

## Explosion-Proof Radial Fans – RKDY Series

### For Ducted Air Systems



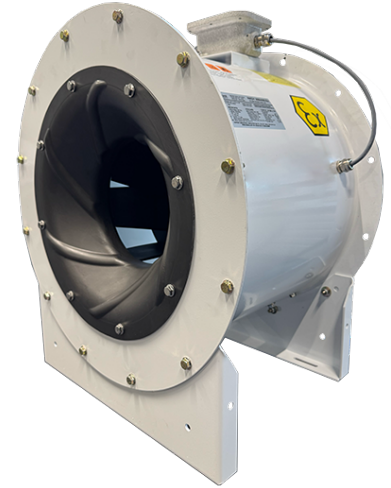
The **RKDY series centrifugal fans** are specially designed for the ventilation of small air volumes through ducted systems. They are the right solution whenever **explosive gases** are present in the exhaust air.

### Typical applications include:

- Natural gas ventilation
- Fume cupboard (fume hood) systems
- Petrochemical plants
- Waste treatment systems
- Painting machines

### Key Features

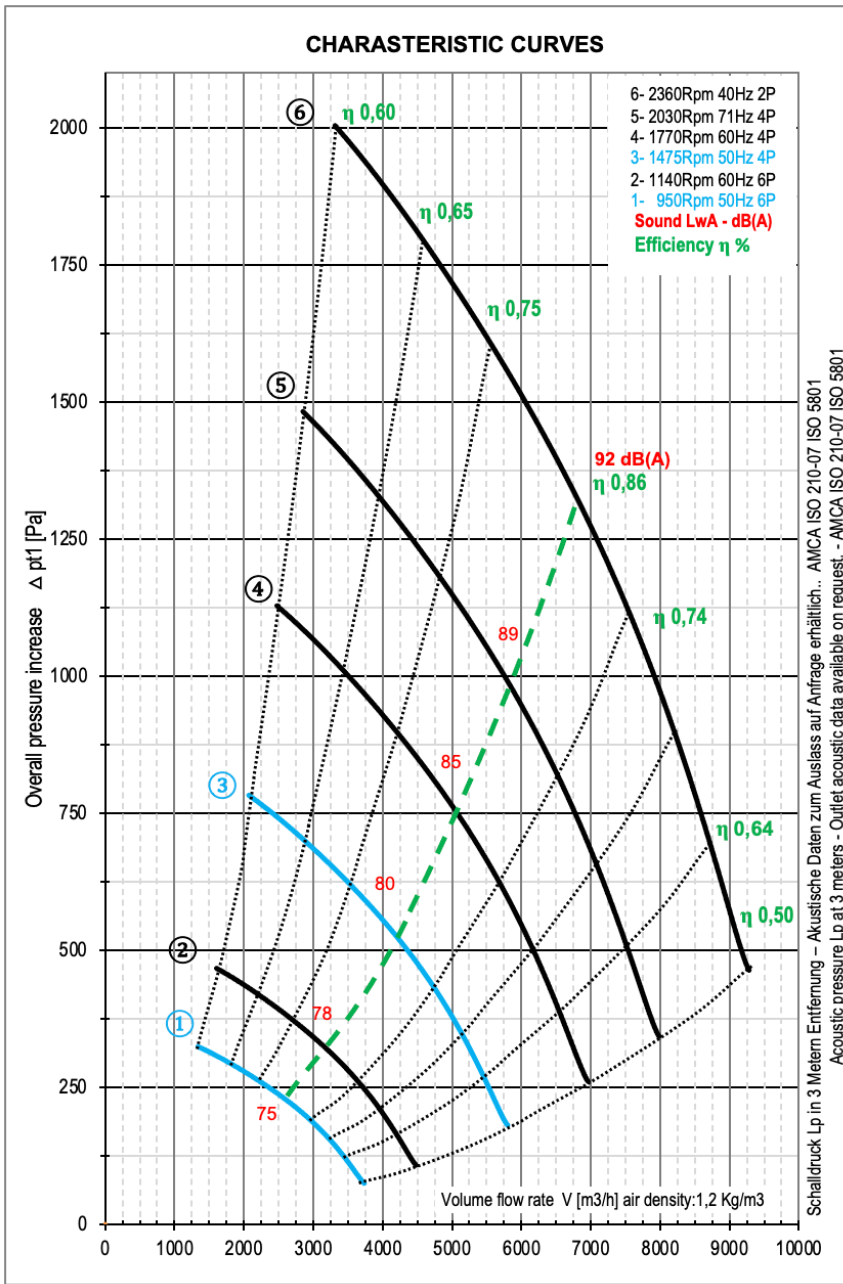
- **Impeller:**
  - Statically and dynamically balanced
  - High efficiency and low-noise operation
  - Aerofoil 3D blade geometry, backward-curved structure
  - Manufactured from PPS-el **anti-static and non-flammable material**
- **Casing:**
  - Made of **Aluminum or Carbon Steel Alloy**
  - Coated with **UV-resistant paint**
  - Suitable for installation at **any mounting angle**
- **Fittings:**
  - All components made of **A4/316 grade stainless steel**
- **Operating Conditions:**
  - Conveyed air temperature: **-20 °C to +55 °C**
  - High-efficiency, fully enclosed electric motor, positioned **inside the airflow**
  - Protection class **IP55/IP65**
  - Easy maintenance
  - **Speed control only via frequency inverter**
- **Explosion-Proof Design:**
  - All models are produced as complete fans with **ATEX certification**
  - Constructed from **anti-static and non-flammable materials**
  - Do not emit smoke during operation
  - **Inlet and outlet connections are made with ATEX-certified flexible hoses**
  - **Electrical connection is provided through an ATEX-certified ON/OFF switch**



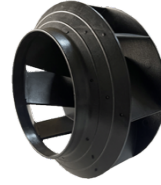
**RKDY series explosion-proof fans** combine **safety, durability, and energy efficiency**, making them the ideal solution for demanding industrial environments.

