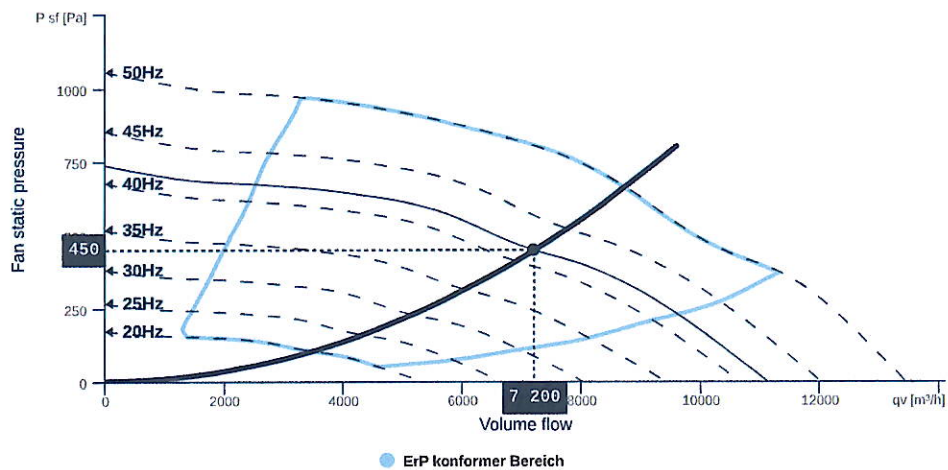
NFAN

- Centrifugal fan with backward curved impeller
- Variable discharge direction right / left / linear
- Double wall housing made of galvanized steel sheet, insulated
- Efficient IE3 motor, frequency controllable
- Motor protection via frequency converter or motor protection switch
- With bottom tray



FAN CURVES

Name	Value	Unit
Volume flow	7200	m³/h
Pressure	450	Pa



TECHNICAL SPECIFICATIONS

Name	Value	Unit	Formula symbol
Volume flow	7200	m ³ /h	qV _{calc}
Pressure	450	Pa	ps _{calc}
Fan pressure	456	Pa	pf
Fan static pressure	450	Pa	psf
Current consumption Motor	3.7	A	I _e
Current consumption Electric	2	A	I _{ed}
Electrical power consumption	1556	W	P _{ek}
Electrical power consumption	1631	W	P _{edk}
Frequency	41	Hz	f _{rq}
Rotation speed	1201	1/min	N
Total static efficiency	57	%	etaFaPeK
Total speed controlled static efficiency	55	%	etaFaPeK
Total efficiency	58	%	etatPeK
Total speed controlled efficiency	55	%	etatPeK
SFP (entire device)	778	W/(m ³ /s)	sfp _{device}
Sound power level inlet	81	dB(A)	L _{WA5}
Sound power level outlet	85	dB(A)	L _{WA6}
Sound power level housing radiation	63	dB(A)	L _{WA2}

SOUND DATA

Sound power	mid-frequency tape										Unit	Formula symbol
	Σ	63	125	250	500	1000	2000	4000	8000	16000		
suction	82	47	71	75	78	74	72	65	61	50	dB(A)	L _{WA5}
blowout	85	52	70	74	83	77	71	64	63	48	dB(A)	L _{WA6}
Casing break out	63	43	57	53	61	52	49	39	33	25	dB(A)	L _{WA2}

SOUND PRESSURE LEVEL CALCULATOR

Name	Value	Unit
Enveloping surface	Halfsphere	
Distance	3	m

Sound pressure	NR	mid-frequency tape										Unit	Formula symbol
		Σ	63	125	250	500	1000	2000	4000	8000	16000		
suction	60	64	30	54	57	60	56	54	48	44	32	dB(A)	L _{WA5}
blowout	66	68	35	52	57	66	60	53	46	45	31	dB(A)	L _{WA6}
Casing break out	42	46	26	39	36	43	35	32	22	15	7	dB(A)	L _{WA2}

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GENERAL DATA

Name	Value	Unit	Formula symbol
Labeling	CE, UKCA		
Duct size	-		WXHduct
Pipe connection size (DN)	DN630		DN
Rated voltage (entire device)	400	v	Urated
Phases (entire device)	3~		phase
Electrical protection (entire device)	6 A		fuse
Housing material	Galvanized steel		matcasing
Impeller material	Coated steel		matimpeller
IP-protection class (entire device)	IPX4		IPcompl
IP-Protection class (terminal box)	IP55		IPebox
Weight	134	kg	m
Nominal air flow rate, nominal point m³/h	8038.8	CmH	qVnom
Nominal external pressure, static	735.7	Pa	psnom
Fan type	Radial		Fantype
Category / Installation situation	A		cat

