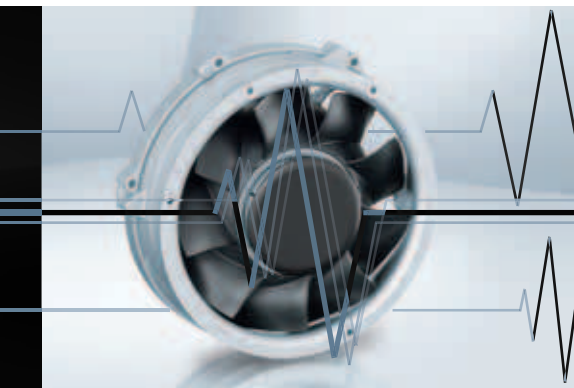
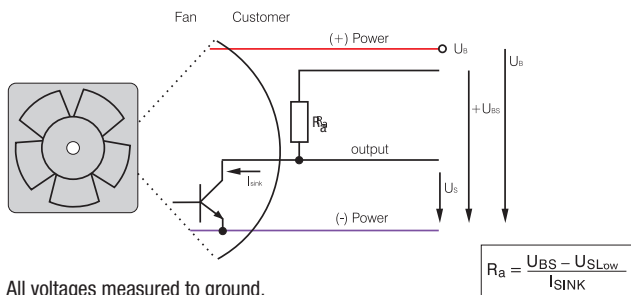


# Speed signal /2



- Speed-proportional rectangular pulse for external speed monitoring of fan motor
- 2, 3 or 6 pulses per revolution
- Open collector signal output
- Extremely wide operating voltage range
- Easy adaptation to user interface
- Connection via separate lead
- 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 several interconnected fans.

## Electrical connection

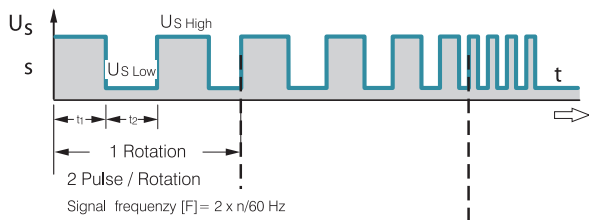


All voltages measured to ground.  
External load resistor  $R_a$  /  $U_S$  /  $U_{BS}$  required.

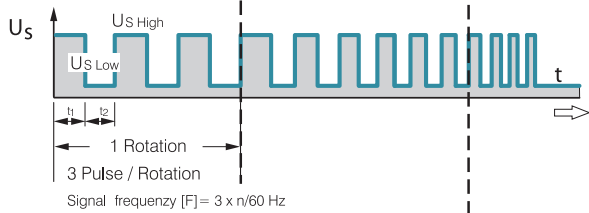
$$R_a = \frac{U_{BS} - U_{S\text{Low}}}{I_{SINK}}$$

## Signal output voltage

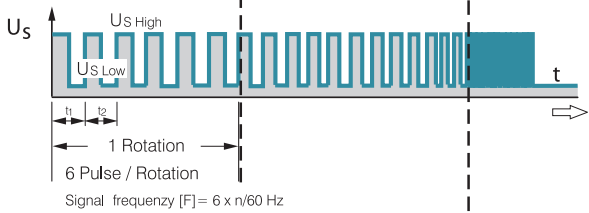
Standard signal for all models (exceptions see below)



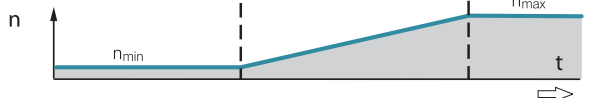
only for 4100 NH7 and NH8



Alle TD Lüfter. Bsp.: 6400 TD



## Fan Speed



Signal data	Speed signal $U_{S\text{Low}}$		Condition: $I_{SINK}$		Speed signal $U_{S\text{High}}$		Condition: $I_{SOURCE}$		Sensor operating voltage $U_{BS\text{max}}$		Perm. sink current $I_{SINK\text{max}}$		Pulses per revolution		Fan description	
	Type	VDC	mA	VDC	mA	VDC	mA	VDC	mA	mA	mA	Page	Basic type			
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								
620	≤ 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	≤ 0,4	2	≤ 30	0	30	4	2	50								
3300 N	≤ 0,4	2	≤ 30	0	30	4	2	51								
3212 J / 3214 J	≤ 0,4	2	≤ 30	0	30	4	2	52								
3218 J	≤ 0,4	2	≤ 60	0	60	4	2	52								
3250 J	≤ 0,4	2	≤ 60	0	60	4	3	53								
4412 F / 4414 F	≤ 0,4	2	≤ 30	0	30	4	2	54								
4418 F	≤ 0,4	2	≤ 60	0	60	4	2	54								
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...NH6	≤ 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								

Subject to alternations

**Available on request:**

- Electrically isolated sensor and 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>	Sensor operating voltage U <sub>GS</sub> max.	Perm. sink current I <sub>sink</sub> max.	Pulses per revolution	Fan description Basic type
Type	VDC	mA	VDC	mA	VDC	mA		Page
5200 N	≤ 0,4	2	≤ 30	0	30	4	2	64
DV 5200	≤ 0,4	2	≤ 30	0	30	4	2	65
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	≤ 72	0	72	4	2	67
5300 TD	≤ 0,4	2	≤ 72	0	72	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
6300	≤ 0,4	2	≤ 72	0	72	20	2	72
6300 TD	≤ 0,4	2	≤ 72	0	72	20	6	73/74
DV 6300	≤ 0,4	2	≤ 72	0	72	20	6	75
6400	≤ 0,4	2	≤ 60	0	60	20	2	76
2200 FTD	≤ 0,4	2	≤ 72	0	72	20	6	80
RL 48	≤ 0,4	2	≤ 30	0	30	4	2	95
RL 65	≤ 0,4	2	≤ 30	0	30	4	2	96
RL 90 N	≤ 0,4	2	≤ 30	0	30	4	2	97
RLF 100	≤ 0,4	2	≤ 30	0	30	4	2	98
RG 90 N	≤ 0,4	2	≤ 30	0	30	4	2	99
RG 125 N	≤ 0,4	2	≤ 30	0	30	4	2	100
RG 160 N	≤ 0,4	2	≤ 30	0	30	20	2	101
RG 160 NTD	≤ 0,4	2	≤ 60	0	60	20	6	102
RG 190 TD	≤ 0,4	2	≤ 72	0	72	20	6	103
RG 220 TD	≤ 0,4	2	≤ 72	0	72	20	6	104
RG 225 TD	≤ 0,4	2	≤ 72	0	72	20	6	105
RET 97 TD	≤ 0,4	2	≤ 72	0	72	20	6	106
REF 100	≤ 0,4	2	≤ 30	0	30	4	2	107
RER 120 TD	≤ 0,4	2	≤ 72	0	72	20	6	109
RER 133 TD	≤ 0,4	2	≤ 72	0	72	20	6	113
RER 160 NTD	≤ 0,4	2	≤ 60	0	60	20	6	115
REF 175 TD	≤ 0,4	2	≤ 72	0	72	20	6	116
RER 175 TD	≤ 0,4	2	≤ 72	0	72	20	6	117
RER 190 TD	≤ 0,4	2	≤ 72	0	72	20	6	118
RER 220 TD	≤ 0,4	2	≤ 72	0	72	20	6	124
RER 225 TD	≤ 0,4	2	≤ 72	0	72	20	6	125

Subject to alternations

**Note:**

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