



INSULATED IN-LINE RECTANGULAR DUCT FANS

IRAB / IRAT Series



Insulated **rectangular duct fan**. **Very low profile design**. Backward curved centrifugal impeller. Casing manufactured from heavy gauge galvanised sheet steel. **50mm thickness of M0 glass fibre internal acoustic insulation**. External rotor motor, speed controllable, **IP55**, **Class F** insulation. External wiring terminal box. Safety thermal overload protection. Working air temperature up to 60°C.

Motors

Motor and impeller fitted on the inspection cover enabling easy cleaning and maintenance.

Type of electrical supply

Single-phase 230V 50Hz (IRAB)

Three-phase 400V 50Hz (IRAT)

All motors are speed by autotransformer.

400A and 400B models are speed controllable by frequency inverter.

On request

Three phase motors suitable for frequency inverter control with motor E22 version: 315 and 355 models.

Inspection door



Inspection door that facilitates maintenance

Versatile design

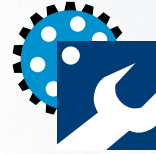


Can be installed in any position

A P P L I C A T I O N S



Warehouses



Workshops



Commercial premises



Offices



Cafes, bars and restaurants



Commercial and industrial kitchens



Parkings

■ Technical characteristics

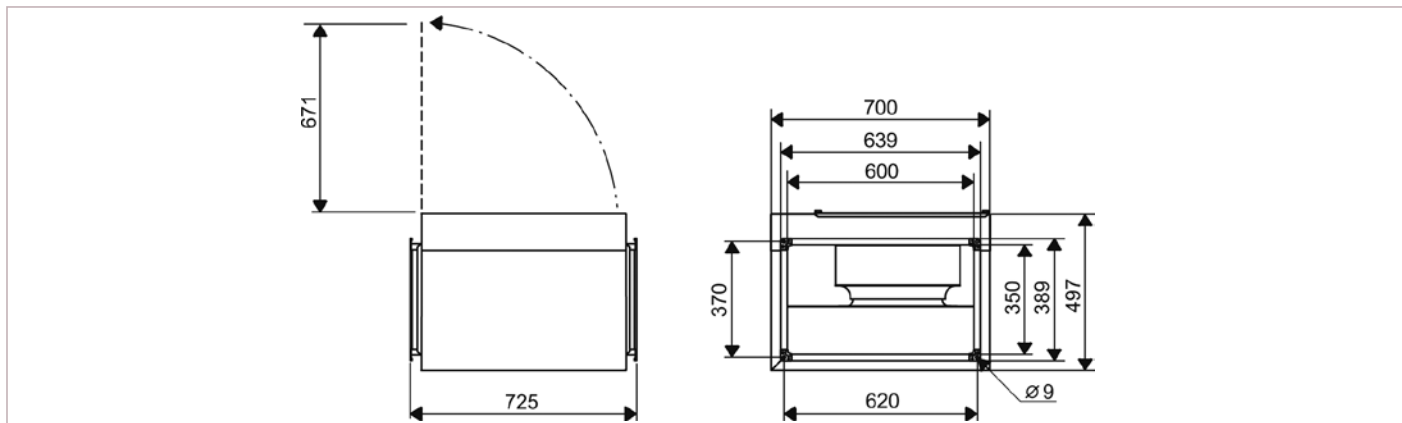
Before making any electrical connection ensure that the voltage and frequency of the mains electrical supply matches that of the fan data plate label.

