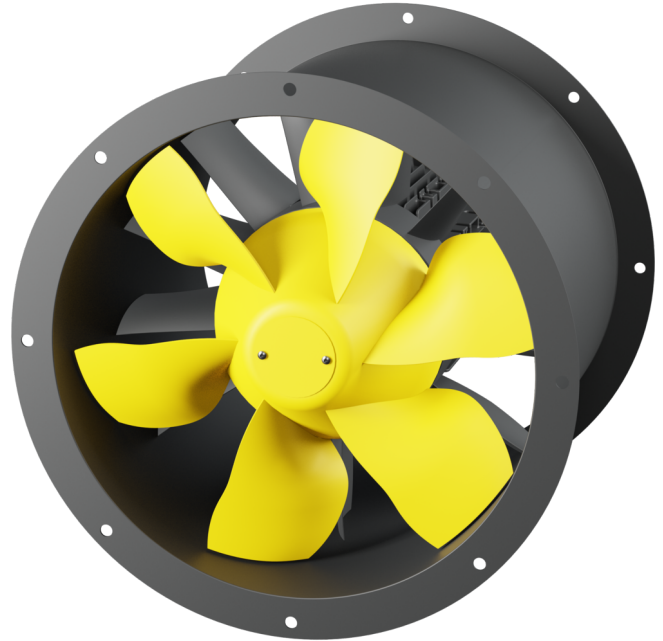


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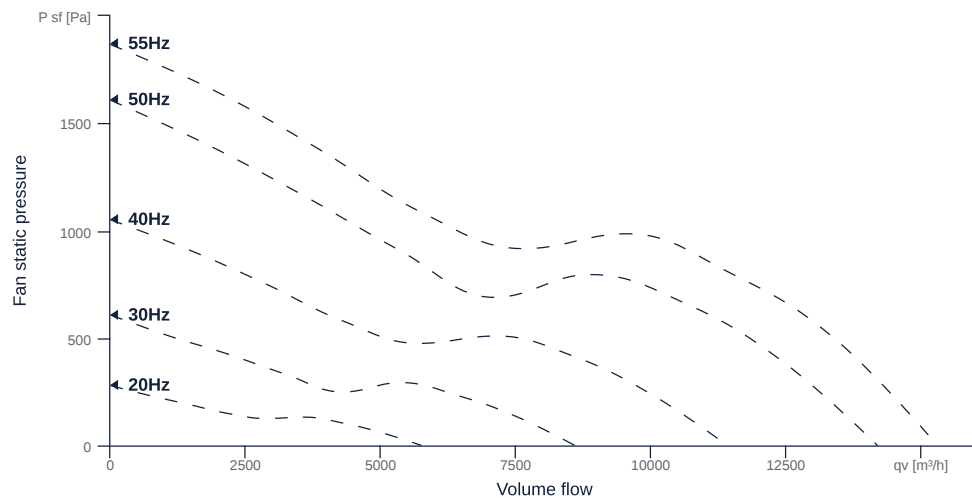
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- Innovative, high-efficiency axial fan
- Optimally tuned, CFD-optimized aerodynamics
- Housing weight optimized, powder coated
- Efficient IE3 motor, frequency controllable
- Smoke extract fan F400, 60 °C continuous operation, dual-use
- Exceeds current ErP regulation



FAN CURVES

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



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GENERAL DATA

Name	Value	Unit	Formula symbol
Labeling	CE, UKCA		
Duct size	-		$W \times H_{duct}$
Pipe connection size (DN)	DN450		DN
Rated voltage (entire device)	400	V	U_{rated}
Phases (entire device)	3~		phase
Electrical protection (entire device)	10 A		fuse
Housing material	Steel		matcasing
Impeller material	Steel		matimpeller
IP-protection class (entire device)	IPX4		IPcompl
IP-Protection class (terminal box)	IP55		IPebox
Weight	53.4	kg	m
Fan type	Axial		Fan _{type}
Category / Installation situation	B		cat

