

CBF 560-43

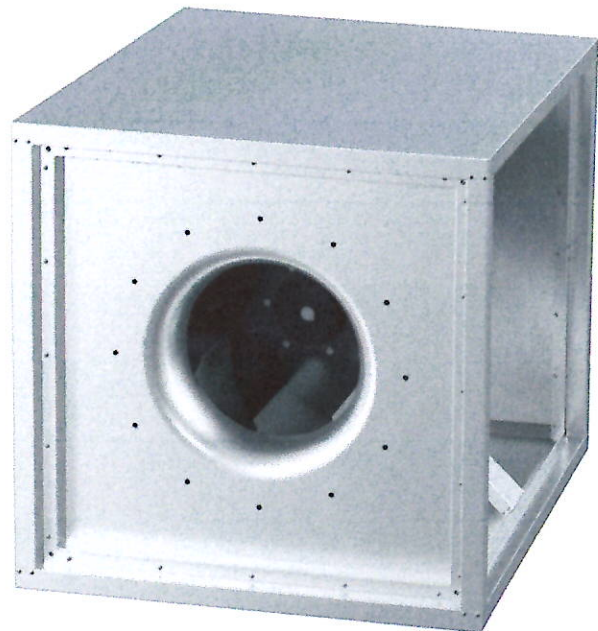
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MANSON - FRESH AIR FAN SYST (2)



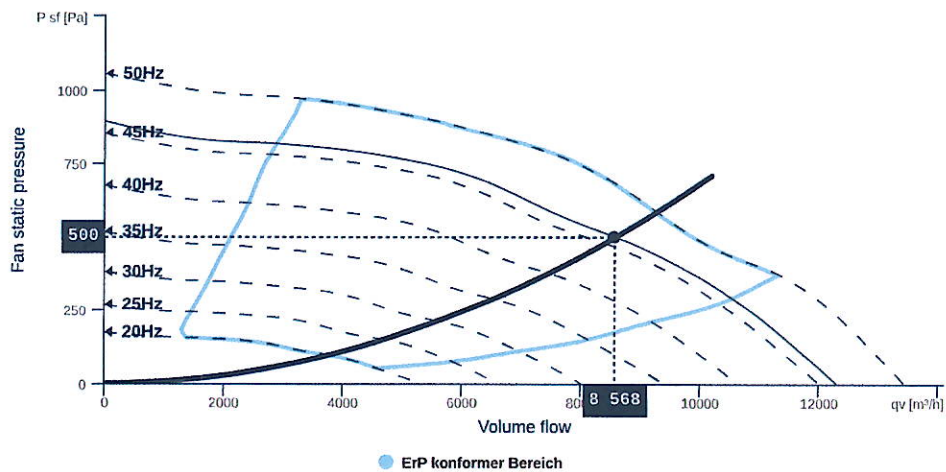
NFAN

- 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	8568	m³/h
Pressure	500	Pa



CBF 560-43

157539



TECHNICAL SPECIFICATIONS

Name	Value	Unit	Formula symbol
Volume flow	8568	m ³ /h	qV _{calc}
Pressure	500	Pa	p _{sfcalc}
Fan pressure	508	Pa	p _f
Fan static pressure	500	Pa	p _{sf}
Current consumption Motor	4.2	A	I _e
Current consumption Electric	3	A	I _{ed}
Electrical power consumption	2063	W	P _{ek}
Electrical power consumption	2137	W	P _{edk}
Frequency	46	Hz	f _{rq}
Rotation speed	1323	1/min	N
Total static efficiency	57	%	etaFaPeK
Total speed controlled static efficiency	55	%	etaFaPedK
Total efficiency	58	%	etatPeK
Total speed controlled efficiency	56	%	etatPedK
SFP (entire device)	866	W/(m ³ /s)	sfp _{device}
Sound power level inlet	83	dB(A)	LwA5
Sound power level outlet	86	dB(A)	LwA6
Sound power level housing radiation	64	dB(A)	LwA2