Model	Nominal ducting diameter (mm)	Speed (r.p.m.)	Maximum absorbed power (W)	Maximum absorbed current (A)	Maximum airflow (m ³ /h)	Sound pressure level (dB(A)) at 1,5 m*		Maximum ambient temperature (°C)	Weight (kg)	Speed controller
						Inlet	Radiated			
IRAB/4-315 A	600 x 350	1375	500	2	3390	57	48	60	54	RMB-3,5
IRAT/4-315 A	600 x 350	1360	475	1	3450	57	48	65	52	RMT-1,5
IRAB/4-315 B	600 x 350	1260	735	2,8	4080	56	48	60	57	RMB-3,5
IRAT/4-315 B	600 x 350	1320	760	1,4	4400	58	49	60	55	RMT-1,5
IRAB/4-355	700 x 400	1300	795	3,2	4970	57	50	60	66	RMB-3,5
IRAT/4-355	700 x 400	1335	745	1,5	4940	58	51	60	64	RMT-2,5
IRAT/4-400A	800 x 500	1350	1100	1,9	6690	62	52	60	72	RMT-2,5
IRAT/4-400B	800 x 500	1310	2220	3,7	10200	78	69	50	75	RMT-5
IRAT/4-450	1000 x 500	1330	3745	5,8	12400	87	79	50	125	RMT-8

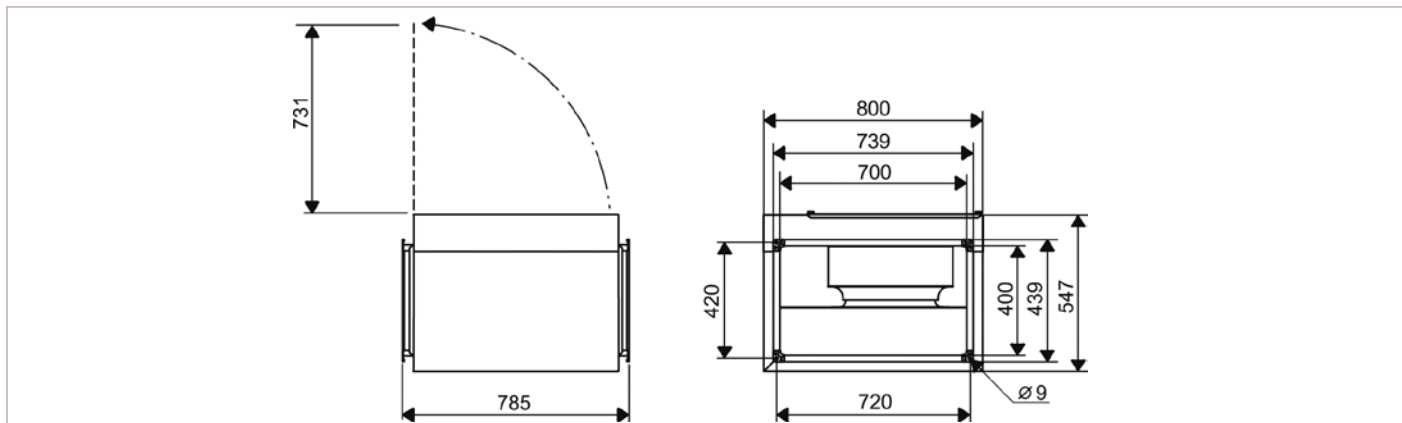
* Average sound pressure level, measured at 1,5 m in free field

