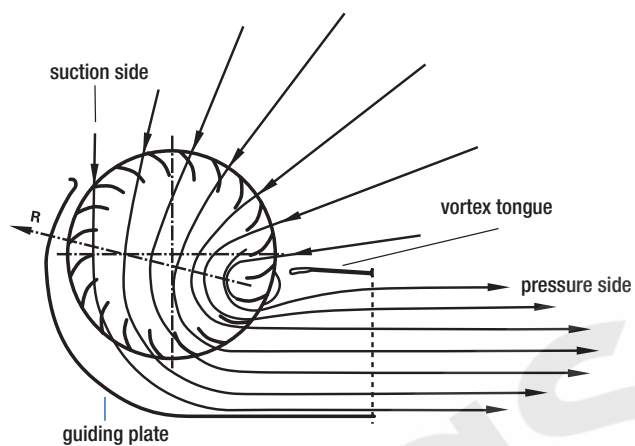


Vortex stream through tangential blower

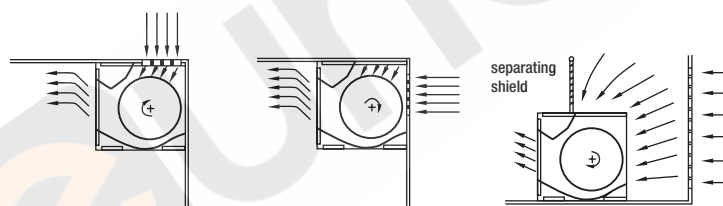


Mounting conditions for QL 4 series

air sucked in from top, covered backside

air sucked in from the back, covered topside

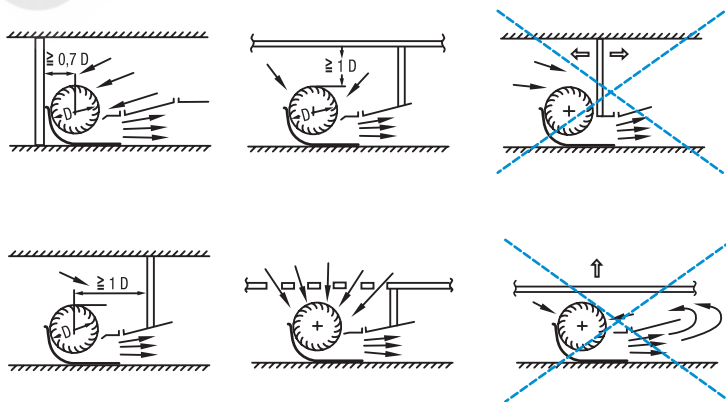
air sucked in from top and back



Mounting conditions on suction side QL 3, QLK, QLZ, QLN

functional

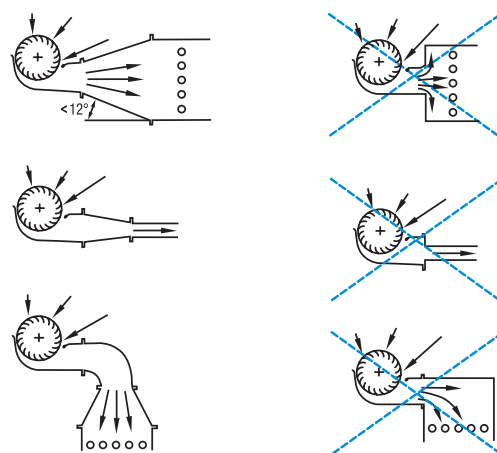
non functional



Mounting conditions on pressure side QL 3, QLK, QLZ, QLN

functional

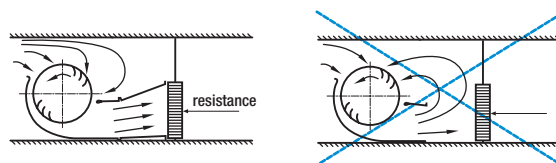
non functional



Separation of suction and pressure area

functional

non functional



Tangential blowers

QL 3



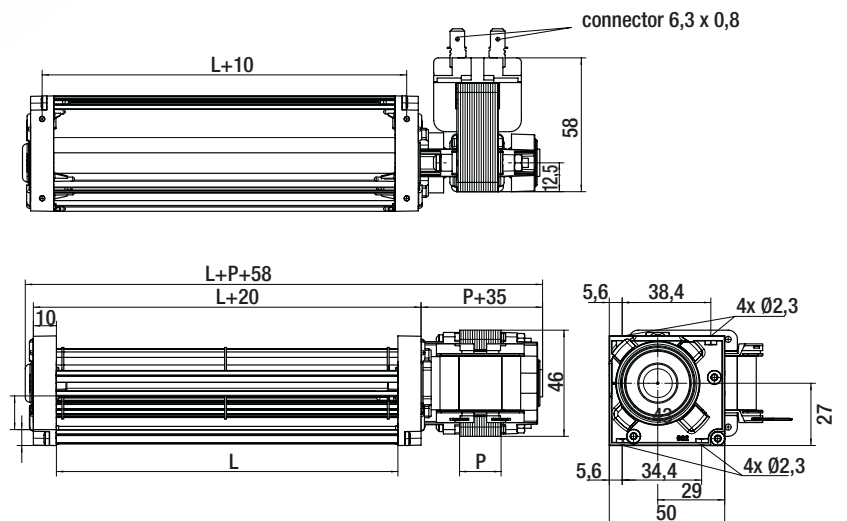
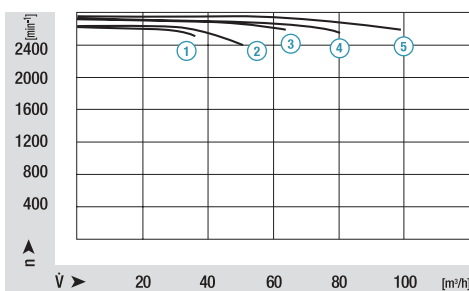
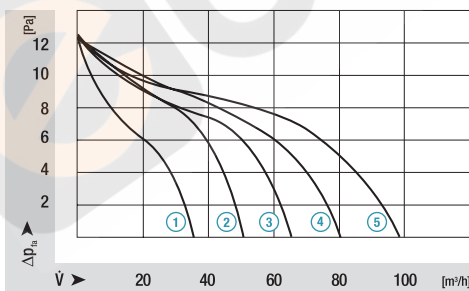
- impeller diameter 30 mm
- mounting position horizontal or vertical with motor at the bottom
- permissible ambient temperature 0 - 60°C
- insulation class B, class F or H on request

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Nominal data		characteristic curve	rated voltage	frequency	air flow	max. pressure increase	power input	rated current	speed	mass	Dimensions mm	
motor right*	motor left										V	Hz
QL3/1500-2112	QL3/0015-2112	①	230	50	35	12,3	8	77	2550	0,36	148,0	12
QL3/2000-2112	QL3/0020-2112	②	230	50	51	12,6	8	79	2400	0,40	198,0	12
QL3/2500-2118	QL3/0025-2118	③	230	50	67	12,2	10	82	2600	0,56	248,0	18
QL3/3000-2118	QL3/0030-2118	④	230	50	80	12,7	10	82	2580	0,60	302,6	18
QL3/3500-2124	QL3/0035-2124	⑤	230	50	98	12,3	10	77	2600	0,68	352,6	24

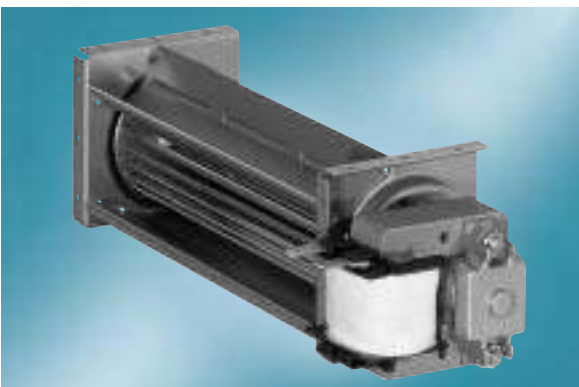
*) Corresponding to dimensional drawing; Technical data valid at free air flow and rated voltage; bold print = standard type; subject to alterations

