

# ISOR 160 E2 K 02

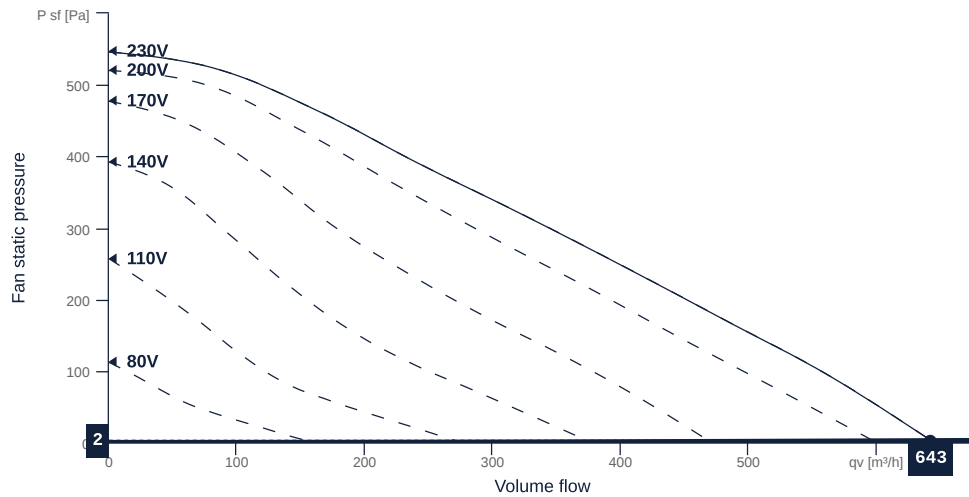
168454

- Soundproof centrifugal fan with backward curved impeller
- Galvanized sheet steel housing
- Connection spigots with double lip seal
- Swing-out fan unit
- Robust single-phase AC motor, voltage controllable
- Integrated thermal switch
- Suitable for outdoor installation



## FAN CURVES

Name	Value	Unit
Volume flow	642.95	m³/h
Pressure	2.44	Pa



to the product detail page

# ISOR 160 E2 K 02

168454

## TECHNICAL SPECIFICATIONS

Name	Value	Unit	Formula symbol
Volume flow	642	m³/h	QV <sub>calc</sub>
Pressure	2	Pa	psf <sub>calc</sub>
Fan pressure	50	Pa	pf
Fan static pressure	2	Pa	psf
Current consumption Motor	0.4	A	I <sub>e</sub>
Electrical power consumption	110	W	P <sub>ek</sub>
Voltage	229	V	U
Rotation speed	2419	1/min	N
Total static efficiency	0	%	etaFaPeK
Total efficiency	8	%	etatPeK
SFP (entire device)	620	W/(m³/s)	sfp <sub>device</sub>
Sound power level inlet	57	dB(A)	LwA5
Sound power level outlet	72	dB(A)	LwA6
Sound power level housing radiation	53	dB(A)	LwA2

## SOUND DATA

Sound power	mid-frequency tape										Unit	Formula symbol
	Σ	63	125	250	500	1000	2000	4000	8000	16000		
suction	58	5	47	53	54	44	42	41	32	21	dB(A)	LwA5
blowout	72	5	50	58	68	66	65	63	52	40	dB(A)	LwA6
Casing break out	53	5	45	47	51	37	30	24	16	7	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	36	40	0	29	36	37	27	25	24	15	3	dB(A)	LwA5
blowout	49	55	0	33	40	51	48	48	45	35	23	dB(A)	LwA6
Casing break out	32	36	0	28	30	33	20	12	6	0	0	dB(A)	LwA2



