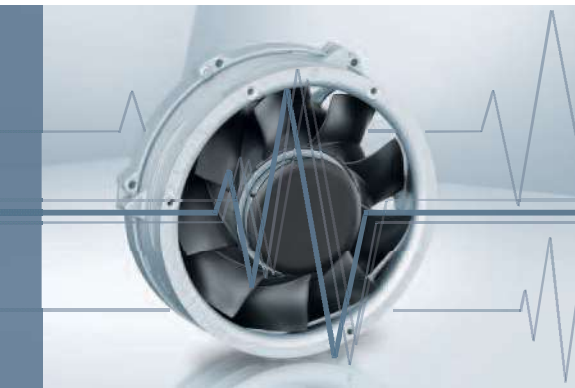
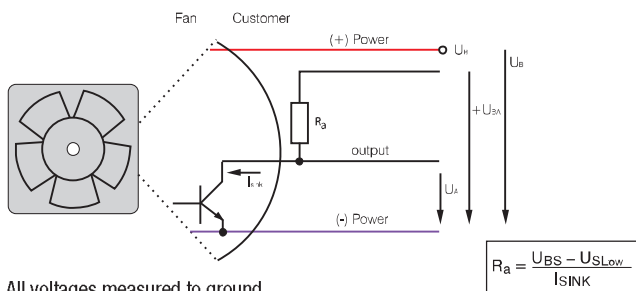


# Speed signal /2



- Speed-proportional, square-wave signal for external monitoring of the fan motor speed
- 2, 3, or 6 pulses per revolution
- Open-collector signal output
- Extremely wide operating voltage range
- Easy adaptation to user interface
- Connection via separate cable
- The sensor signal also serves as a major comparison variable for setting and maintaining the setpoint speed for interactive or controlled cooling with one or more interconnected fans.

## Electrical hookup

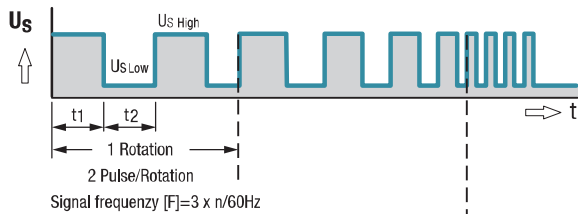


All voltages measured to ground.  
External load resistor  $R_a$  /  $U_S$  /  $U_{BS}$  required.

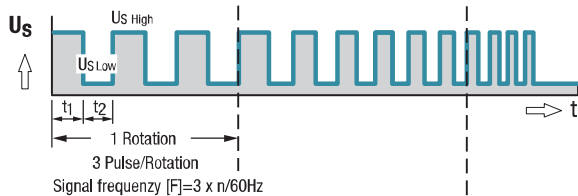
$$R_a = \frac{U_{BS} - U_{S\text{Low}}}{I_{SINK}}$$

## Signal output voltage

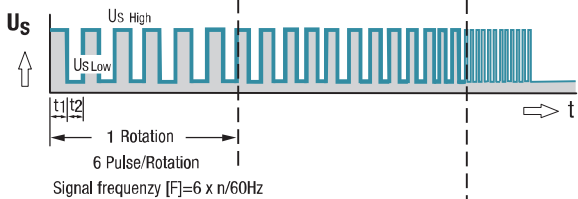
Standard signal for all models (exceptions see below)



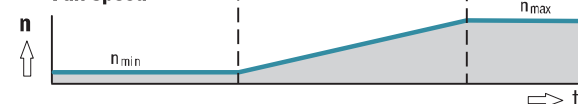
For multi options control input and 4100 NH7 and NH8



All TD Fans e.g. 6300 TD



## Fan speed



Signal data		Speed signal $U_{S\text{Low}}$	Condition: $I_{SINK}$	Speed signal $U_{S\text{High}}$	Condition: $I_{SOURCE}$	Tach operating voltage $U_{BS\text{max}}$	Admissible sink current $I_{SINK\text{max}}$	Pulses per revolution	Fan description Basic type
Type	VDC	mA	VDC	mA	VDC	mA	Page		
250	≤ 0.4	2	≤ 30	0	30	2	2	31	
400 F	≤ 0.4	1	≤ 30	0	30	2	2	32	
400	≤ 0.4	1	≤ 30	0	30	2	2	33	
420 J	≤ 0.4	2	≤ 15	0	15	4	2	34	
500 F	≤ 0.4	1	≤ 30	0	30	2	2	35	
600 F	≤ 0.4	1	≤ 30	0	30	2	2	36	
62C	≤ 0.4	2	≤ 30	0	30	4	2	37	
630 U	≤ 0.4	2	≤ 30	0	30	4	2	38	
600 N	≤ 0.4	2	≤ 28	0	28	4	2	39	
600 J	≤ 0.4	2	≤ 30	0	30	4	2	41	
700 F	≤ 0.4	2	≤ 30	0	30	4	2	42	
8450	≤ 0.4	2	≤ 28	0	28	4	2	43	
8400 N	≤ 0.4	2	≤ 28	0	28	4	2	44	
8400 N VARIOFAN	≤ 0.4	2	≤ 30	0	30	4	2	45	
8300	≤ 0.4	2	≤ 30	0	30	4	2	46	
8200 J	≤ 0.4	2	≤ 30	0	30	4	2	47	
3400 N	≤ 0.4	2	≤ 28	0	28	4	2	48	
3400 N VARIOFAN	≤ 0.4	2	≤ 30	0	30	4	2	49	
3300 N	≤ 0.4	2	≤ 30	0	30	4	2	50	
3212 J / 3214 J	≤ 0.4	2	≤ 30	0	30	4	2	51	
3218 J	≤ 0.4	2	≤ 60	0	60	4	2	51	
3250 J	≤ 0.4	2	≤ 60	0	60	4	3	52	
4412 F / 4414 F	≤ 0.4	2	≤ 30	0	30	4	2	53	
4418 F	≤ 0.4	2	≤ 60	0	60	4	2	53	
4400 FN	≤ 0.4	2	≤ 30	0	30	4	2	55	
4312 / 4314	≤ 0.4	2	≤ 30	0	30	4	2	56	
4318	≤ 0.4	2	≤ 60	0	60	4	2	56	
4312 / 4314 VARIOFAN	≤ 0.4	2	≤ 30	0	30	4	2	57	
4318 VARIOFAN	≤ 0.4	2	≤ 60	0	60	4	2	57	
4400	≤ 0.4	2	≤ 30	0	30	4	2	58/59	
4100 N	≤ 0.4	2	≤ 30	0	30	4	2	60	
4100 NHH...NHC	≤ 0.4	2	≤ 60	0	60	10	2	61	
4100 NH7...NH8	≤ 0.4	2	≤ 60	0	60	20	3	62	
DV 4100	≤ 0.4	2	≤ 30	0	30	4	2	63	
5200 N	≤ 0.4	2	≤ 30	0	30	4	2	64	
DV 5200	≤ 0.4	2	≤ 30	0	30	4	2	65	