Characteristic curves



Tangential blowers

QL 4



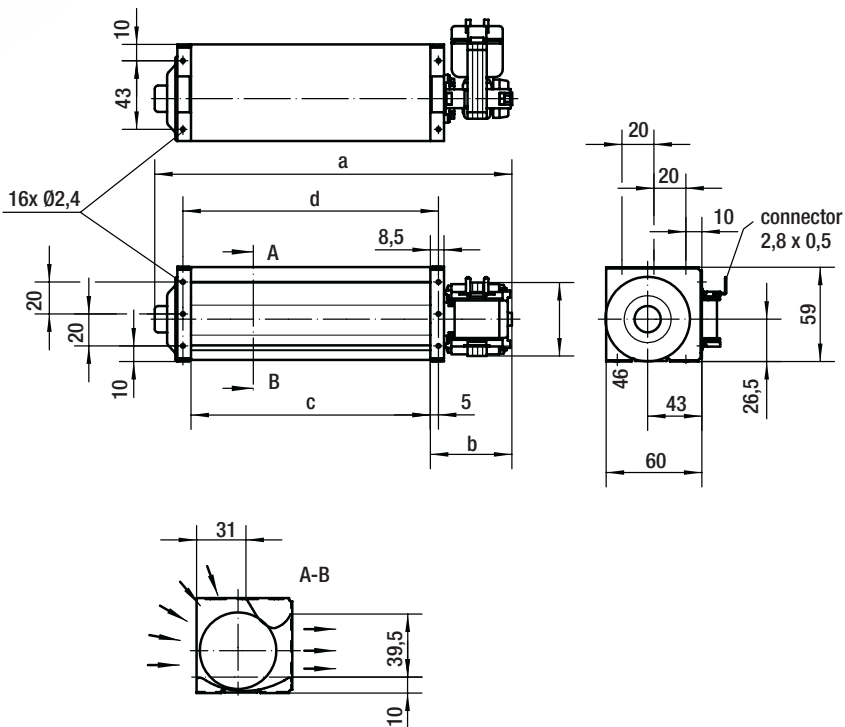
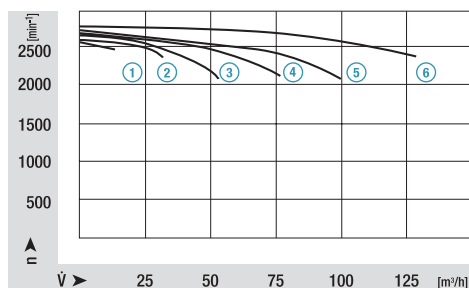
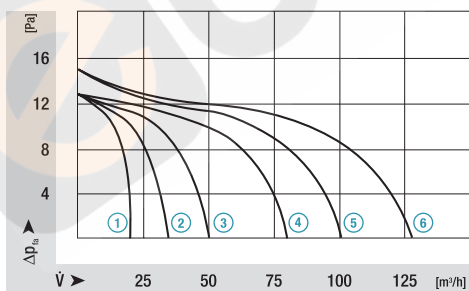
- impeller diameter 40 mm
- airflow direction of 180° possible
- mounting position horizontal or vertical with motor at the bottom
- permissible ambient temperature 0 - 60°C
- insulation class B, class F or H on request

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Nominal data		characteristic curve	rated voltage	frequency	air flow	max. pressure increase	power input	rated current	speed	mass	Dimensions mm			
motor right*	motor left										V	Hz	m³/h	Pa
QL4/0500-2112	QL4/0005-2112	①	230	50	18	13	8	100	2500	0,40	126	51	50	60
QL4/1000-2112	QL4/0010-2112	②	230	50	36	13	9	100	2300	0,45	176	51	100	110
QL4/1500-2112	QL4/0015-2112	③	230	50	50	13	12	130	2150	0,50	226	51	150	160
QL4/2000-2118	QL4/0020-2118	④	230	50	80	14	14	140	2250	0,60	282	57	200	210
QL4/2500-2118	QL4/0025-2118	⑤	230	50	100	15	15	140	2200	0,65	338	63	250	260
QL4/3000-2124	QL4/0030-2124	⑥	230	50	126	15	20	170	2300	0,80	388	63	300	310

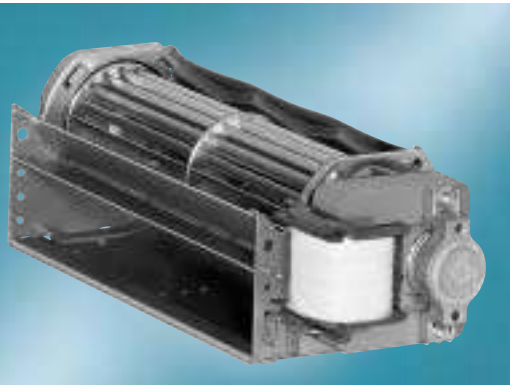
*) Corresponding to dimensional drawing; Technical data valid at free air flow and rated voltage; bold print = standard type; subject to alterations

Characteristic curves



Tangential blowers

QLK 45



- impeller diameter 45 mm
- horizontal or vertical mounting position with motor at the bottom
- permissible ambient temperature 0 - 60°C
- insulation class B, class F or H on request

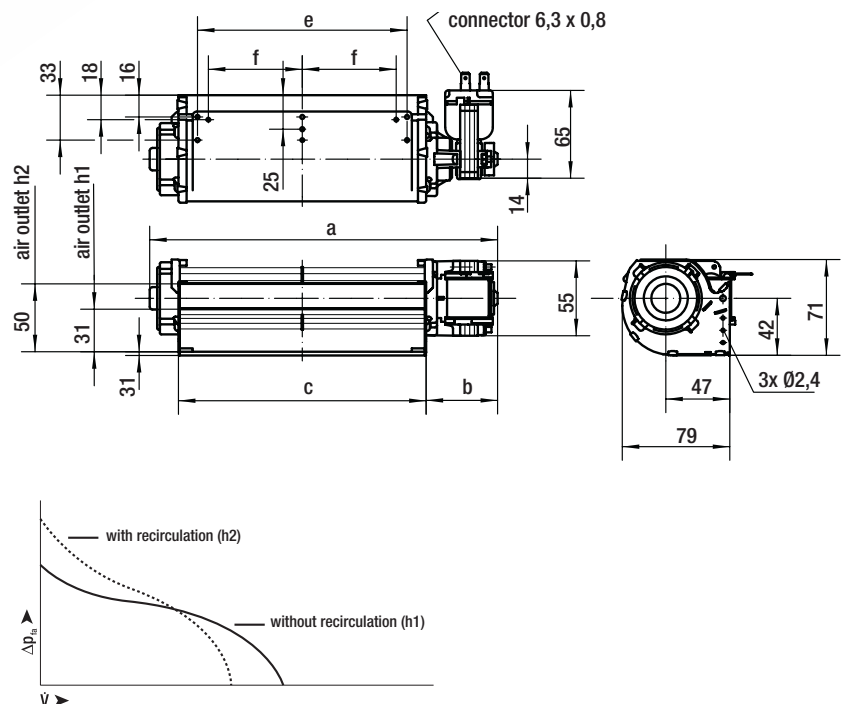
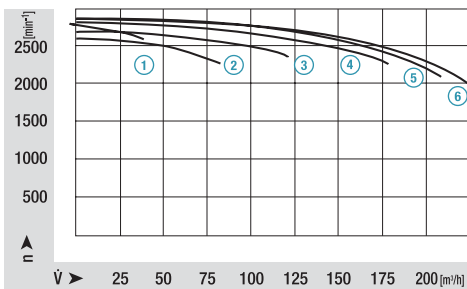
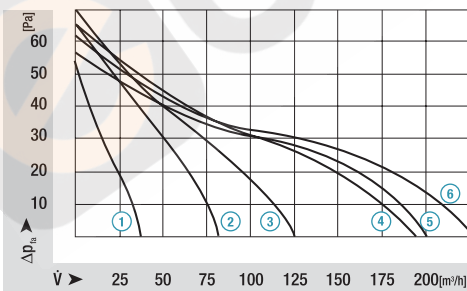
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Nominal data		characteristic curve	rated voltage	frequency	air flow	max. pressure increase	power input	rated current	speed	mass	Dimensions mm				
motor right*	motor left										V	Hz	m ³ /h	Pa	W
QLK45/0600-2513	QLK45/0006-2513	①	230	50	36	55	15	170	2650	0,60	140	55	62	32	-
QLK45/1200-2513	QLK45/0012-2513	②	230	50	80	66	17	180	2250	0,65	200	55	122	94	-
QLK45/1800-2518	QLK45/0018-2518	③	230	50	125	67	26	245	2350	0,85	265	60	182	154	69
QLK45/2400-2524	QLK45/0024-2524	④	230	50	190	64	32	280	2200	1,10	331	66	242	212	98
QLK45/3000-2524	QLK45/0030-2524	⑤	230	50	200	56	32	280	2100	1,25	391	66	302	272	128
QLK45/3600-2524	QLK45/0036-2524	⑥	230	50	230	63	35	300	1800	1,40	451	66	362	332	158

*) Corresponding to dimensional drawing; Technical data valid at free air flow and rated voltage; bold print = standard type; subject to alterations