ERP DATA (LOT 6)

Name	Value	Unit	Formula symbol
Nominal air flow rate, nominal point m³/s	2.23	CmS	qVnom
Actual electrical input power, nominal point	2.69	kw	Pe,nom
Face velocity, nominal point	3.7	mps	Vnom
Nominal external pressure, static	735.7	Pa	ps,nom
supply air fan static efficiency, nominal point	63.4	p	ηes,SUP
Enclosure sound level, nominal point	74	db	LWA2
Rating	Product is compliant 2018		

MAXIMAL DATA

Name	Value	Unit	Formula symbol
Max. power consumption (device)	2688	w	Ped, max
Max. operating current (device)	5.04	A	Ied, max
Max. speed	1470	rpm	nmax
Max. stat. efficiency	57.5	p	ηes
Max. fan efficiency	58.1	p	ηe
Max. flowrate	13410	CmH	qV, max
Max. stat pressure	1050	Pa	psf, max
Max. medium temperature	60	°C	Tm, max
Max. environment temperature	60	°C	Tamb, max
Min. environment temperature	-20	°C	Tamb, min

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MOTOR DATA

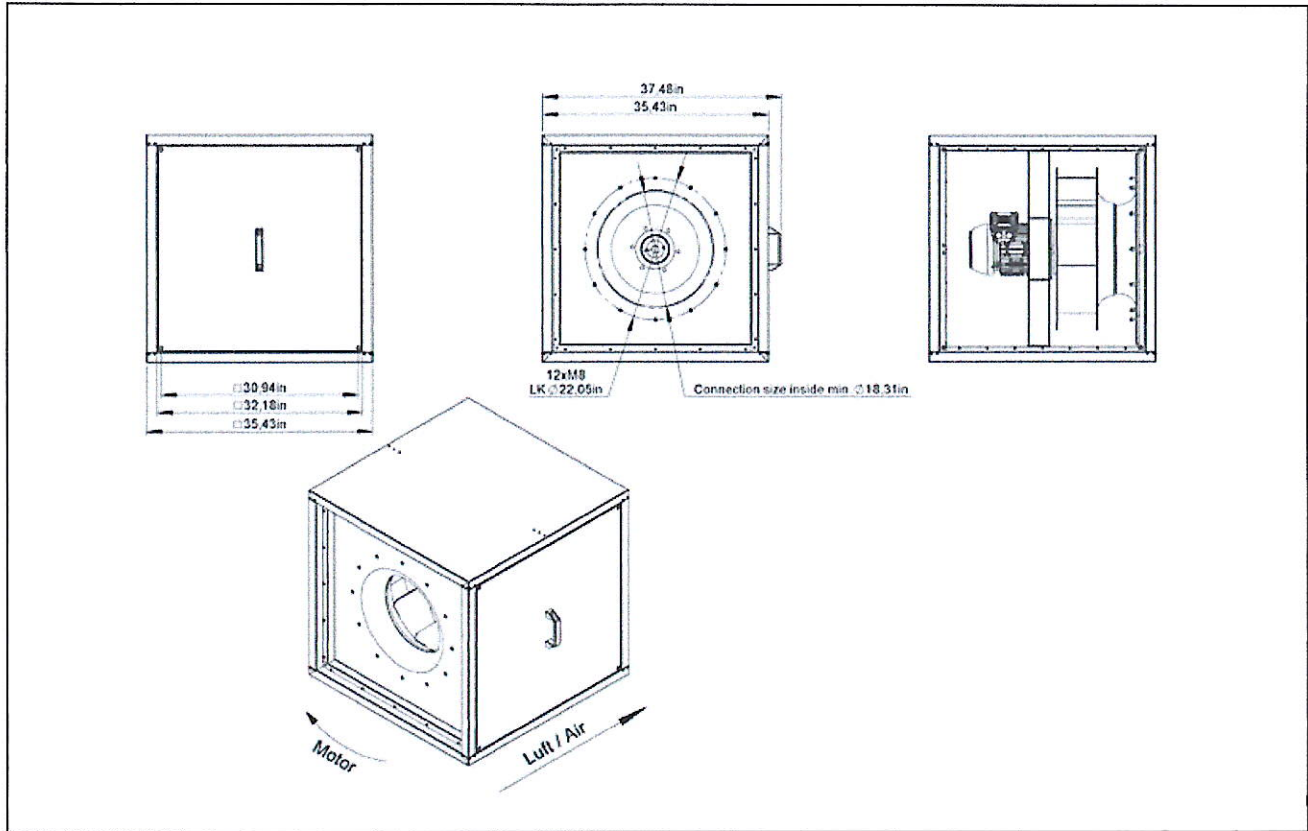
Name	Value		Unit	Formula symbol
	50 Hz	60 Hz		
Rated frequency (device)		50		f
Motor type		AC 3~		phase
Control type		frequency-controlled		ctrltype
Installation type		IRM (In)		install
Rotation direction		right		rotation
Isolation class		ISO F		ISOclass
Protection class		IP55		IPmotor
Is pole-changeable		No		polexch
Type of power supply		AC 3~		pwrSUPmotor
Number of poles (1)		4.000000		num polesw1
Connection	Δ			wiringw1
Connection (wiring 2)	Y			wiringw2
Rated voltage	230		V	U _{rated, f1}
Rated voltage (wiring 2)	400		V	U _{rated, f2}
Rated current	8.3		A	I _{rated, f1}
Rated current (wiring 2)	4.8		A	I _{rated, f2}
Nominal power	2200		W	P _A
Nominal power (wiring 2)	2200		W	P _{out, f2}
Speed	1447		rpm	n _{f1}
Speed (wiring 2)	1447		rpm	n _{f2}
Efficiency	86.7		%	$\eta_{m, f1}$
Efficiency (wiring 2)	86.7		%	$\eta_{m, f2}$
Efficiency class	IE3			IE _{motor}
Min. temperature	-30		°C	T _{motor, min}
Cos Phi	0.790000	0.000000		cos φ
UL-Certification motor		None		ULcert

