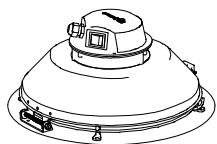
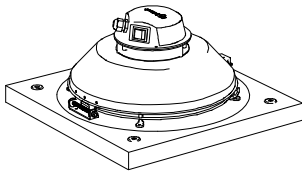
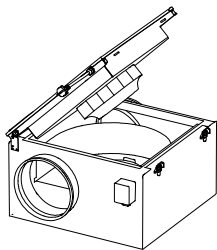
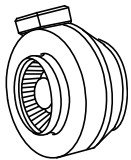
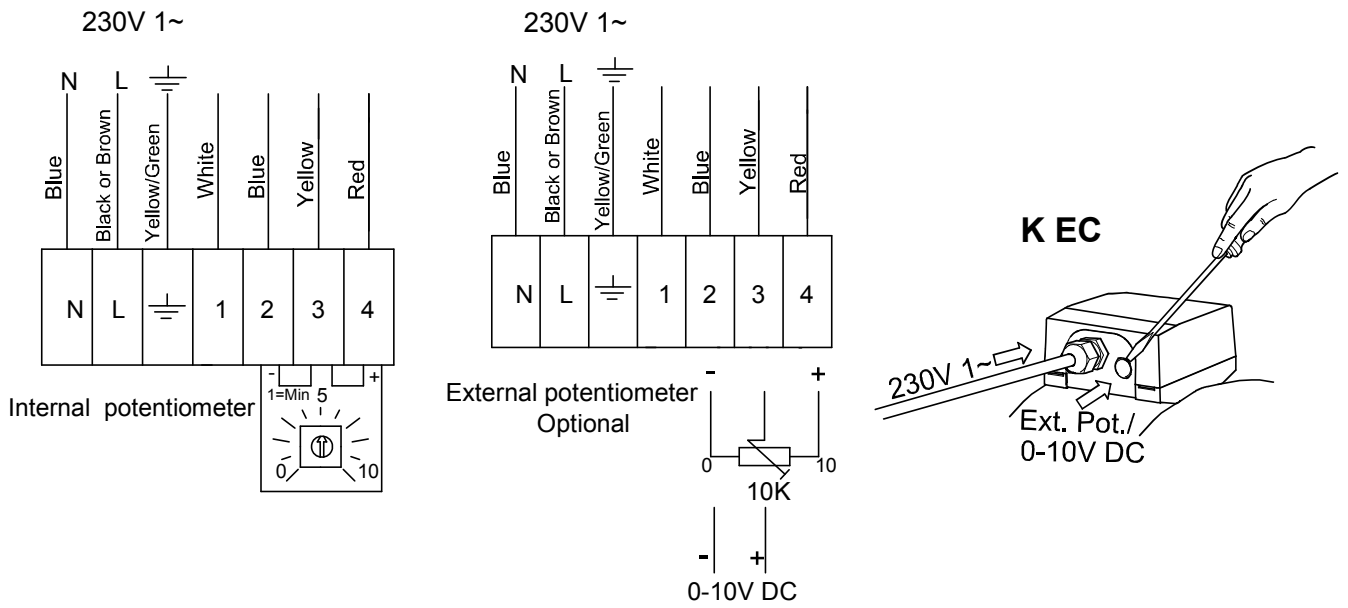


K EC, KVKE EC, TFSR EC, TFSK EC, KVO EC, KD EC, RS EC, RSI EC, KV DUO EC

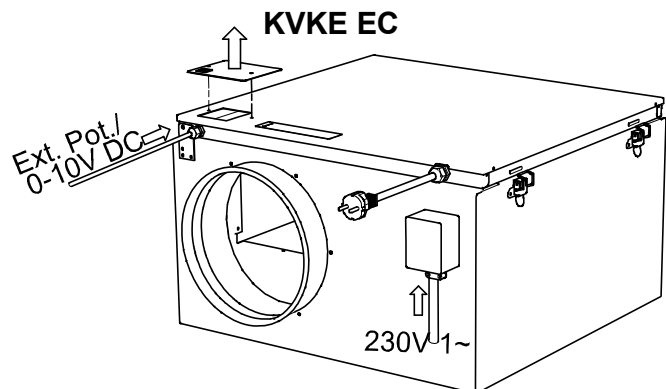
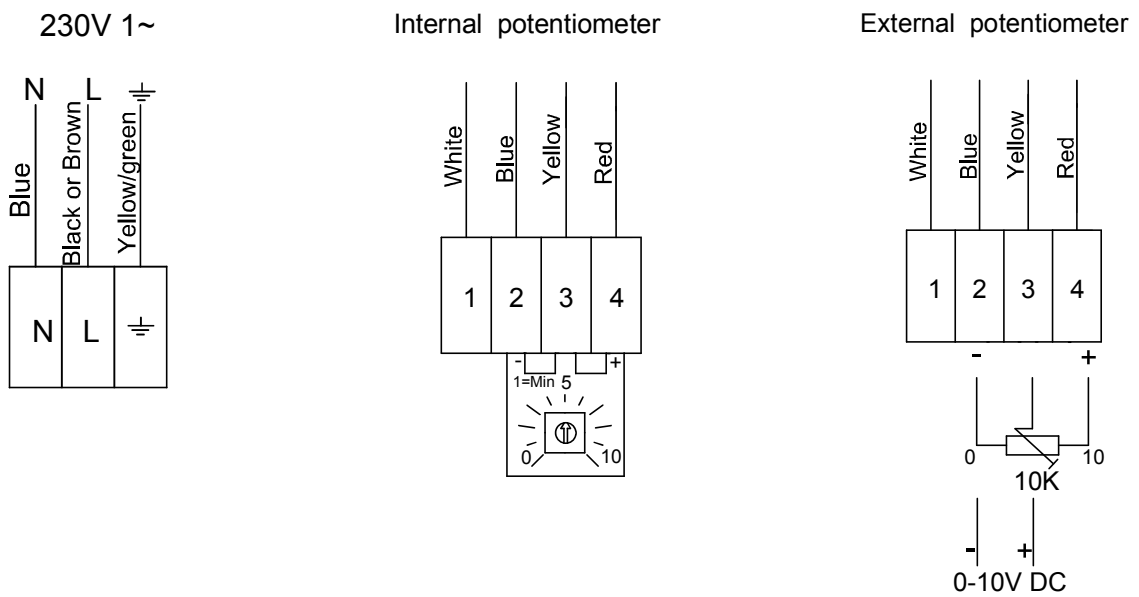


GB	Operation and maintenance instructions	27
SE	Drift och underhållsinstruktion	30
DE	Betriebsanleitung	33
DK	Drifts- og vedligeholdelsesvejledning	36
ES	Instrucciones de uso y mantenimiento	39
EE	Käitamis- ja hooldusjuhised	42
FI	Käyttö- ja huolto-ohjeet	45
IT	Istruzioni di funzionamento e manutenzione	47
LT	Naudojimo ir techninės priežiūros instrukcijos	51
LV	Lietošanas un montāžas instrukcija	54
NL	Gebruiks- en onderhoudsinstructies	57
NO	Drifts- og vedlikeholdsanvisning	60
PL	Instrukcja obsługi i konserwacji	63
RU	Руководство по эксплуатации и техническому обслуживанию	66
SK	Pokyny týkajúce sa prevádzky a údržby	69
SI	Navodila za uporabo in vzdrževanje	72
FR	Instructions d'utilisation et d'entretien	75
PT	Instruções de operação e manutenção	78
AR	81	تعليمات التشغيل والصيانة

K EC, RS 30-15 EC, RS 40-25 EC

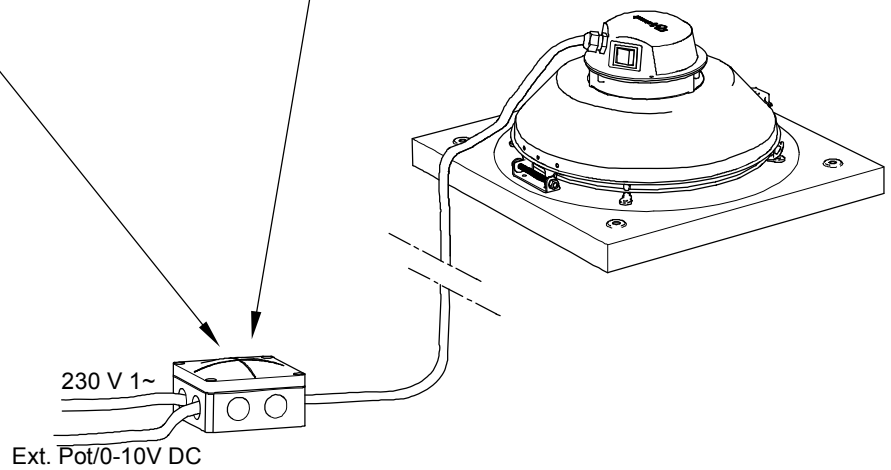
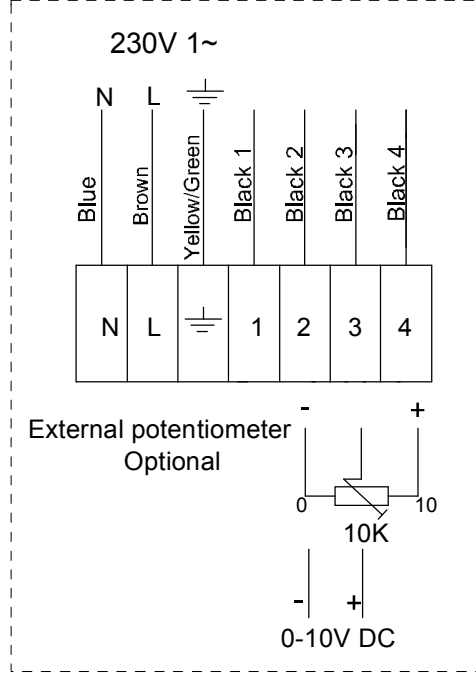
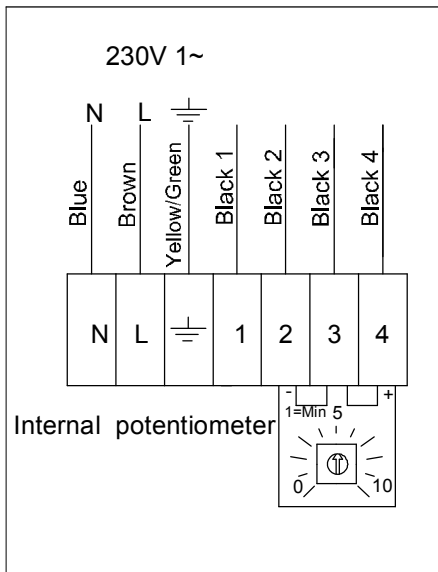


