

DOCUMENTATION

for sample(s) of fan

per SKL

6448 / 2TDP - 378

PAPST internal order No.: 632142 00

July 31. 2001

with : Commutation circuit
 Tacho /2

Scope:

Nominal values

PWM / speed diagram

Specification Tachometer Output signal

Connection diagram

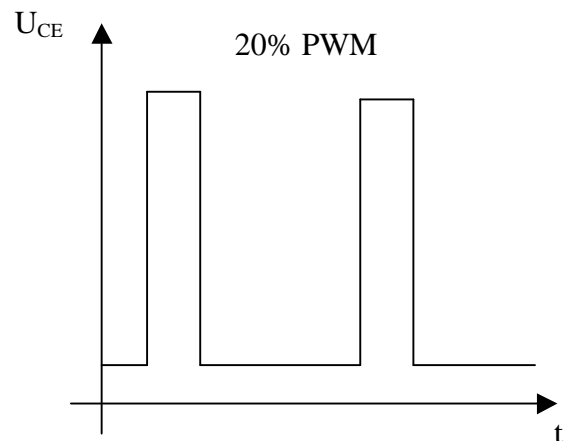
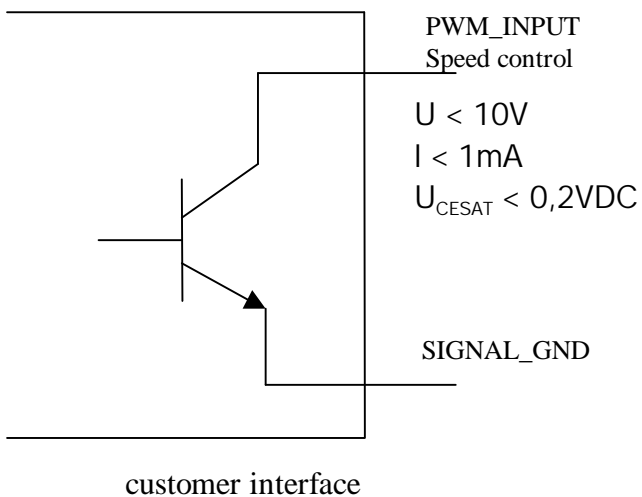
Remark:

Nominal values of fans

(6448 / 2TDP-3780)

Commutation circuit :

Nominal voltage:	$U_N = 48 \text{ V DC}$
Voltage range:	$U = (36 \dots 72) \text{ V DC}$
Current consumption:	$I_N \sim 1,0 \text{ A}$
Speed:	$n_N \sim 5100 \text{ rpm}$
Temperature range:	$\vartheta_{\text{amb}} = (-20 \dots 60) \text{ }^\circ\text{C}$
PWM input signal:	open collector $f = 2 \text{ kHz} \pm 20\%$



Sensor specification (/ 2)

(six pulses per revolution)

Open collector

Low

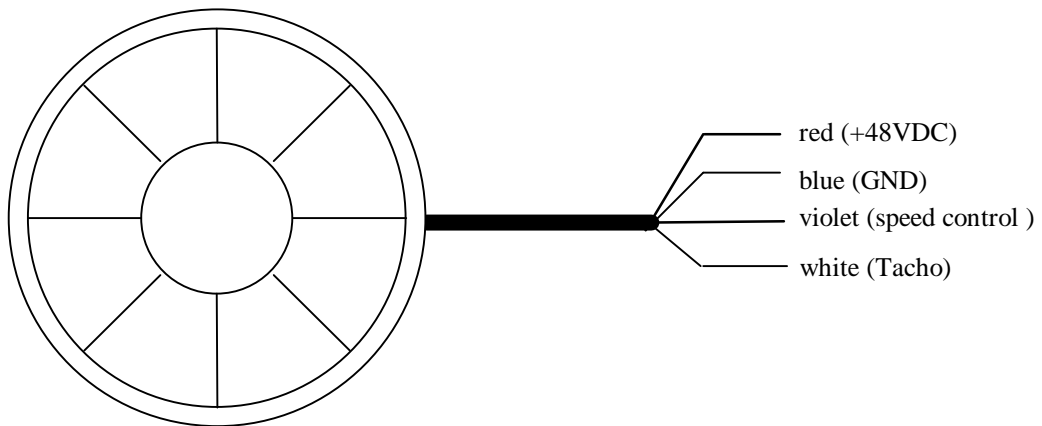
$$V_{S\text{ Low}} \leq 0,4\text{ V}$$
$$@ I_{\text{sink}} = 2\text{mA}$$

