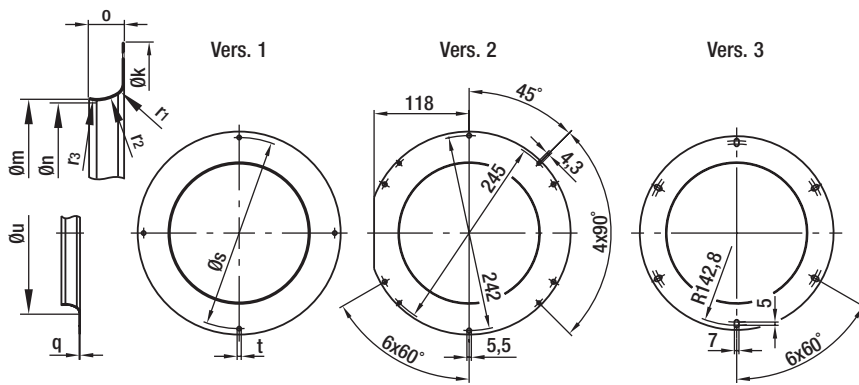


Accessories

Inlet rings	306
Guard grilles	309
Lead connections, capacitors	313
Terminal boxes, air filters	316
Motor protection switch, speed setting, star-delta switch, repair switch	317



Accessories



- **Material:** galvanised sheet steel

ebm-papst · Mulfingen

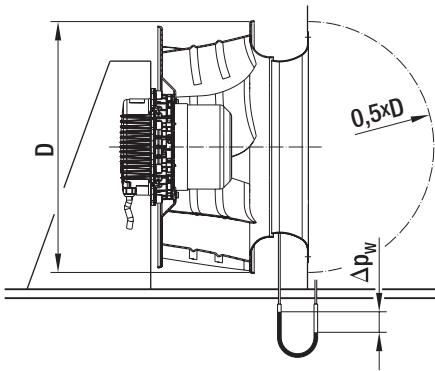
Inlet rings for backward curved centrifugal fans

Part no.	Size ⁽¹⁾	Vers.	k	m	n	o	q	r ₁	r ₂	r ₃	s	t	u
96120-2-4013	120 (P)	1	146	94,4	---	18,0	0,80	16,0	---	---	134	4x4,5	126
09566-2-4013	133 (P)	1	129	87,0	---	13,0	1,00	8,0	---	---	118	4x4,5	103
09576-2-4013	175 / 190 (P)	1	170	125,5	---	14,0	1,25	10,0	---	---	158	4x4,5	146
09609-2-4013	220 (P)	2	252	155,0	---	21,0	0,80	22,0	---	---	---	---	199
96358-2-4013	225 (P)	1	223	146,0	---	28,0	1,50	25,0	---	---	210	4x4,5	196
96359-2-4013	250 (P)(S)	1	255	164,5	---	31,0	1,50	28,0	---	---	240	4x4,5	221
96360-2-4013	270 / 280 (S)	1	280	182,5	---	35,0	1,50	31,0	---	---	260	4x4,5	245
97512-2-4013	310 (P)	3	300	192,0	---	53,0	1,00	30,0	60,0	---	---	---	257
31050-2-4013	310 (A)	1	300	211,0	208,1	48,0	1,25	18,0	55,5	35,0	280	4x4,5	256
31051-2-4013	310 ⁽²⁾ (A)	1	300	211,0	209,2	27,5	1,25	10,0	32,0	20,0	280	4x4,5	236
51357-2-4013	330 / 355 (P)	1	350	224,0	---	60,0	1,50	54,0	28,0	---	325	4x4,5	284
35560-2-4013	355 (A)	1	350	240,0	236,4	60,0	1,50	22,5	70,0	44,0	325	4x4,5	296
35561-2-4013	355 ⁽²⁾ (A)	1	350	240,0	238,0	30,0	1,50	11,0	35,0	22,0	325	4x4,5	267
54476-2-4013	400 (A)	1	370	257,0	---	66,0	1,50	22,0	50,0	90,0	345	4x4,5	322
54478-2-4013	450 (A)	1	413	287,0	---	71,0	1,50	25,0	55,0	100,0	390	6x9	362
63045-2-4013	450 (A)	1	450	289,0	284,5	75,0	1,50	28,0	87,0	49,0	425	6x9	360
54480-2-4013	500 (A)	1	520	323,0	---	79,0	1,50	28,0	65,0	115,0	430	6x9	408
63072-2-4013	500 (A)	1	470	342,0	337,0	75,0	2,00	28,0	87,0	55,0	445	6x9	412
63071-2-4013	560 (A)	1	515	385,0	380,0	82,0	2,00	30,0	95,0	60,0	490	6x9	461
63070-2-4013	630 (A)	1	634	433,0	427,0	98,5	2,00	37,0	14,0	72,0	600	6x10,5	525

subject to alterations

⁽¹⁾ size with key for impeller material: (P) = plastic, (S) = sheet steel, (A) = aluminium