SOUND DATA

Sound power	mid-frequency tape										Unit	Formula symbol
	Σ	63	125	250	500	1000	2000	4000	8000	16000		
suction	84	49	78	79	75	76	74	67	61	54	dB(A)	LwA5
blowout	86	54	75	78	81	81	76	70	62	53	dB(A)	LwA6
Casing break out	64	45	61	56	55	57	52	42	35	25	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	63	66	32	61	62	57	58	56	50	43	37	dB(A)	LwA5
blowout	63	69	36	58	61	64	64	59	52	44	35	dB(A)	LwA6
Casing break out	42	47	27	44	39	37	39	34	24	17	7	dB(A)	LwA2

CBF 560-43

157539



GENERAL DATA

Name	Value	Unit	Formula symbol
Labeling	CE, UKCA		
Duct size	-		WxH _{duct}
Pipe connection size (DN)	DN630		DN
Rated voltage (entire device)	400	v	U _{rated}
Phases (entire device)	3~		phase
Electrical protection (entire device)	6 A		fuse
Housing material	Galvanized steel		mat _{casing}
Impeller material	Coated steel		mat _{impeller}
IP-protection class (entire device)	IPX4		IP _{compl}
IP-Protection class (terminal box)	IP55		IP _{box}
Weight	134	kg	m
Nominal air flow rate, nominal point m³/h	8038.8	CmH	q _{v,nom}
Nominal external pressure, static	735.7	Pa	p _{s,nom}
Fan type	Radial		Fan _{type}
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	q _{v,nom}
Actual electrical input power, nominal point	2.69	kw	P _{e,nom}
Face velocity, nominal point	3.7	mps	V _{nom}
Nominal external pressure, static	735.7	Pa	p _{s,nom}
supply air fan static efficiency, nominal point	63.4	p	η _{es,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	P _{ed, max}
Max. operating current (device)	5.04	A	I _{ed, max}
Max. speed	1470	rpm	n _{max}
Max. stat. efficiency	57.5	p	η _{es}
Max. fan efficiency	58.1	p	η _e
Max. flowrate	13410	CmH	q _{v, max}
Max. stat pressure	1050	Pa	p _{st, 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}