to the product detail page

## GENERAL DATA

Name	Value	Unit	Formula symbol
Labeling	CE, UKCA		
Duct size	-		WxH <sub>duct</sub>
Pipe connection size (DN)	DN160		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	11.76	kg	m
Nominal air flow rate, nominal point m <sup>3</sup> /h	644.4	CmH	q <sub>v,nom</sub>
Nominal external pressure, static	546	Pa	p <sub>s,nom</sub>
Fan type	Radial		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	0.18	CmS	q <sub>v,nom</sub>
Actual electrical input power, nominal point	0.11	kw	P <sub>e,nom</sub>
Face velocity, nominal point	8.91	m/s	v <sub>nom</sub>
Nominal external pressure, static	546	Pa	p <sub>s,nom</sub>
static efficiency of the extract fan, nominal point	88.13	p	η <sub>es,EHA</sub>
Enclosure sound level, nominal point	53.31	db	LWA2
Rating	Product is compliant 2018		

## MAXIMAL DATA

Name	Value		Unit	Formula symbol
	50 Hz	60 Hz		
Max. power consumption (device)	103	132	w	P <sub>ed, max</sub>
Max. operating current (device)	0.47	0.61	A	I <sub>ed, max</sub>
Max. speed	2700	3070	rpm	n <sub>max</sub>
Max. stat. efficiency	27.1	23.6	p	η <sub>es</sub>
Max. fan efficiency	28.1	24.2	p	η <sub>e</sub>
Max. flowrate	640	670	CmH	q <sub>v, max</sub>
Max. stat pressure	545	700	Pa	p <sub>st, max</sub>
Max. medium temperature	75	75	°C	T <sub>m, max</sub>
Max. environment temperature	75	75	°C	T <sub>amb, max</sub>
Min. environment temperature	-25	-25	°C	T <sub>amb, min</sub>
Min. voltage	80	80	v	U <sub>min</sub>



to the product detail page

## MOTOR DATA

Name	Value		Unit	Formula symbol
	50 Hz	60 Hz		
Rated frequency (device)		50		f
Motor type		AC 1~		phase
Control type		stepless-controlled		ctrltype
Installation type		ORM (Out)		install
Rotation direction		right		rotation
Isolation class		ISO F		ISOclass
Motor-protection		TAI		protectmotor
Protection class		IP33		IPmotor
Is pole-changeable		No		polexch
Type of power supply		AC 1~		pwrsupmotor
Capacity capacitor		2.5	µF	Ccond
Voltage capacitor		450	v	VUcond
Number of poles (1)		2.000000		num polesw1
Rated voltage	230	230	v	Urated, f1
Rated current	0.43	0.55	A	Irated, f1
Speed	2390	2460	rpm	nf1
Starting current	0.73	0.72	A	Istart, f1
Efficiency	47.3	21.5	p	ηm, f1
Min. temperature	-30	-30	°C	Tmotor, min
Cos Phi	0.980000	0.980000		cos φ
UL-Certification motor		None		ULcert