⁽²⁾ short inlet ring



The differential pressure approach compares the static pressure before the inlet ring with the static pressure inside the inlet ring. Air flow can be calculated on the basis of the differential pressure (difference in pressure of the static pressures) in keeping with the following equation:

$$\dot{V} = k \cdot \sqrt{\Delta p_w} \quad \dot{V} \text{ [m}^3/\text{h]} \text{ and } \Delta p_w \text{ [Pa]}$$

If constant air flow is to be controlled to, then the nozzle pressure has to be kept constant:

$$\Delta p_w = \dot{V}^2 : k^2$$

k takes into account the specific nozzle characteristics.

1 resp. 4 pressure measuring points are spaced along the circumference of the inlet ring. Connection on the customer side is accomplished via a premounted T tube connector. This tube connector is suited for pneumatic hoses with an internal diameter of 4 mm.

ebm-papst • Muldingen

Inlet rings with measuring device to determine air flow for backward curved centrifugal fans

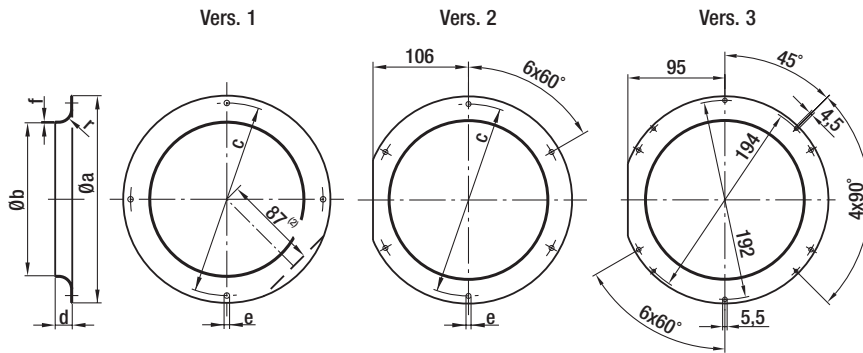
Part no. with 1 nozzle	Part no. with ring line	Size	k-value	Dimensions see
25002-2-4013	25001-2-4013	250	69	96359-2-4013
28002-2-4013	28001-2-4013	280	88	96360-2-4013
31100-2-4013	31080-2-4013	310	120	31050-2-4013
31110-2-4013 ⁽¹⁾	31090-2-4013 ⁽¹⁾	310	103	31051-2-4013
35600-2-4013	35580-2-4013	355	155	35560-2-4013
35610-2-4013 ⁽¹⁾	35590-2-4013 ⁽¹⁾	355	138	35561-2-4013
54515-2-4013	54500-2-4013	400	183	54476-2-4013
54514-2-4013	54510-2-4013	450	217	54478-2-4013
64015-2-4013	64005-2-4013	450	214	63045-2-4013
54518-2-4013	54516-2-4013	500	265	54480-2-4013
64025-2-4013	64002-2-4013	500	283	63072-2-4013
64030-2-4013	64001-2-4013	560	350	63071-2-4013
64040-2-4013	64000-2-4013	630	480	63070-2-4013