KVKE EC

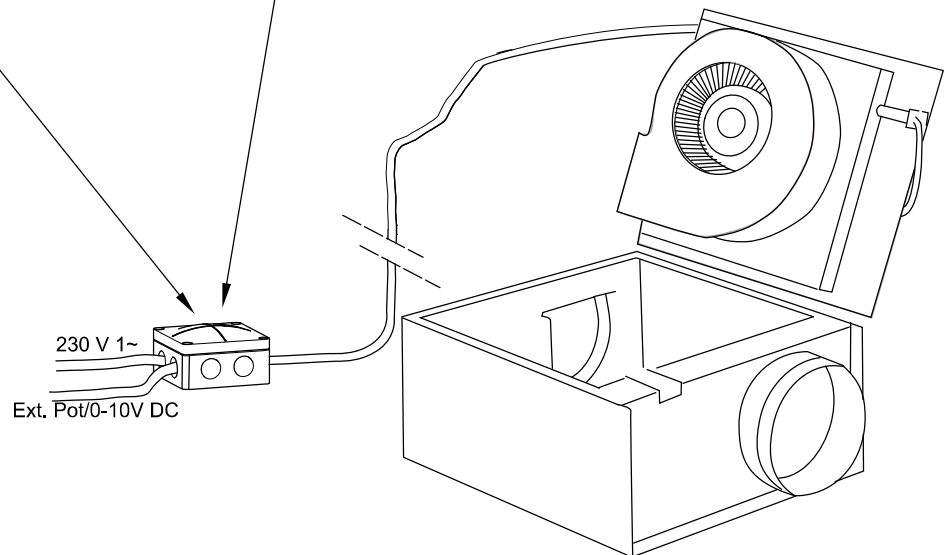
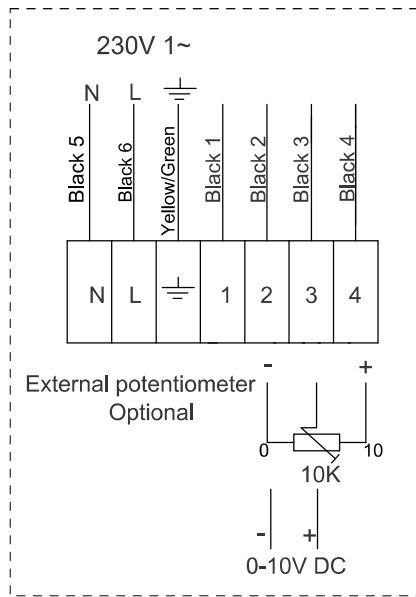
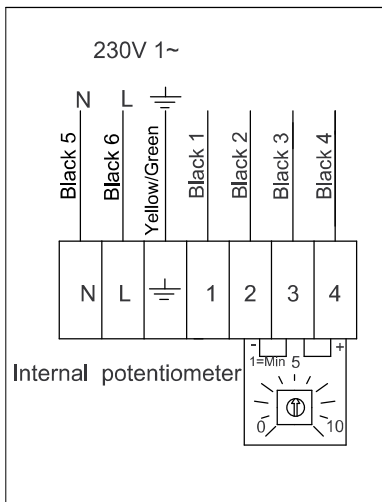


No.	Description
1	Tach output, I_{sink} max 10mA
2	GND
3	Control input 0-10 VDC/PWM
4	Output 10 VDC max 1.1 mA

TF SR/TFSK EC

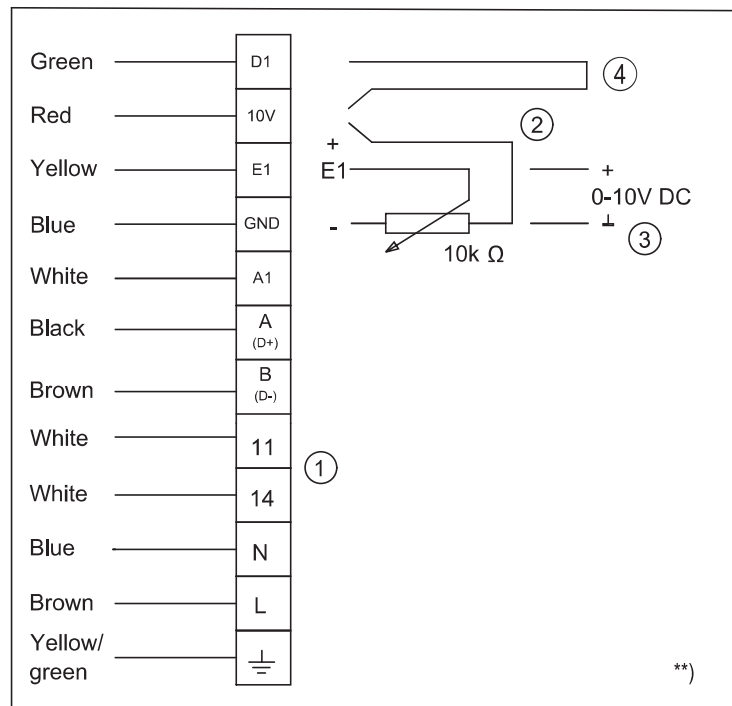
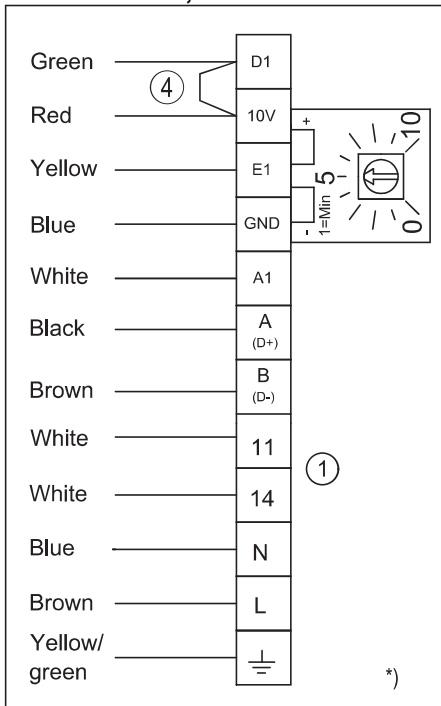


KVO EC



KD EC, RS EC, RSI EC

For KD EC 315, 355

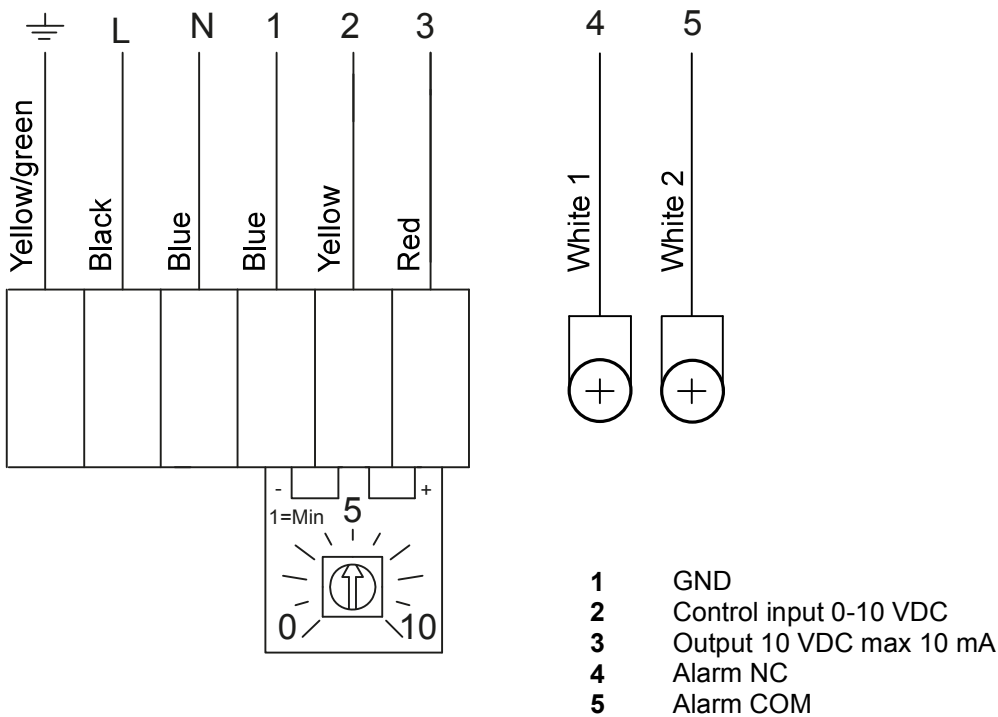


*) Internal potentiometer

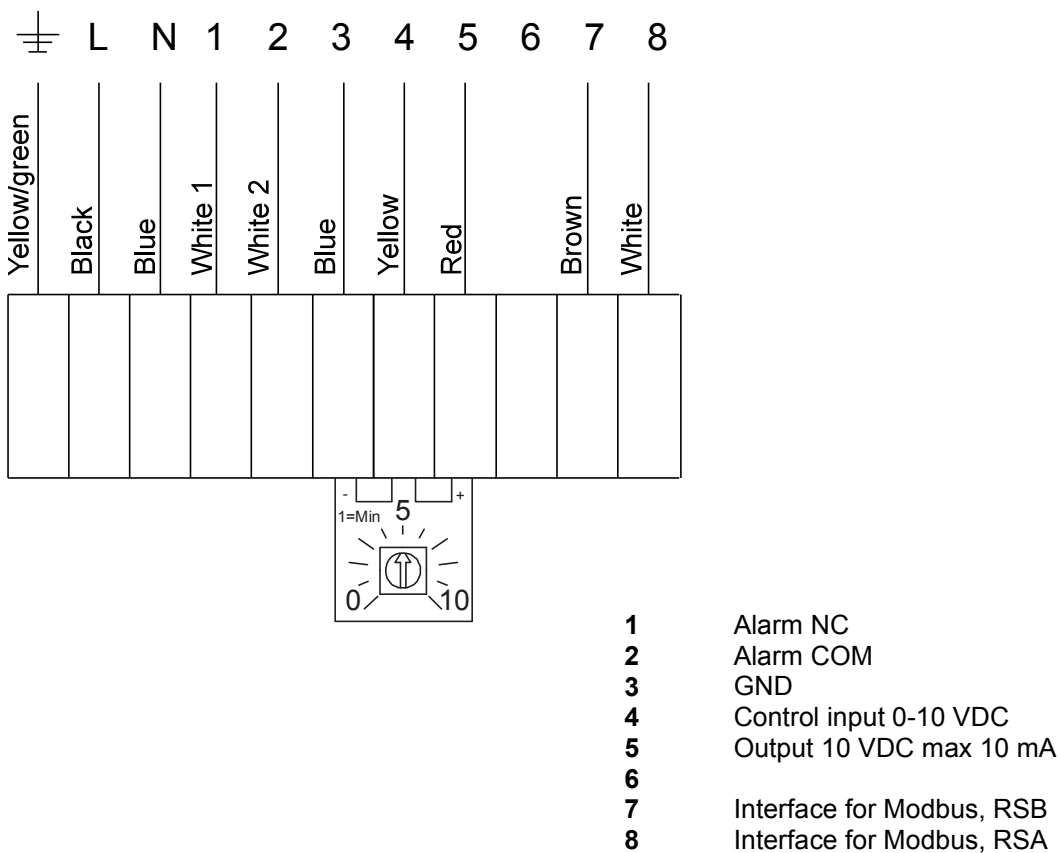
***) External speed setting

- 1 11 & 14 = Alarm
For operation the relay is energized, connections "11" and "14" are bridged.
For fault the relay is de-energized (Diagnostics/faults).
Contact rating max. AC 250V 2A.
- 2 External potentiometer
- 3 External input DC 0...10V
- 4 External ON / OFF control via potential free contact