MAXIMAL DATA

Name	Value	Unit	Formula symbol
Max. power consumption (device)	6325	W	$P_{ed, max}$
Max. operating current (device)	8.1	A	$I_{ed, max}$
Max. speed	3220	1/min	n_{max}
Max. stat. efficiency	55.8	%	η_{es}
Max. fan efficiency	71	%	η_e
Max. flowrate	15300	m ³ /h	$Q_{v, max}$
Max. stat pressure	960	Pa	$p_{sf, max}$
Max. medium temperature	60	°C	$T_{m, max}$
Max. environment temperature	60	°C	$T_{amb, max}$
Min. environment temperature	-20	°C	$T_{amb, min}$



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 H		ISOclass
Motor-protection		TEC		protectmotor
Protection class		IP55		IPmotor
Is pole-changeable		No		polexch
Type of power supply		AC 3~		pwrsupmotor
Number of poles (1)		2.000000		num polesw1
Connection	Δ	Δ		wiringw1
Connection (wiring 2)	Y			wiringw2
Rated voltage	380	460	V	U _{rated, f1}
Rated voltage (wiring 2)	660		V	U _{rated, f2}
Rated current	7.83	6.67	A	I _{rated, f1}
Rated current (wiring 2)	4.51		A	I _{rated, f2}
Shaft power	4000	4000	W	P _{out, f1}
Shaft power (wiring 2)	4000		W	P _{out, f2}
Speed	2890	3515	1/min	n _{f1}
Speed (wiring 2)	2890		1/min	n _{f2}
Starting current	54.8	60	A	I _{start, f1}
Starting current (wiring 2)	31.6		A	I _{start, f2}
Efficiency	88.2	88.5	%	η _{m, f1}
Efficiency (wiring 2)	88.2		%	η _{m, f2}
Efficiency class	IE3	IE3		IE _{motor}
Min. temperature	-20		°C	T _{motor, min}
Cos Phi	0.880000	0.850000		cos φ
UL-Certification motor		None		ULcert



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ERP DATA (LOT11)