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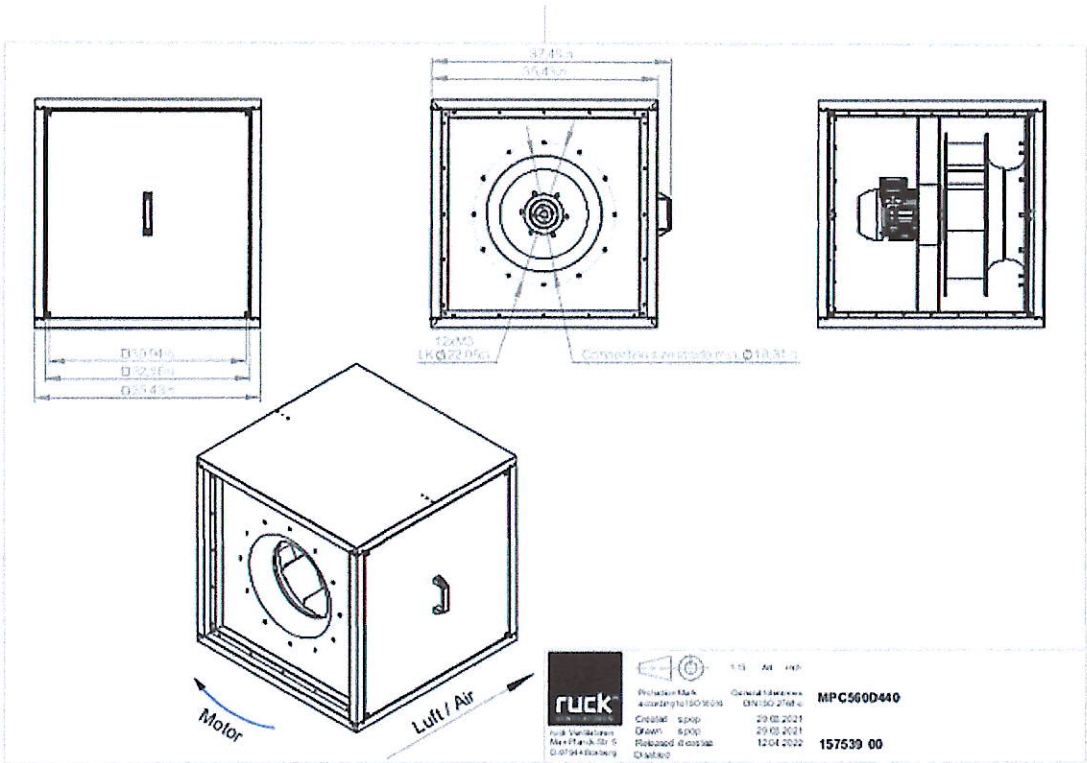
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CIRCUIT DIAGRAMS / DIMENSIONAL DRAWINGS