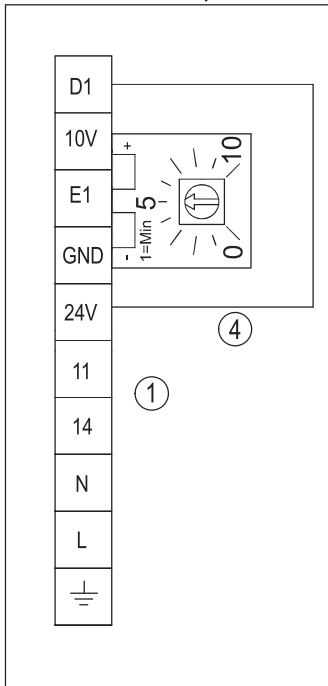
For RS 50-25 EC



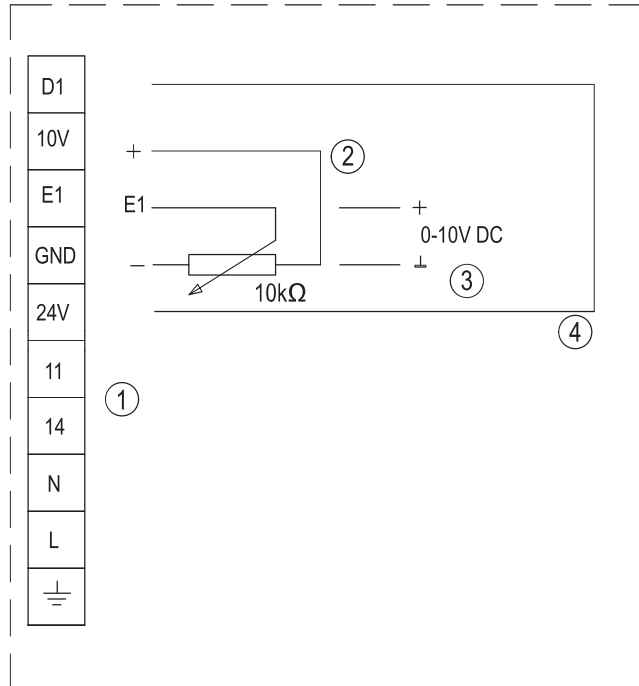
For RS 60-35 EC, RSI 60-35 EC



For KD EC 400E, RS EC 70-40, RSI EC 70-40

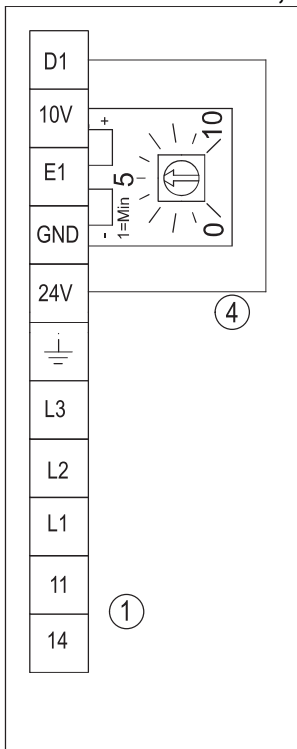


Internal potentiometer

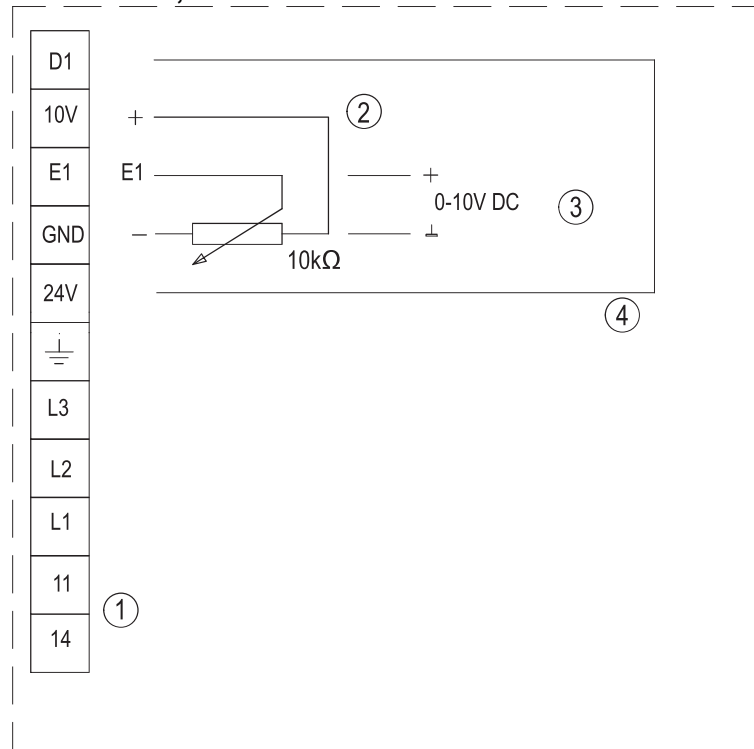


External speed setting

For KD EC 400D-500D, RS EC 80-50-100-50, RSI EC 80-50-100-50



Internal potentiometer

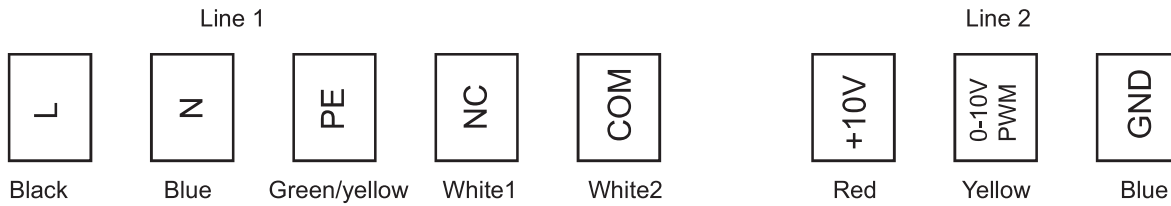


External speed setting

- 1** 11 & 14 = Alarm
For operation the relay is energized, connections "11" and "14" are bridged.
For fault the relay is de-energized (Diagnostics/faults).
Contact rating max. AC 250V 2A.
- 2** External potentiometer
- 3** External input DC 0...10V
- 4** External ON / OFF control via potential free contact

KBT EC

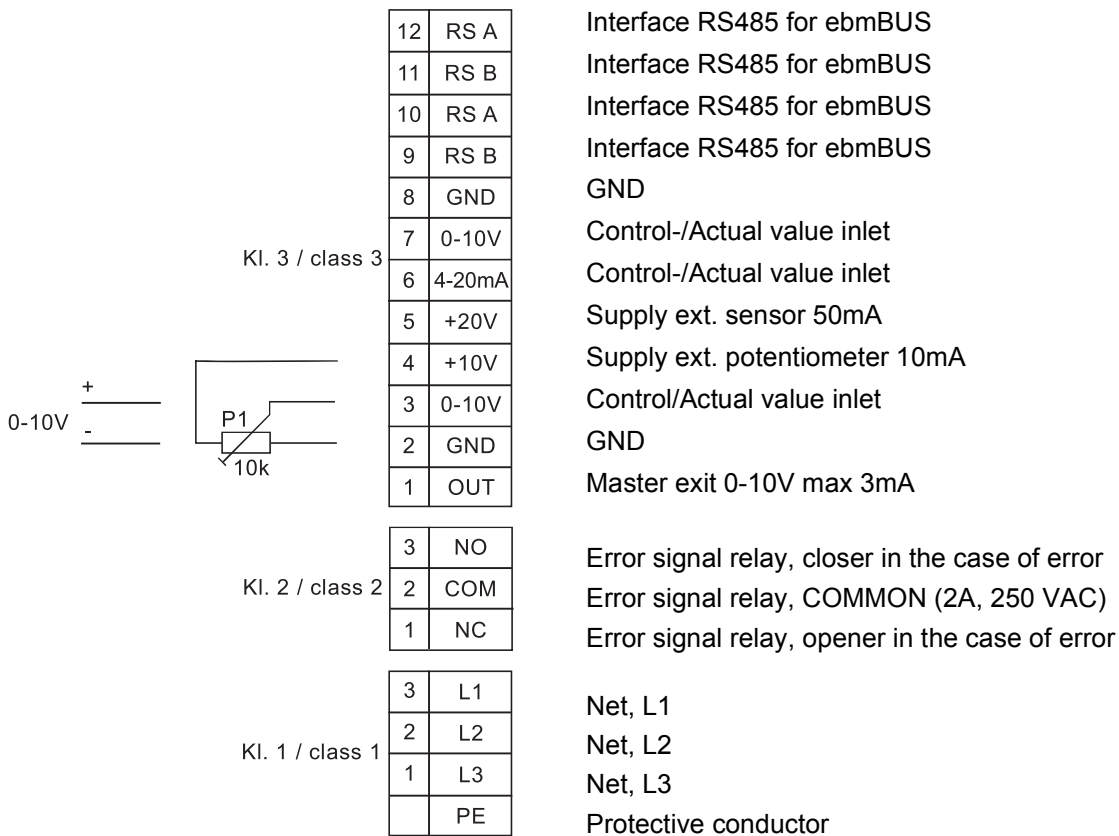
For KBT 160EC



Line	Connection	Colour	Assignment/function
1	L	black	Mains 50/60 Hz, phase
	N	blue	Mains 50/60 Hz, neutral
	PE	green/yellow	Protective earth
	NC	white1	Alarm relay, break for failure
	COM	white2	Alarm relay, COMMON

Line	Connection	Colour	Assignment/function
2	+10V	red	Voltage output +10V max 1.1 mA
	0-10V/PWM	yellow	Control input (impedance 100 kΩ)
	GND	blue	Protective earth