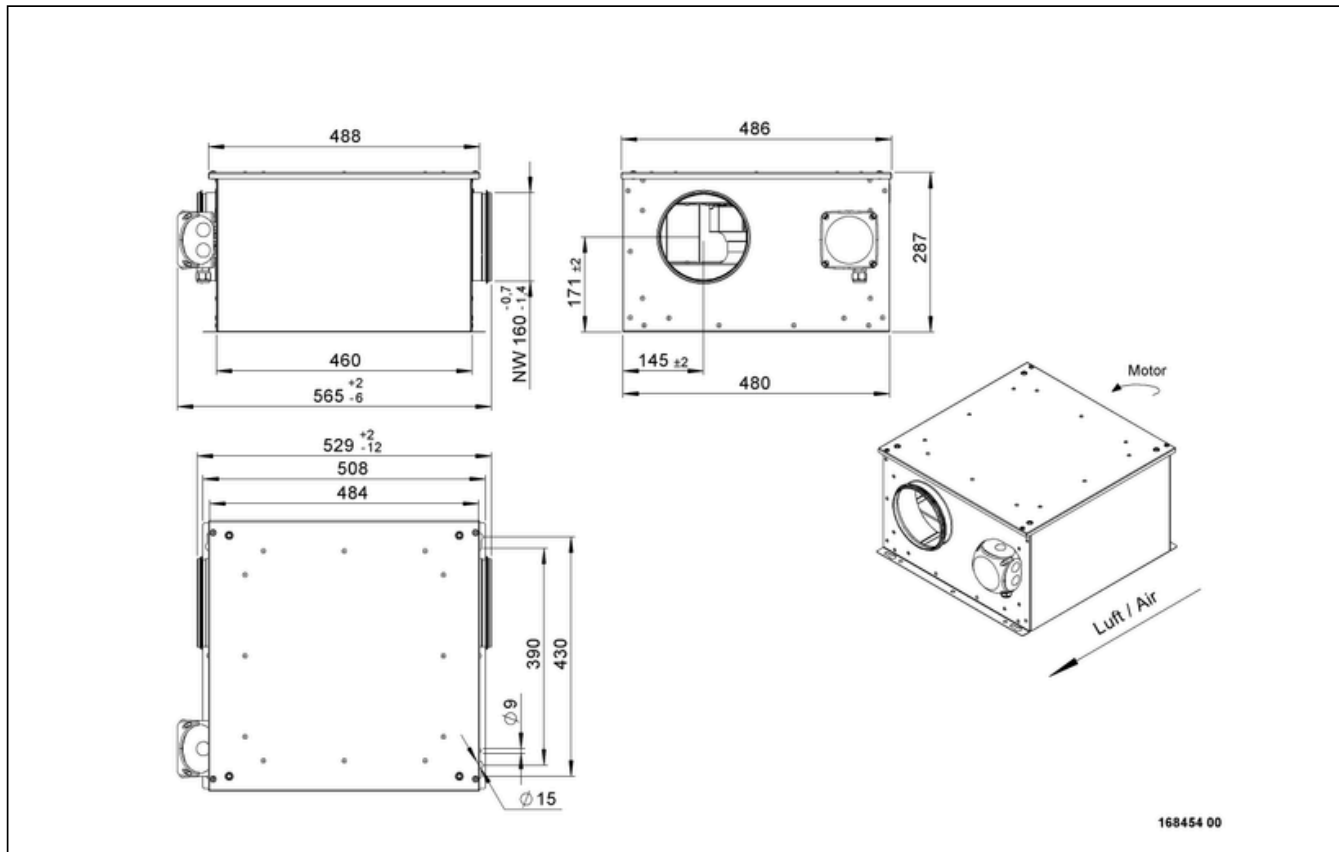


to the product detail page

# ISOR 160 E2 K 02

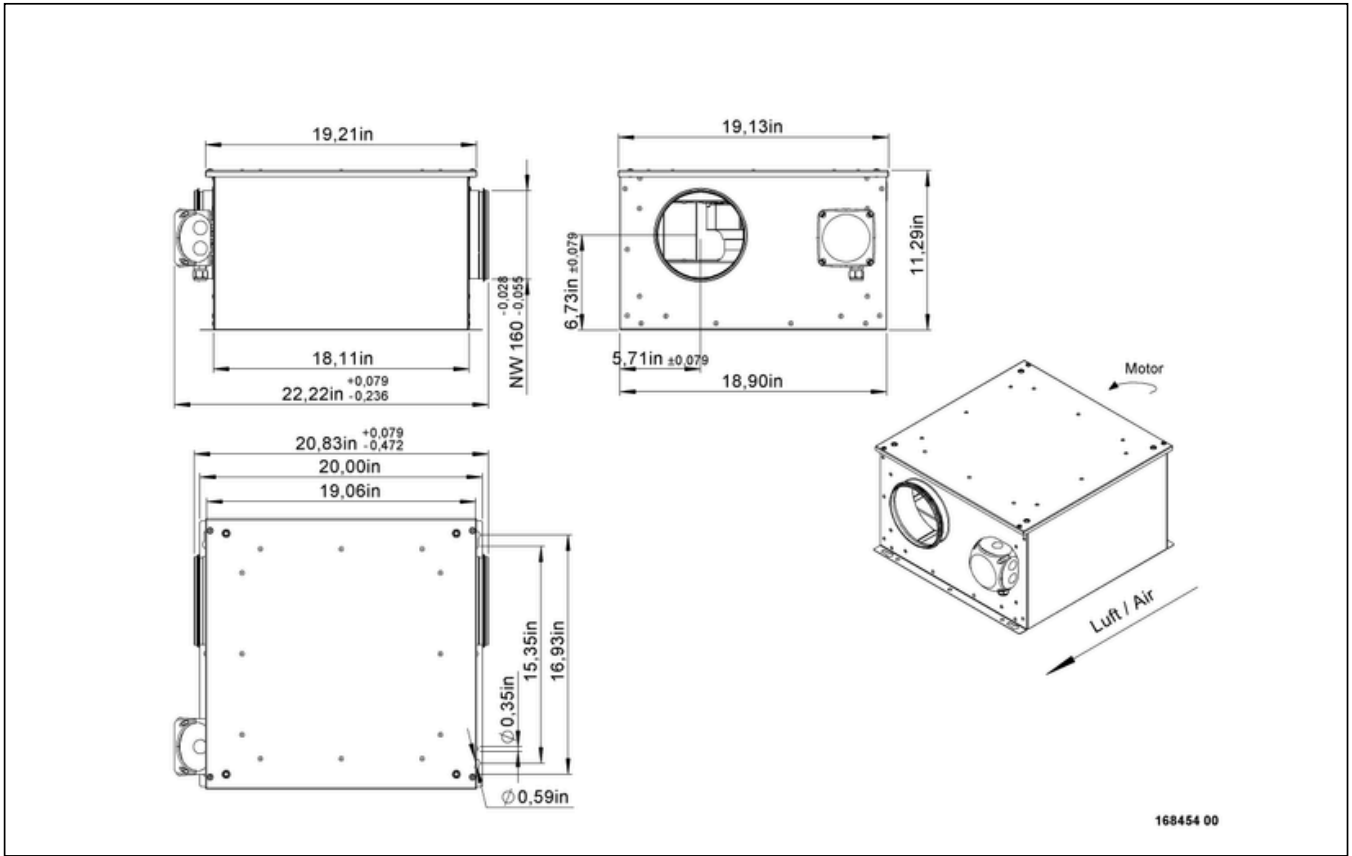
168454

## CIRCUIT DIAGRAMS / DIMENSIONAL DRAWINGS



# ISOR 160 E2 K 02

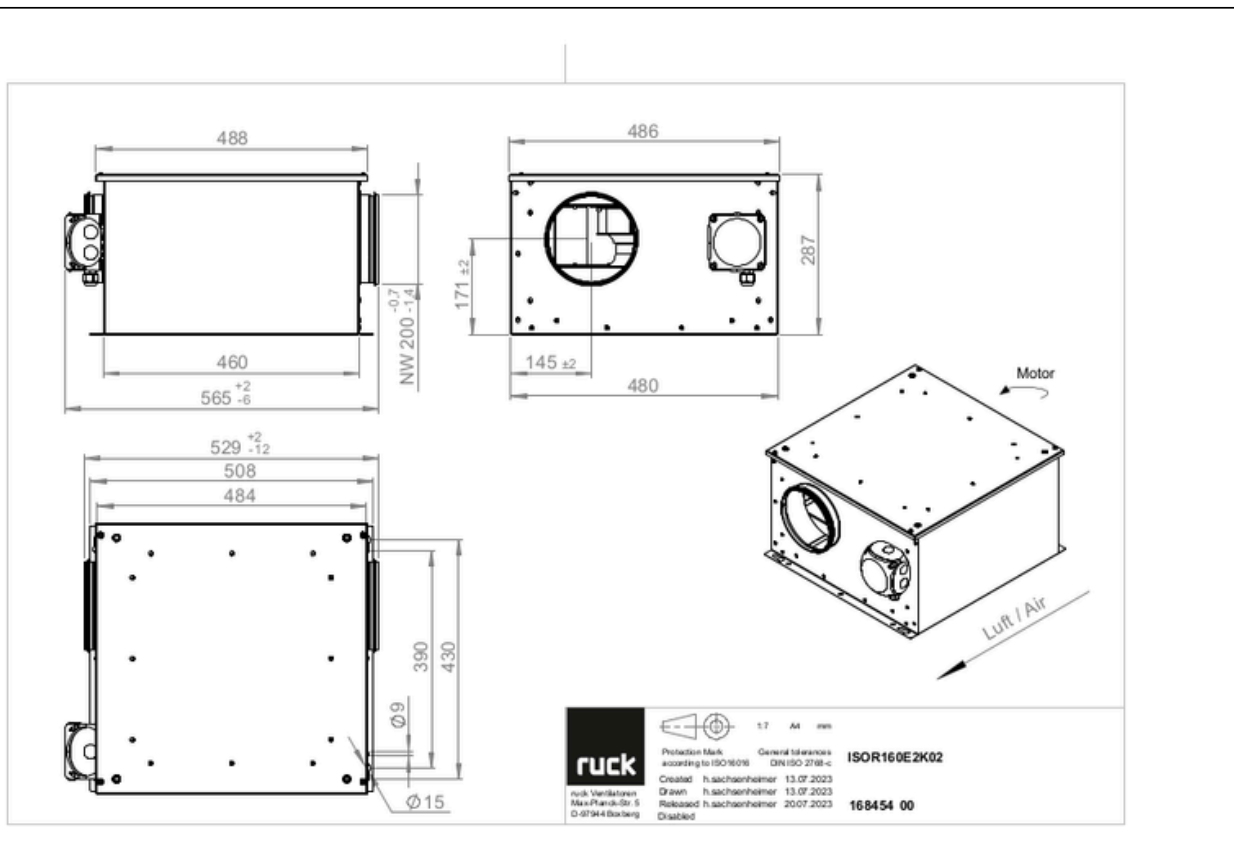
168454



to the product detail page

# ISOR 160 E2 K 02

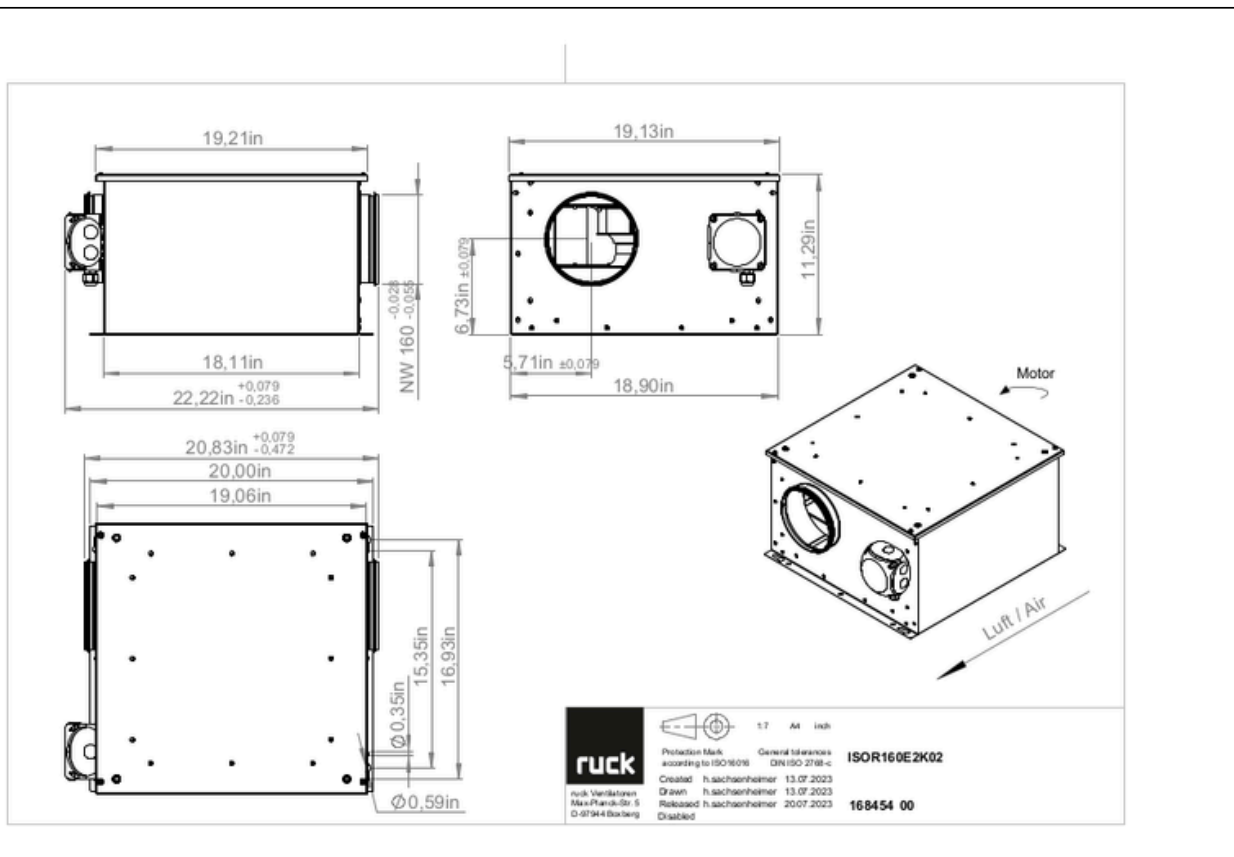
168454



to the product detail page