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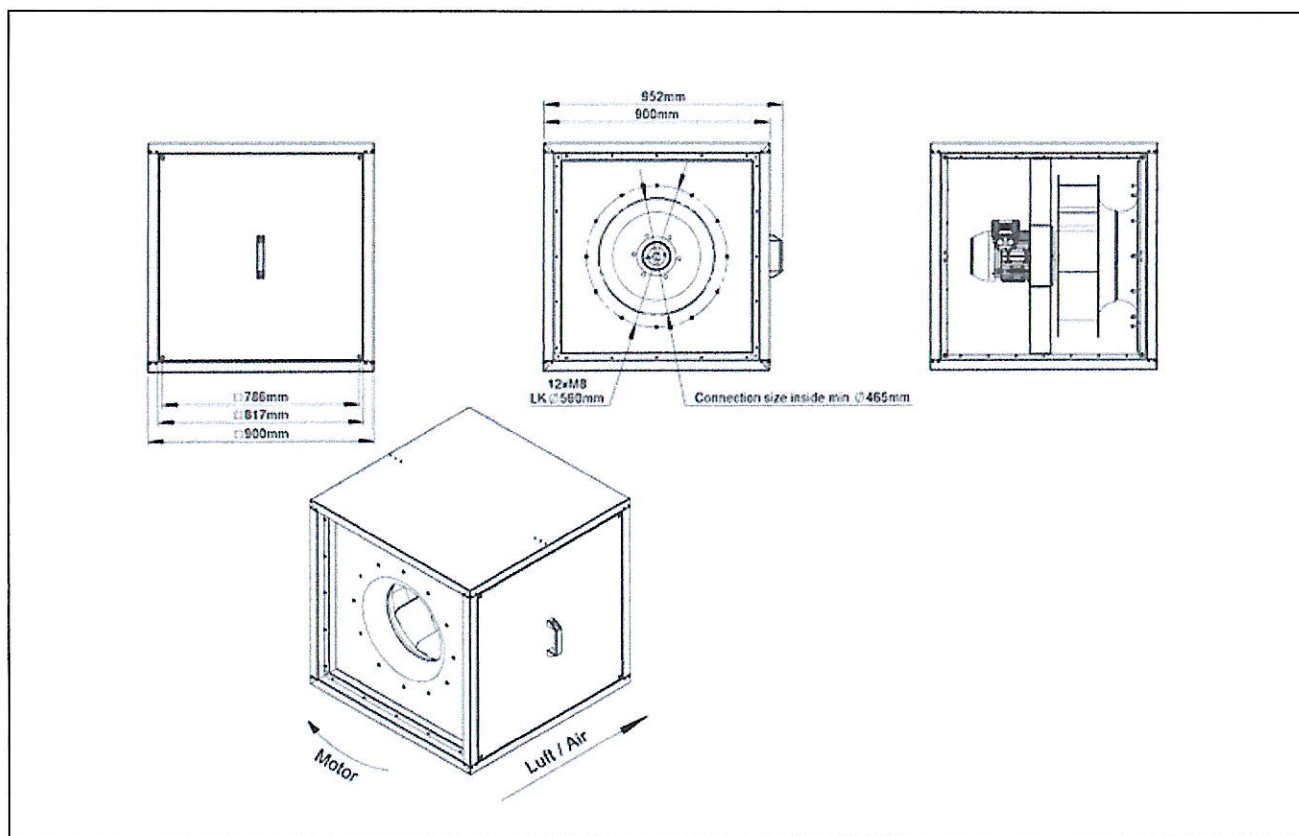