Characteristic curves

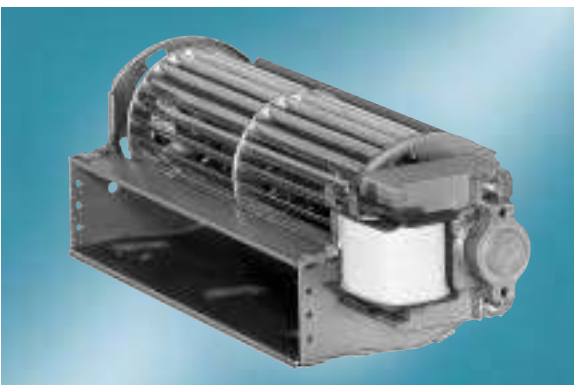
with recirculation (air outlet h2)



Tangential blowers

QLZ 06

- impeller diameter 60 mm
- horizontal or vertical mounting position with motor at the bottom
- permissible ambient temperature 0 - 60°C
- insulation class B, class F or H on request

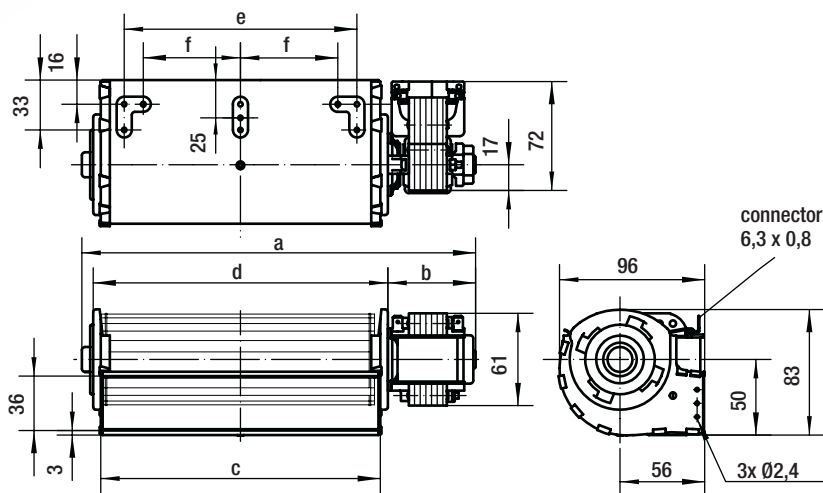
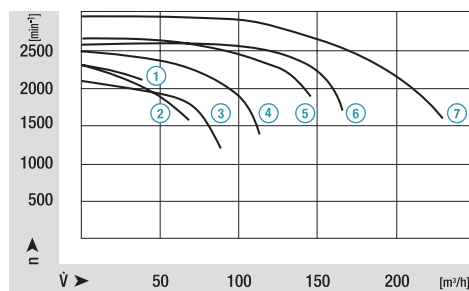
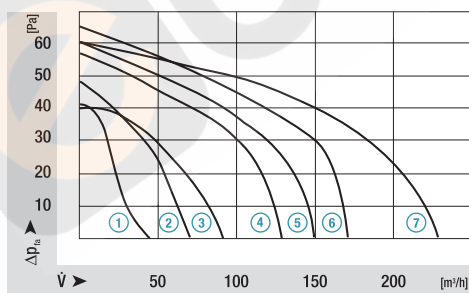


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Nominal data		characteristic curve	rated voltage	frequency	air flow	max. pressure increase	power input	rated current	speed	mass	Dimensions mm					
motor right*	motor left										V	Hz	m³/h	Pa	W	mA
QLZ06/0600-2513	QLZ06/0006-2513	①	230	50	40	42	15	160	2500	0,60	124	42	63	73	32	-
QLZ06/1200-2513	QLZ06/0012-2513	②	230	50	70	48	20	180	1550	0,70	186	42	125	135	94	-
QLZ06/1800-2513	QLZ06/0018-2513	③	230	50	90	40	20	160	1200	0,80	246	42	183	196	154	64
QLZ06/1800-2518	QLZ06/0018-2518	④	230	50	130	58	30	220	1350	0,90	251	47	183	196	154	64
QLZ06/1800-2524	QLZ06/0018-2524	⑤	230	50	150	60	33	240	1800	1,00	257	53	183	196	154	64
QLZ06/2400-3030	QLZ06/0024-3030	⑥	230	50	170	63	33	290	1700	1,40	324	62	243	253	212	93
QLZ06/3000-3038	QLZ06/0030-3038	⑦	230	50	230	60	45	350	1600	1,70	395	72	303	313	272	123

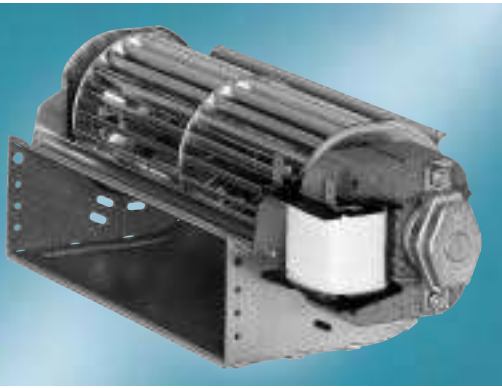
* Corresponding to dimensional drawing; Technical data valid at free air flow and rated voltage; bold print = standard type; subject to alterations

Characteristic curves



Tangential blowers

QLN 65



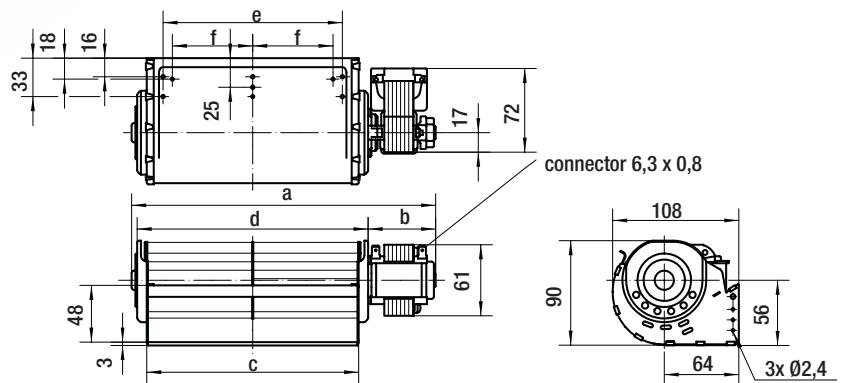
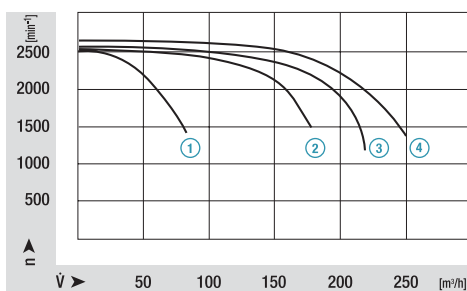
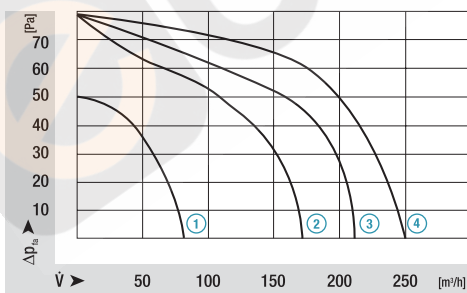
- impeller diameter 65 mm
- horizontal or vertical mounting position with motor at the bottom
- permissible ambient temperature 0 - 60°C
- insulation class B, class F or H on request

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Nominal data		characteristic curve	rated voltage	frequency	air flow	max. pressure increase	power input	rated current	speed	mass	Dimensions mm					
motor right*	motor left		V	Hz	m ³ /h	Pa	W	mA	min ⁻¹	kg	a	b	c	d	e	f
QLN65/1200-3015	QLN65/0012-3015	①	230	50	83	50	14	135	1300	0,90	196	49	122	139	94	-
QLN65/1800-3025	QLN65/0018-3025	②	230	50	170	80	30	270	1500	1,20	266	59	182	199	154	77
QLN65/2400-3030	QLN65/0024-3030	③	230	50	220	80	38	360	1200	1,45	331	65	242	259	212	106
QLN65/3000-3038	QLN65/0030-3038	④	230	50	250	80	45	415	1200	1,75	400	73	302	319	272	136

*) Corresponding to dimensional drawing; Technical data valid at free air flow and rated voltage; bold print = standard type; subject to alterations

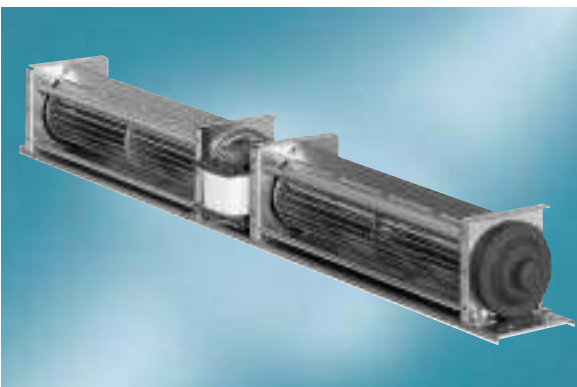
Characteristic curves



Tangential blowers

QL 4 with double housing

- impeller diameter 40 mm
- airflow direction of 180° possible
- horizontal mounting position
- permissible ambient temperature 0 - 60°C
- insulation class B, class F or H on request

