


mcr Monsun
smoke exhaust axial-flow fans

APPLICATION

mcr Monsun fan has been designed for removing hot air, smoke and exhaust gases generated in enclosed interiors during fire. It may be used in comfort and industrial ventilation system as exhaust and venting or air intake fan. The device may be used, for example, in public utility buildings, collective dwellings, industrial halls, underground car parks, shopping centres.

mcr Monsun fan enables evacuation of people from the affected area, makes it easier to efficiently tackle the fire, and protects the building structure and its fittings against high temperature, as well as prevents the fire from spreading to the neighbouring fire compartments.

It is intended for ducted or unducted mounting in vertical or horizontal position. It can work indoors and outdoors.

mcr Monsun fan was tested according to EN-12101-3 standard.
Certificate of Conformity  no. 1488-CPD-0129/W.

FIRE RESISTANCE

- ▶ F400 (400°C/2H)
- ▶ F300 (300°C/1H)
- ▶ F200 (200°C/2H)

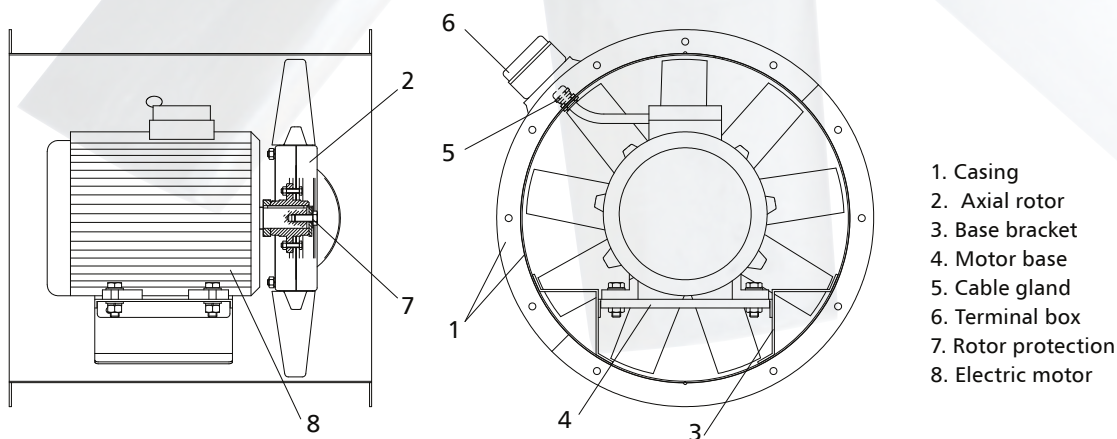
STRUCTURE

Casing is made of galvanized steel sheet, 2 mm to 6 mm in thickness, depending on device diameter, dry powder coated or hot dip galvanized, with dual corrosion protection.

Fan **rotor** is mounted directly on the motor pin. It has 9 or 12 blades made of aluminium cast, with aerodynamic grid of blades profile providing required flow parameters.

Rotor can operate with various blade angle settings and variable number of blades. Angle is factory pre-set.

Depending on requirements, the fan utilizes a three-phase one-speed or two-speed **motor** with variable rotational speed (3000, 1500, 1000, 750 rpm), without installed thermal protection system. Motor features H class insulation and IP55 protection rating.



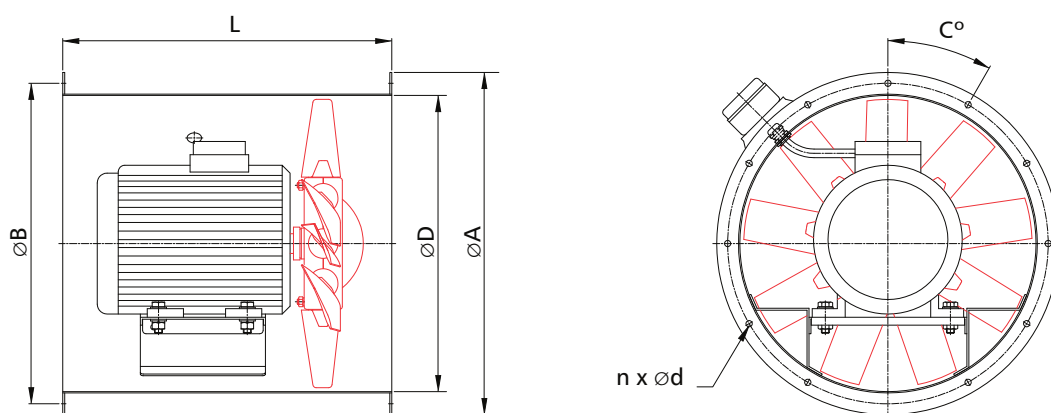
DIMENSIONS

Available diameters of axial smoke-exhaust fans:

355 mm, 400 mm, 450 mm, 500 mm, 560 mm, 630 mm, 710 mm, 800 mm, 900 mm, 1000 mm.