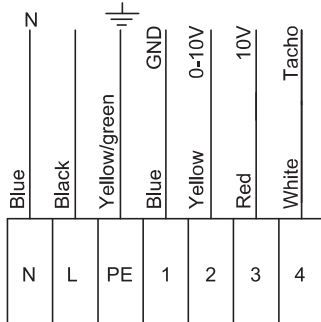
For KBT 180-250EC



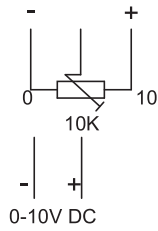
KV DUO EC

For KV DUO 150-315 EC

230V 1~

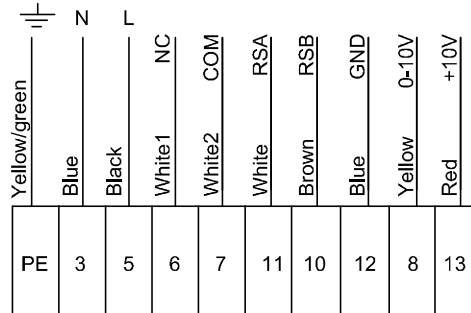


External potentiometer
Optional

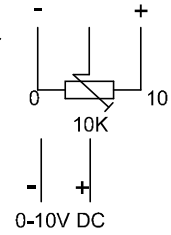


For KV DUO 400 EC

230V 1~

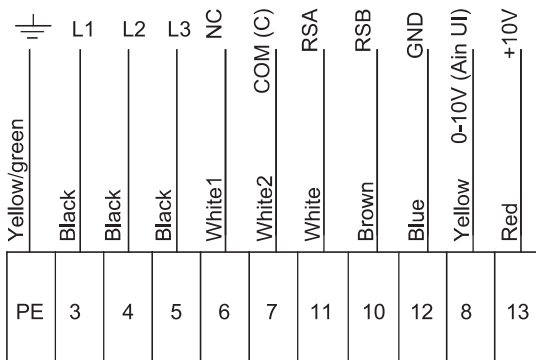


External potentiometer
Optional

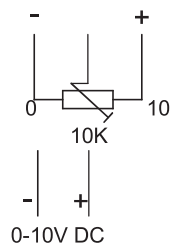


For KV DUO 500-630 EC

400V 3~



External potentiometer
Optional



K EC

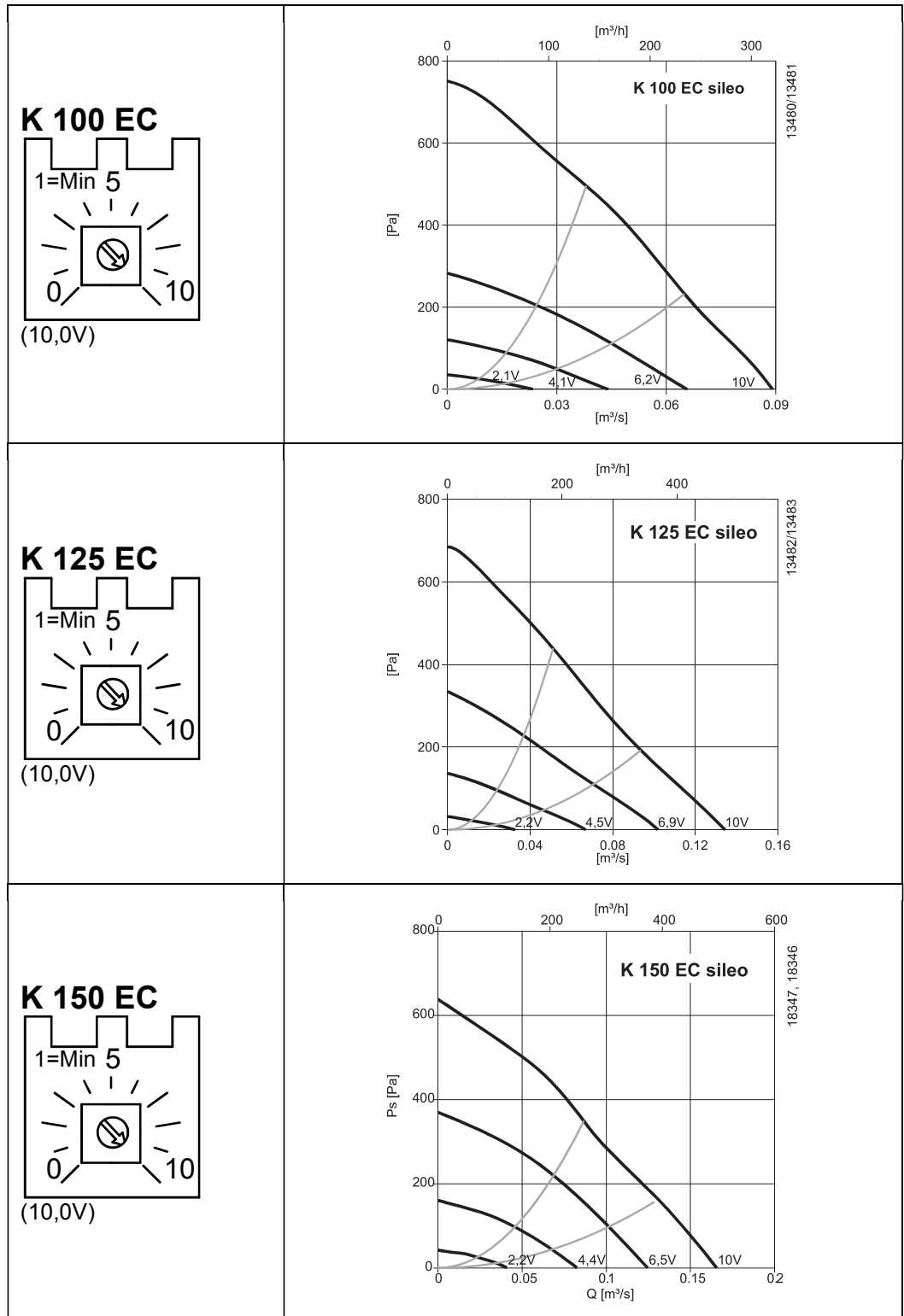
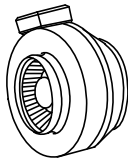