■ **Dimensions (mm)**

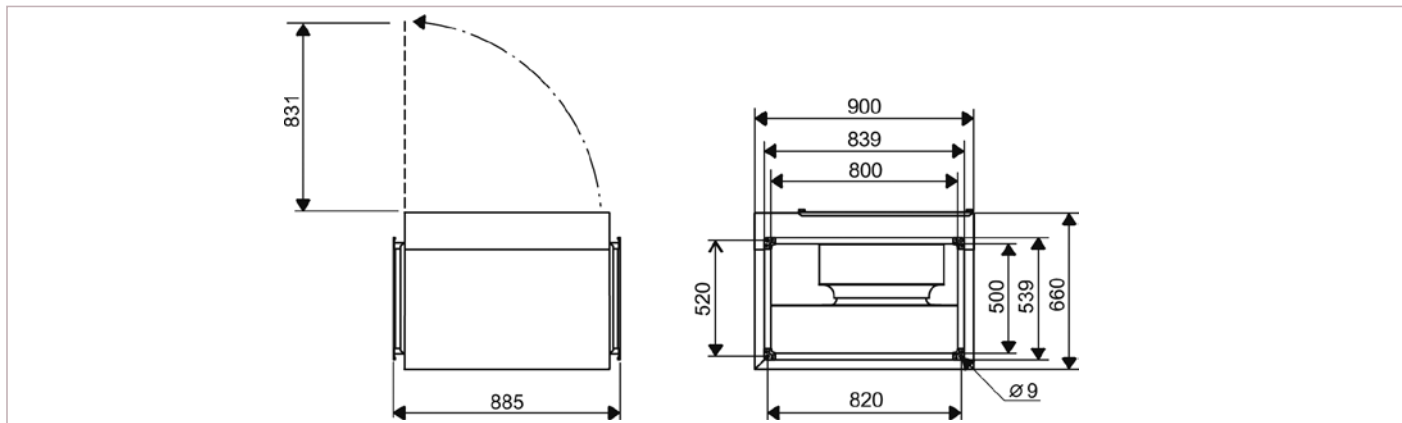
IRAB-IRAT/4 315A - IRAB-IRAT/4 315B



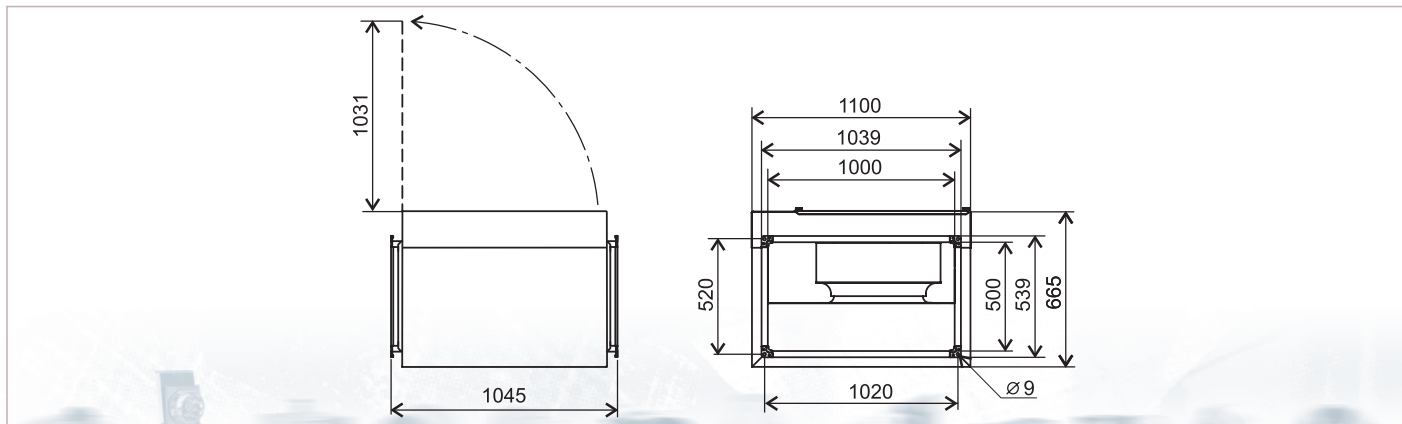
IRAB-IRAT/4 355



IRAB-IRAT/4 400A - IRAB-IRAT/4 400B



IRAT/4 450



■ Acoustic characteristics

Sound power spectrum in dB(A), at the fan inlet / outlet , and outside the fan casing (radiated noise) at 3 working points of the performance curve (A = 0 Pa) maximum supply voltage