Table 1 Fan dimensions.

fan - type	D [mm]	~A [mm]	~L [mm]	B [mm]	C [°]	nxd [mm]
mcr Monsun-35-...	355	425	400	395	45	8 x 9,6
mcr Monsun-40-...	400	470	500	438	30	12 x 9,6
mcr Monsun-45-...	450	520	500	487	30	12 x 9,6
mcr Monsun-50-...	500	570	600	541	30	12 x 9,6
mcr Monsun-56-...	560	640	700	605	22,5	16 x 10,5
mcr Monsun-63-...	630	710	600	674	22,5	16 x 10,5
mcr Monsun-71-...	710	790	750	751	22,5	16 x 10,5
mcr Monsun-80-...	800	875	750	837	15	24 x 10,5
mcr Monsun-90-...	900	975	900	934	15	24 x 10,5
mcr Monsun-100-...	1000	1080	1000	1043	15	24 x 10,5



ACCESSORIES

- ▶ mounting feet for horizontal installation **SW**
- ▶ protective wire fan guard on rotor or motor side **SO**
- ▶ vibration compensators - flexible connectors, F400 class **KD**
- ▶ counterflange for duct installation **PK**
- ▶ back draft dampers **KS**
- ▶ shock absorbers **KA**
- ▶ control automatics **OM**



for n = 750 rpm motors

Markings used in tables and specification sheets:

Δp_c – fan total pressure [Pa]

Q – output [m³/h]

nr – characteristic curve number

k – blade angle [°]

n – motor speed [rpm]

P – rated power [kW]

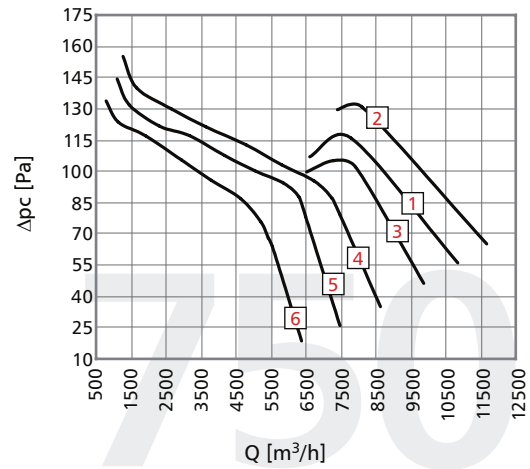
Un – rated voltage [V]

W – fan weight without accessories [kg]

Characteristic curves were prepared at 21°C temperature and 1.2 kg/m³ air density.

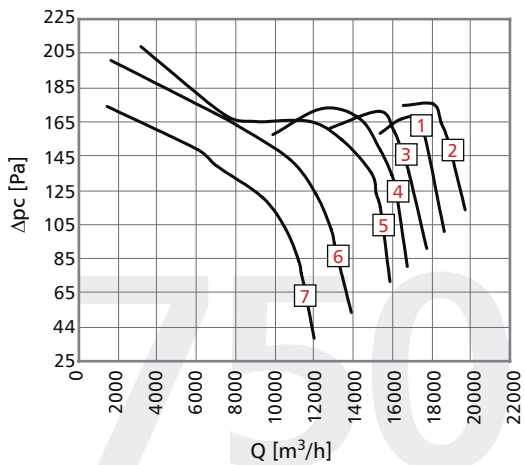
Technical data and characteristic curves for two-speed fans available on demand.

mcr Monsun-63/8-...



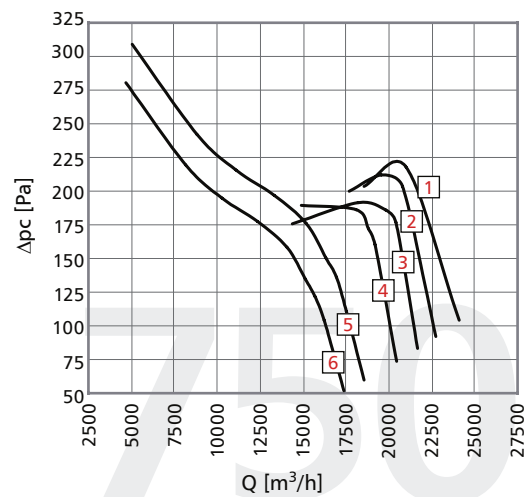
no.	size	k	n	P	Un	W
1	63/8-0,55-5	5°	750	0,55	400	60
2	63/8-0,75-10	10°	750	0,75	400	68
3	63/8-0,55-15	15°	750	0,55	400	60
4	63/8-0,55-20	20°	750	0,55	400	60
5	63/8-0,37-25	25°	750	0,37	400	56
6	63/8-0,25-30	30°	750	0,25	400	52

mcr Monsun-71/8-...



no.	size	k	n	P	Un	W
1	71/8-1,1-0	0°	750	1,1	400	110
2	71/8-1,1-5	5°	750	1,1	400	110
3	71/8-0,75-10	10°	750	0,75	400	104
4	71/8-0,75-15	15°	750	0,75	400	104
5	71/8-0,75-20	20°	750	0,75	400	104
6	71/8-0,55-25	25°	750	0,55	400	96
7	71/8-0,55-30	30°	750	0,55	400	96

mcr Monsun-80/8-...