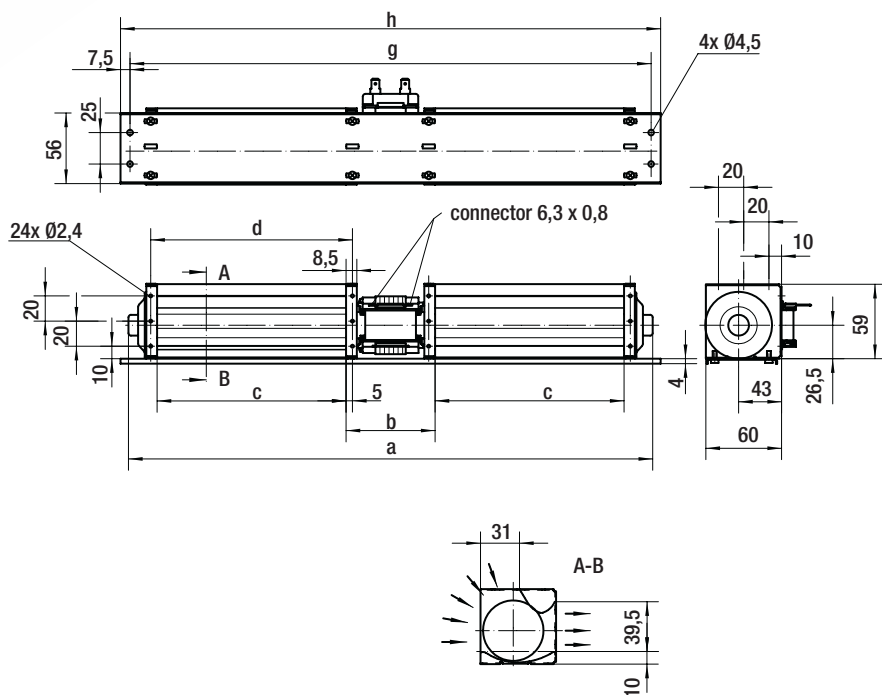
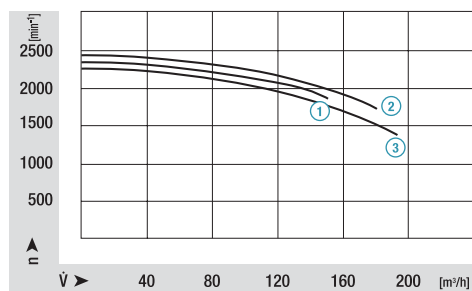
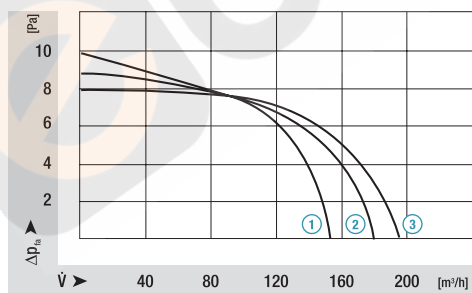


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Nominal data	characteristic curve	rated voltage	frequency	air flow	max. pressure increase	power input	rated current	speed	mass	Dimensions mm					
										type	V	Hz	m ³ /h	Pa	W
QL4/2020-2124	①	230	50	155	10	16	130	1900	1,2	522	72	200	210	515	530
QL4/2525-2124	②	230	50	180	9	16	135	1700	1,3	622	72	250	260	615	630
QL4/3030-2124	③	230	50	190	8	17	140	1500	1,4	722	72	300	310	715	730

Technical data valid at free air flow and rated voltage; bold print = standard type; subject to alterations

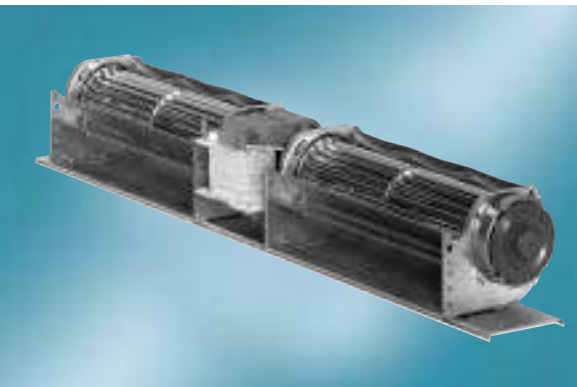
Characteristic curves



Tangential blowers

QLK 45 with double housing

- impeller diameter 45 mm
- horizontal mounting position
- permissible ambient temperature 0 - 60°C
- insulation class B, class F or H on request

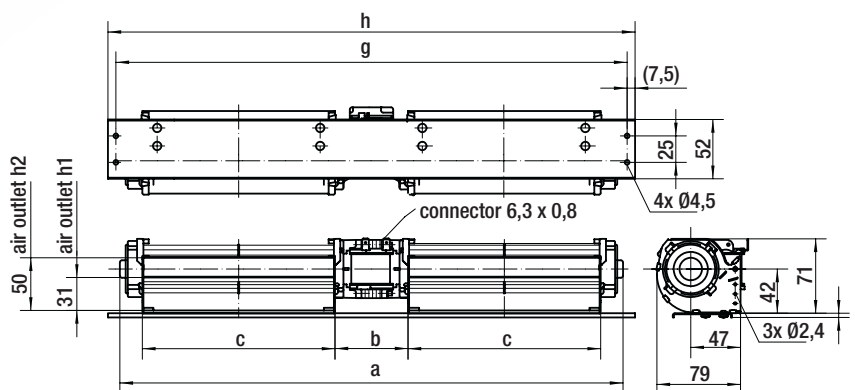
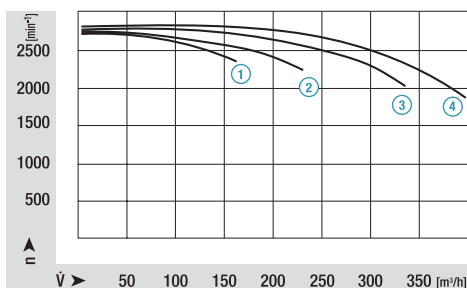
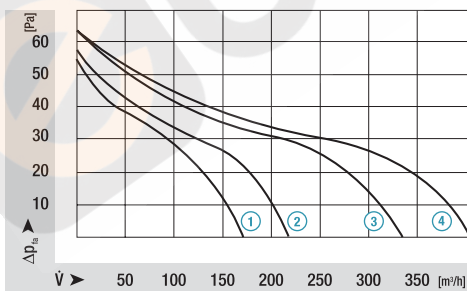


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Nominal data	characteristic curve	rated voltage	frequency	air flow	max. pressure increase	power input	rated current	speed	mass	Dimensions mm				
										type	V	Hz	m ³ /h	Pa
QLK45/1212-3030	①	230	50	160	55	29	250	2300	1,85	372	81	122	375	390
QLK45/1818-3030	②	230	50	220	59	32	265	2200	2,15	492	81	182	495	510
QLK45/2424-3038	③	230	50	330	64	46	385	2000	2,40	620	89	242	620	635
QLK45/3030-3038	④	230	50	400	64	48	390	1700	2,60	740	89	302	740	755

Technical data valid at free air flow and rated voltage; bold print = standard type; subject to alterations

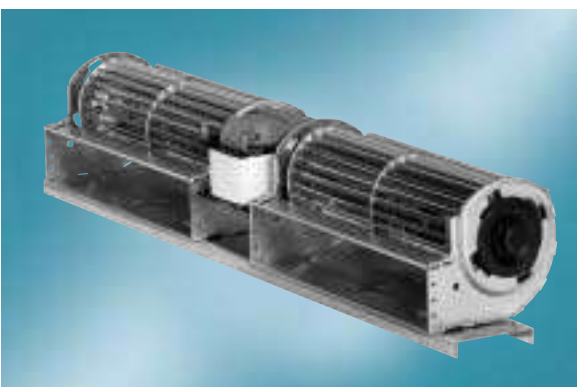
Characteristic curves



Tangential blowers

QLZ 06 with double housing

- impeller diameter 60 mm
- horizontal mounting position
- permissible ambient temperature 0 - 60°C
- insulation class B, class F or H on request