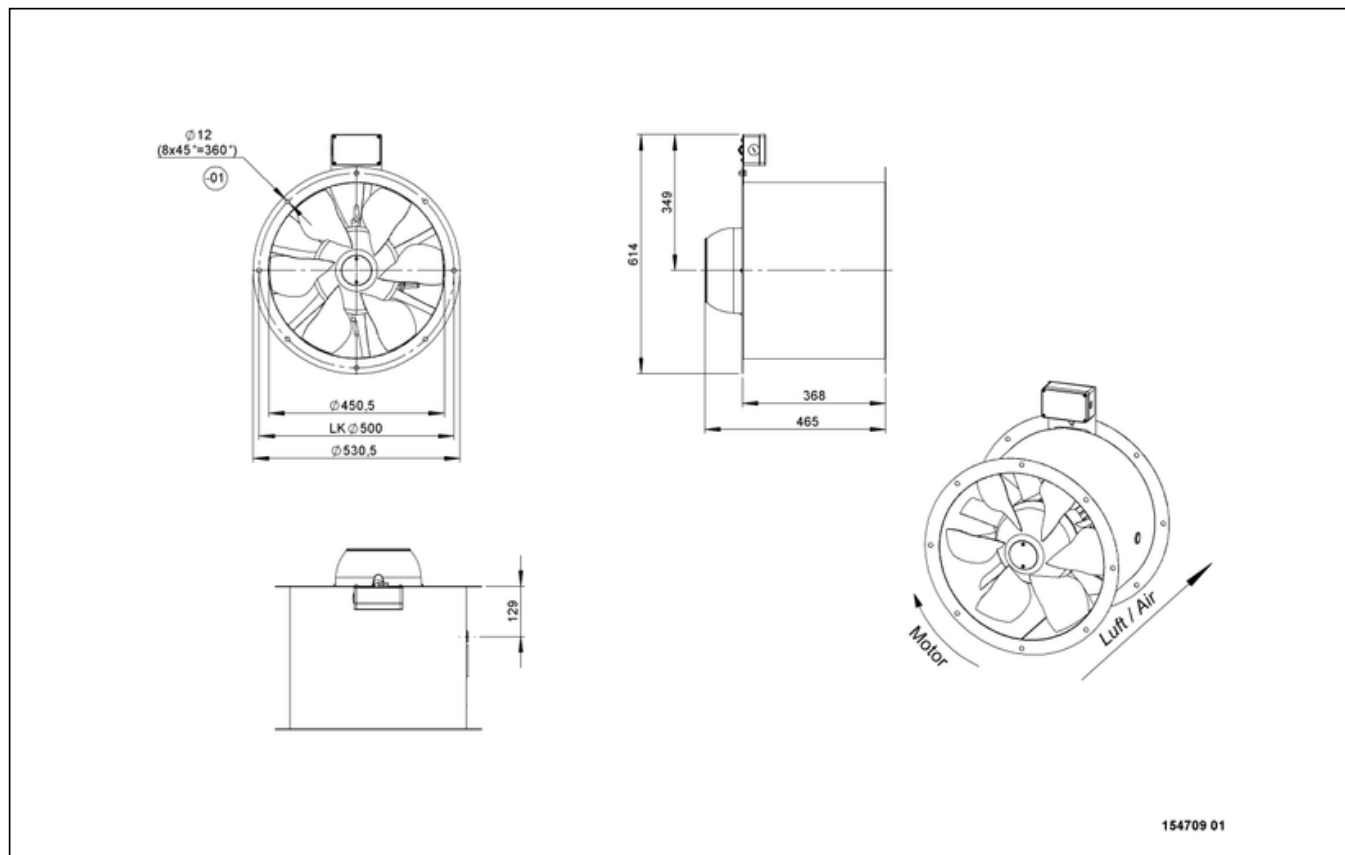
Name	Value	Unit	Formula symbol
Speed at the energy efficiency optimum	3214	1/min	n_{opt}
Efficiency level	71.2	%	N
Efficiency category	total		cat _{efficiency}
Input power of the motor at the energy efficiency optimum	4.64	kW	$P_{e, opt}$
Overall efficiency	73.3	%	η_{ges}
Measurement category	B		meas cat
Fan pressure at energy efficiency optimum	973	Pa	p_f, opt
Flowrate at energy efficiency optimum	12224	m³/h	Q_v, opt

SMOKE EXTRACT DATA

Name	Value	Unit	Formula symbol
Maximum resistance temperature	400	°C	T_{fire}
Maximum resistance time	120.000000		t_{fire}
Fire resistance class	F 400 (120)		F _{class}
Snow load class	-		SL _{class}