subject to alterations

⁽¹⁾ short inlet ring

Accessories

- **Material:** galvanised sheet steel



ebm-papst • Mulfingen

Inlet rings for forward curved centrifugal fans

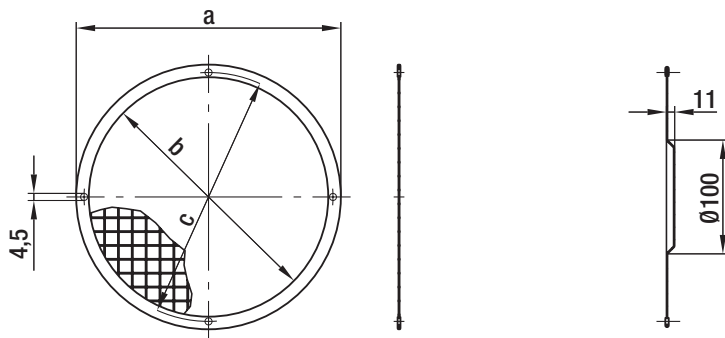
Part no.	Size	Vers.	a	b	c	d	e	f	r
09560-2-4013	076 / 085 ⁽¹⁾	1	92	63,4	84	6	3x4,2	0,80	6,8
09563-2-4013	097 ⁽¹⁾	1	116	80,0	108	10	3x4,5	0,80	10,0
09566-2-4013	108	1	129	87,0	118	13	4x4,5	1,00	8,0
09569-2-4013	120	1	142	100,0	132	9	4x4,5	1,00	8,0
09572-2-4013	133	1	150	112,0	142	12	4x4,5	1,00	10,0
09576-2-4013	140 / 146	1	170	125,5	158	14	4x4,5	1,25	10,0
09588-2-4013	160	1 ⁽²⁾	185	130,0	175	17	4x4,5	0,75	12,0
09597-2-4013	180	3	210	149,0	---	28	---	1,25	25,0
09605-2-4013	200 / 225	2	230	175,0	213	24	6x5,5	1,25	20,0

subject to alterations

⁽¹⁾ 3 drilled holes staggered by 120°

⁽²⁾ dimension 87 only with 09588-2-4013

Accessories



⁽⁴⁾ Size 160

- **Material:** welded grille made of galvanised steel, frame made of tinned sheet iron 0.3 mm thick

ebm-papst • Mulfingen

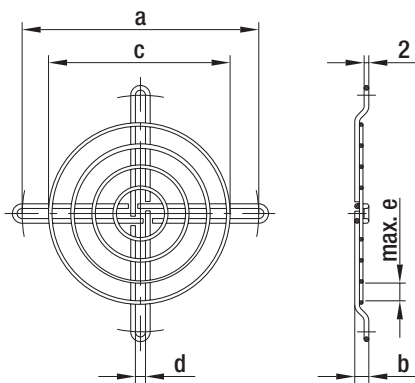
Guard grilles for centrifugal blowers with single inlet

Part no.	Size	a	b	c
09489-2-4039	076 / 085 ⁽³⁾	90	74	84
09490-2-4039	108	126	110	118
09494-2-4039	120	140	124	132
09492-2-4039	140 / 146	168	152	158
09503-2-4039	160 ⁽⁴⁾	183	170	175
09493-2-4039	180 ⁽⁵⁾	205	189	194

subject to alterations

⁽³⁾ 3 drilled holes staggered by 120°

⁽⁴⁾ not suitable for G2E180-EH03-01



- **Material:** steel wire

ebm-papst • Mulfingen

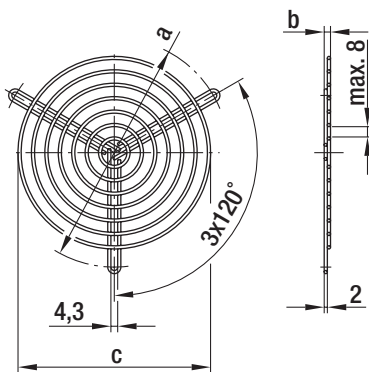
Guard grilles for centrifugal blowers with single inlet

Part no.	Size	Coating	a	b	c	d	e
09603-2-4039	076 / 085	plastic coated, silver-metallic gloss	101	6,0	79	4,3	8
98214-2-4039	108	plastic coated, silver-metallic gloss	120	3,5	88	4,3	8
25028-2-4039	140 / 146	galvanised, chromatised in blue	162	8,5	139	4,3	8
17729-2-4039	160	galvanised, chromatised in blue	175	3,5	139	4,6	7
09526-2-4039	180 ⁽⁶⁾	phosphatized, plastic coated in RAL no. 9005	194	39,5	164	4,3	8

subject to alterations

⁽⁶⁾ only suitable for G2E180-EH03-01

Accessories



- **Material:** steel wire

ebm-papst • Mulfingen

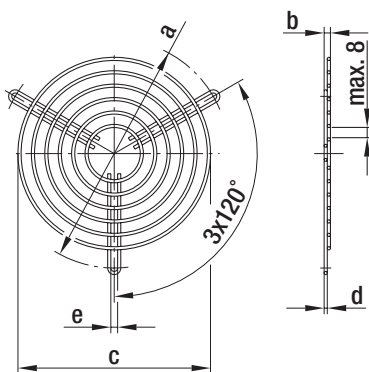
Guard grilles for centrifugal blowers with dual inlet