Fig 1

K EC

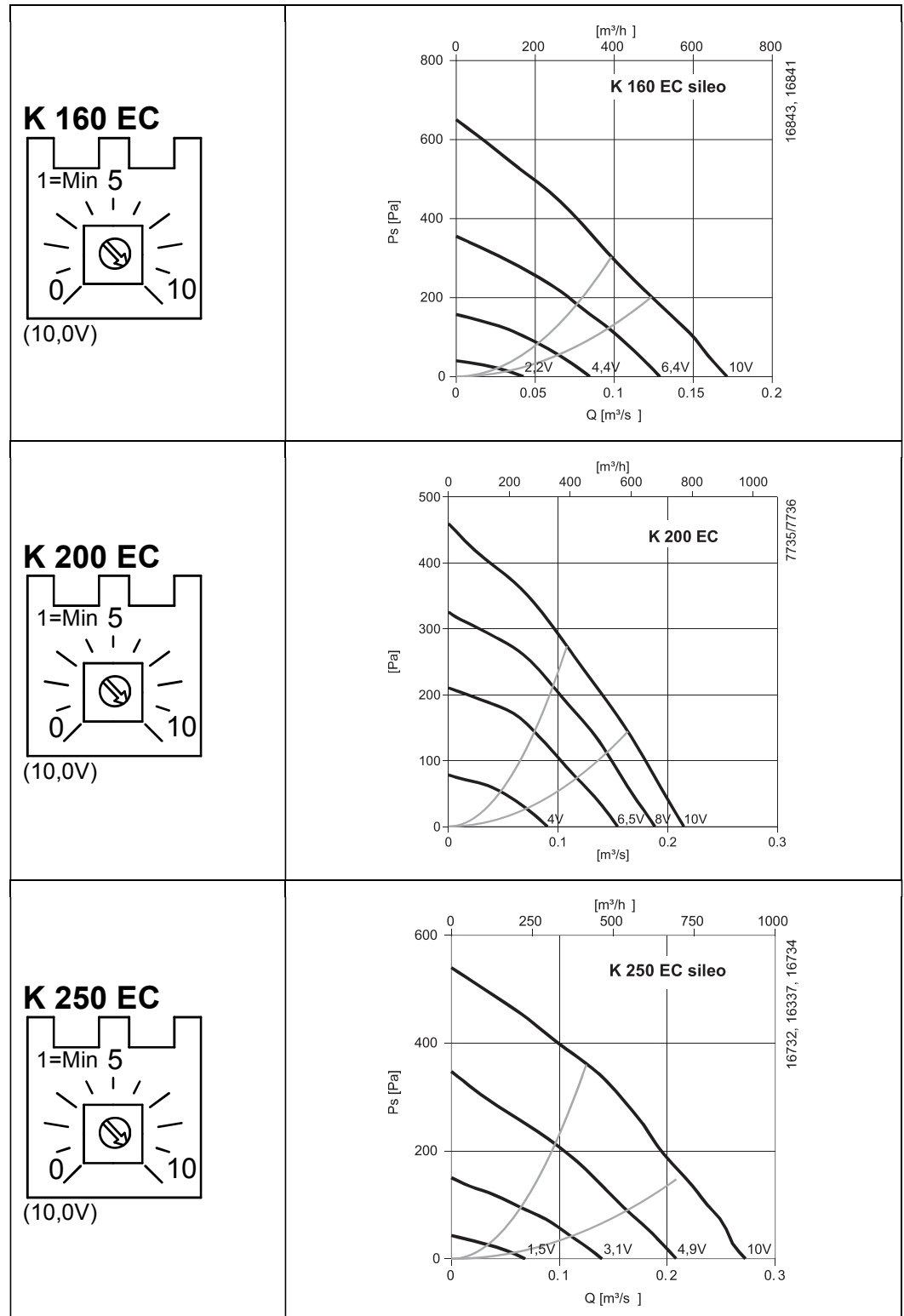


Fig 2

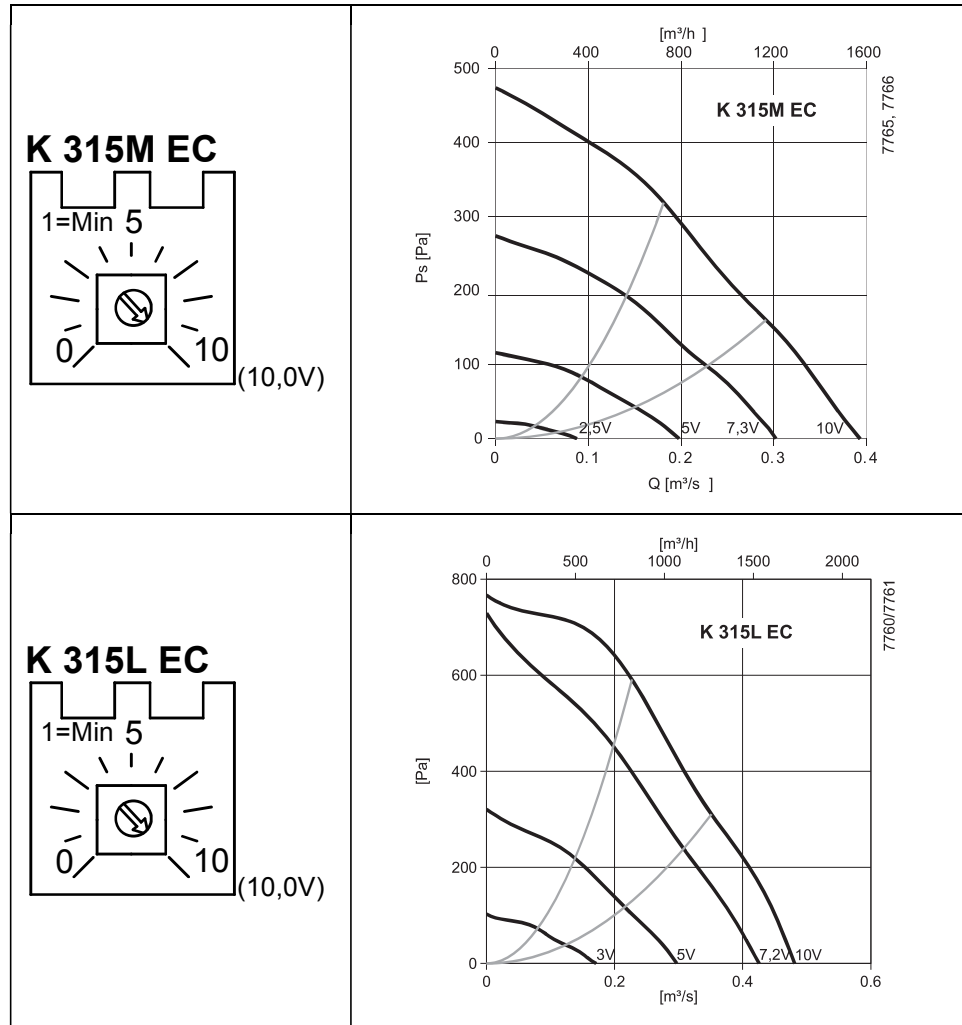


Fig 3

KVKE EC

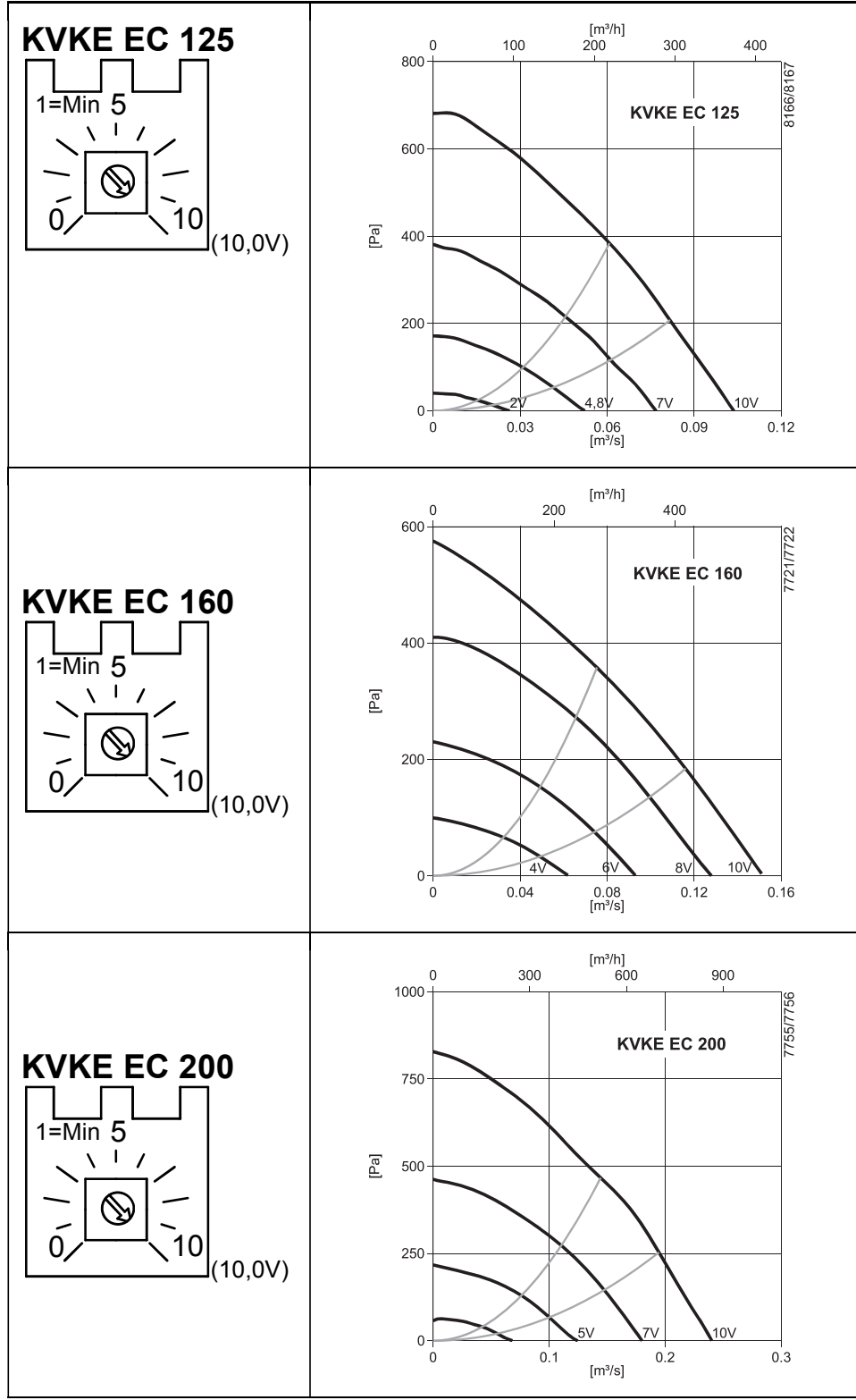
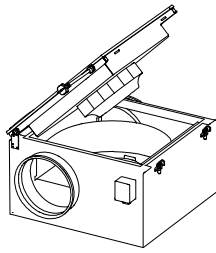


Fig 4

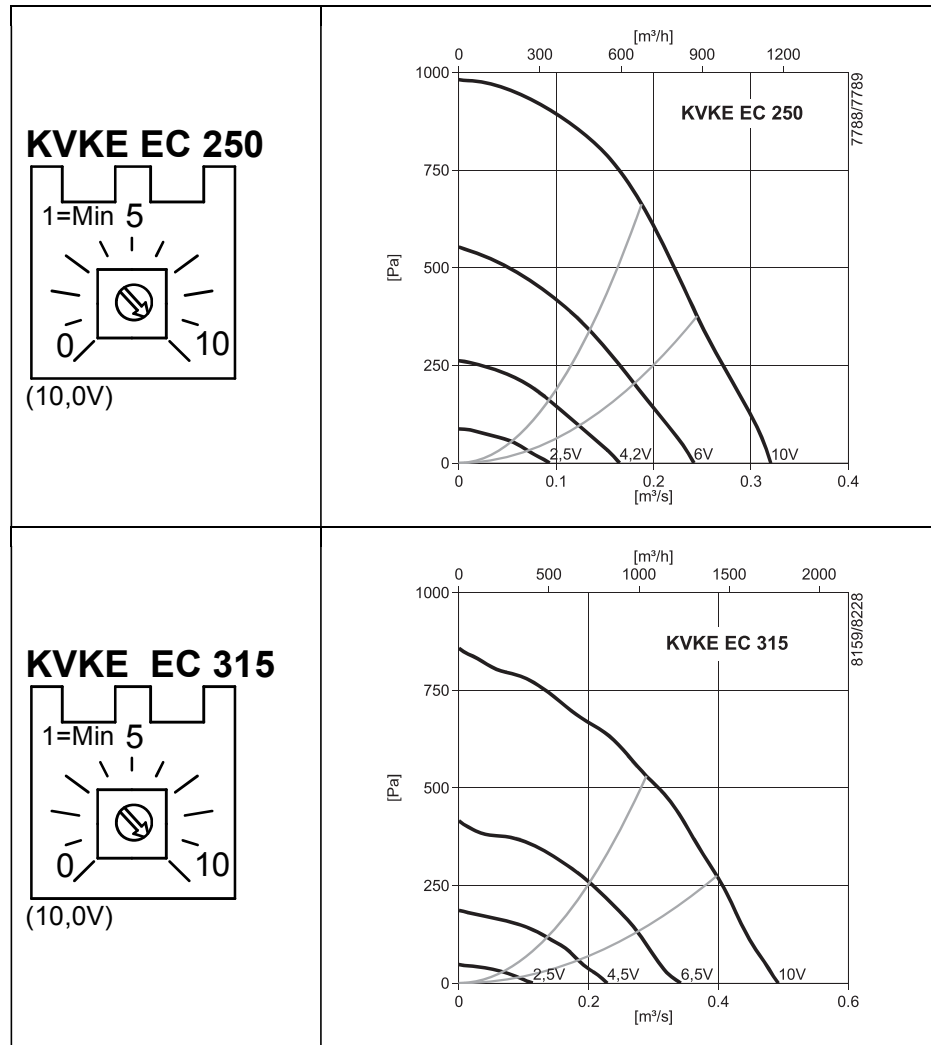
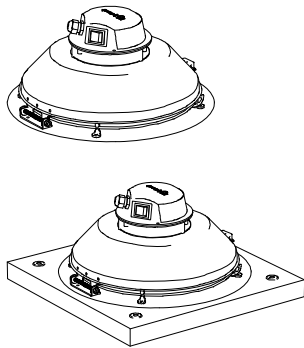
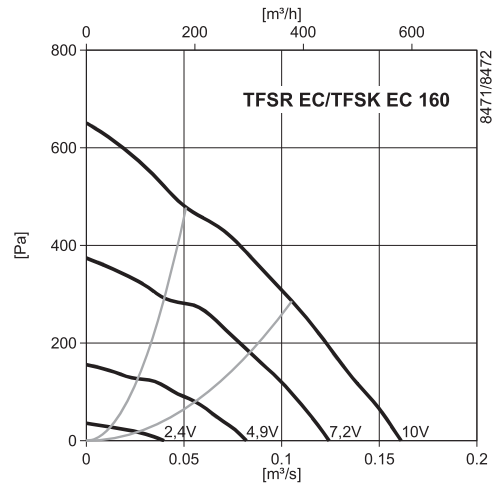
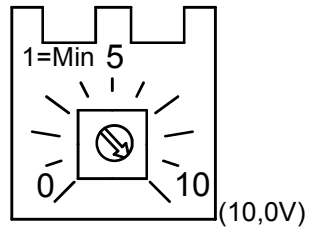


Fig 5

TFSR EC/TFSK EC



**TFSR EC/
TFSK EC 160**



**TFSR EC/
TFSK EC 200**

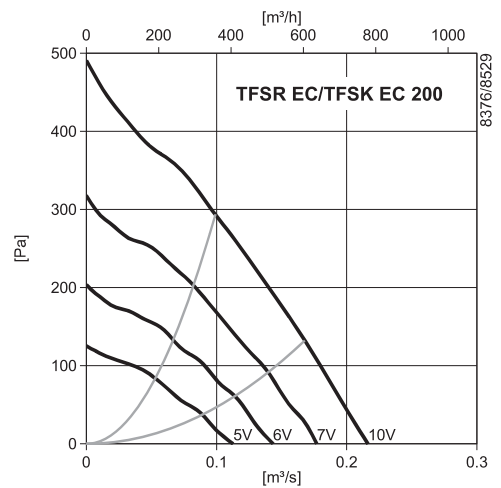
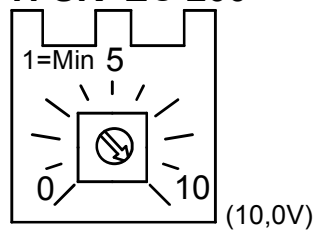


Fig 6

KVO EC

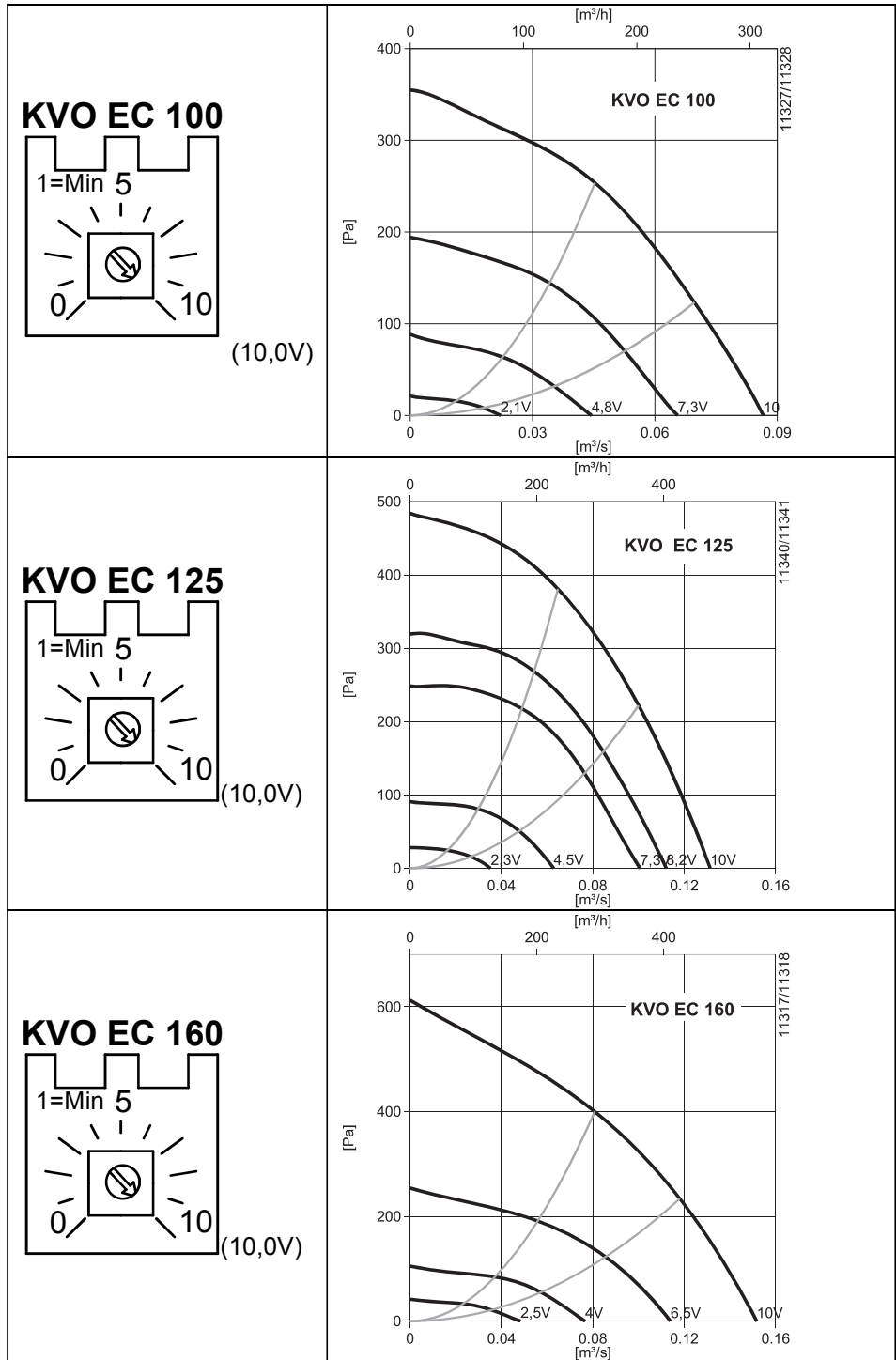
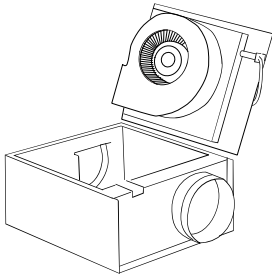