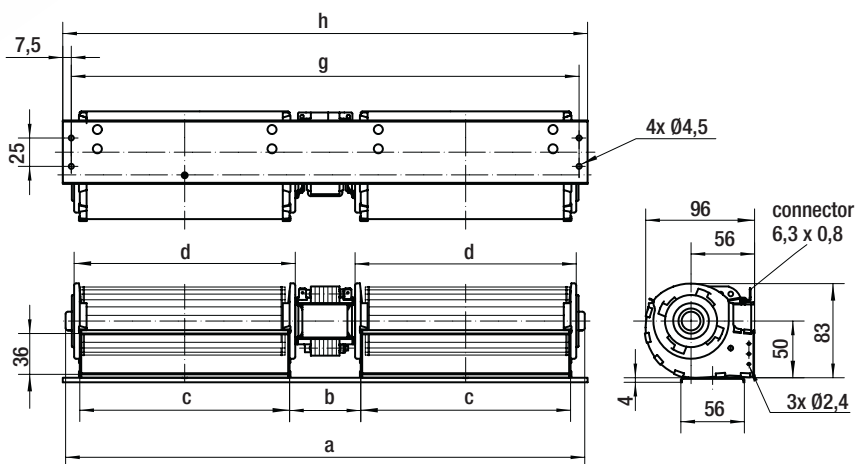
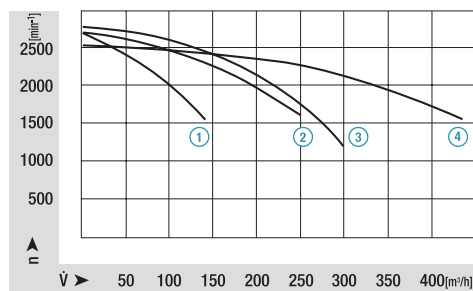
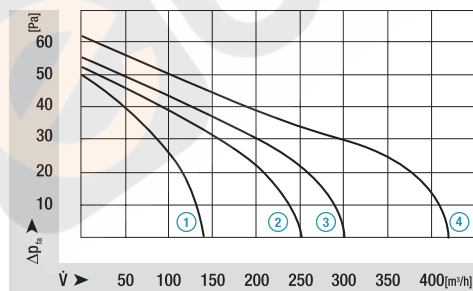


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Nominal data	characteristic curve	rated voltage	frequency	air flow	max. pressure increase	power input	rated current	speed	mass	Dimensions mm					
										type	V	Hz	m ³ /h	Pa	W
QLZ06/1212-3020	①	230	50	140	50	26	210	1500	1,55	340	58	125	135	-	-
QLZ06/1818-3030	②	230	50	250	52	45	400	1550	2,00	468	69	183	196	455	470
QLZ06/2424-3038	③	230	50	300	55	45	350	1150	2,30	591	76	243	253	579	594
QLZ06/3030-3045	④	230	50	420	62	65	550	1500	2,75	720	83	303	313	705	720

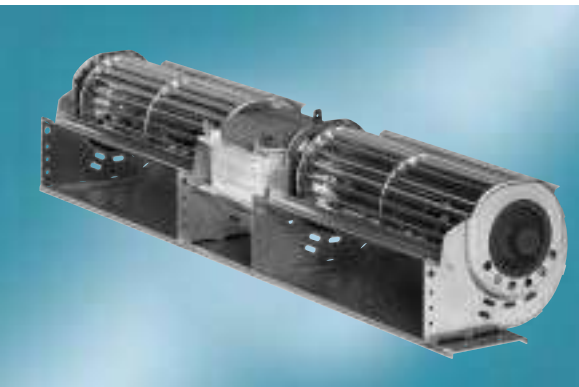
Technical data valid at free air flow and rated voltage; bold print = standard type; subject to alterations

Characteristic curves



Tangential blowers

QLN 65 with double housing



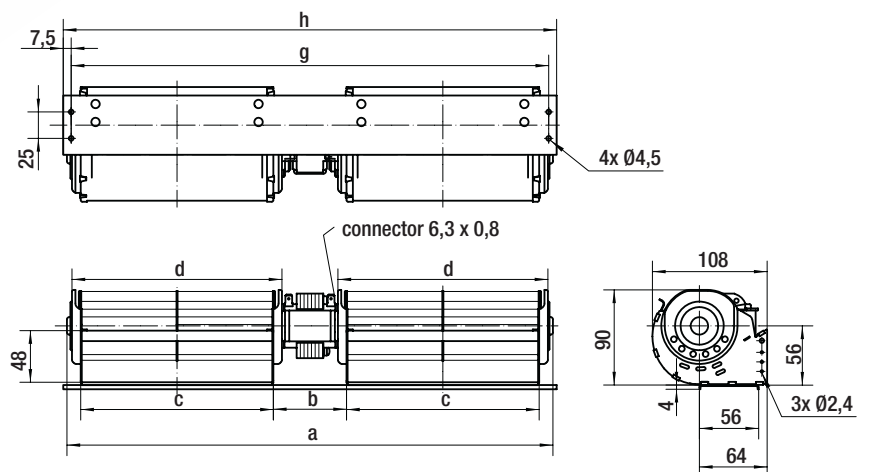
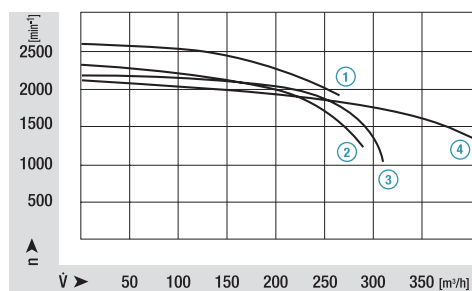
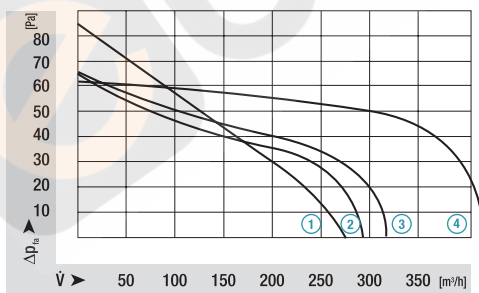
- impeller diameter 65 mm
- horizontal mounting position
- permissible ambient temperature 0 - 60°C
- insulation class B, class F or H on request

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Nominal data	characteristic curve	rated voltage	frequency	air flow	max. pressure increase	power input	rated current	speed	mass	Dimensions mm					
										type	V	Hz	m ³ /h	Pa	W
QLN65/1212-3030	①	230	50	270	85	54	460	1900	1,7	352	76	122	139	-	-
QLN65/1818-3045	②	230	50	295	66	51	420	1250	2,4	480	84	182	199	463	478
QLN65/2424-3038	③	230	50	320	65	55	480	1050	2,6	600	84	242	259	583	598
QLN65/3030-3045	④	230	50	410	62	72	560	1225	2,8	728	92	302	319	706	721

Technical data valid at free air flow and rated voltage; bold print = standard type; subject to alterations

Characteristic curves



Tangential blowers

with humidity protected bobbin

Special design for refrigeration.

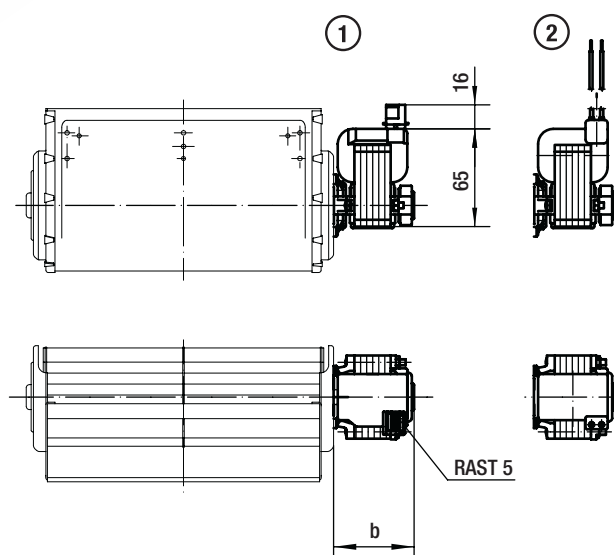
- shaded pole motor, humidity protected with plastic-encapsulated coil
- electrical connection with leads or Rast-5 plug
- permissible ambient temperature $-40^{\circ} - +60^{\circ}\text{C}$

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Nominal data		rated voltage	frequency	air flow	max. pressure increase	power input	speed	electrical connection	mass	Dimensions mm
motor right*	motor left	V	Hz	m ³ /h	Pa	W	min ⁻¹		kg	b
QL4/1000-2118	QL4/0010-2118	230	50	40	13	10	2550	②	0,5	57
QL4/1500-2118	QL4/0015-2118	230	50	55	13	10	2350	②	0,55	57
QL4/2000-2118	QL4/0020-2118	230	50	75	13	10	2150	②	0,65	57
QL4/2500-2118	QL4/0025-2118	230	50	85	12	10	1900	②	0,7	57
QL4/3000-2118	QL4/0030-2118	230	50	90	12	10	1700	②	0,75	57
QLK45/0600-2513	QLK45/0006-2513	230	50	36	55	15	2650	②	0,65	55
QLK45/1200-2513	QLK45/0012-2513	230	50	82	65	15	2300	②	0,9	66
QLK45/1800-2524	QLK45/0018-2524	230	50	120	65	27	2300	①②	1	66
QLK45/2400-2524	QLK45/0024-2524	230	50	140	65	27	2100	①②	1,15	66
QLK45/3000-2524	QLK45/0030-2524	230	50	160	60	27	1600	①②	1,35	66
QLK45/3600-2524	QLK45/0036-2524	230	50	175	60	27	1400	①②	1,5	66
QLZ06/1200-2524	QLZ06/0012-2524	230	50	115	70	24	2200	①②	0,95	58
QLZ06/1800-2524	QLZ06/0018-2524	230	50	130	65	24	1600	①②	1,1	58
QLZ06/2400-2524	QLZ06/0024-2524	230	50	145	62	24	1100	①②	1,2	58
QLN65/1200-2524	QLN65/0012-2524	230	50	130	60	24	2000	①②	1,05	54
QLN65/1800-2524	QLN65/0018-2524	230	50	140	60	24	1200	①②	1,2	54

*) Corresponding to dimensional drawing; subject to alterations



for blower Dimensions, see basic AC types

Tangential blowers

QL 4 with EC motor



Tangential blowers with electronically commutated EC-motors.

