

D O C U M E N T A T I O N

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

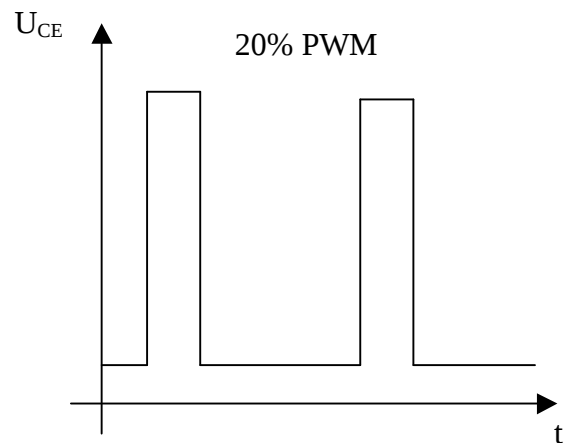
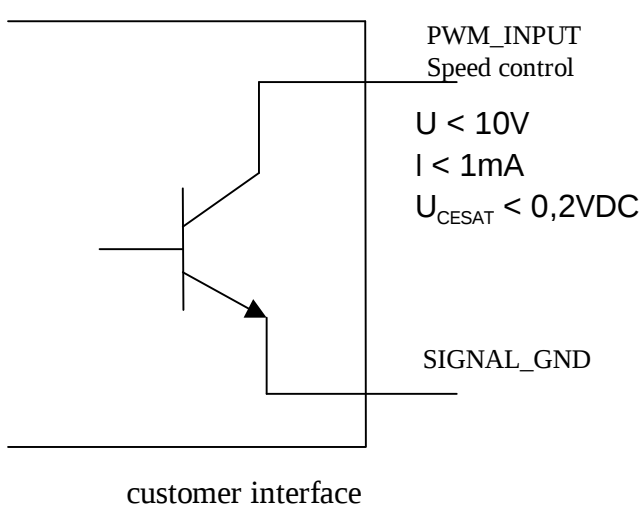
Remark:

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

$$V_{S\ Low} \leq 0,4\ V$$

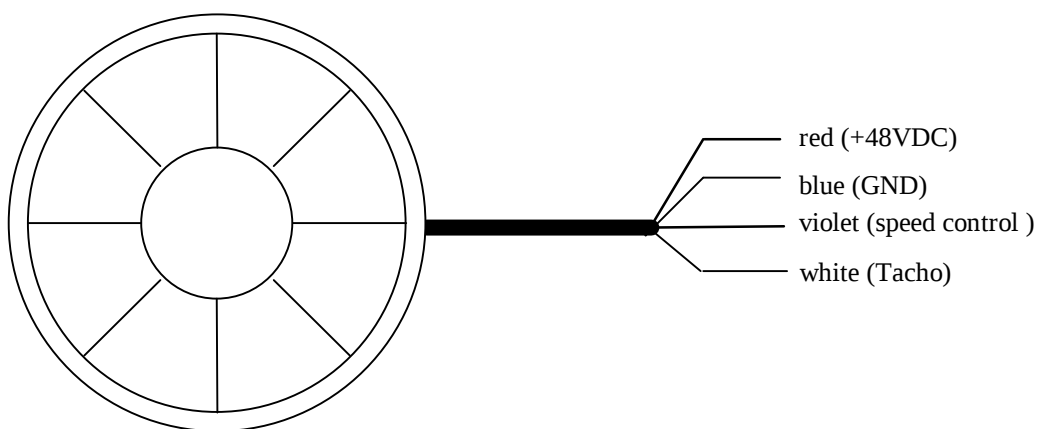
$$@\ I_{sink} = 2mA$$

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

High

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

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)