Fig 7

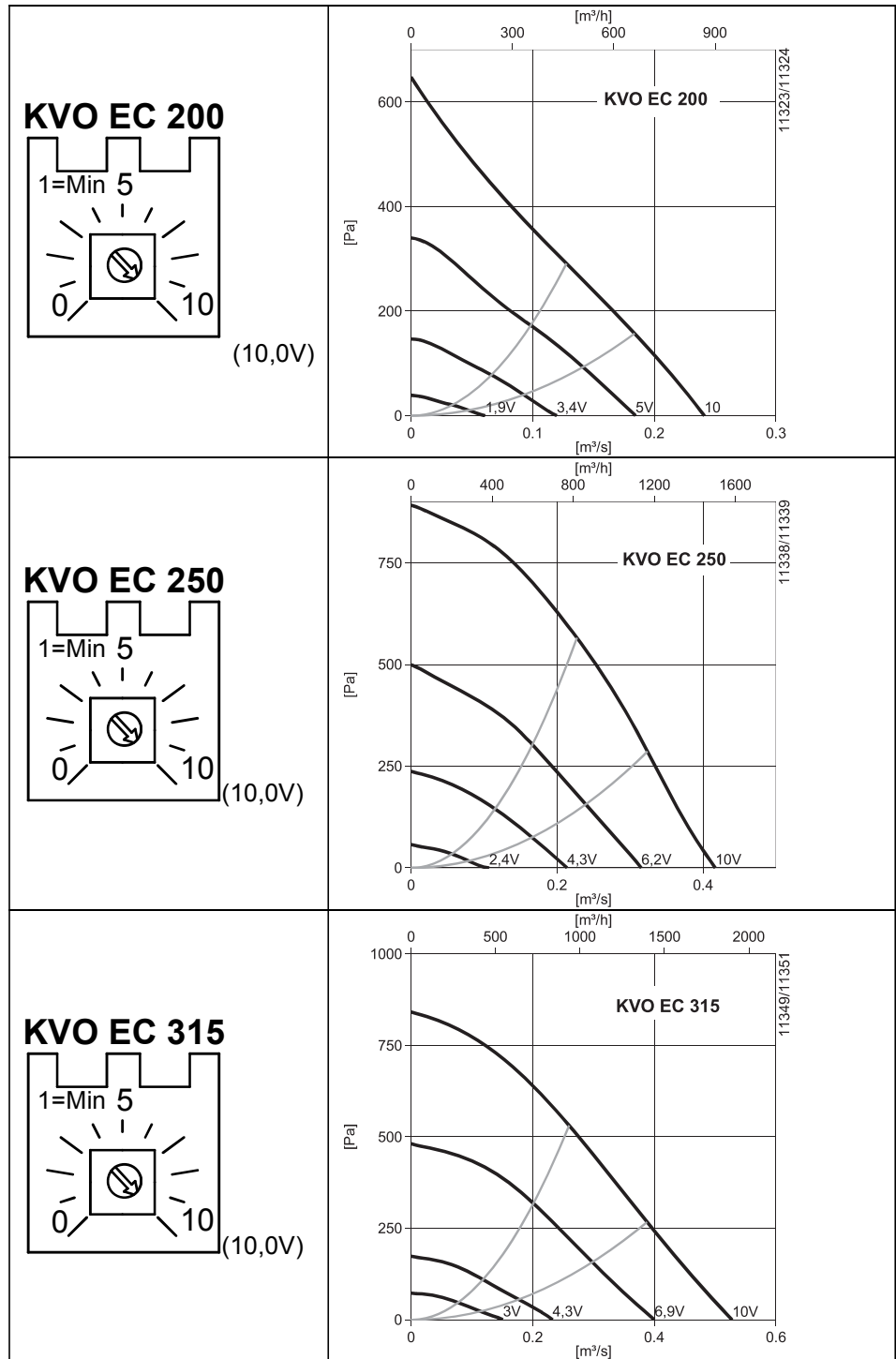
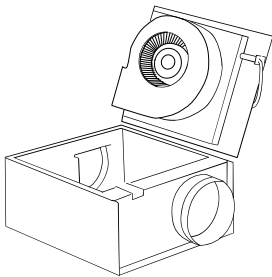