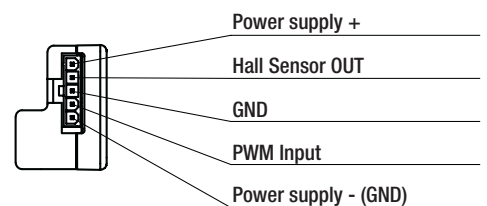
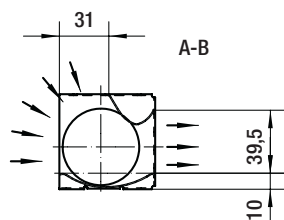
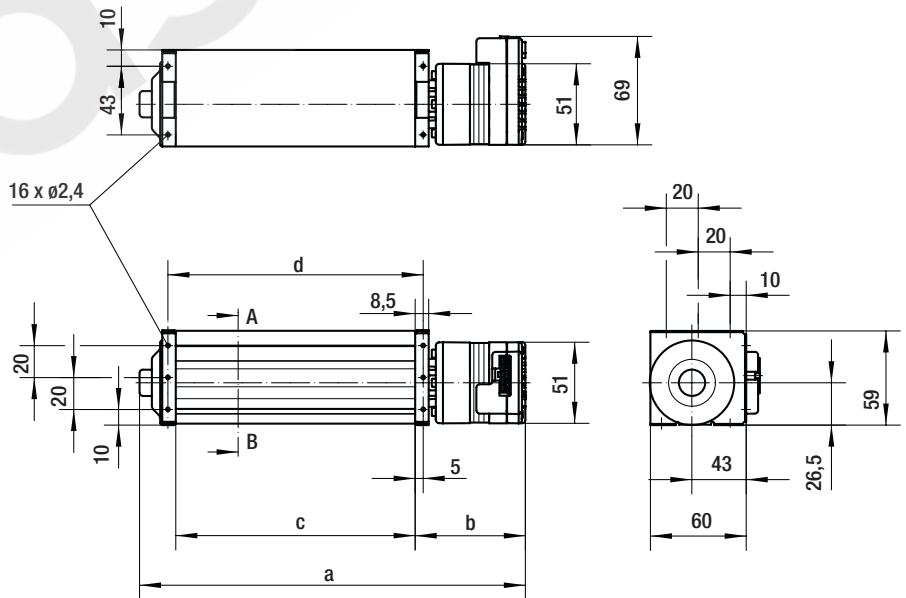
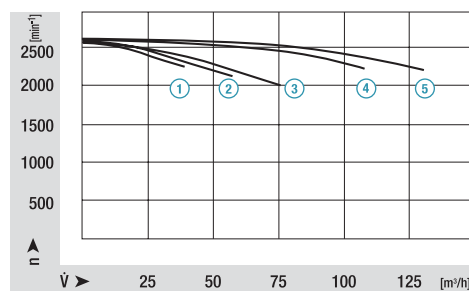
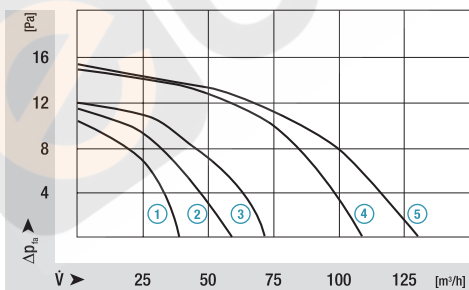
- integrated electronics
- blower speed variable via PWM (pulse width modulation) signal, optionally speed adjustment via 0 - 10 V analoguous voltage signal
- impeller diameter 40 mm
- airflow direction of 180° possible
- mounting position horizontal or vertical with motor at the bottom
- protection class IP20, insulation class F
- permissible ambient temperature 0 – 60 °C

ebm-papst • Landshut

Nominal data		rated voltage	air flow	max. pressure increase	power input	speed	mass	Dimensions mm			
motor right*	motor left	VDC	m³/h	Pa	W	min ⁻¹	kg	a	b	c	d
QL4/1000-2212	QL4/0010-2212	24	35	10	5	2250	0,55	193	71	100	110
QL4/1500-2212	QL4/0015-2212	24	60	12	5	2150	0,6	243	71	150	160
QL4/2000-2212	QL4/0020-2212	24	75	12	6	2000	0,65	293	71	200	210
QL4/2500-2212	QL4/0025-2212	24	110	15	7	2250	0,7	343	71	250	260
QL4/3000-2212	QL4/0030-2212	24	130	15	7	2200	0,75	393	71	300	310

*) Corresponding to dimensional drawing; Technical data are preliminary and valid at free air flow and rated voltage; subject to alterations

Characteristic curves



suitable for connector Molex Mini-Fit, Jr. (not part of delivery)
connector: order number 39-01-4050
female terminal: for example 39-00-0059

Tangential blowers

QLK 45 with EC motor



Tangential blowers with electronically commutated EC-motors.

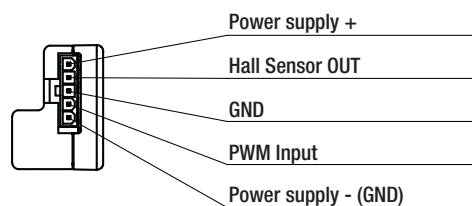
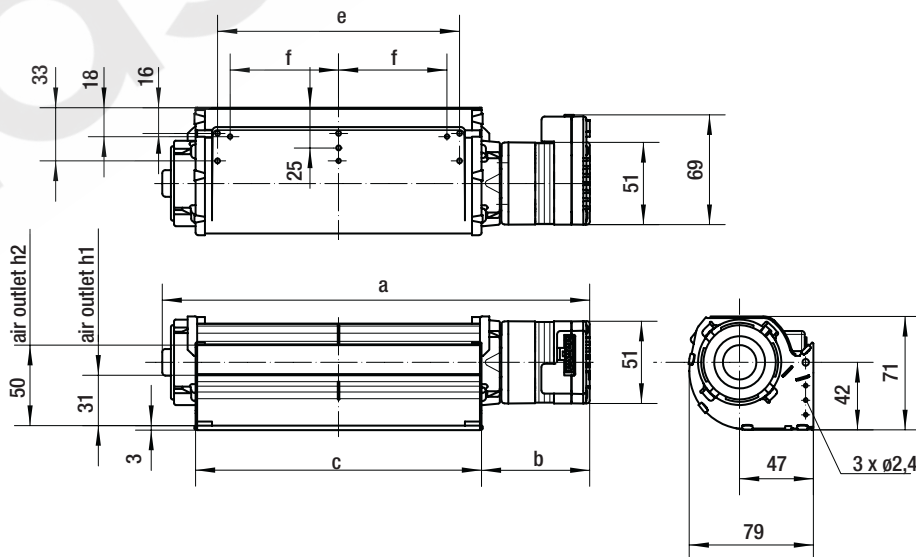
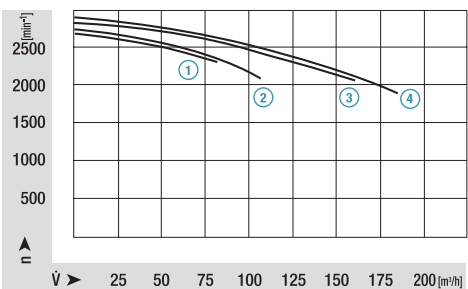
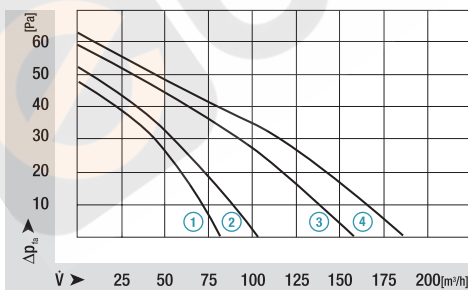
- integrated electronics
- blower speed variable via PWM (pulse width modulation) signal, optionally speed adjustment via 0 - 10 V analoguous voltage signal
- impeller diameter 45 mm
- horizontal or vertical mounting position with motor at the bottom
- protection class IP20, insulation class F
- permissible ambient temperature 0 – 60 °C

ebm-papst • Landshut

Nominal data		rated voltage	air flow	max. pressure increase	power input	speed	mass	Dimensions mm				
motor right*	motor left	VDC	m³/h	Pa	W	min ⁻¹	kg	a	b	c	e	f
QLK45/1200-2212	QLK45/0012-2212	24	80	50	7	2250	0,65	215	70	122	94	39
QLK45/1800-2212	QLK45/0018-2212	24	110	55	8	2050	0,7	275	70	182	154	69
QLK45/2400-2212	QLK45/0024-2212	24	160	60	10	2050	0,75	335	70	242	212	98
QLK45/3000-2212	QLK45/0030-2212	24	190	60	11	1900	0,8	395	70	302	272	128