Model	Sipariş Kodu	Supply	Air Flow	Speed	Motor	Current	Temp.	Weight	
	Code	V	m <sup>3</sup> /h	min <sup>-1</sup>	Kw	Amp	+°C	Kg	
RKDY 45B/4/50.T ③	5454501	400V/50Hz	5850	1450	1,10	2,50	55	43	
RKDY 45B/4/50.M ③	5454502	230V/50Hz	5850	1450	1,10	5,00	55	45	
RKDY 45B/6/50.T ①	5456501	400V/50Hz	3800	950	0,55	2,50	55	43	
Explosion proof / ATEX Version		>> Gas / Ex II 2G h T4-T6 IP65 - (Gas) - Zone1/2			>>Dust / Ex II 2D tb IIIC T135° Db (IP65) – Zone1/2				
RKDY 45B/4/50.Ex ③	5454503	400V/50Hz	5850	1450	1,10	1,58	55	45	
RKDY 45B/4/50.Ex(M)* ③	5454504	230V/50Hz	5850	1450	1,10	3,80	55	48	
RKDY 45B/6/50.Ex ①	5456503	400V/50Hz	3800	950	0,55	0,70	55	43	

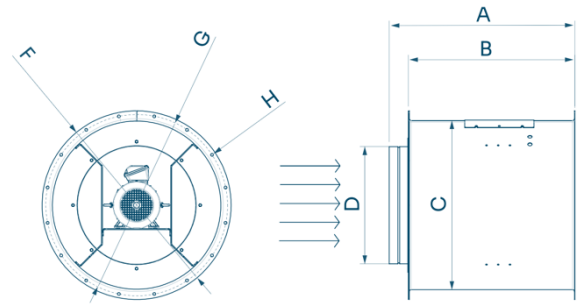
\*\* Only Variable Frequency Inverter 400/230V



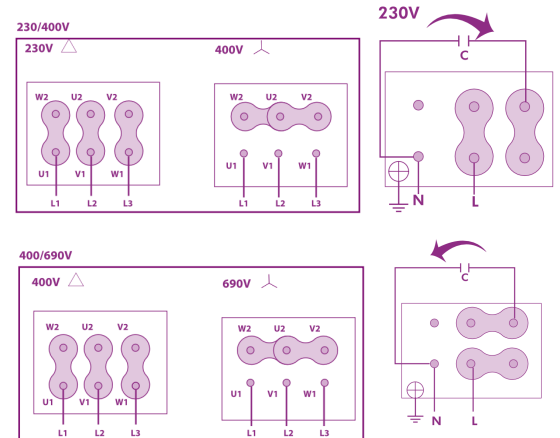
Atex Notification Certificat Number : IEP 22 ATEX N 406  
CE Type Examination Number : IEP 16 ATEX 0402X  
Product Quality Assurance Notification : IEP 25 ATEX Q1643  
**Notified Body Number : 2284**  
ATEX 2014/34/EU - EN 14986 : 2007  
EN 60079-0 : 2012 - EN 13463-1 : 2011  
**ZONE1 - ZONE 2**



Management System  
**ISO 9001:2015**  
ID : 01 100 902038  
www.tuv.com



TYPE	ØD	A	B	C	E	F	G
RKDY 45B	500	550	500	630	Ø12x12	720	690



Model	Speed Rpm	Freq Hz	Pw Kw	Lp dB(A)	Total Pressure $\Delta p_t$ (Pa) / Volume Flow Rate (m <sup>3</sup> /h)												
					50	100	200	300	400	500	600	700	800	900	1000	1100	1250
RKDY 45B/6/50.. ①	950	50Hz	0,55	75	3800	3500	2800	1500									
RKDY 45B/6/60.. ②	1140	60Hz	0,55	78		3800	4200	3500	2500	1000							
RKDY 45B/4/50.. ③	1450	50Hz	1,10	80			5800	5500	4800	4300	3900	3000					
RKDY 45B/4/60.. ④	1770	60Hz	1,50	85				6900	6400	6200	5800	5400	4600	4000	3500		
RKDY 45B/4/71.. ⑤	2030	71Hz	2,20	89				8000	7750	7500	7250	7000	6500	6000	5750	5450	4500

Model	Speed Rpm	Freq Hz	Pw Kw	Lp dB(A)	Total Pressure $\Delta p_t$ (Pa) / Volume Flow Rate (m <sup>3</sup> /h)												
					500	700	800	900	1000	1200	1400	1600	1800	2000	2200	2500	2750
RKDY 45B/2/40.. ⑥	2360	40Hz	4,00	92	9050	8850	8500	8250	8000	7500	6500	5800	4800	3500			

(Direct Coupled) 1,3 and 8 operating points products without speed adjuster

(Direktantrieb) 1,3 und 8 Betriebspunkte Produkte ohne Drehzahlsteller