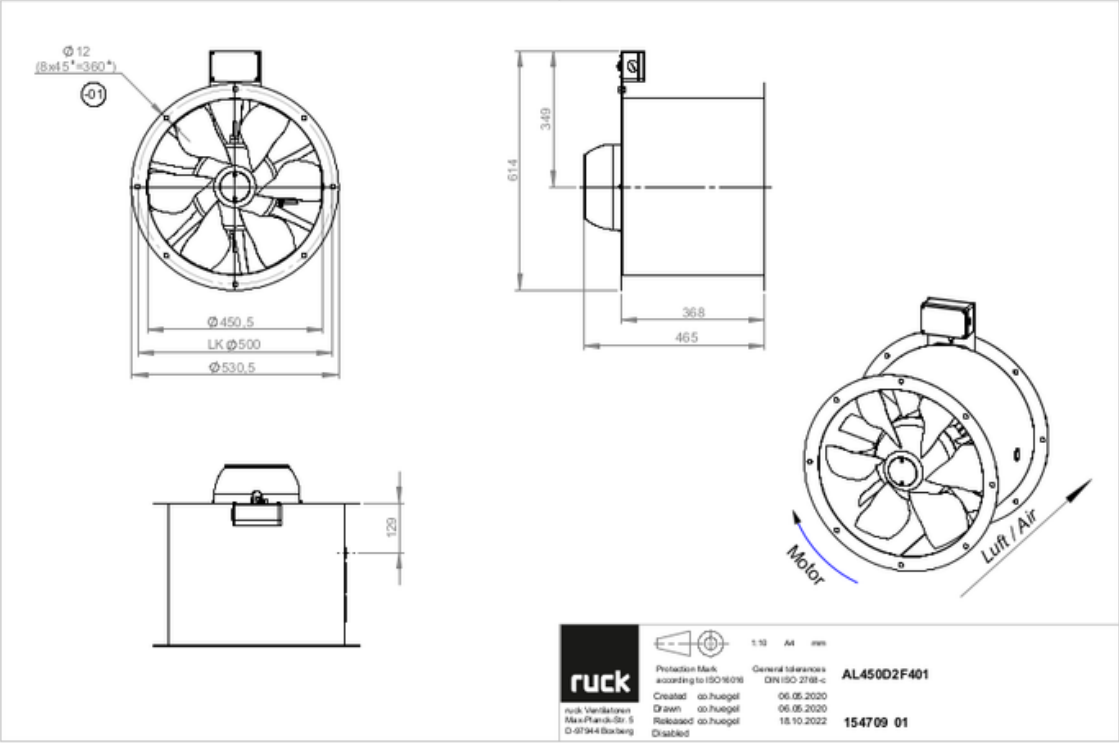


CIRCUIT DIAGRAMS / DIMENSIONAL DRAWINGS



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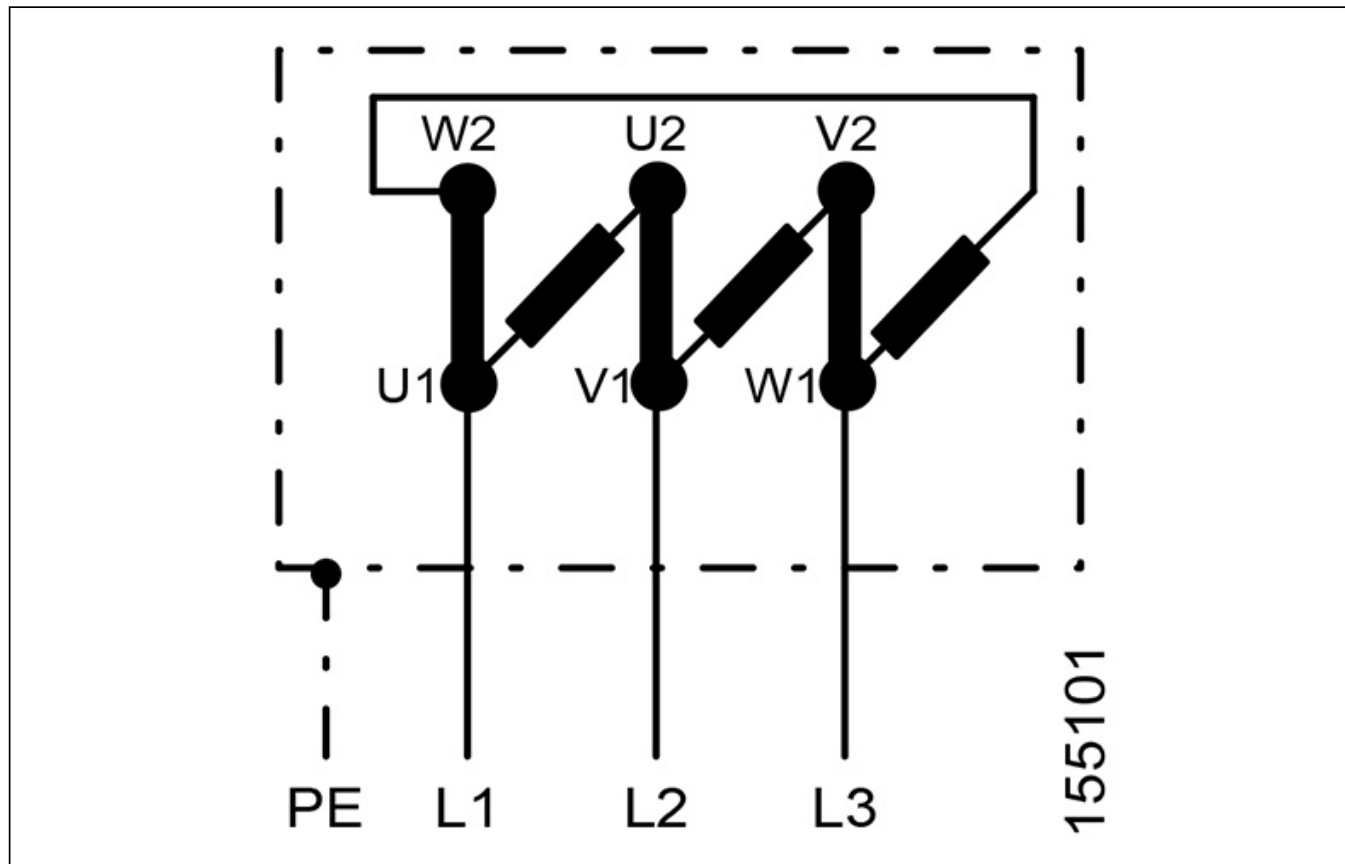
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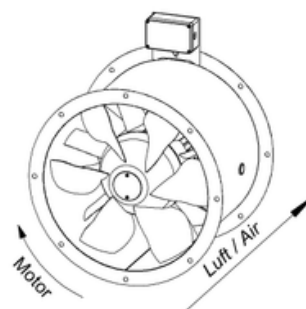
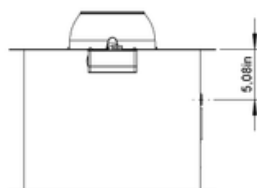
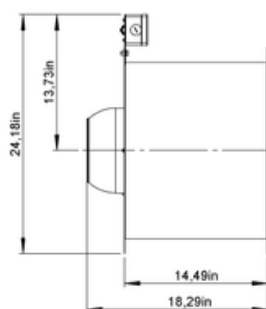
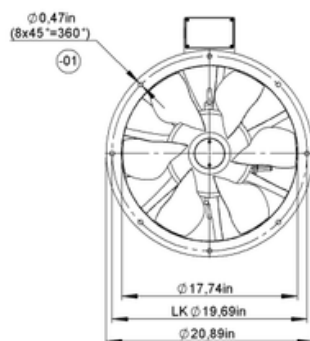