Fig 8

KD EC

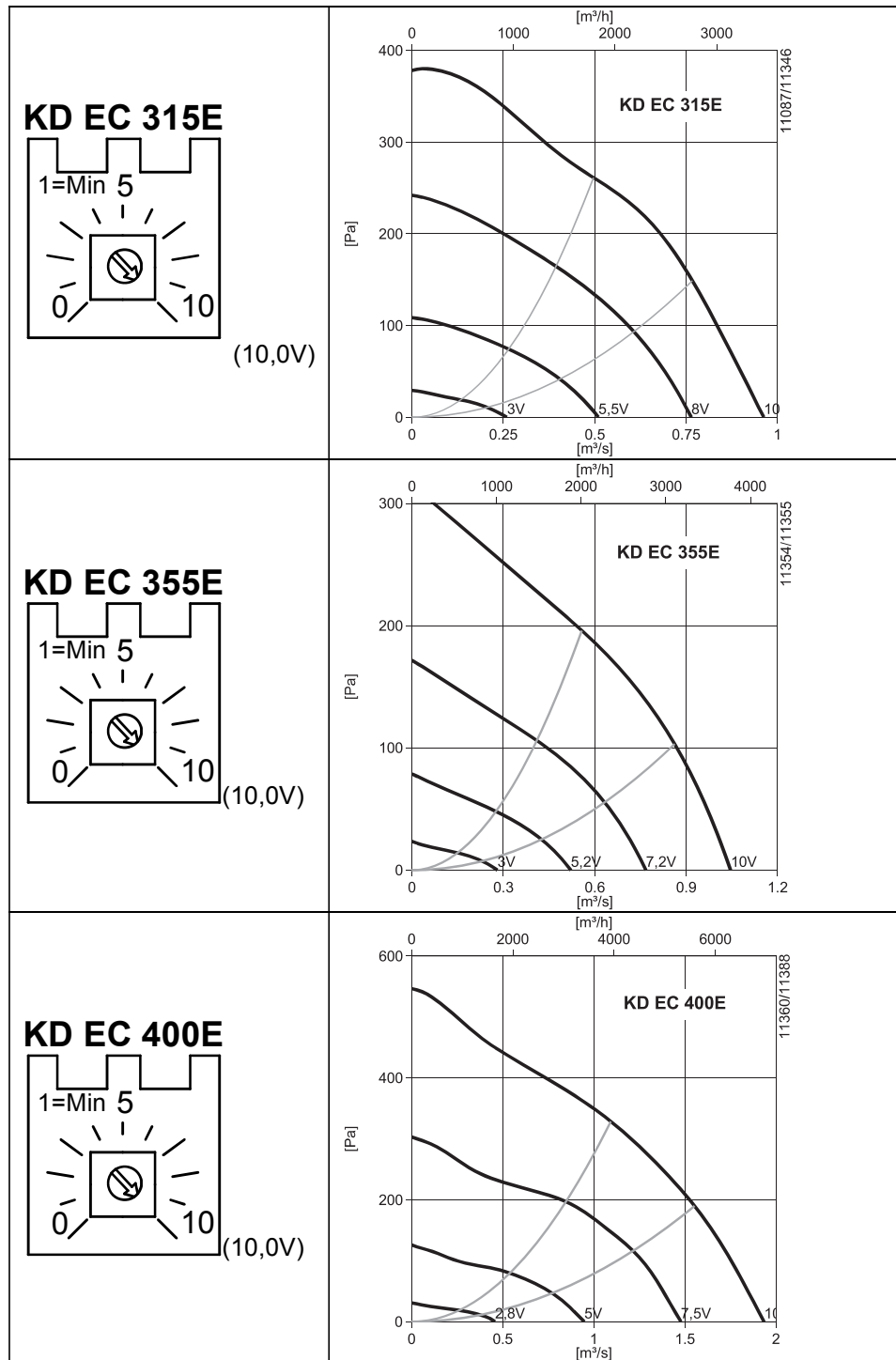


Fig 9

RS, RSI EC

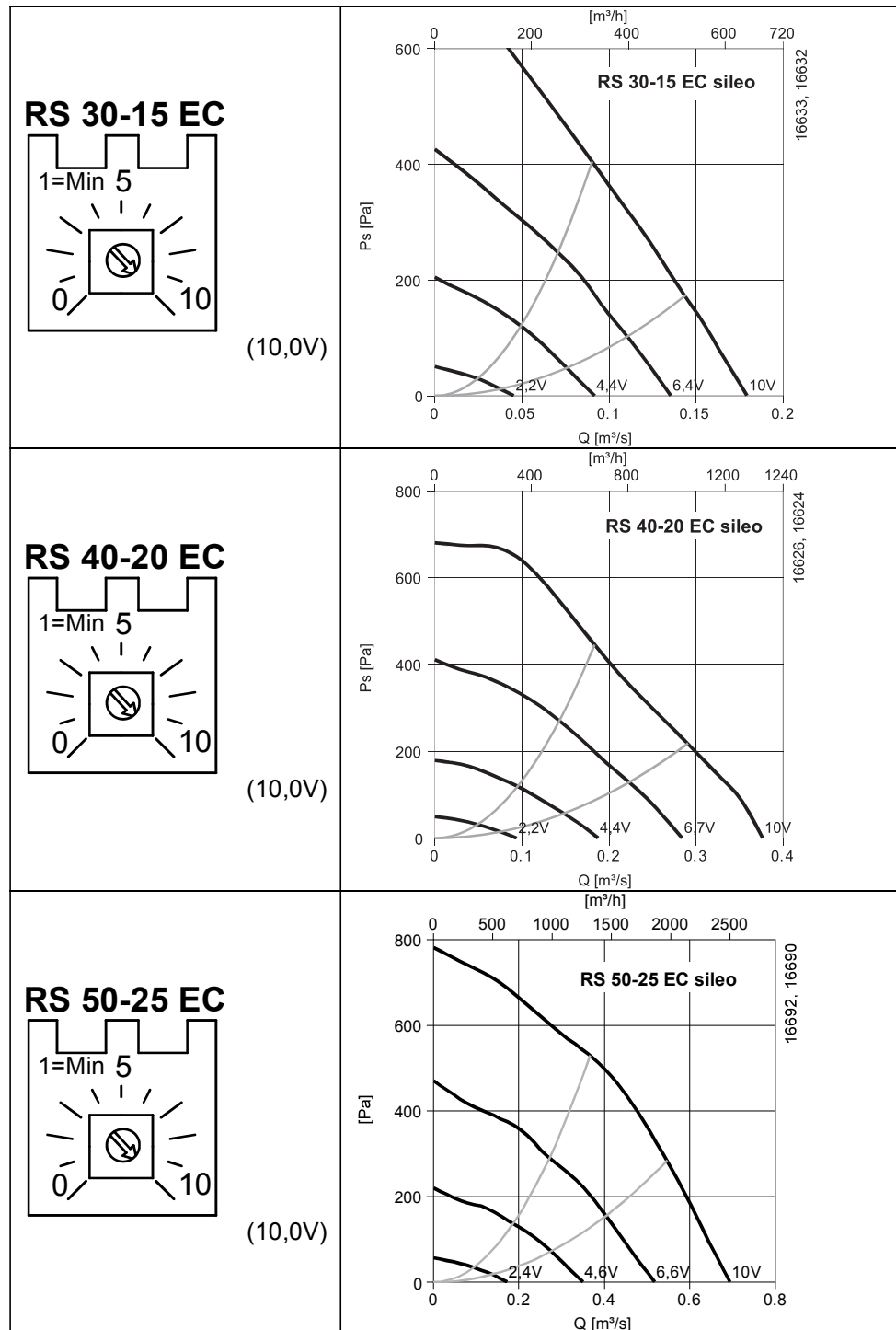


Fig 10

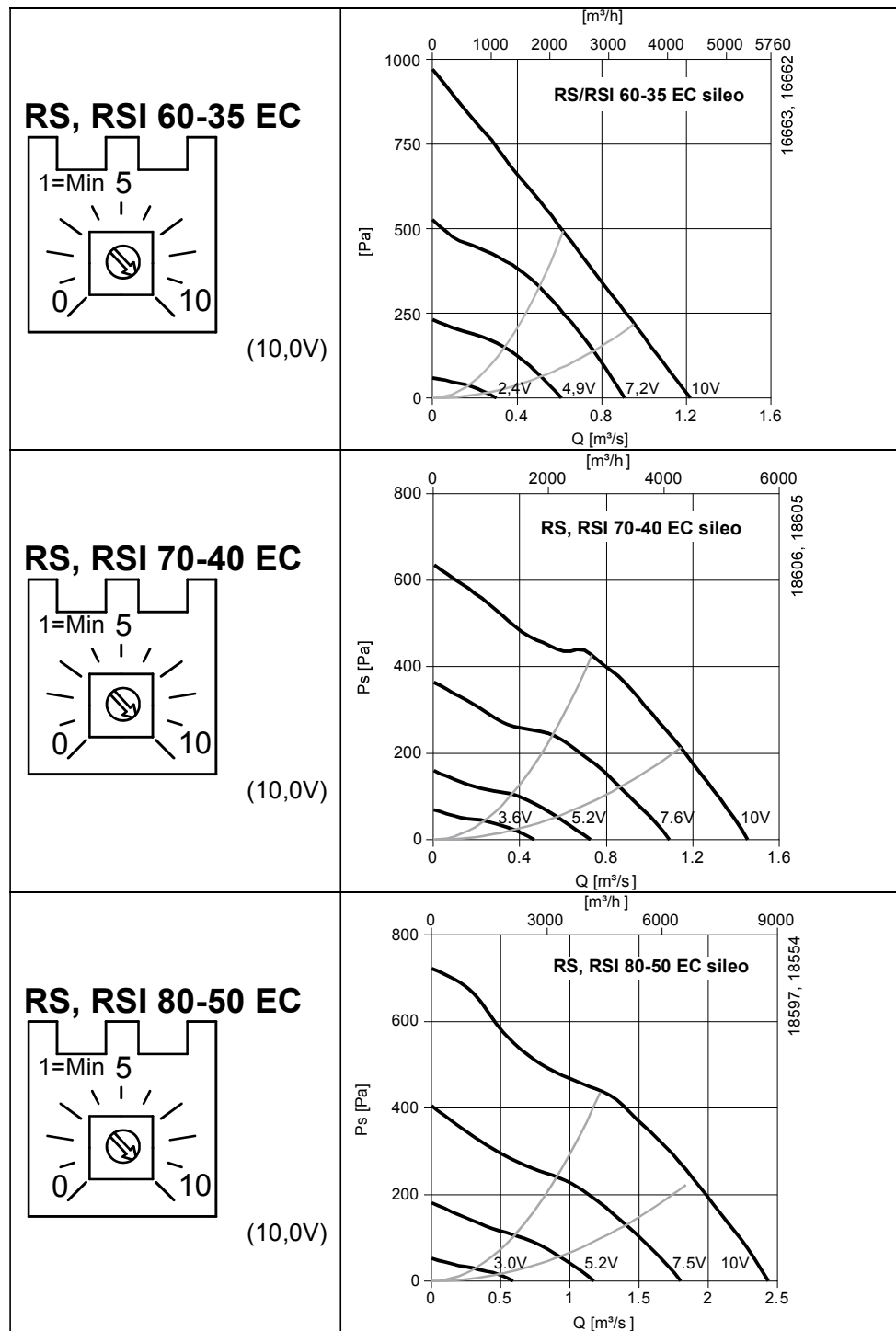


Fig 11

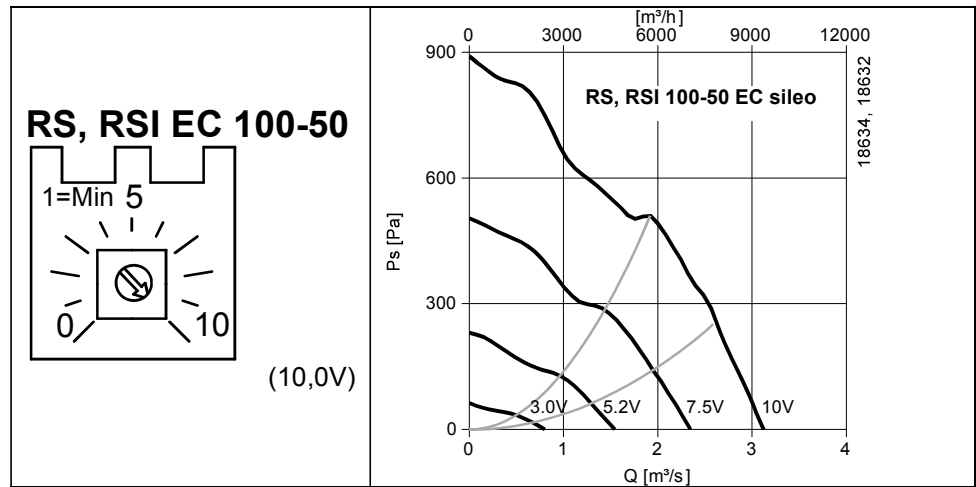
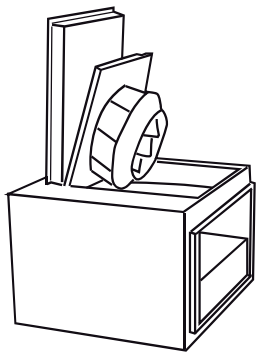