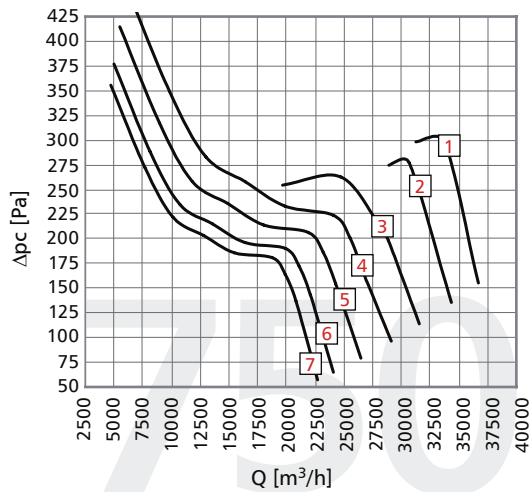


no.	size	k	n	P	Un	W
1	80/8-2,2-0	0°	750	2,2	400	143
2	80/8-2,2-5	5°	750	2,2	400	143
3	80/8-1,5-10	10°	750	1,5	400	127
4	80/8-1,5-15	15°	750	1,5	400	127
5	80/8-1,1-20	20°	750	1,1	400	118
6	80/8-1,1-25	25°	750	1,1	400	118

BASIC TECHNICAL DATA

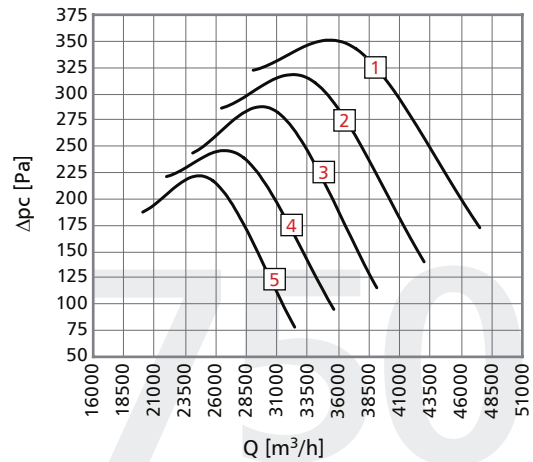
for n = 750 rpm motors

mcr Monsun-90/8-...



no.	size	k	n	P	Un	W
1	90/8-4-0	0°	750	4	400	207
2	90/8-3-5	5°	750	3	400	170
3	90/8-3-10	10°	750	3	400	170
4	90/8-2,2-15	15°	750	2,2	400	162
5	90/8-2,2-20	20°	750	2,2	400	162
6	90/8-1,5-25	25°	750	1,5	400	147
7	90/8-1,5-30	30°	750	1,5	400	147

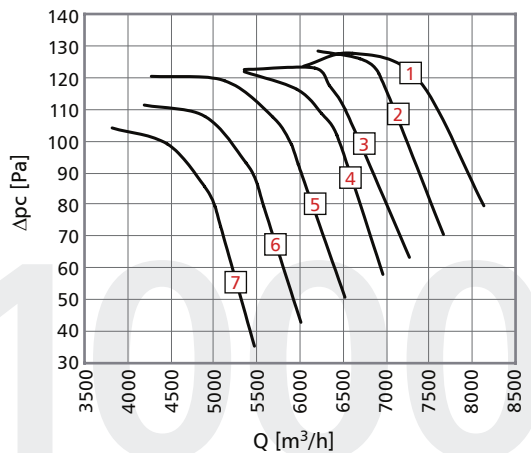
mcr Monsun-100/8-...



no.	size	k	n	P	Un	W
1	100/8-5,5-5	5°	750	5,5	400	253
2	100/8-4-10	10°	750	4	400	247
3	100/8-4-20	20°	750	4	400	247
4	100/8-3-25	25°	750	3	400	210
5	100/8-2,2-30	30°	750	2,2	400	202

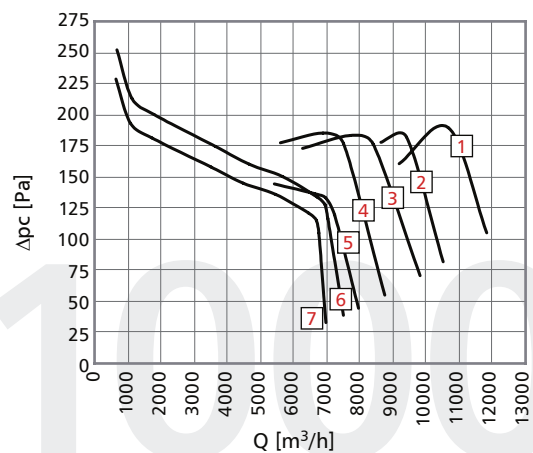
for n = 1000 rpm motors

mcr Monsun-50/6-...



no.	size	k	n	P	Un	W
1	50/6-0,55-0	0°	1000	0,55	400	45
2	50/6-0,55-5	5°	1000	0,55	400	45
3	50/6-0,37-10	10°	1000	0,37	400	43
4	50/6-0,37-15	15°	1000	0,37	400	43
5	50/6-0,25-20	20°	1000	0,25	400	42
6	50/6-0,25-25	25°	1000	0,25	400	42
7	50/6-0,25-30	30°	1000	0,25	400	42

mcr Monsun-56/6-...