Model IRAB/4			63	125	250	500	1000	2000	4000	8000
315A	Inlet	A	55	66	72	63	64	64	61	55
		B	53	64	69	59	60	59	56	51
		C	53	61	63	55	55	54	49	44
	Outlet	A	51	68	78	81	80	78	72	66
		B	48	65	75	77	76	73	67	60
		C	48	62	71	72	70	68	60	53
	Radiated	A	55	56	63	50	52	52	50	40
		B	53	54	60	46	48	47	45	36
		C	53	51	54	42	43	42	38	29

Model IRAT/4			63	125	250	500	1000	2000	4000	8000
315A	Inlet	A	55	66	72	63	64	64	61	55
		B	53	64	69	59	60	59	56	51
		C	53	61	63	55	55	54	49	44
	Outlet	A	51	68	78	81	80	78	72	66
		B	48	65	75	77	76	73	67	60
		C	48	62	71	72	70	68	60	53
	Radiated	A	55	56	63	50	52	52	50	40
		B	53	54	60	46	48	47	45	36
		C	53	51	54	42	43	42	38	29

Model IRAB/4			63	125	250	500	1000	2000	4000	8000
315B	Inlet	A	57	67	70	67	65	65	61	58
		B	56	64	67	63	60	60	56	51
		C	59	65	62	60	57	56	51	47
	Outlet	A	54	71	78	82	82	79	74	68
		B	53	67	75	78	77	74	69	61
		C	54	65	70	74	74	71	65	58
	Radiated	A	55	58	60	60	56	52	48	44
		B	54	55	57	56	51	47	43	37
		C	57	56	52	53	48	43	38	33

Model IRAT/4			63	125	250	500	1000	2000	4000	8000
315B	Inlet	A	58	68	72	69	66	66	62	59
		B	57	65	68	64	61	61	57	52
		C	60	65	63	60	57	57	52	47
	Outlet	A	56	73	80	84	84	81	76	70
		B	54	68	76	79	78	75	70	62
		C	54	66	71	74	74	71	65	58
	Radiated	A	56	59	62	62	57	53	49	45
		B	55	56	58	57	52	48	44	38
		C	58	56	53	53	48	44	39	33

Model IRAB/4			63	125	250	500	1000	2000	4000	8000
355	Inlet	A	58	74	68	69	64	65	61	54
		B	53	68	63	65	59	60	57	48
		C	51	65	60	62	58	58	53	49
	Outlet	A	56	79	81	82	81	76	71	63
		B	53	75	77	79	76	71	65	57
		C	51	70	71	74	73	69	64	58
	Radiated	A	56	68	62	59	56	51	46	38
		B	51	62	57	55	51	46	42	32
		C	49	59	54	52	50	44	38	33

Model IRAT/4			63	125	250	500	1000	2000	4000	8000
355	Inlet	A	59	75	69	70	65	66	62	55
		B	54	69	64	66	60	61	58	49
		C	52	66	61	63	59	59	54	50
	Outlet	A	57	80	82	83	82	77	72	64
		B	54	76	78	80	77	72	66	58
		C	52	71	72	75	74	70	65	59
	Radiated	A	57	69	63	60	57	52	47	39
		B	52	63	58	56	52	47	43	33
		C	50	60	55	53	51	45	39	34

Model IRAT/4			63	125	250	500	1000	2000	4000	8000
400A	Inlet	A	62	76	70	74	68	66	65	59
		B	61	72	67	72	64	61	59	54
		C	58	68	62	67	61	59	55	51
	Outlet	A	62	83	85	86	84	80	77	67
		B	59	78	82	83	81	76	70	63
		C	61	73	78	78	76	71	65	60
	Radiated	A	55	68	60	59	56	54	52	44
		B	54	64	57	57	52	49	46	39
		C	51	60	52	52	49	47	42	36