Part no.	Size	Coating	a	b	c
83319-2-4039	097 ⁽¹⁾	phosphatized, plastic coated in RAL no. 9005	96	3,5	71
09485-2-4039	097 ⁽²⁾	phosphatized, plastic coated in RAL no. 9005	114	3,5	88
09500-2-4039	133 / 146	phosphatized, plastic coated in RAL no. 9005	145	4,0	122
31003-2-4039	180	phosphatized, plastic coated in RAL no. 9005	192	9,5	174
95644-2-4039	200	plastic coated, silver-metallic gloss	250	5,0	206

subject to alterations

⁽¹⁾ for D2E097-CH

⁽²⁾ for D2E097-B*



- **Material:** phosphatized steel wire, plastic coated, silver-metallic gloss

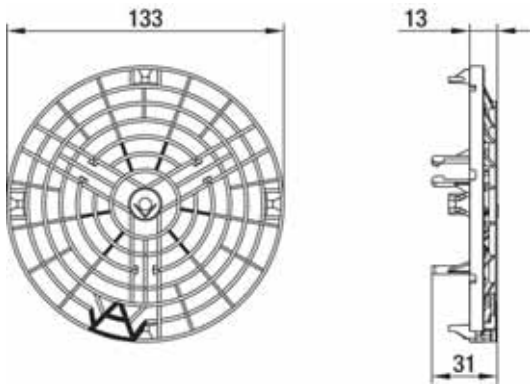
ebm-papst • Mulfingen

Guard grilles for centrifugal blowers with dual inlet (EW sheet steel support)

Part no.	Size	a	b	c	d	e
35000-2-4039	160	182	12	144	2,4	4,5
62226-2-4039	180	192	9	173	3,0	5,2
62227-2-4039	200	213	9	190	3,0	5,2
62228-2-4039	225 / 240	242	9	222	3,0	5,2
25825-2-4039	250	275	9	255	3,0	5,2

subject to alterations

Accessories



- **Material:** PA6.6, fibre-glass reinforced V0, black
- **Special feature:** triangular, raised contour
- **Suitable for:**
D2E140-HR; D2E146-KA; D2E146-KB;
D2E146-HR; D2E146-HS; D2E146-HT;
D4E146-LV; K4E146-AB; D4E160-HN

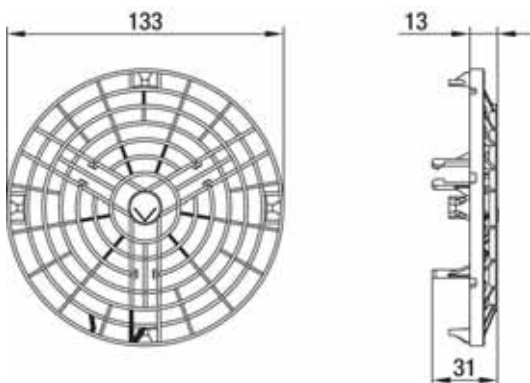
ebm-papst · Muldingen

Guard grilles for blowers with dual inlet with plastic housing (cable exit side of blower)

Part no.

34265-2-2929

subject to alterations



- **Material:** PA6.6, fibre-glass reinforced V0, black
- **Special feature:** outmost two rings are closed
- **Suitable for:**
D2E140-HR; D2E146-KA; D2E146-KB;
D2E146-HR; D2E146-HS; D2E146-HT;
D4E146-LV; K4E146-AB; D4E160-HN

ebm-papst · Muldingen

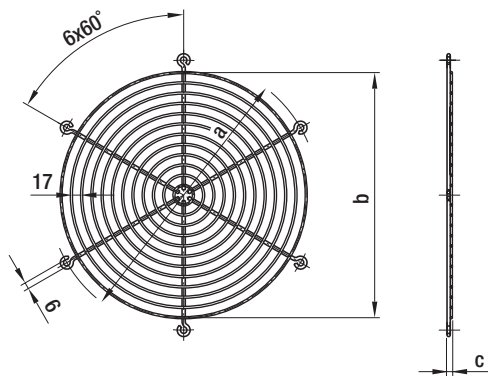
Guard grilles for blowers with dual inlet with plastic housing (side of blower opposite cable exit)

Part no.