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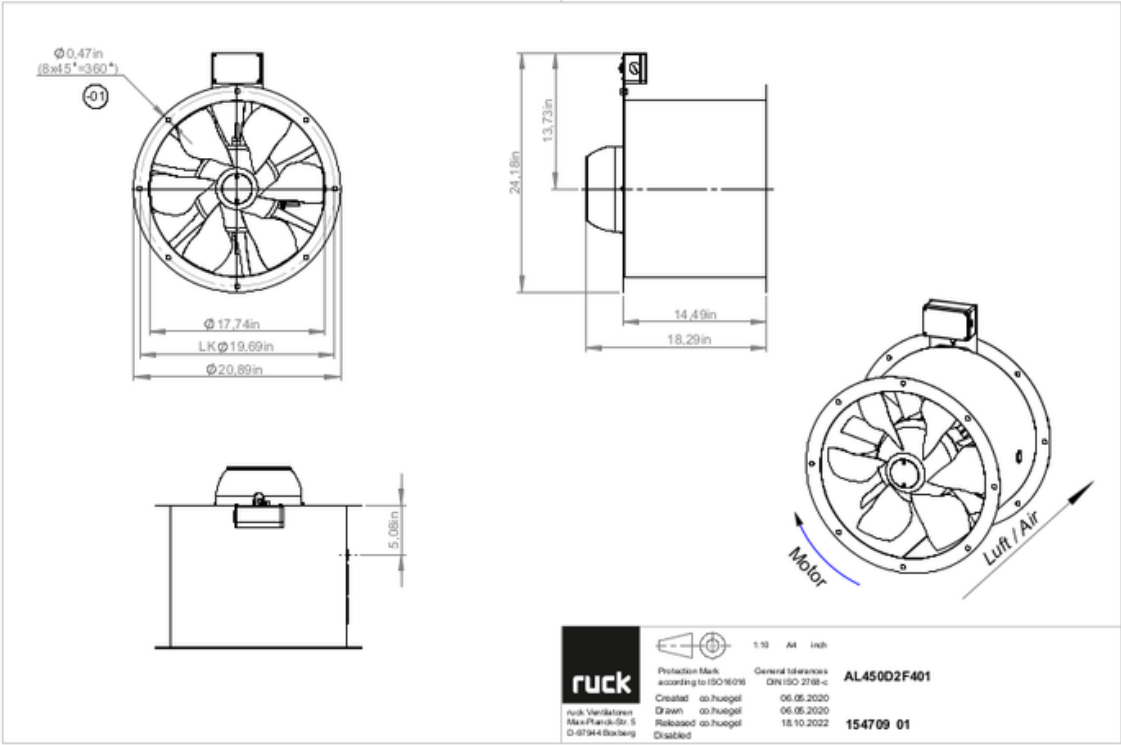