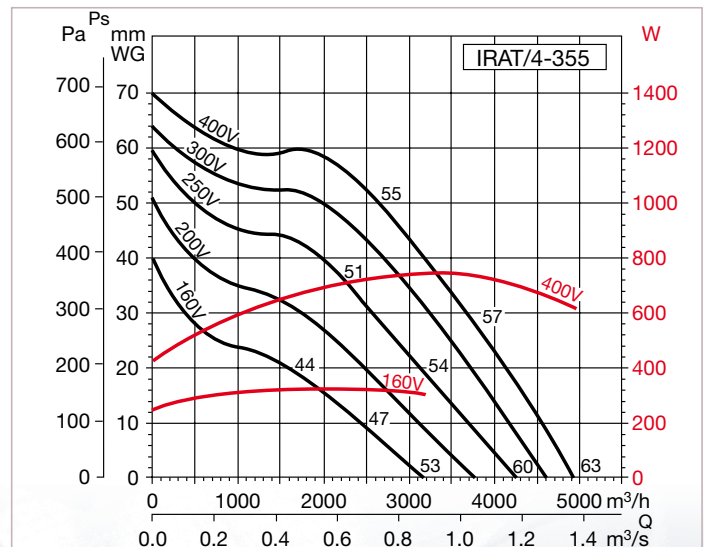
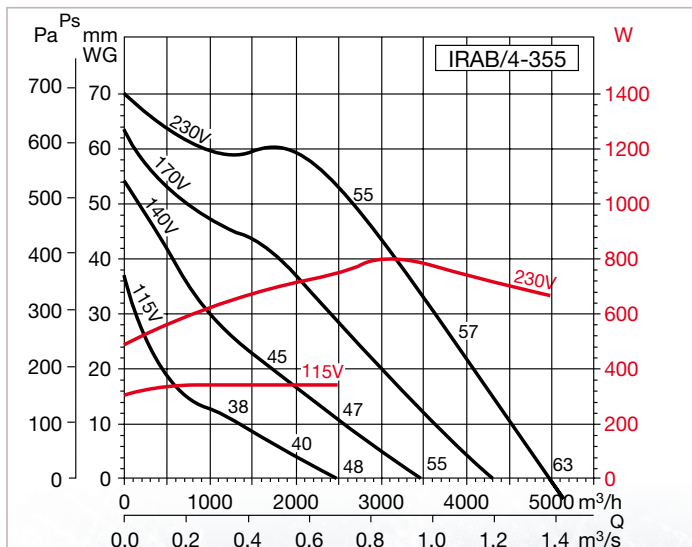
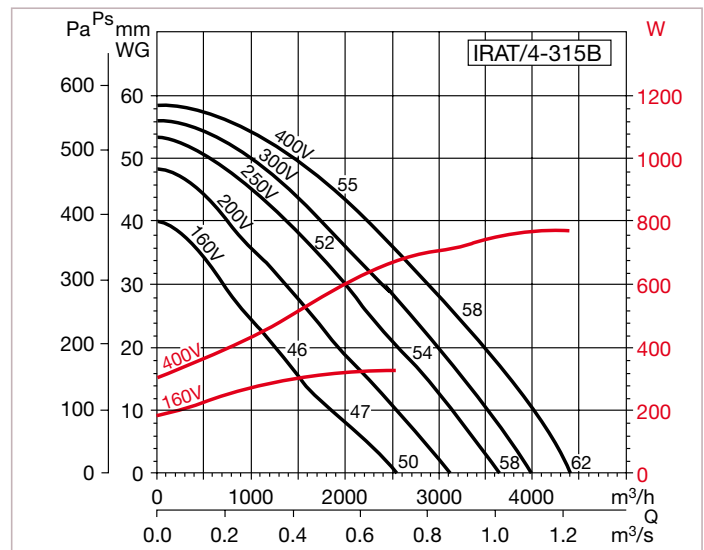
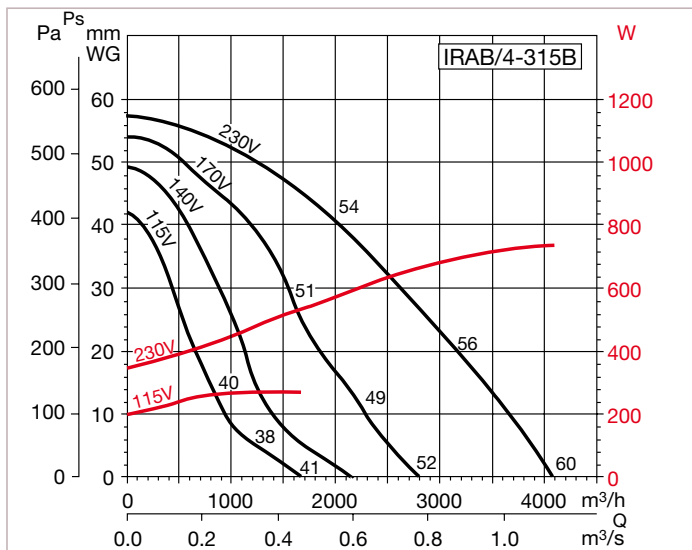
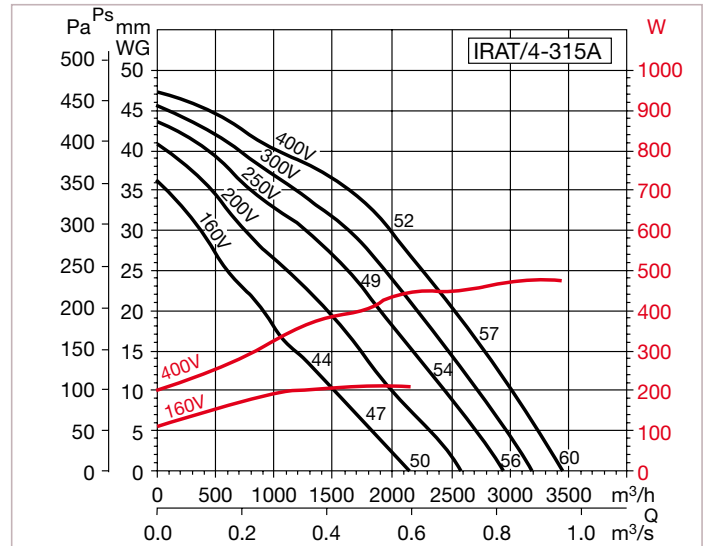
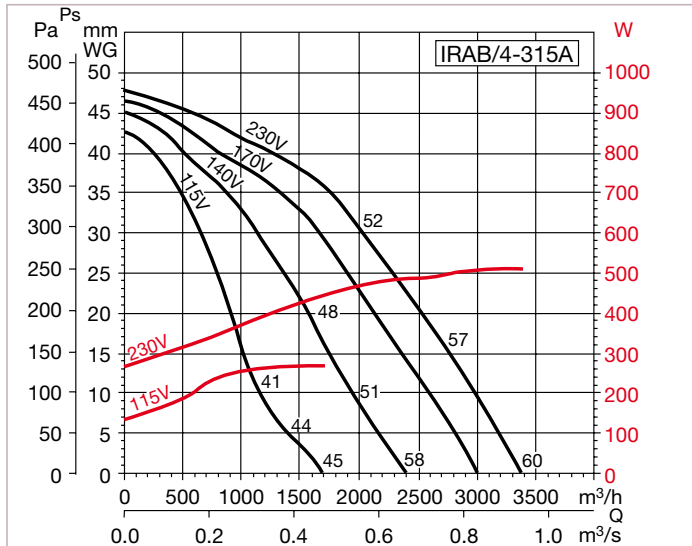
Model IRAT/4			63	125	250	500	1000	2000	4000	8000
400B	Inlet	A	66	73	73	78	76	74	67	61
		B	61	69	68	75	71	68	62	55
		C	61	67	64	69	67	66	61	57
	Outlet	A	65	77	89	91	91	87	81	73
		B	62	74	85	87	86	82	75	68
		C	61	70	80	81	81	77	71	65
	Radiated	A	58	66	65	65	67	67	61	55
		B	53	62	60	62	62	61	56	49
		C	53	60	56	56	58	59	55	51