$$I_{\text{sink (max.)}} = 20\text{ mA}$$

High

$$V_{\text{CEmax}} \leq 40\text{ V}$$

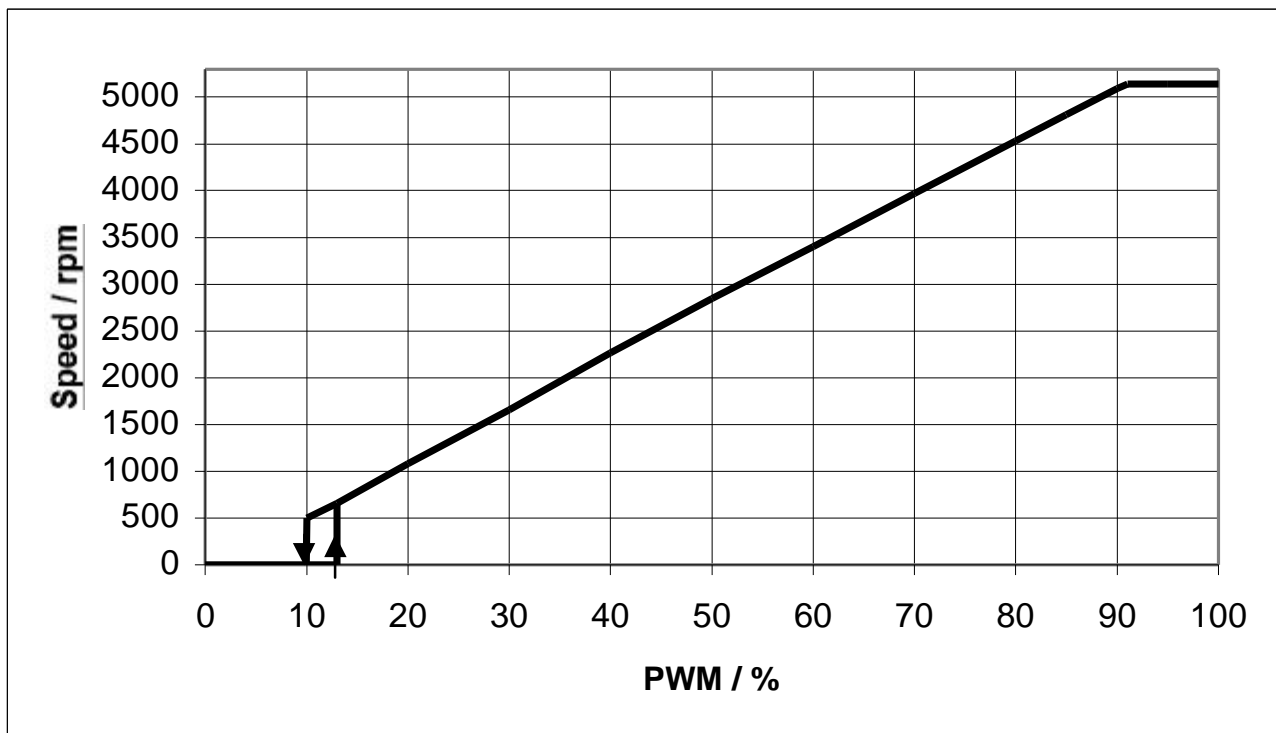
Connection diagram :



Lead	Description
Red	+48 V DC
Blue	GND 0 V
Violet	Speed control
White	Tacho

Speed-PWM

PWM [%] (f=500 Hz)	Speed [rpm]
100	5140
95	5140
91	5140
90	5090
85	4795
80	4510
70	3970
60	3405
50	2870
40	2265
30	1660
20	1080
13	660
10	0
5	0
0	0
10	Fan off (500)
13	start up (660)



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