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MECHANICAL ACCESSORIES

ESD 450 | 153957



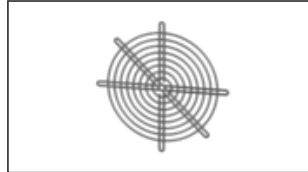
- Inlet cone
- Steel sheet, powder coated
- Flange mounting

RAF 450 | 154020



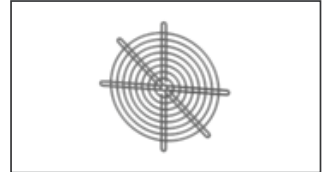
- Round flange
- Sheet steel, powder coated

SGW 450 | 154051



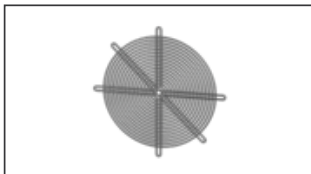
- Protection grille, wide meshed
- Steel sheet, galvanized
- Flange mounting

SGW 500 | 154052



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

SGE 450 | 154075



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

RVS 450 | 154189



- Tube connection spigot
- Sheet steel, powder coated
- Suitable for outdoor installation
- Flange mounting

RAS 450 F4 | 154303



- Round spigot, flexible
- Galvanized steel sheet, silicone band
- 400 °C/120 min. conf. DIN EN 12101-3
- F400, 75 °C continuous operation
- Flange mounting

RVK 450 F4 | 154394



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

FAL 450 | 154808



- Mounting foot
- Sheet steel, powder coated

FSD 03 | 155500



- Set of 4 vibration dampers
- All metal design, galvanized

RVK H 450 F4 | 155669



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



ELECTRICAL ACCESSORIES

CON P1000 | 115259



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

MTP 20 | 128146



- Potentiometer 10 kΩ
- Switching contact 1A/250V AC - 2,5A/12V DC
- Max. ambient temperature 50 °C
- VDE

MTP 30 | 143289



- Stepped potentiometer 10 kΩ
- Step 1 + 2 settable 10 % - 100 % Vdc
- Step 3 100 % Vdc
- Supply voltage +10 Vdc

SEN AIR | 148641



- Airflow and temperature transducer
- Measuring range temperature 0...+50 °C
- With adjustable switching threshold (air speed)
- Measuring range air velocity up to 20 m/s

GS 08-F4 | 154397



- Device switch with holder
- F400, 400 °C/120 min (DIN EN 12101-3)
- Umax = 400 V, 50/60 Hz, Imax = 25 A
- Switching capacity 400 V 3~ = 7,5 kW

FU 55 12 | 155162



- Frequency converter
- Supply voltage 400 V 3~ 50/60 Hz
- Output voltage 0 - 400 V 3~
- Fire mode function (smoke extract fans)



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