*) Corresponding to dimensional drawing; Technical data are preliminary and valid at free air flow and rated voltage; subject to alterations

Characteristic curves



suitable for connector Molex Mini-Fit, Jr. (not part of delivery)
connector: order number 39-01-4050
female terminal: for example 39-00-0059

Tangential blowers

QLZ 06 with EC motor



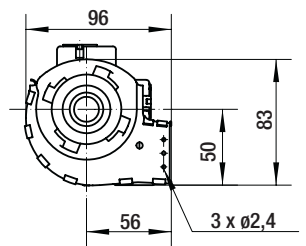
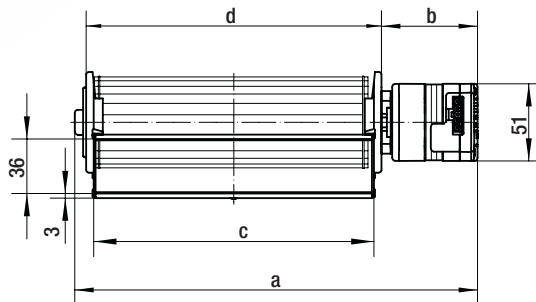
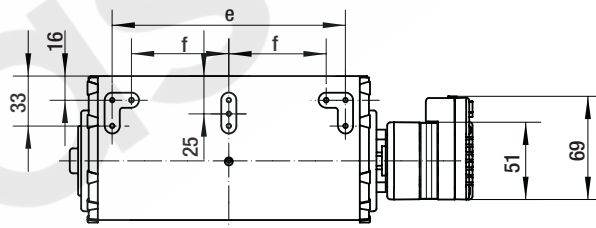
Tangential blowers with electronically commutated EC-motors.

- integrated electronics
- blower speed variable via PWM (pulse width modulation) signal, optionally speed adjustment via 0 - 10 V analoguous voltage signal
- impeller diameter 60 mm
- horizontal or vertical mounting position with motor at the bottom
- protection class IP20, insulation class F
- permissible ambient temperature 0 – 60 °C

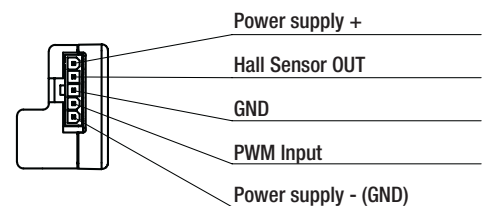
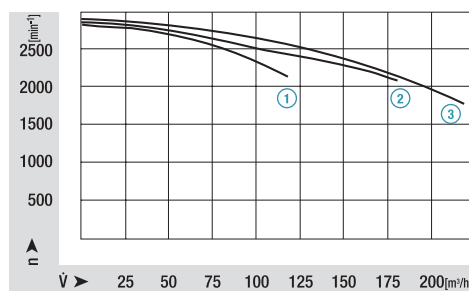
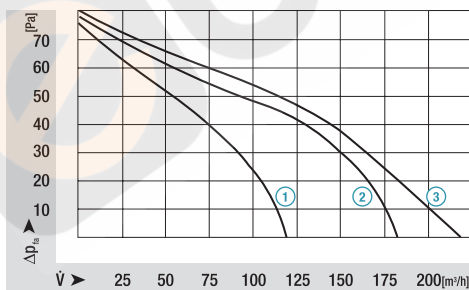
ebm-papst • Landshut

Nominal data		rated voltage	air flow	max. pressure increase	power input	speed	mass	Dimensions mm					
motor right*	motor left	VDC	m³/h	Pa	W	min ⁻¹	kg	a	b	c	d	e	f
QLZ06/1200-2212	QLZ06/0012-2212	24	120	75	10	2100	0,7	206,5	64,5	125	135	94	–
QLZ06/1800-2212	QLZ06/0018-2212	24	180	80	15	2050	0,75	267	64,5	185	195	154	64
QLZ06/2400-2212	QLZ06/0024-2212	24	220	80	17	1800	0,8	327	64,5	243	253	212	93

*) Corresponding to dimensional drawing; Technical data are preliminary and valid at free air flow and rated voltage; subject to alterations



Characteristic curves



suitable for connector Molex Mini-Fit, Jr. (not part of delivery)
connector: order number 39-01-4050
female terminal: for example 39-00-0059

Tangential blowers

QLN 65 with EC motor

Tangential blowers with electronically commutated EC-motors.

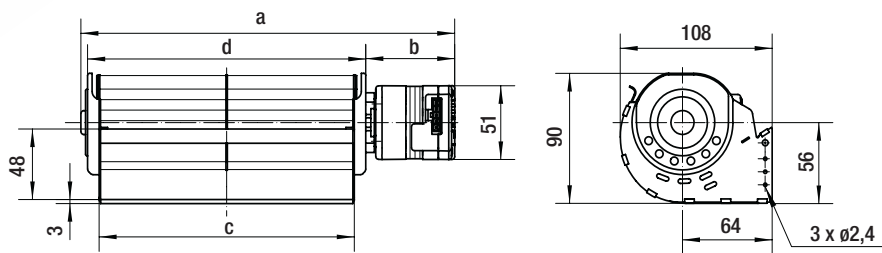
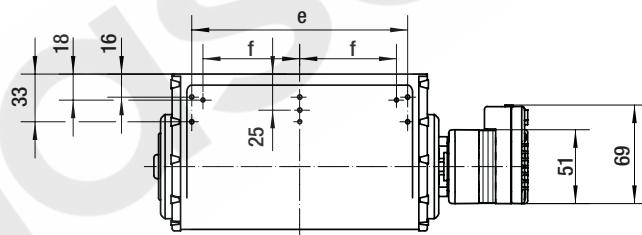
- integrated electronics
- blower speed variable via PWM (pulse width modulation) signal, optionally speed adjustment via 0 - 10 V analoguous voltage signal
- impeller diameter 65 mm
- horizontal or vertical mounting position with motor at the bottom
- protection class IP20, insulation class F
- permissible ambient temperature 0 – 60 °C

ebm-papst • Landshut

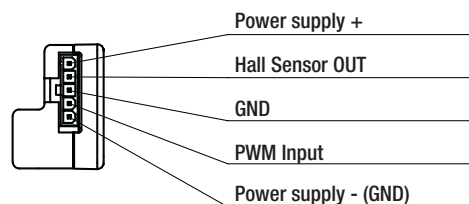
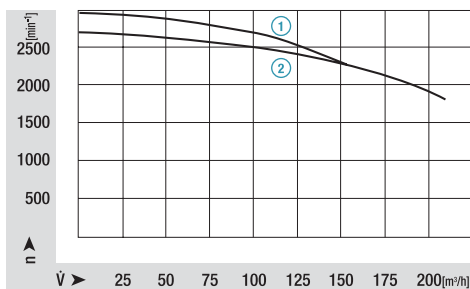
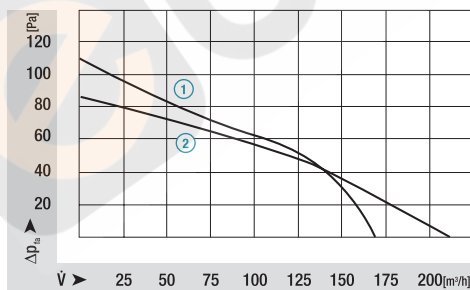


Nominal data		rated voltage	air flow	max. pressure increase	power input	speed	mass	Dimensions mm					
motor right*	motor left	VDC	m³/h	Pa	W	min ⁻¹	kg	a	b	c	d	e	f
QLN65/1200-2212	QLN65/0012-2212	24	160	110	14	2200	0,75	209	64,5	122	139	94	-
QLN65/1800-2212	QLN65/0018-2212	24	210	85	16	1850	0,8	269	64,5	182	199	154	69