Model IRAT/4			63	125	250	500	1000	2000	4000	8000
450	Inlet	A	68	78	80	83	82	84	80	83
		B	64	77	76	80	78	77	78	79
		C	63	73	73	77	76	75	77	80
	Outlet	A	69	80	94	95	96	92	85	78
		B	67	78	91	92	93	88	81	74
		C	67	77	87	88	89	85	79	73
	Radiated	A	64	70	75	75	73	74	73	74
		B	60	69	71	72	69	67	71	70
		C	59	65	68	69	67	65	70	71



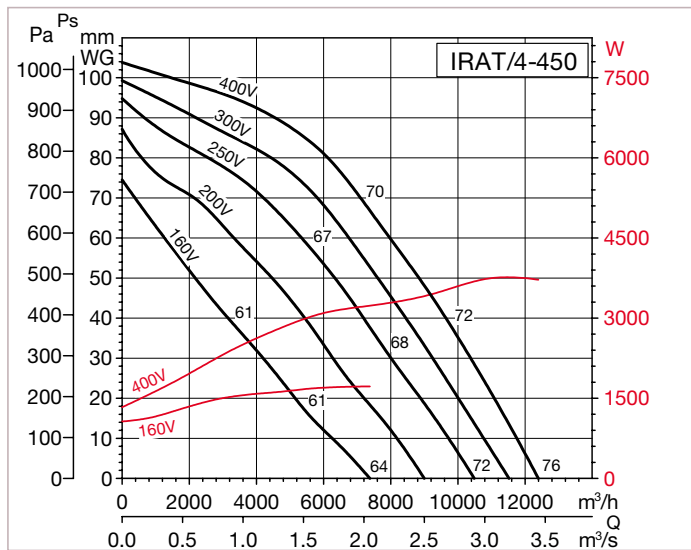
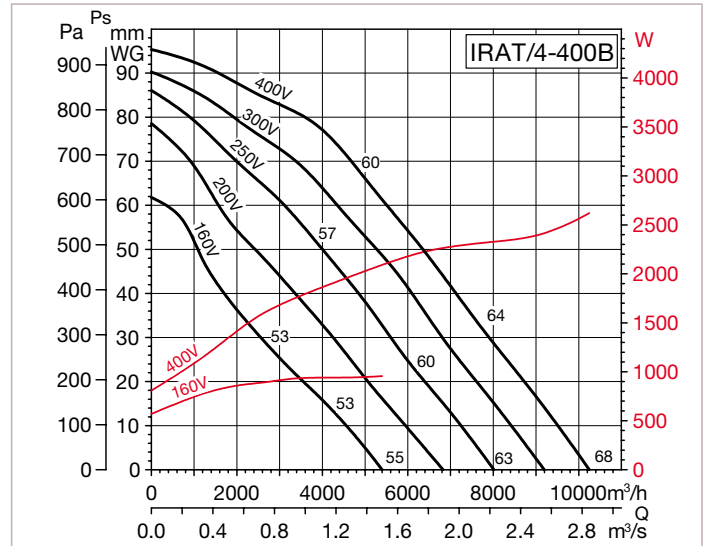
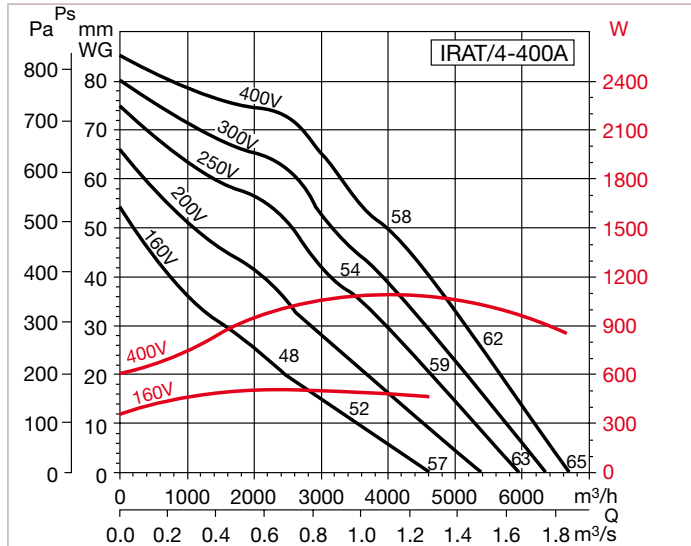
Performance curves