38182-2-2929

subject to alterations

Accessories



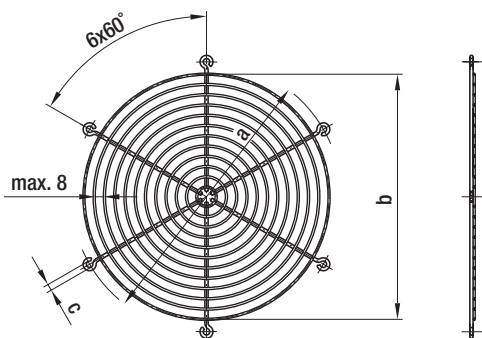
- **Material:** steel wire

ebm-papst • Mulfingen

Guard grilles (e.g. for backward curved centrifugal fans)

Part no.	Size	Coating	a	b	c
65152-2-4039	250	galvanised	250	172	5
53526-2-4039	280 / 310	galvanised	290	210	10
54329-2-4039	355	phosphatized, plastic coated in RAL no. 9005	328	286	10
54328-2-4039	400	phosphatized, plastic coated in RAL no. 9005	366	286	10

subject to alterations



- **Material:** phosphatized steel wire, plastic coated in RAL no. 9005, black

ebm-papst • Mulfingen

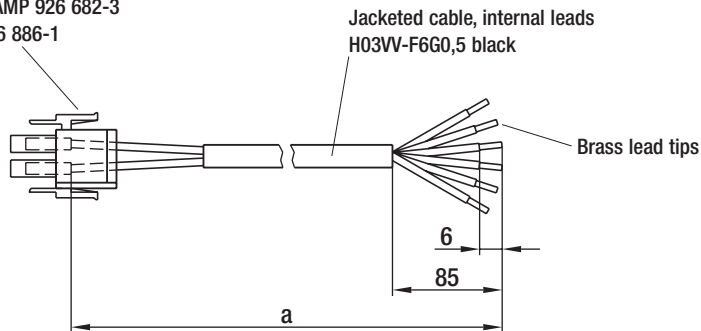
Guard grilles (e.g. for axial fans)

Part no.	Size	a	b	c
09513-2-4039	200	250	227	6
09518-2-4039	250	295	265	7
09532-2-4039	300	380	323	9

subject to alterations

Accessories

AMP-Universal-Mate-N-Lok suitable for:
connector shell AMP 926 682-3
plug pin AMP 926 886-1



- **Suitable for:**
D2E 140 -HR; D2E 146 -KA; D2E 146 -KB;
D2E 146 -HR; D2E 146 -HS; D2E 146 -HT;
D2E 160 -FI; D2E 160 -FK
- **Plug assignment:**
1 = Step 1 (white)
2 = Step 2 (red)
3 = Step 3 (grey)
4 = Step 4 (black)
5 = N (blue)
6 = PE (green/yellow)

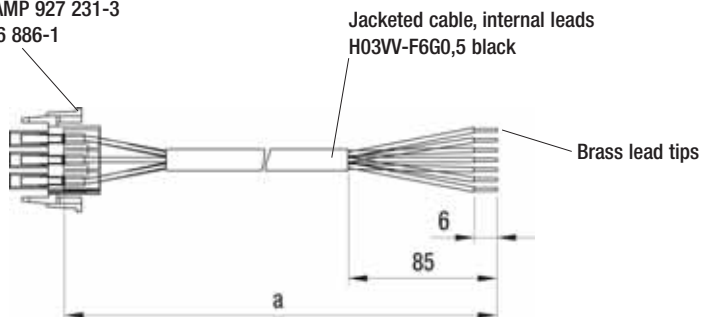
ebm-papst • Muldingen

Lead connections for centrifugal blowers

Part no.	a
21956-4-1040	300
21957-4-1040	450
21958-4-1040	650
21959-4-1040	1000

subject to alterations

AMP-Universal-Mate-N-Lok suitable for:
connector shell AMP 927 231-3
plug pin AMP 926 886-1



- **Suitable for:**
D4E 146 -LV; K4E 146 -AB
- **Plug assignment:**
1 = Step 1 (white)
2 = Step 2 (red)
3 = Step 3 (grey)
4 = Step 4 (orange)
5 = Step 5 (black)
8 = N (blue)
9 = PE (green/yellow)

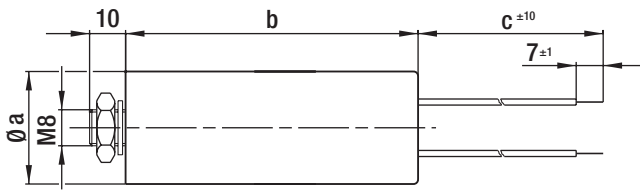
ebm-papst • Muldingen

Lead connections for centrifugal blowers

Part no.	a
21810-4-1012	450
21811-4-1012	1050
21812-4-1012	1300
21813-4-1012	1600
21814-4-1012	2300

subject to alterations

Accessories



- **Material:** housing made of thermoplast
- **Connection lead:** multi-lead PVC cable 0.5 mm² (16x 0.2 mm²) with brass lead tips
- **Approval:** VDE according to DIN EN 60252 (VDE 0560/8)
- **Calculated life time:**
400 V; -25..+85°C; 30,000 hrs; class A
450 V; -25..+85°C; 10,000 hrs; class B

