

NEW

DC Axial Fans

Series 6400 TD TURBOFAN 172 x 150 x 51 mm



- DC electronic fan with 3 phase EC drive and fully integrated operating electronics. For load-dependent speed control with highly intelligent motor management and power and speed reserves which open up completely new areas of application.
- With electronic protection against reverse polarity, locked rotor and overloading.
- Metal fan housing, impeller of fibre- glass reinforced plastic PA.
- Air exhaust over struts. CCW rotational direction looking at rotor.
- Optional Vario-Pro: Highly adaptable software configuration of the fan enables a tailor-made solution to the specific requirements of your applications.
- Electrical connection via leads. Housing with ground lug M4 for M4 x 8 screws.
- 48 V version incl. screws.
- Mass 760 g.

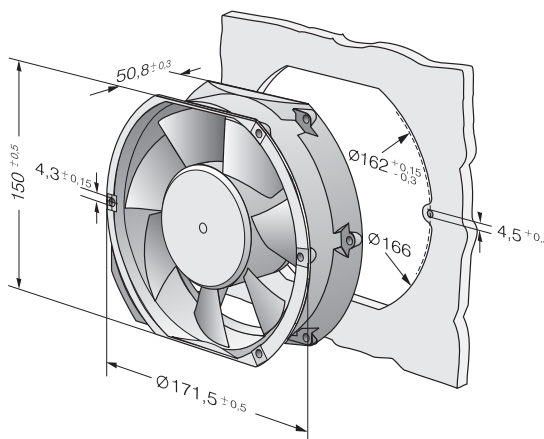
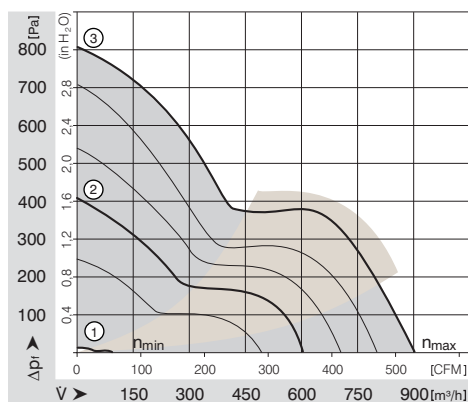
Nominal Data		Air Flow	Air Flow	Nominal Voltage	Voltage Range	Noise		Sinter-Sleeve Bearings Ball Bearings	Power Input	Nominal Speed	Temperature Range	Service Life L ₁₀ at 40 °C	at t _{max}	Curve
Type		m³/h	CFM	V DC	V DC	dB(A)	Bel	□/■	Watt	min ⁻¹	°C	Hours	Hours	
min max	6424 TD...	90	53.0	24	16...28	18	—	■	2.0	800	-20...+60	70 000 / 45 000		1
		600	353.1			65	7.4		50.0	5 100				2
min max	6448 TD...	90	53.0	48	40...55*	18	—	■	2.0	800	-20...+60	70 000 / 45 000		1
		600	353.1			65	7.4		50.0	5 100				2
min max	6448 TDHH...	90	53.0	48	36...72	18	—	■	2.0	800	-20...+60	70 000 / 45 000		1
		900	529.7			78	8.6		163.0	7 500				3

*Fan with extended voltage range available on request.

Models 6424 TD, 6448 TD... and 6448 TDHH... are available in customer-specific, custom-developed variants only.

The data specified here are technically feasible benchmark values. The fans can be specially adapted to your application with signal outputs and control inputs.

For details of the technical possibilities, refer to the chapters on the sensor signal, alarm signal and control inputs.

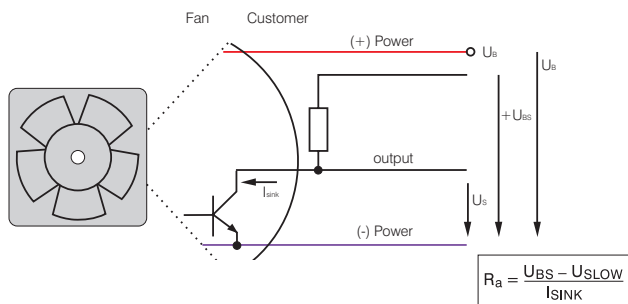


Sensor signal /2 “tacho”



- Speed-proportional rectangular pulse for external speed monitoring of fan motor
- 2 pulses per revolution / 6 pulses per revolution with TURBOFANS.
- Open-Collector signal output
- Extremely wide operating voltage range (5 ... 60 V)
- Easy adaptation to user interface
- Connection via separate lead
- The sensor signal also serves as a major comparison variable for setting and maintaining the desired speed for interactive or controlled cooling with one or several interconnected fans.

Electrical connection

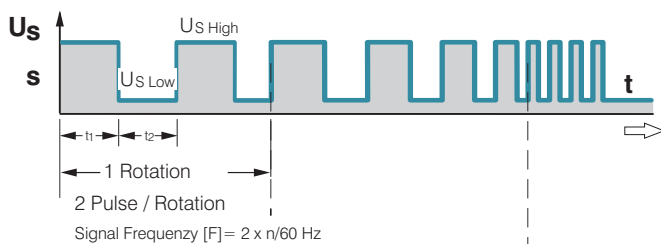


All voltages measured to ground.