*) *) Corresponding to dimensional drawing; Technical data are preliminary and valid at free air flow and rated voltage; subject to alterations



Characteristic curves



suitable for connector Molex Mini-Fit, Jr. (not part of delivery)
connector: order number 39-01-4050
female terminal: for example 39-00-0059

Tangential blowers

QLK 45 double housing with EC motor



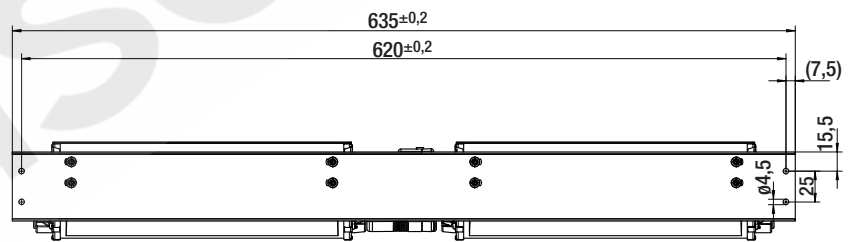
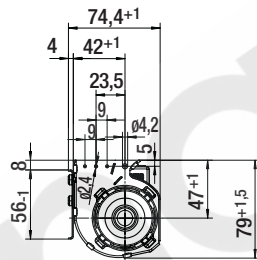
Tangential blowers with electronically commutated EC-motors.

- integrated electronics
- speed setting via 0 - 10 V analogue voltage signal
- speed-adjustable (version) via PWM signal available upon request
- impeller diameter 45 mm
- horizontal or vertical mounting position
- protection class IP20, insulation class F
- permissible ambient temperature 0 – 60 °C

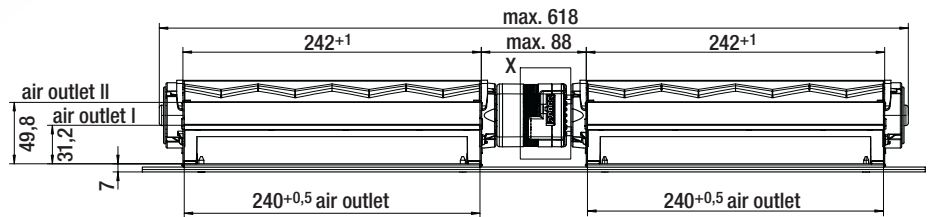
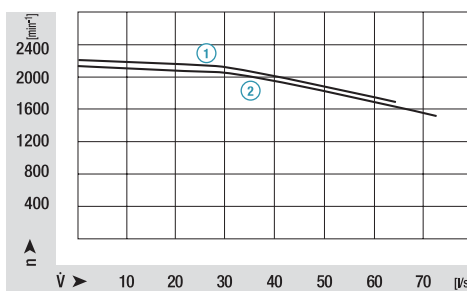
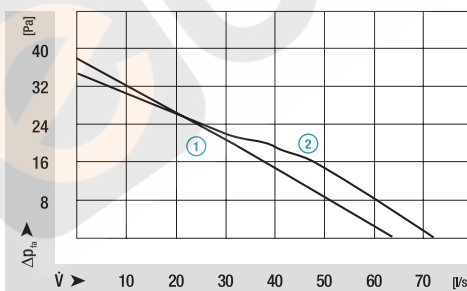
ebm-papst • Landshut

Nominal data	characteristic curve	rated voltage	air flow	max. pressure increase	power input	speed	mass	Dimensions mm						
								a	b	c	g	h		
QLK45/2424-2212*	①	VDC	m ³ /h	Pa	W	min ⁻¹	kg							
QLK45/3030-2212	②	24	230	37	8	1650	2,4							
		24	265	34	10	1500	2,6							

*) Corresponding to dimensional drawing; subject to alterations

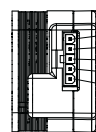


Characteristic curves



Power supply: 24 DC (10V...26,8V)
 Hall sensor out: 2 pulses per rotation
 $U_{H1} = 12V$; $R_1 = 1k\Omega$
 Input: control voltage: 0...10V
 input switched to GND: fan off
 input open: fan off

X

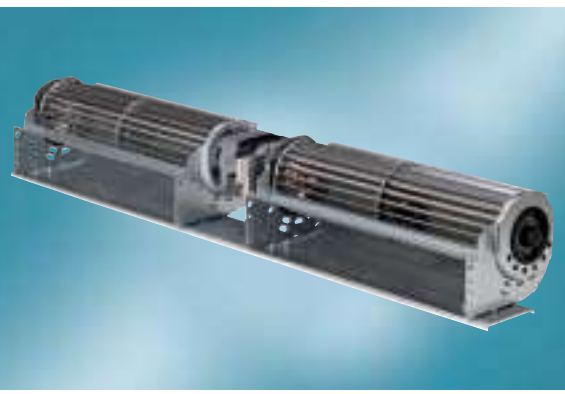


Power supply +
 Hall Sensor OUT
 GND
 PWM Input
 Power supply - (GND)

suitable for connector housing Mini-Fit, Jr. (Fa. Molex)
 order number 39-01-4050

Tangential blowers

QLN 65 double housing with EC motor



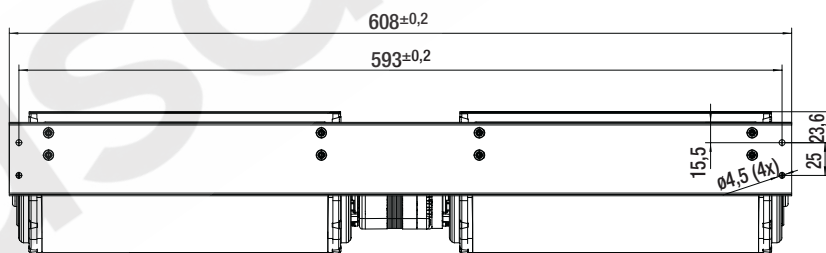
Tangential blowers with electronically commutated EC-motors.

- integrated electronics
- speed setting via 0 - 10 V analogue voltage signal
- speed-adjustable (version) via PWM signal available upon request
- impeller diameter 65 mm
- horizontal or vertical mounting position
- protection class IP20, insulation class F
- permissible ambient temperature 0 – 60 °C

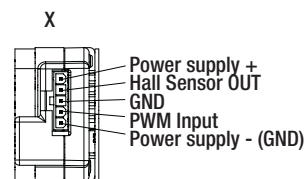
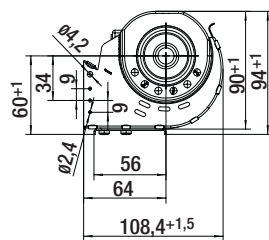
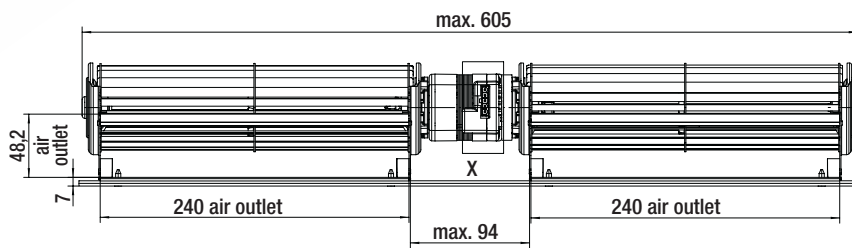
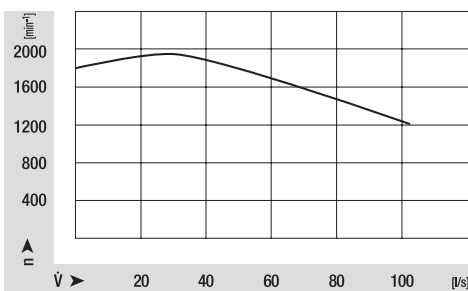
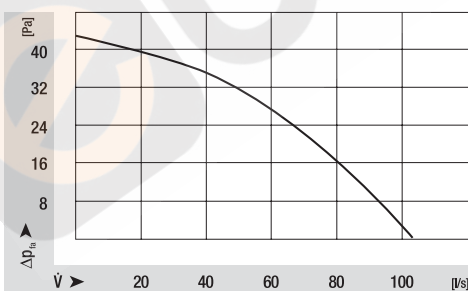
ebm-papst • Landshut

Nominal data	rated voltage	air flow	max. pressure increase	power input	speed	mass	Dimensions mm				
	V	m ³ /h	Pa	W	min ⁻¹	kg	a	b	c	g	h
QLN65/2424-2212	24	360	42	19	1250	1,5					

subject to alterations



Characteristic curves



suitable for connector housing Mini-Fit, Jr. (Fa. Molex)
order number 39-01-4050