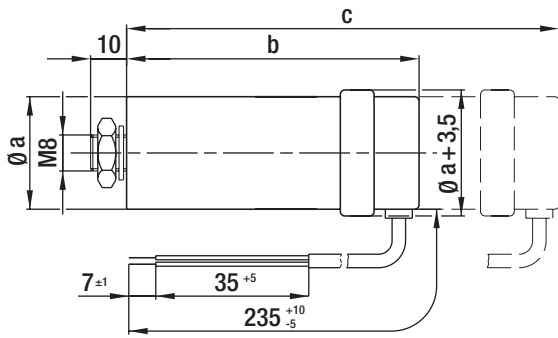
ebm-papst • Muldingen

MKP motor capacitors (without fuse)

Part no.	Capacity	a	b (max.)	c
02100-4-7320	1,0 µF	25-28	58	235
99282-4-7320	1,5 µF	25-28	58	235
99283-4-7320	2,0 µF	25-28	58	235
02103-4-7320	2,5 µF	25-28	70	235
68462-4-7320	3,0 µF	25-28	70	235
99284-4-7320	4,0 µF	28-32	58	235
02101-4-7320	5,0 µF	30-36	70	235
99285-4-7320	6,0 µF	30-36	70	235
66788-4-7320	7,0 µF	30-36	72	100
99286-4-7320	8,0 µF	35-40	72	235
99287-4-7320	10,0 µF	35-40	72	200
66786-4-7320	12,0 µF	40	72	100
30457-4-7320	14,0 µF	40-45	92	150
50090-4-7320	16,0 µF	35-40	95	100
90034-4-7320	20,0 µF	40	95	235
90025-4-7320	25,0 µF	40	120	235

subject to alterations

Accessories

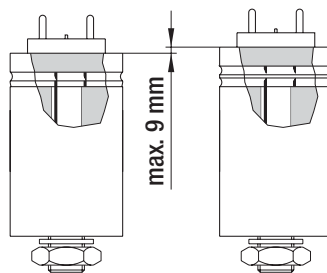


- **Material:** plastic cap, aluminium cup
- **Designation:** FPU or P2 according to IEC 252 (non-flammable, non-explosive, circuit-breaking)
- **Approval:** VDE according to DIN EN 60252 (VDE 0560/8)
- **Calculated life time:**
 420 V; -25...+85°C; 30,000 hrs; class A
 470 V; -25...+85°C; 10,000 hrs; class B
 500 V; -25...+85°C; 3,000 hrs; class C

ebm-papst • Muldingen

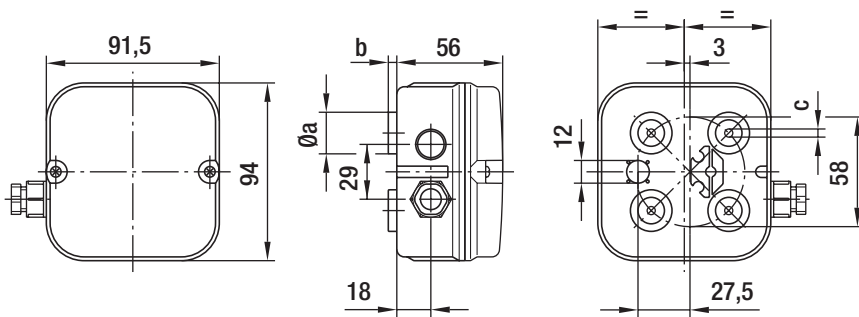
Part no.	Capacity	a	b (max.)	c (max.)
02151-4-7320	1,0 µF	25-30	77	92
02155-4-7320	1,5 µF	25	77	92
02156-4-7320	2,0 µF	25	77	92
02159-4-7320	2,5 µF	30	71	92
02160-4-7320	3,0 µF	30	71	92
02161-4-7320	4,0 µF	25-30	104	135
02162-4-7320	5,0 µF	25-30	104	113
02163-4-7320	6,0 µF	30	101	110
02164-4-7320	7,0 µF	30-35	101	110
02165-4-7320	8,0 µF	30-35	102	111
02166-4-7320	10,0 µF	35	96	110
02167-4-7320	12,0 µF	35	96	110
90026-4-7320	14,0 µF	40	130	139
02168-4-7320	16,0 µF	40	96	130
02169-4-7320	20,0 µF	40	116	130
02170-4-7320	25,0 µF	40-45	116	130

subject to alterations



- **Pull-off protector:** The housing expands by max. 9mm. The protector responds to overload by the generated excess pressure snapping off the internal lead in a predetermined breaking point.
- **Mounting:** c is the overall dimension of the capacitor which has to be taken into account when mounting the part. The capacitor design, however, depends on the manufacturer. The expansion (9mm) is either added to dimension b, or it is already integrated in the capacitor.