Fig 12

KBT EC

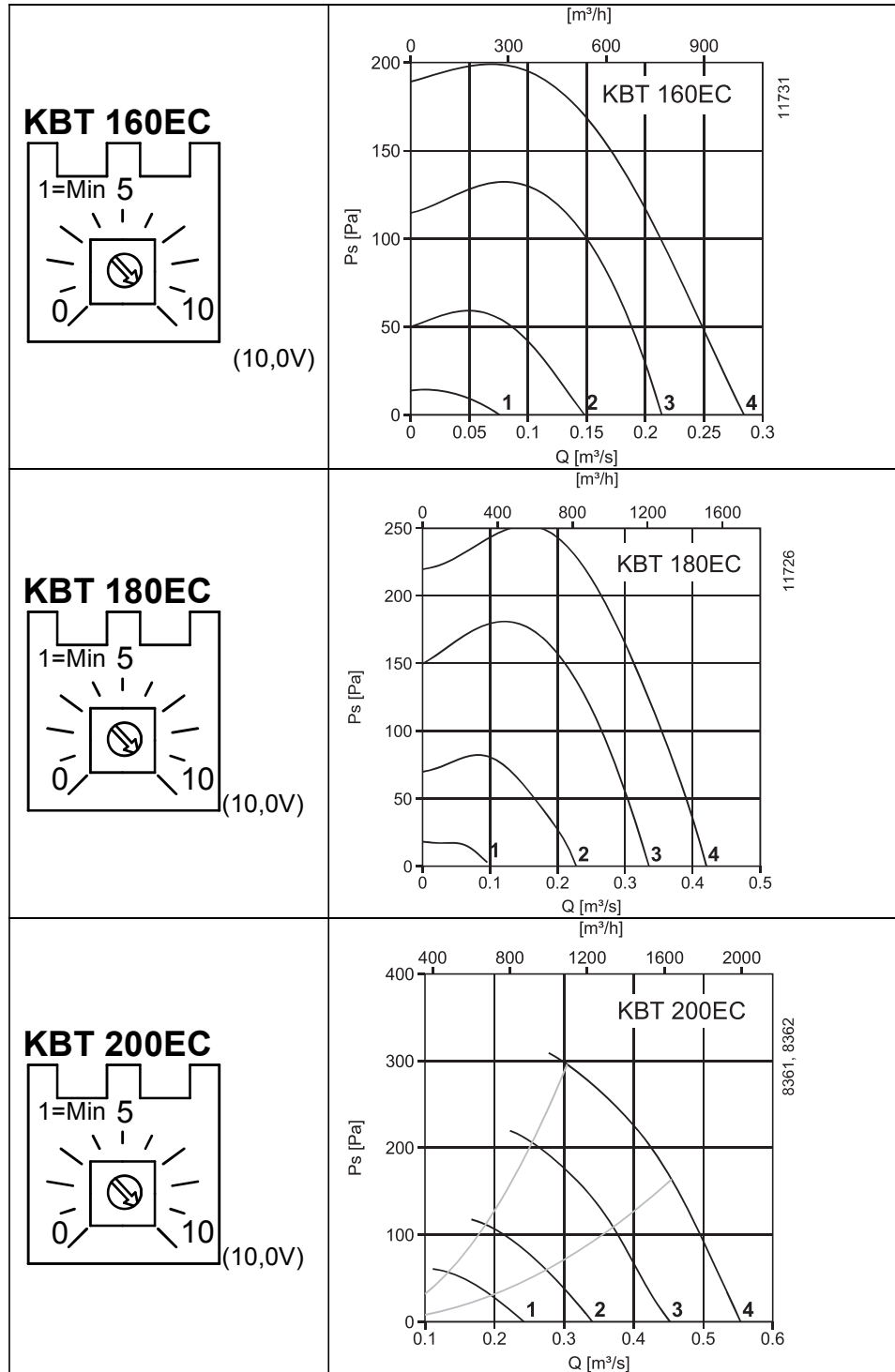


Fig 13

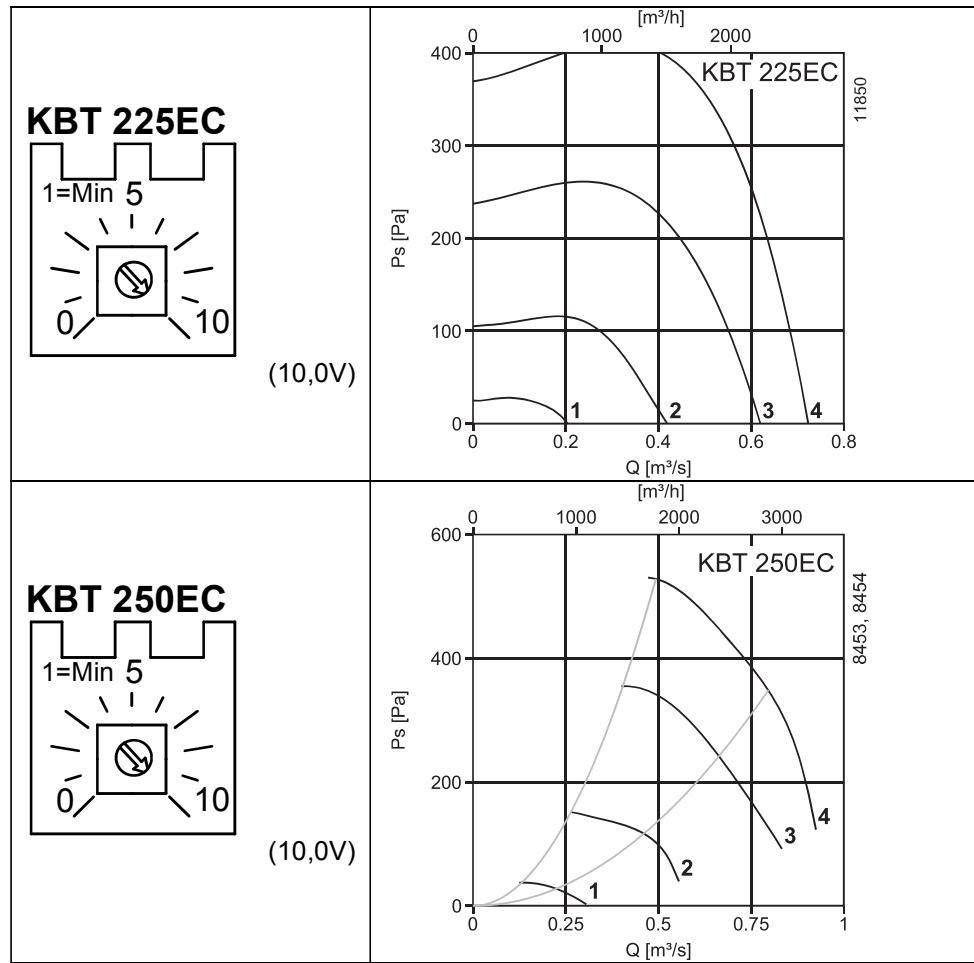


Fig 14

KV DUO EC

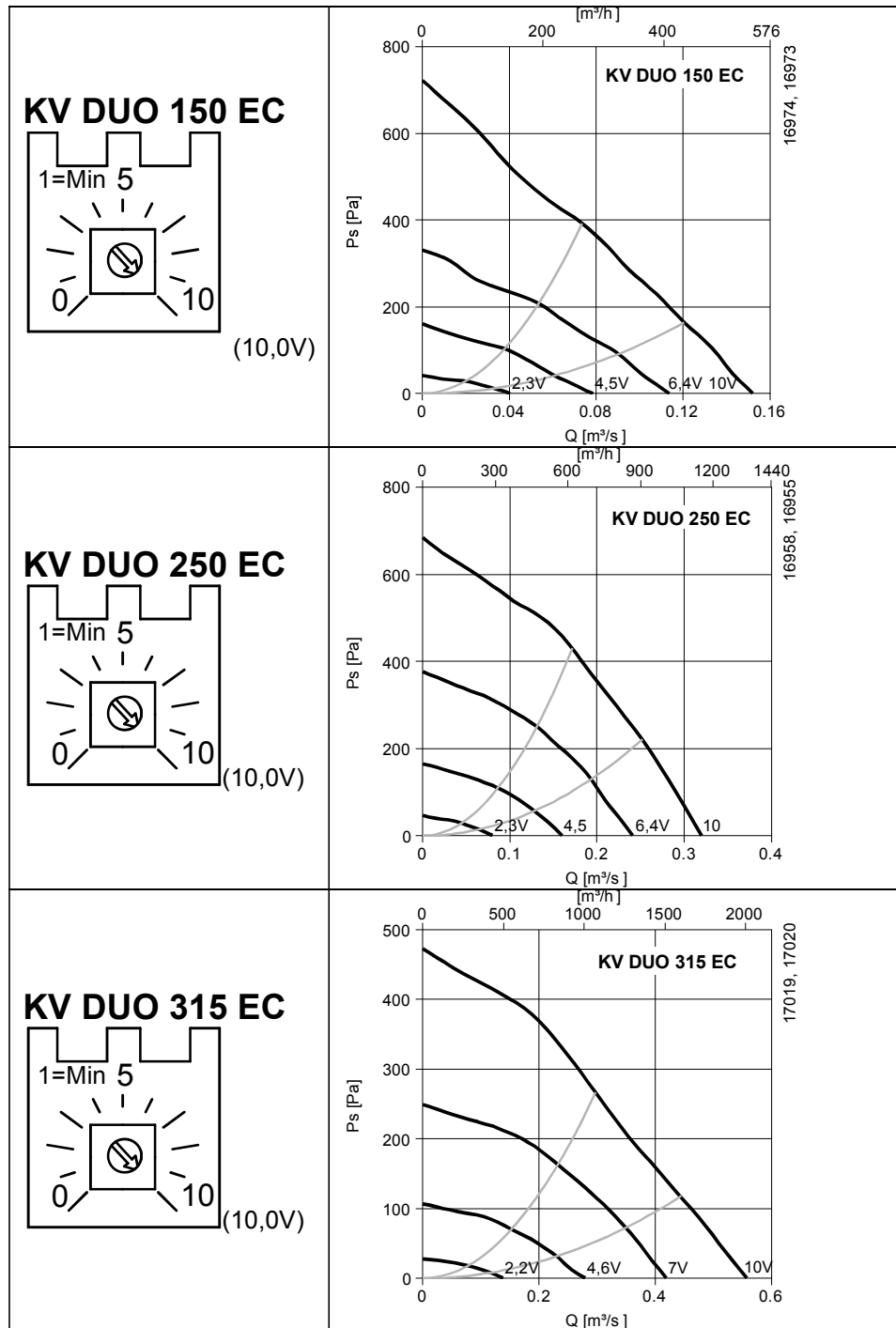


Fig 15

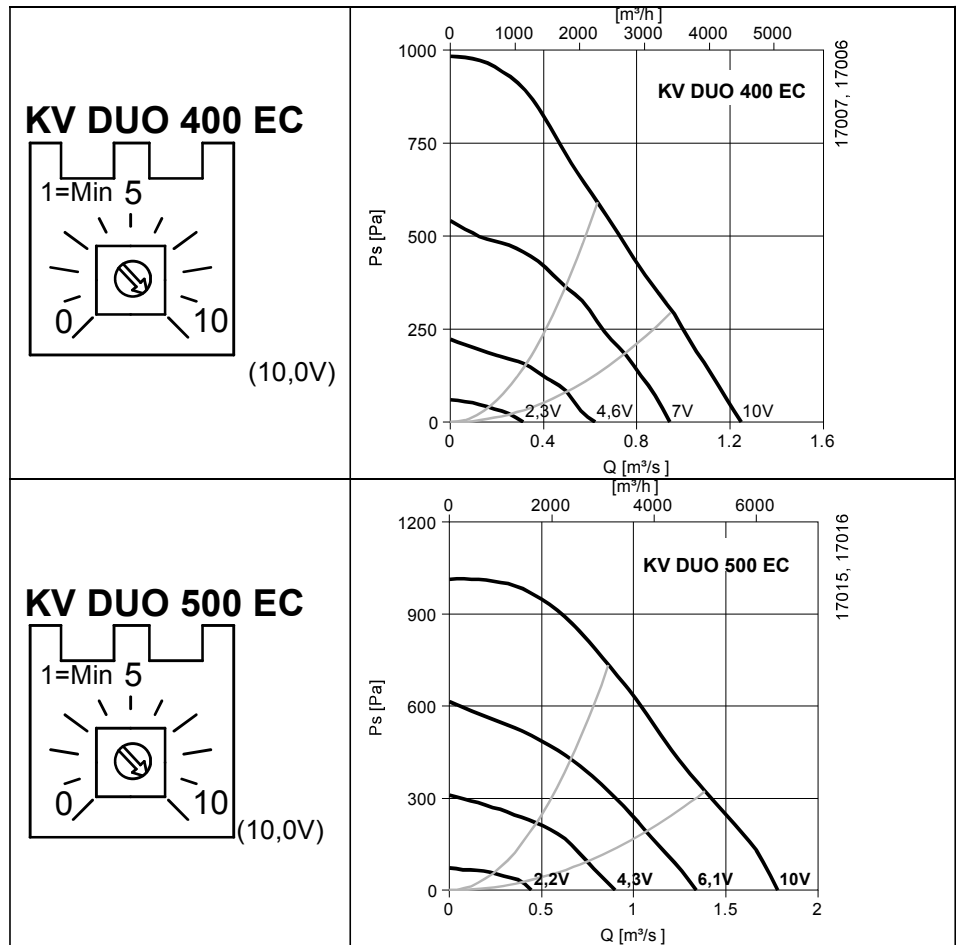
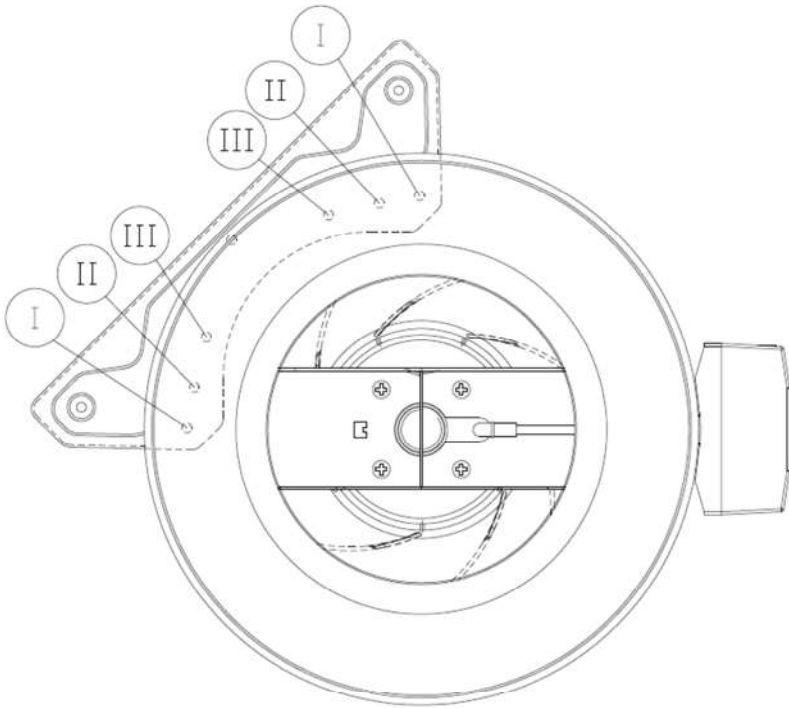


Fig 16



Type	Screw
K EC 100	I
K EC 125	I
K EC 160	II
K EC 200	I + II
K EC 250	I + II
K EC 315 M/L	I + II