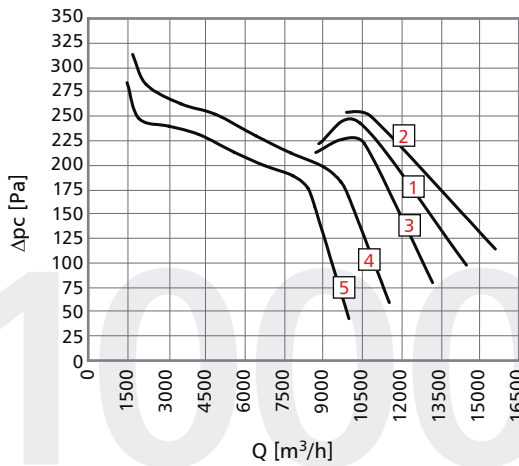


no.	size	k	n	P	Un	W
1	56/6-1,1-0	0°	1000	1,1	400	58
2	56/6-1,1-5	5°	1000	1,1	400	58
3	56/6-0,75-10	10°	1000	0,75	400	54
4	56/6-0,75-15	15°	1000	0,75	400	54
5	56/6-0,55-20	20°	1000	0,55	400	49
6	56/6-0,55-25	25°	1000	0,55	400	49
7	56/6-0,55-30	30°	1000	0,55	400	49

BASIC TECHNICAL DATA

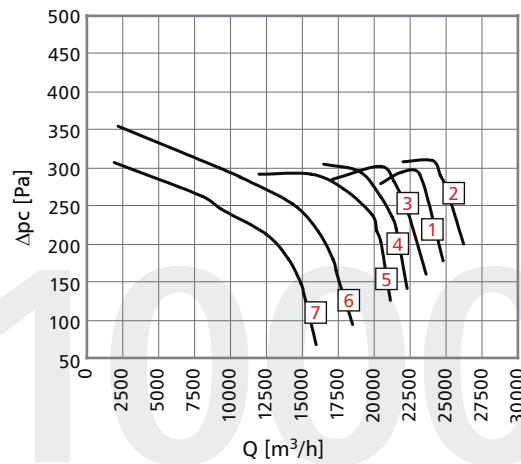
for n = 1000 rpm motors

mcr Monsun-63/6-...



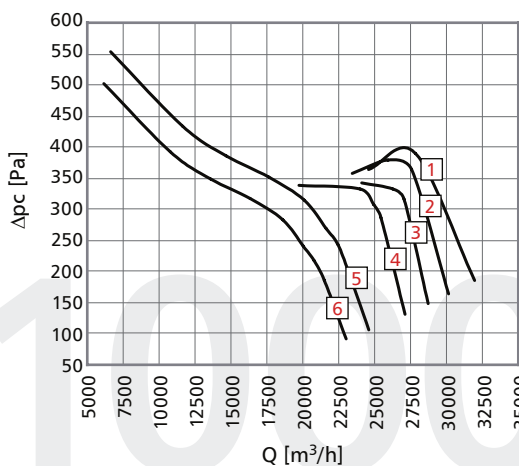
no.	size	k	n	P	Un	W
1	63/6-1,5-5	5°	1000	1,5	400	76
2	63/6-1,5-10	10°	1000	1,5	400	76
3	63/6-1,1-15	15°	1000	1,1	400	62
4	63/6-1,1-20	20°	1000	1,1	400	62
5	63/6-0,75-25	25°	1000	0,75	400	58

mcr Monsun-71/6-...



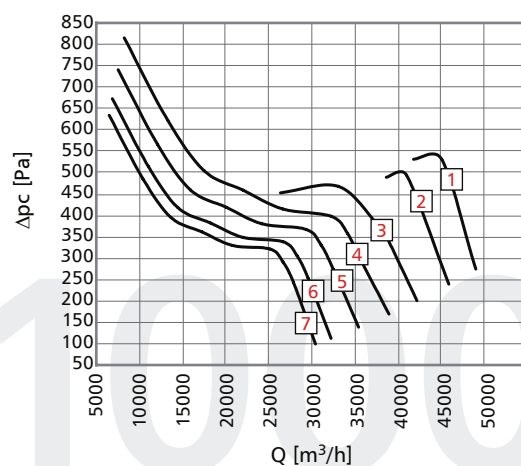
no.	size	k	n	P	Un	W
1	71/6-3-0	0°	1000	3	400	132
2	71/6-3-5	5°	1000	3	400	132
3	71/6-2,2-10	10°	1000	2,2	400	119
4	71/6-2,2-15	15°	1000	2,2	400	119
5	71/6-1,5-20	20°	1000	1,5	400	110
6	71/6-1,5-25	25°	1000	1,5	400	110
7	71/6-1,1-30	30°	1000	1,1	400	97

mcr Monsun-80/6-...