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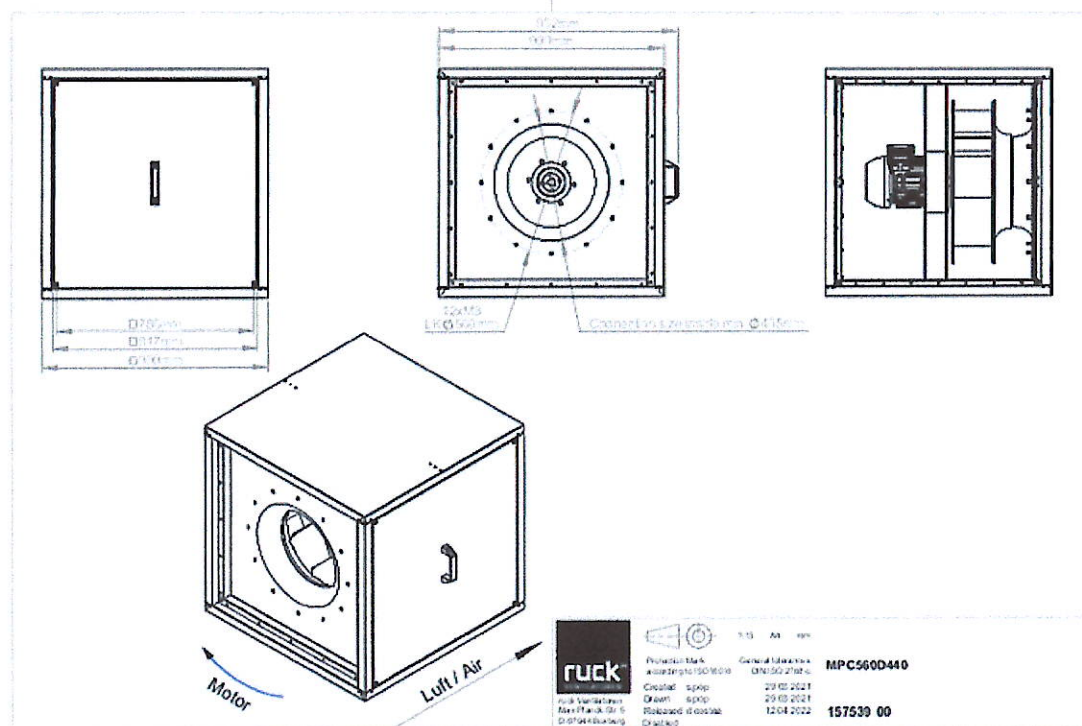
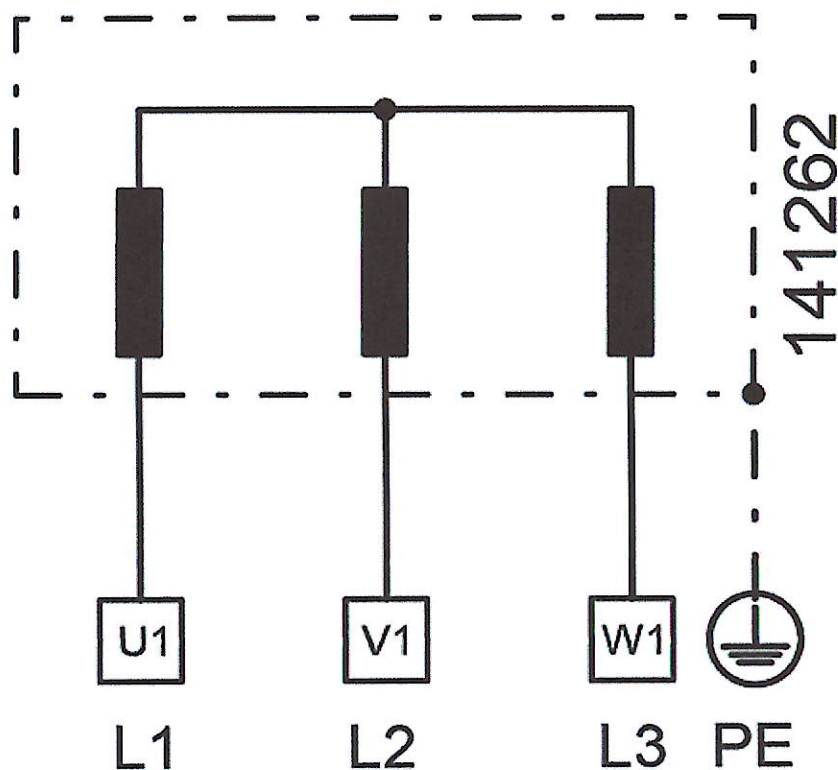


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