- Q = Air volume in, m³/hr and m³/s.
- Ps = Static pressure in mmWG and Pa.
- Dry air at 20°C and 760 mmHg.
- Performance data in accordance with ISO 5801 and AMCA 210-99 Standards.



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■ Mounting accessories

Table of Accessories

Model	Anti-vibration mount	Duct flange	Flexible connector	Sound attenuator	Defense guard	Damper	Filtration box G4
IRAT-315	ISA	IBR-315	IAE-315	IAA-315	DEF-600x350	IJK-315	IFL-315 G4
IRAT-355	ISA	IBR-355	IAE-355	IAA-355	DEF-700x400	IJK-355	IFL-355 G4
IRAT-400	ISA	IBR-400	IAE-400	IAA-400	DEF-800x500	IJK-400	IFL-400 G4
IRAT-450	ISA	IBR-450	IAE-450	IAA-450	DEF-1000x500	IJK-450	IFL-450 G4

Model	Filtration* box for F5,F6, F7 or F8 filters	Filter F5	Filter F6	Filter F7	Filter F8	Electric heater battery	Water coil
IRAT-315	IFL-315 F	IFR-315 F5	IFR-315 F6	IFR-315 F7	IFR-315 F8	IBE-315/30T	IBW-315
IRAT-355	IFL-355 F	IFR-355 F5	IFR-355 F6	IFR-355 F7	IFR-355 F8	IBE-355/30T	IBW-355
IRAT-400	IFL-400 F	IFR-400 F5	IFR-400 F6	IFR-400 F7	IFR-400 F8	IBE-400/30T	IBW-400
IRAT-450	IFL-450 F	IFR-450 F5	IFR-450 F6	IFR-450 F7	IFR-450 F8	IBE-450/30T	IBW-450



IFL-F
In-line duct bag filter



IBE
Electric Heater Battery



IBR
Rectangular duct Flange



IAE
Rectangular flexible Connector



DEF
Rectangular defense Guard



ISA
Anti-vibration Mounting

(1 ISA = 4 supports)



IAA
Acoustic Attenuator



IBW
Hot water coil



IFL-G4
In-line duct bag filter

For more information see the mounting accessories for direct air fans, behind ILT serie.



■ Electrical accessories



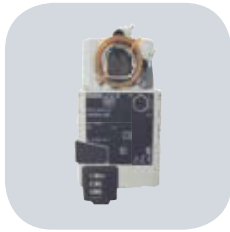
RMB
RMT
Fan speed
Controllers



VFTM IP21
Adjustable frequency
drive for three phase
motors



DPS 2-30
DPS 10-100
Differential pressure
switches:
- DPS 2-30:
from 20Pa to 300Pa
- DPS 10-100:
from 100Pa to 1000Pa



LM-230A
Electrical damper
actuator



TTC-2000
TTC-2000 + TTS-1
Three phase electrical
heater battery controller.
The TTC-2000 needs
an external temperature
sensor to control the
battery (TG-K300 or
TG-R530)



TTC-40F + TTS-4
Three phase electrical
heater battery controller.
The TTC-40F needs an
external temperature
sensor to control the
battery (TG-K300
or TG-R530)



TG-K330
Duct temperature
sensor

TG-R530
Room temperature
sensor

For more information see **ELECTRICAL ACCESSORIES**.