no.	size	k	n	P	Un	W
1	80/6-5,5-0	0°	1000	5,5	400	160
2	80/6-4-5	5°	1000	4	400	150
3	80/6-3-10	10°	1000	3	400	142
4	80/6-3-15	15°	1000	3	400	142
5	80/6-2,2-20	20°	1000	2,2	400	127
6	80/6-1,5-25	25°	1000	1,5	400	118

mcr Monsun-90/6-...

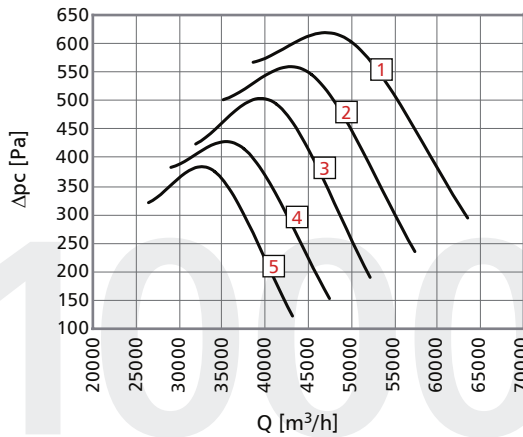


no.	size	k	n	P	Un	W
1	90/6-11-0	0°	1000	11	400	230
2	90/6-7,5-5	5°	1000	7,5	400	202
3	90/6-5,5-10	10°	1000	5,5	400	179
4	90/6-5,5-15	15°	1000	5,5	400	179
5	90/6-5,5-20	20°	1000	5,5	400	179
6	90/6-4-25	25°	1000	4	400	169
7	90/6-3-30	30°	1000	3	400	161

for n = 1000 rpm motors

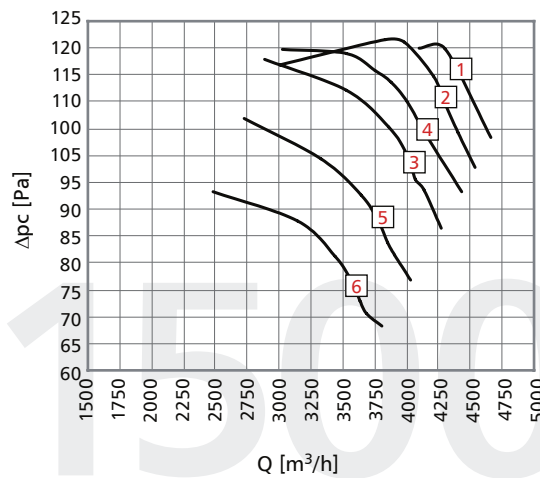
for n = 1500 rpm motors

mcr Monsun-100/6-...



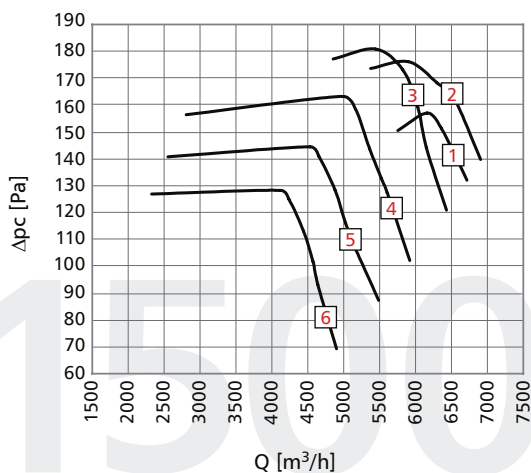
no.	size	k	n	P	Un	W
1	100/6-11-5	5°	1000	11	400	270
2	100/6-11-10	10°	1000	11	400	270
3	100/6-7,5-20	20°	1000	7,5	400	242
4	100/6-7,5-25	25°	1000	7,5	400	242
5	100/6-5,5-30	30°	1000	5,5	400	219

mcr Monsun-35/4-...