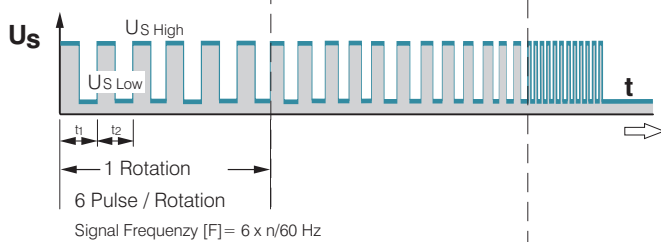
External load resistance R_a / U_s / U_{BS} required.

Signal output voltage

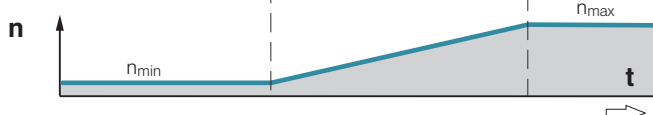
all models except TD-Fans



only TD-Fans



Fan speed



Signal data

	Sensor signal $U_{S \text{ Low}}$	Condition: I_{sink}	Sensor signal $U_{S \text{ High}}$	Condition: I_{source}	Sensor operating voltage U_{BS}	Perm. sink current $I_{\text{sink max}}$	Fan description
Type	V DC	mA	V DC	mA	V DC	mA	Page
250	≤ 0.4	≤ 2	30	0	≤ 30	2	19
400 F	≤ 0.4	1	30	0	≤ 30	≤ 2	20
400	≤ 0.4	1	30	0	≤ 30	≤ 2	21
412 J	≤ 0.4	2	30	0	≤ 30	≤ 4	22
414 J	≤ 0.4	2	30	0	≤ 30	≤ 4	22
500 F	≤ 0.4	1	30	0	≤ 30	≤ 2	23
600 F	≤ 0.4	1	30	0	≤ 30	≤ 2	24
620	≤ 0.4	2	30	0	≤ 30	≤ 4	25
600 N	≤ 0.4	2	30	0	≤ 30	≤ 4	26
600 J	≤ 0.4	2	30	0	≤ 30	≤ 4	28
700 F	≤ 0.4	2	30	0	≤ 30	≤ 4	29
8400 N	≤ 0.4	2	28	0	≤ 28	≤ 4	30
8300	≤ 0.4	2	30	0	≤ 30	≤ 4	32
8200 J	≤ 0.4	2	30	0	≤ 30	≤ 4	33
3400 N	≤ 0.4	2	28	0	≤ 28	≤ 4	34
3300	≤ 0.4	2	30	0	≤ 30	≤ 4	36
3200 J	≤ 0.4	2	30	0	≤ 30	≤ 4	37
4400 F	≤ 0.4	2	30	0	≤ 30	≤ 4	39
4300 N	≤ 0.4	2	30	0	≤ 30	≤ 4	40
4300	≤ 0.4	2	30	0	≤ 30	≤ 4	41
4400	≤ 0.4	2	30	0	≤ 30	≤ 4	43
4212	≤ 0.4	2	30	0	≤ 30	≤ 4	44
4214	≤ 0.4	2	30	0	4-30	≤ 4	44
4218	≤ 0.4	2	30	0	4-30	≤ 4	44
4100 N	≤ 0.4	2	30	0	4-30	≤ 4	45/46
DV 4100	≤ 0.4	2	30	0	≤ 30	≤ 4	47
5200 N	≤ 0.4	2	30	0	4-30	≤ 4	48
DV 5200	≤ 0.4	2	30	0	≤ 30	≤ 4	49
5112 N	≤ 0.4	2	15	0	≤ 5	≤ 20	50
5114 N	≤ 0.4	2	60	0	≤ 60	≤ 20	50
5118 N	≤ 0.4	2	60	0	≤ 60	≤ 20	50
7112 N	≤ 0.4	2	60	0	≤ 60	≤ 20	51
7114 N	≤ 0.4	2	30	0	≤ 30	≤ 20	51
7118 N	≤ 0.4	2	60	0	≤ 60	≤ 20	51

Available on request:

- Galvanically separated sensor signal circuit
- Varying voltage potentials for power and logic circuit.

Signal data		Sensor signal $U_{S, low}$	Condition: I_{sink}	Sensor signal $U_{S, high}$	Condition: I_{source}	Sensor operating voltage U_{SS}	Perm. sink current $I_{sink, max.}$	Fan description
Type	V DC	mA	V DC	mA	V DC	mA	Page	
6224 N	≤ 0.4	8	30	0	≤ 30	≤ 20	53	
6248 N	≤ 0.4	8	60	0	≤ 30	≤ 20	53	
DV 6200	≤ 0.4	2	30	0	≤ 60	≤ 20	55	
6400	≤ 0.4	2	60	0	≤ 60	≤ 20	57	
RL 48	≤ 0.4	2	28	0	4–30	≤ 4	67	
RL 65	≤ 0.4	2	30	0	≤ 30	≤ 4	68	
RL 90 N	≤ 0.4	2	30	0	≤ 30	≤ 4	69	
RLF 100	≤ 0.4	2	30	0	≤ 30	≤ 4	70	
RG 90 N	≤ 0.4	2	30	0	≤ 30	≤ 4	71	
RG 125 N	≤ 0.4	2	30	0	≤ 30	≤ 4	72	
RG 160 N	≤ 0.4	2	30	0	≤ 30	≤ 20	73	
REF 100	≤ 0.4	2	30	0	≤ 30	≤ 4	75	

Attention:

With these fan options, deviations in regard to temperature range, voltage range and power consumption are possible compared with standard fan data.

General spec for 6448TDHH

/2 tachometer spec

Note: The P means this product comes with a PWM speed control lead