CBF 560-43

157539



MOTOR DATA

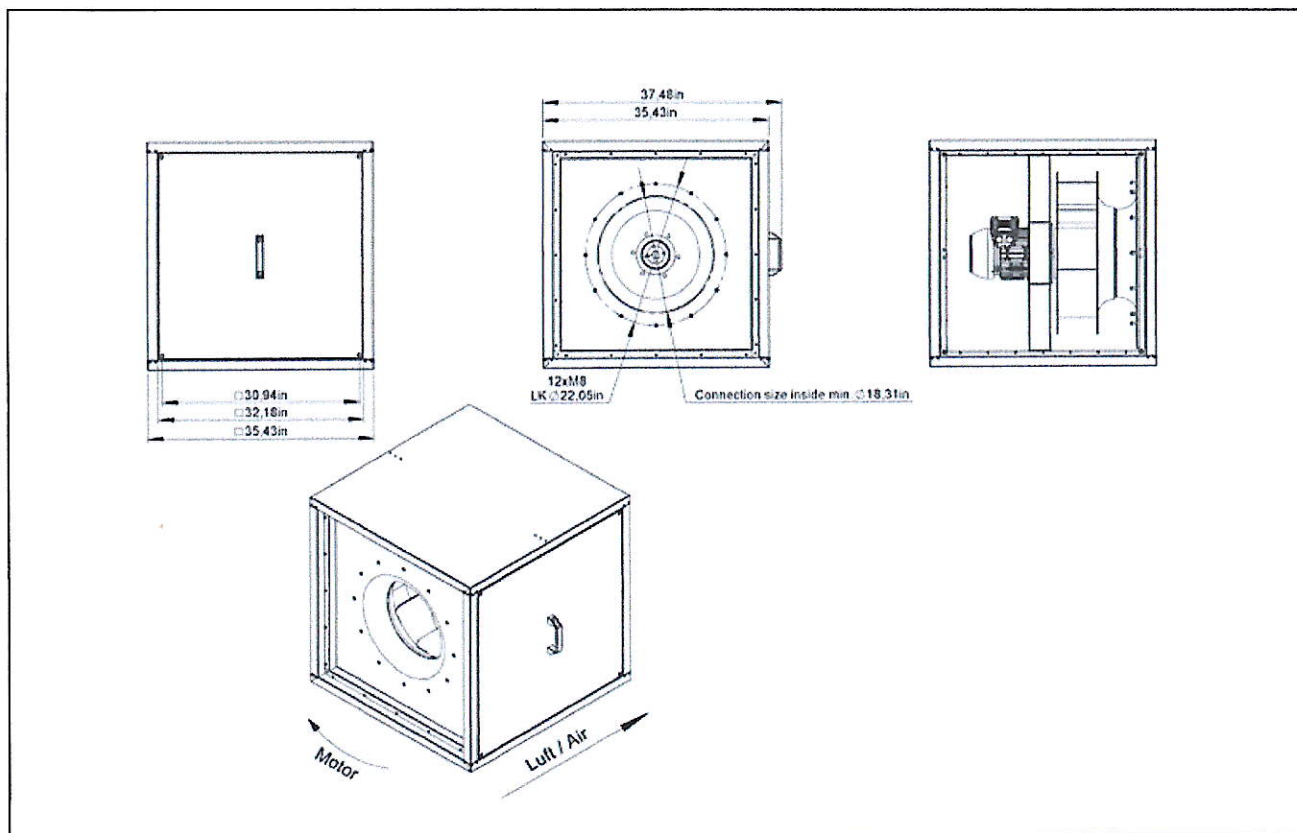
Name	Value		Unit	Formula symbol
	50 Hz	60 Hz		
Rated frequency (device)		50		f
Motor type		AC 3~		phase
Control type		frequency-controlled		ctrltype
Installation type		IRM (In)		install
Rotation direction		right		rotation
Isolation class		ISO F		ISOclass
Protection class		IP55		IPmotor
Is pole-changeable		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	Urated, f1
Rated voltage (wiring 2)	400		V	Urated, f2
Rated current	8.3		A	Irated, f1
Rated current (wiring 2)	4.8		A	Irated, f2
Nominal power	2200		W	Pa
Nominal power (wiring 2)	2200		W	Pout, f2
Speed	1447		rpm	n1
Speed (wiring 2)	1447		rpm	n2
Efficiency	86.7		%	η_m , f1
Efficiency (wiring 2)	86.7		%	η_m , f2
Efficiency class	IE3			IEmotor
Min. temperature	-30		°C	Tmotor, min
Cos Phi	0.790000	0.000000		cos ϕ
UL-Certification motor		None		ULcert

CBF 560-43

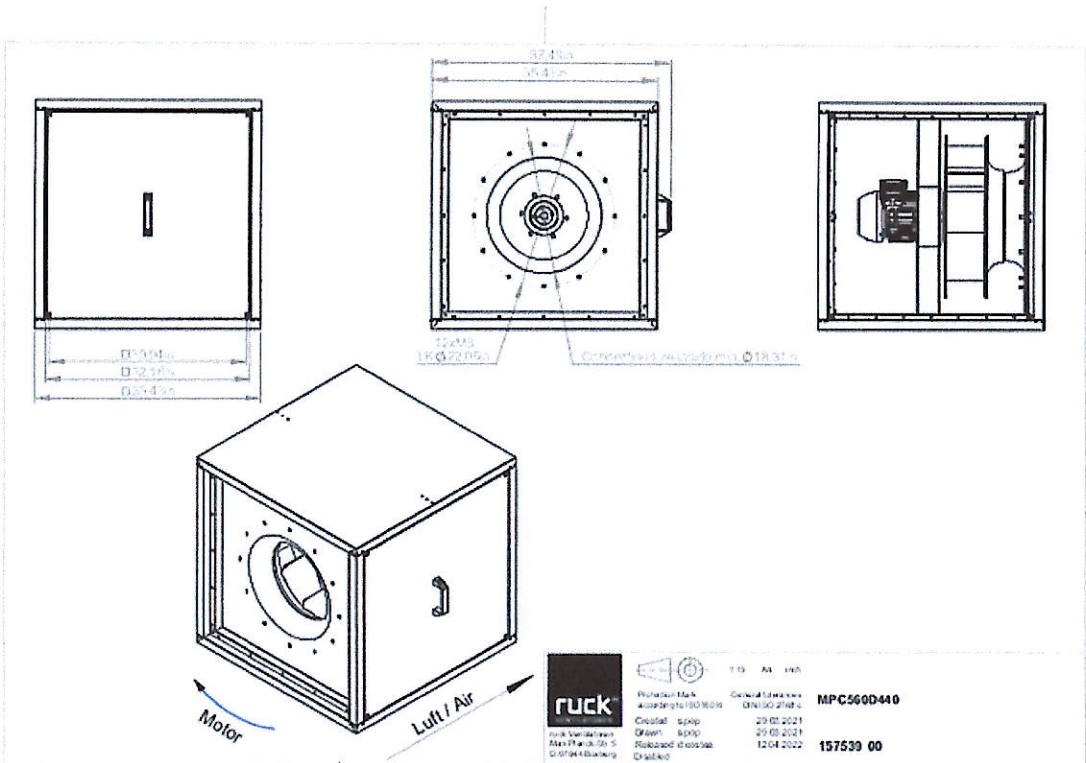
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CIRCUIT DIAGRAMS / DIMENSIONAL DRAWINGS