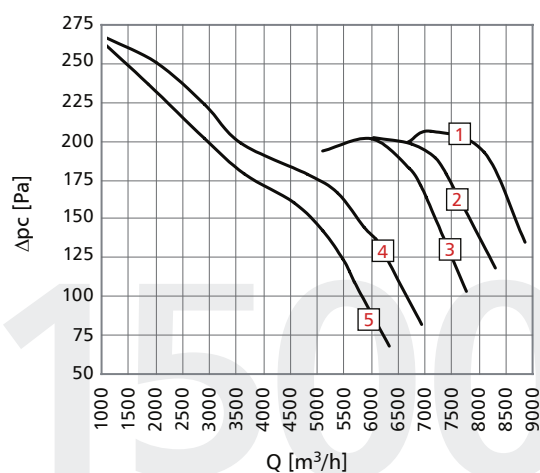
no.	size	k	n	P	Un	W
1	35/4-0,55-35	35°	1500	0,55	400	28
2	35/4-0,55-25	25°	1500	0,55	400	28
3	35/4-0,55-20	20°	1500	0,55	400	28
4	35/4-0,55-15	15°	1500	0,55	400	28
5	35/4-0,55-10	10°	1500	0,55	400	28
6	35/4-0,55-5	5°	1500	0,55	400	28

mcr Monsun-40/4-...



no.	size	k	n	P	Un	W
1	40/4-0,75-35	35°	1500	0,75	400	36
2	40/4-0,75-30	30°	1500	0,75	400	36
3	40/4-0,55-25	25°	1500	0,55	400	34
4	40/4-0,55-15	15°	1500	0,55	400	34
5	40/4-0,55-10	10°	1500	0,55	400	34
6	40/4-0,55-5	5°	1500	0,55	400	34

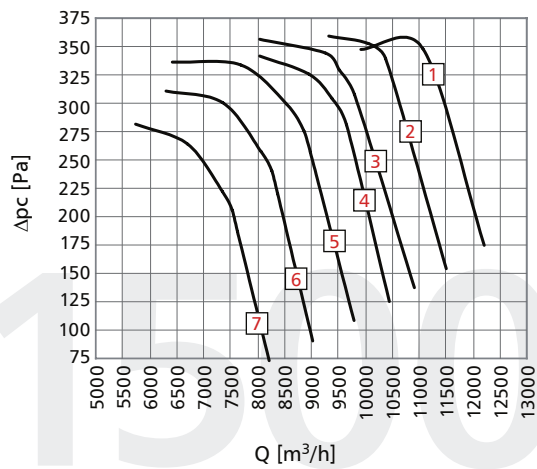
mcr Monsun-45/4-...



no.	size	k	n	P	Un	W
1	45/4-1,1-25	25°	1500	1,1	400	42
2	45/4-0,75-20	20°	1500	0,75	400	39
3	45/4-0,75-15	15°	1500	0,75	400	39
4	45/4-0,55-10	10°	1500	0,55	400	36
5	45/4-0,55-5	5°	1500	0,55	400	36

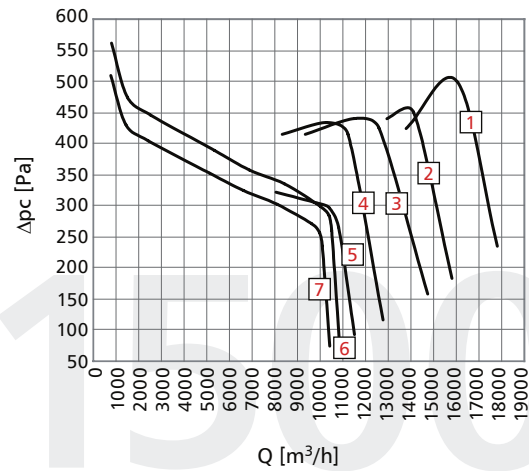
for n = 1500 rpm motors

mcr Monsun-50/4-...



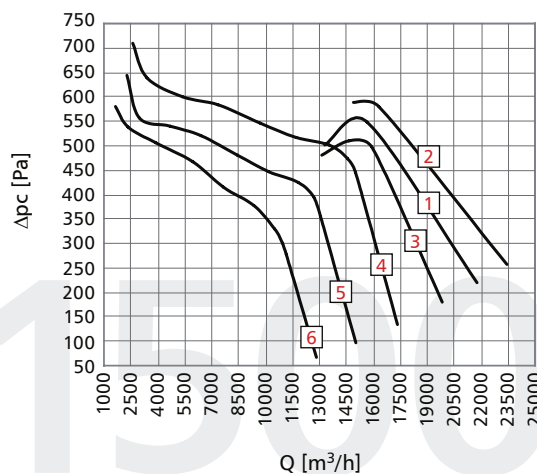
no.	size	k	n	P	Un	W
1	50/4-1,5-0	0°	1500	1,5	400	52
2	50/4-1,5-5	5°	1500	1,5	400	52
3	50/4-1,1-10	10°	1500	1,1	400	50
4	50/4-1,1-15	15°	1500	1,1	400	50
5	50/4-0,75-20	20°	1500	0,75	400	46
6	50/4-0,75-25	25°	1500	0,75	400	46
7	50/4-0,55-30	30°	1500	0,55	400	46

mcr Monsun-56/4-...