Accessories



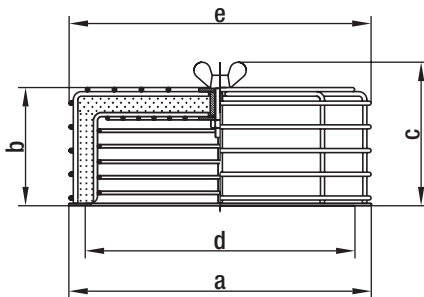
- **Description:** Two-piece terminal box for AC motors of size 068 or 074, terminal strip with 4- or 7-pole. Suitable for installation of capacitor with 10 µF max.
- **Material:** ABS
- **Type of protection:** IP 54

ebm-papst • Muldingen

Terminal boxes

Part no.	AC motor	a	b	c
64442-1-7612	068 (4-polig)	22	5,0	4,3
64444-1-7612	068 (7-polig)	22	5,0	4,3
64443-1-7612	074 (4-polig)	12x14,5	10,5	5,5
64445-1-7612	074 (7-polig)	12x14,5	10,5	5,5

subject to alterations



- **Material:** steel wire / sheet steel, plastic coated in RAL no. 9005, black
- **Filter:** Viledon filter type R: PSB / 29 OS (according to DIN 24185)
separation capacity: < 86 %
efficiency: < 20 %
dust binding capacity: 650 g/m²

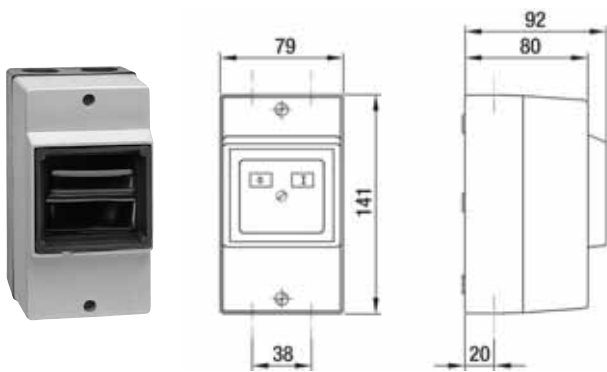
ebm-papst • Muldingen

Air filters for centrifugal blowers (with die-cast aluminium housing)

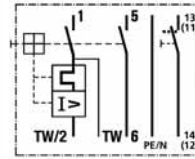
Part no.	Size	a	b	c	d	e	Spare filter
95777-1-5171	108 / 120	142	66	83	118-132	145	95779-1-5171
95778-1-5171	140 / 146 / 160	185	74	91	158-175	185	95780-1-5171
95347-1-5171	180	210	74	91	194	185	95780-1-5171

subject to alterations

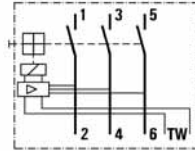
Accessories



Electr. connection TPE...



Electr. connection TPD...



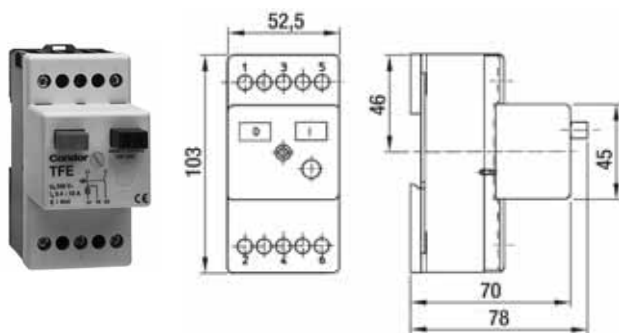
- **Technical features:**
Input for TOP
- **Type of protection:** IP 55

ebm-papst • Mulfingen

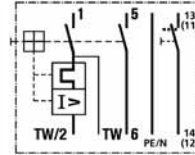
Motor protection switch for wall assembly (single-phase and three-phase)

Type	Voltage	Current	Auxiliary contactor
TPE 100-AA01 -01	1~ 230 VAC (50/60 Hz)	10 A	without auxiliary contactor
TPE 100-AA01 -02	1~ 230 VAC (50/60 Hz)	10 A	with NC contact
TPE 100-AA01 -03	1~ 230 VAC (50/60 Hz)	10 A	with NO contact
TPD 250-AA01 -01	3~ 400 VAC (50/60 Hz)	25 A	without auxiliary contactor
TPD 250-AA01 -02	3~ 400 VAC (50/60 Hz)	25 A	with NC contact
TPD 250-AA01 -03	3~ 400 VAC (50/60 Hz)	25 A	with NO contact

subject to alterations



Electr. connection TPE...