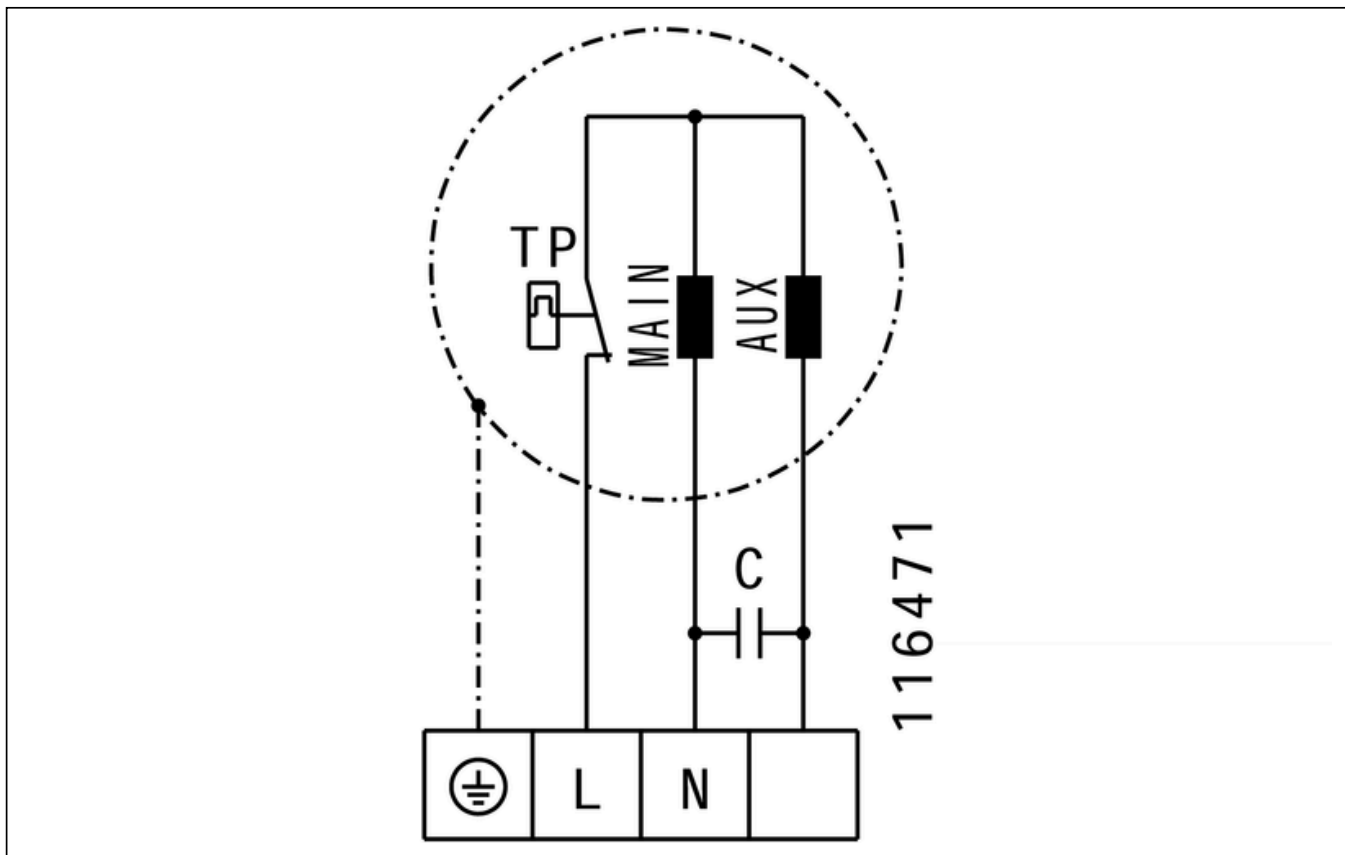
# ISOR 160 E2 K 02

168454



# ISOR 160 E2 K 02

168454



# ISOR 160 E2 K 02

168454

## MECHANICAL ACCESSORIES

VM 160 | 102649



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

RSK 160 | 102661



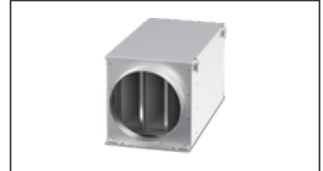
- Back draught shutter for tube fitting
- Galvanized steel sheet housing
- Aluminum flaps

FV 160 | 112831



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

FT 160 | 112841



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

FTW 160 | 112852



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

RSK 160D | 113485



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

SG 160 01 | 169591



- Protection grille for tube connection
- Galvanized wire

SDS 160 | 169605



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

SDF 160 | 169642



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



to the product detail page

# ISOR 160 E2 K 02

168454

## ELECTRICAL ACCESSORIES

**GS 01 | 102787**



- Isolator switch
- $U_{max} = 400\text{ V}$ , 50/60 Hz
- Switching capacity 400 V 3~ = 7,5 kW
- $I_{max} = 25\text{ A}$

**MTY 1 | 103428**



- Electronic controller
- Stepless
- 230 V ~, 50 Hz
- Max. ambient temperature 35 °C
- $I_{max} = 1\text{ A}$
- Surface and flush mounting

**ETY 15 | 115891**



- Electronic controller
- Stepless speed control
- 230 V ~, 50 Hz, 2,5 A
- Max. ambient temperature 35 °C

**TEE 015 | 115893**



- 5-step transformer
- 230 V ~, 50/60 Hz

**TES 0145 | 169581**



- Step transformer
- 230 V ~, 50/60 Hz



to the product detail page