Subject to change

**Available on request:**

- Electrically isolated speed signal circuit
- Varying voltage potentials for power and logic circuit

Signal data		Speed signal U <sub>S</sub> Low	Condition: I <sub>sink</sub>	Speed signal U <sub>S</sub> High	Condition: I <sub>source</sub>	Tach operating voltage U <sub>BS</sub> max.	Admissible sink current I <sub>sink</sub> max.	Pulses per revolution	Fan description Basic type
Type	VDC	mA	VDC	mA	VDC	mA		Page	
5112 N	≤ 0.4	2	≤ 15	0	5	20	2	66	
5114 N / 5118 N	≤ 0.4	2	≤ 60	0	60	20	2	66	
5300	≤ 0.4	2	≤ 60	0	60	4	2	67	
5300 TD	≤ 0.4	2	≤ 60	0	60	20	6	68	
7112 N / 7118 N	≤ 0.4	2	≤ 60	0	60	20	2	69	
7114 N	≤ 0.4	2	≤ 30	0	30	20	2	69	
7200 N	≤ 0.4	2	≤ 15	0	15	20	2	70	
6400	≤ 0.4	2	≤ 60	0	60	20	2	71	
6300 ID	≤ 0.4	2	≤ 60	0	60	20	6	75	
6300 N	≤ 0.4	2	≤ 60	0	60	20	6	76	
6300 NTD	≤ 0.4	2	≤ 60	0	60	20	6	77	
6300	≤ 0.4	2	≤ 60	0	60	20	2	78	
DV 6300 ID	≤ 0.4	2	≤ 60	0	60	20	6	80	
2200 FTD	≤ 0.4	2	≤ 60	0	60	20	6	81	
RL 48	≤ 0.4	2	≤ 30	0	30	4	2	97	
RL 65	≤ 0.4	2	≤ 30	0	30	4	2	98	
RL 90 N	≤ 0.4	2	≤ 30	0	30	4	2	99	
RLF 100	≤ 0.4	2	≤ 30	0	30	4	2	100	
RG 90 N	≤ 0.4	2	≤ 30	0	30	4	2	101	
RG 125 N	≤ 0.4	2	≤ 30	0	30	4	2	102	
RG 140 N	≤ 0.4	3	≤ 60	0	60	4	2	103	
RG 160 N	≤ 0.4	2	≤ 30	0	30	20	2	104	
RG 160 NTD	≤ 0.4	2	≤ 60	0	60	20	6	105	
RG 190 TD	≤ 0.4	2	≤ 60	0	60	20	6	106	
RG 220 TD	≤ 0.4	2	≤ 60	0	60	20	6	107	
RG 225 TD	≤ 0.4	2	≤ 60	0	60	20	6	108	
RET 97 TD	≤ 0.4	2	≤ 60	0	60	20	6	109	
REF 100	≤ 0.4	2	≤ 30	0	30	4	2	110	
RER 120 TD	≤ 0.4	2	≤ 60	0	60	20	6	112	
RER 133 TD	≤ 0.4	2	≤ 60	0	60	20	6	117	
RER 160 NTD	≤ 0.4	2	≤ 60	0	60	20	6	119	
REF 175 TD	≤ 0.4	2	≤ 60	0	60	20	6	120	
RER 175 TD	≤ 0.4	2	≤ 60	0	60	20	6	121	
RER 190 TD	≤ 0.4	2	≤ 60	0	60	20	6	122	
RER 220 TD	≤ 0.4	2	≤ 60	0	60	20	6	128	
RER 225 TD	≤ 0.4	2	≤ 60	0	60	20	6	129	

Subject to change

**Note:**

Fans that come with these fan specials could have variations with respect to the temperature range, voltage range, and power consumption compared to standard fans without specials.