- **Technical features:**
Input for TOP

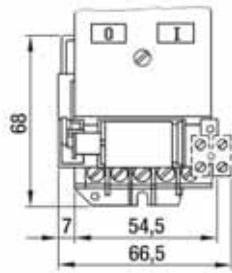
ebm-papst • Mulfingen

Motor protection switch for assembly inside a cabinet (single-phase)

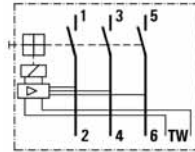
Type	Voltage	Current	Auxiliary contactor
TPE 100-AB01 -01	1~ 230 VAC (50/60 Hz)	10 A	without auxiliary contactor
TPE 100-AB01 -02	1~ 230 VAC (50/60 Hz)	10 A	with NC contact
TPE 100-AB01 -03	1~ 230 VAC (50/60 Hz)	10 A	with NO contact

subject to alterations

Accessories



Electr. connection TPD...



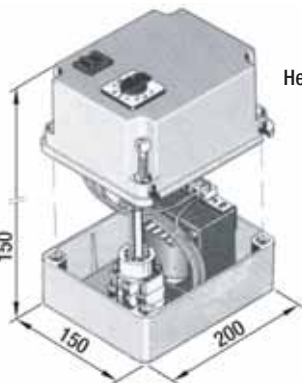
- **Technical features:**
Input for TOP

ebm-papst • Mulfingen

Motor protection switch for assembly inside a cabinet (3-phase current)

Type	Voltage	Current	Auxiliary contactor
TPD 250-AB01 -01	3~ 400 VAC (50/60 Hz)	25 A	without auxiliary contactor
TPD 250-AB01 -02	3~ 400 VAC (50/60 Hz)	25 A	with NC contact
TPD 250-AB01 -03	3~ 400 VAC (50/60 Hz)	25 A	with NO contact

subject to alterations



Height of switch 25 mm

- **Technical features:**
Input for TOP
- **Voltage steps:**
230 / 160 / 145 / 130 / 105 VAC
- **Type of protection:** IP 54

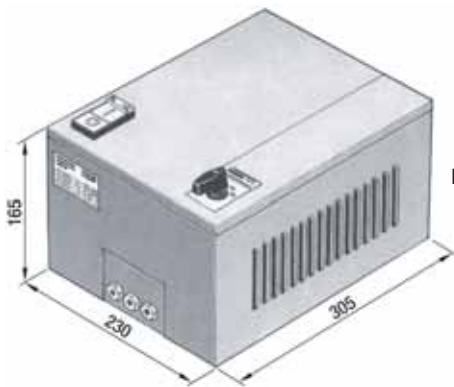
ebm-papst • Mulfingen

Single-phase speed setting for wall assembly (with 5 steps)

Type	Voltage	Current	Mass
TCE 021-AA01 -05	1~ 230 VAC (50/60 Hz)	2,1 A	3,5 kg
TCE 040-AA01 -05	1~ 230 VAC (50/60 Hz)	4,0 A	6,0 kg
TCE 075-AA01 -05	1~ 230 VAC (50/60 Hz)	7,5 A	7,5 kg

subject to alterations

Accessories



Height of switch 25 mm

- **Technical features:**
Input for TOP
- **Voltage steps:**
400 / 280 / 230 / 180 / 140 VAC (3x)
- **Type of protection:** IP 21 (with vertical installation)

ebm-papst · Mulfingen

3-phase current speed setting for wall assembly (with 5 steps)

Type	Voltage	Current	Mass
TCD 020-AA01 -05	3~ 400 VAC (50/60 Hz)	2,0 A	9,5 kg
TCD 040-AA01 -05	3~ 400 VAC (50/60 Hz)	4,0 A	11,5 kg
TCD 070-AA01 -05	3~ 400 VAC (50/60 Hz)	7,0 A	21,0 kg

subject to alterations

Star-delta switch

Möller Electric GmbH

Designation	Installation
T0-4-8410/I1	Wall installation
T0-4-8410/E	Cabinet installation

subject to alterations

Repair switch (lockable)

Möller Electric GmbH

Designation	Installation
T0-2-8900/I1/SVB-SW	Wall installation
T0-2-8900/EA/SVB-SW	Cabinet installation

subject to alterations