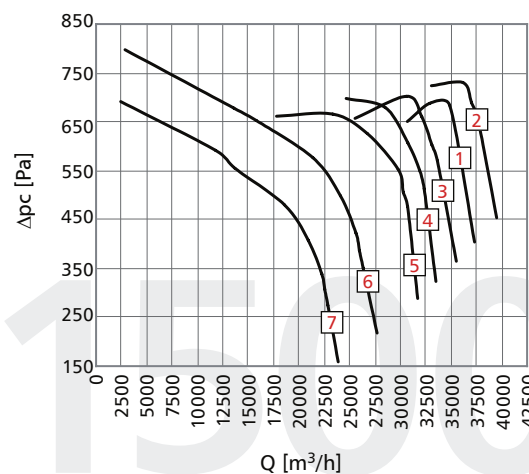
no.	size	k	n	P	Un	W
1	56/4-3-0	0°	1500	3	400	69
2	56/4-3-5	5°	1500	3	400	69
3	56/4-2,2-10	10°	1500	2,2	400	67
4	56/4-2,2-15	15°	1500	2,2	400	67
5	56/4-1,5-20	20°	1500	1,5	400	54
6	56/4-1,5-25	25°	1500	1,5	400	54
7	56/4-1,5-30	30°	1500	1,5	400	54

mcr Monsun-63/4-...



no.	size	k	n	P	Un	W
1	63/4-4-5	5°	1500	4	400	81
2	63/4-4-10	10°	1500	4	400	81
3	63/4-3-15	15°	1500	3	400	74
4	63/4-3-20	20°	1500	3	400	74
5	63/4-3-25	25°	1500	3	400	74
6	63/4-2,2-30	30°	1500	2,2	400	72

mcr Monsun-71/4-...

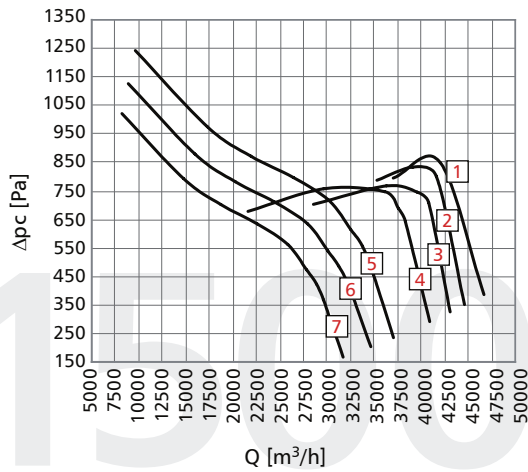


no.	size	k	n	P	Un	W
1	71/4-11-0	0°	1500	11	400	181
2	71/4-11-5	5°	1500	11	400	181
3	71/4-7,5-10	10°	1500	7,5	400	145
4	71/4-7,5-15	15°	1500	7,5	400	145
5	71/4-7,5-20	20°	1500	7,5	400	145
6	71/4-7,5-25	25°	1500	7,5	400	145
7	71/4-5,5-30	30°	1500	5,5	400	137

BASIC TECHNICAL DATA

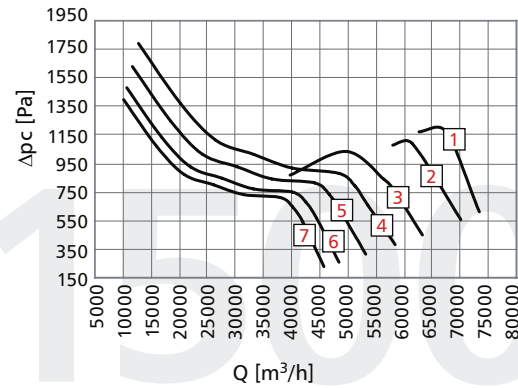
for n = 1500 rpm motors

mcr Monsun-80/4-..



no.	size	k	n	P	Un	W
1	80/4-15-0	0°	1500	15	400	207
2	80/4-15-5	5°	1500	15	400	207
3	80/4-11-10	10°	1500	11	400	190
4	80/4-11-15	15°	1500	11	400	190
5	80/4-11-20	20°	1500	11	400	190
6	80/4-11-25	25°	1500	11	400	190
7	80/4-7,5-30	30°	1500	7,5	400	152

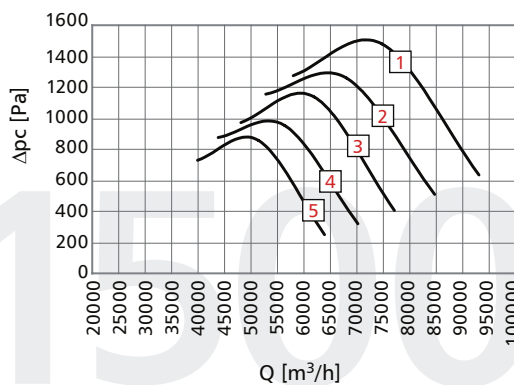
mcr Monsun-90/4-..