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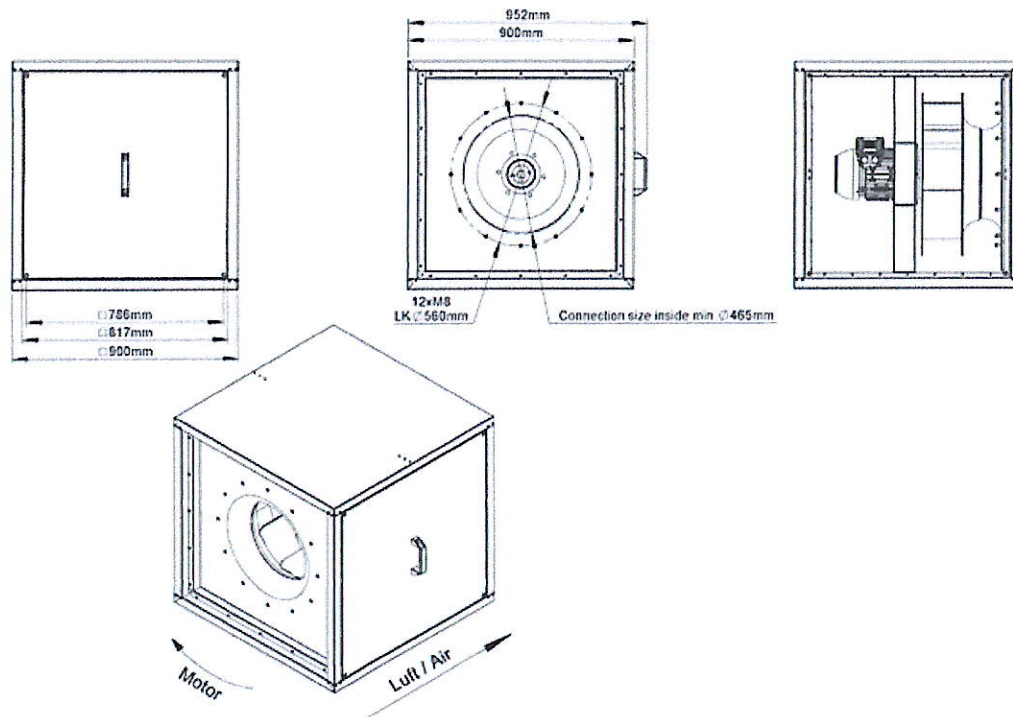


CBF 560-43

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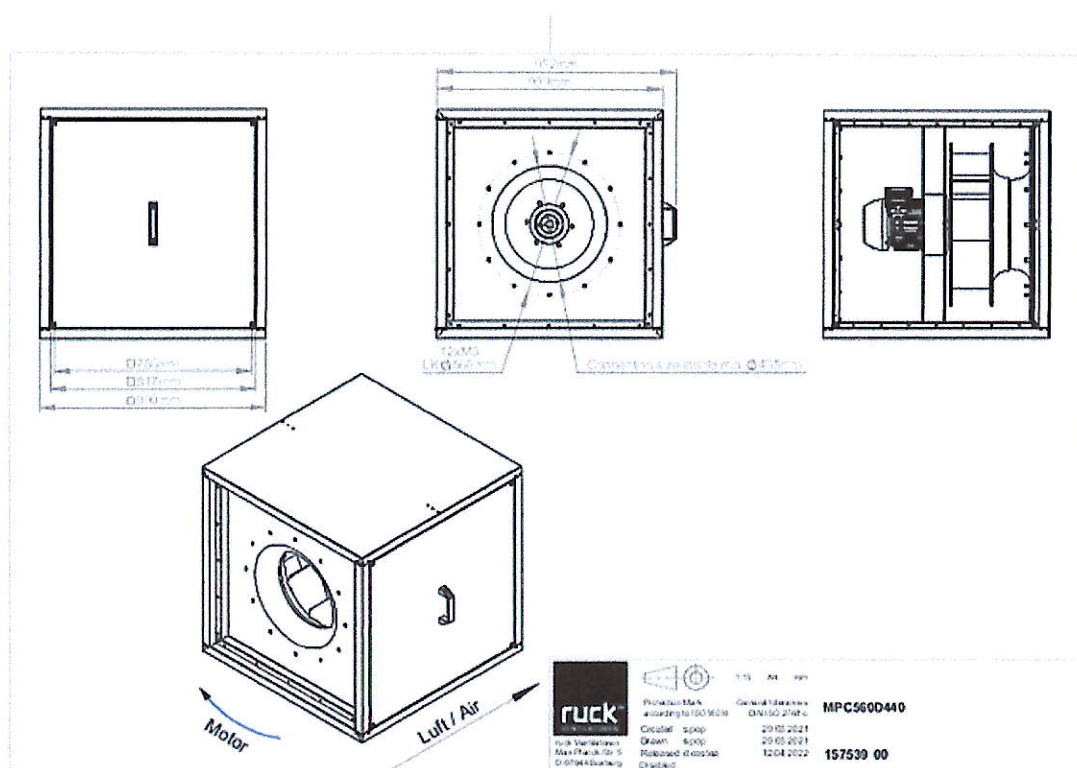
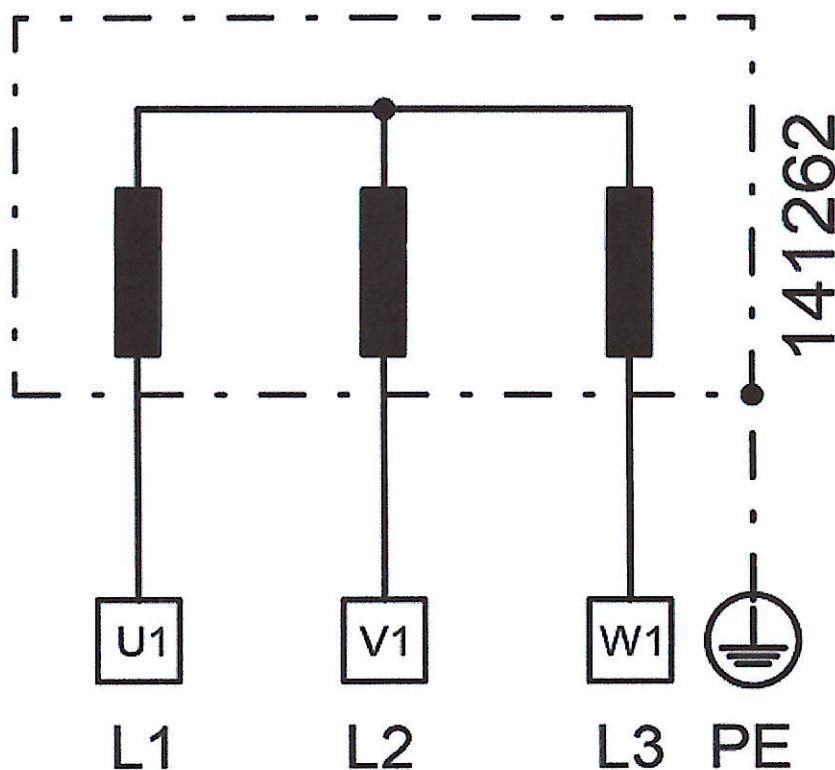


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