no.	size	k	n	P	Un	W
1	90/4-30-0	0°	1500	30	400	366
2	90/4-22-5	5°	1500	22	400	286
3	90/4-18,5-10	10°	1500	18,5	400	237
4	90/4-15-15	15°	1500	15	400	222
5	90/4-15-20	20°	1500	15	400	222
6	90/4-11-25	25°	1500	11	400	205
7	90/4-11-30	30°	1500	11	400	205

for n = 1500 rpm motors

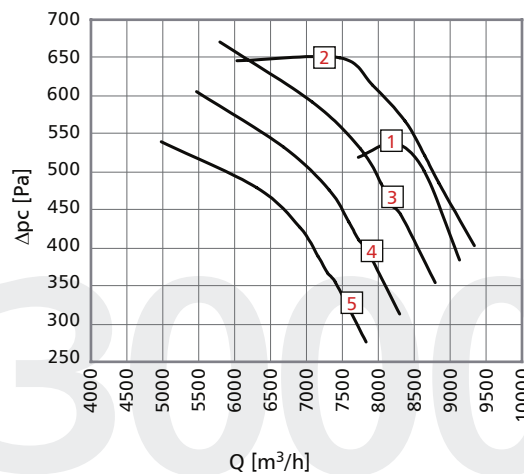
mcr Monsun-100/4-..



no.	size	k	n	P	Un	W
1	100/4-37-5	5°	1500	37	400	426
2	100/4-30-10	10°	1500	30	400	396
3	100/4-30-20	20°	1500	30	400	396
4	100/4-22-25	25°	1500	22	400	315
5	100/4-18,5-30	30°	1500	18,5	400	266

for n = 3000 rpm motors

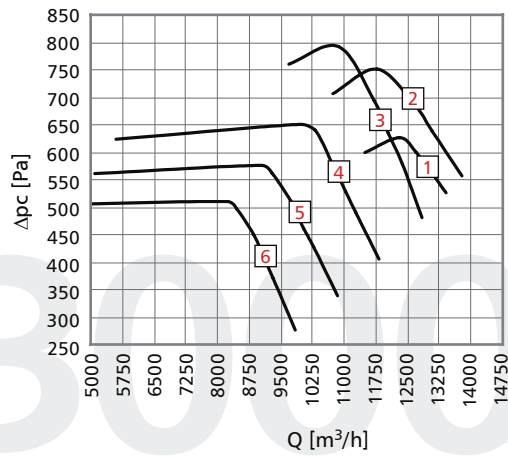
mcr Monsun-35/2-...



no.	size	k	n	P	Un	W
1	35/2-1,5-35	35°	3000	1,5	400	35
2	35/2-2,2-25	25°	3000	2,2	400	38
3	35/2-1,5-20	20°	3000	1,5	400	35
4	35/2-1,1-10	10°	3000	1,1	400	33
5	35/2-1,1-5	5°	3000	1,1	400	33

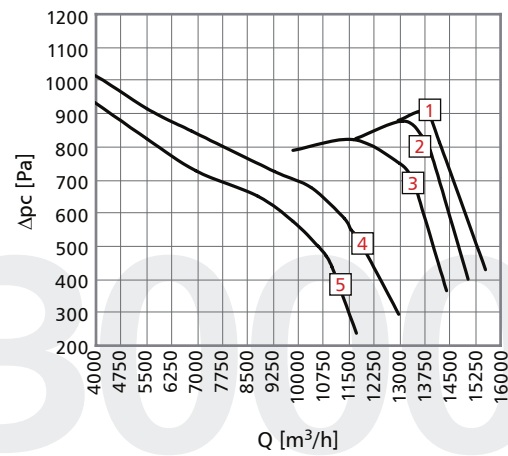
for n = 3000 rpm motors

mcr Monsun-40/2-...



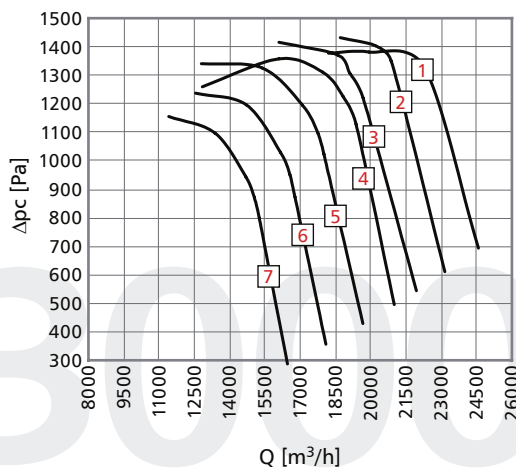
no.	size	k	n	P	Un	W
1	40/2-3-35	35°	3000	3	400	55
2	40/2-4-30	30°	3000	4	400	58
3	40/2-4-25	25°	3000	4	400	58
4	40/2-2,2-15	15°	3000	2,2	400	44
5	40/2-2,2-10	10°	3000	2,2	400	44
6	40/2-1,5-5	5°	3000	1,5	400	40

mcr Monsun-45/2-...



no.	size	k	n	P	Un	W
1	45/2-4-25	25°	3000	4	400	60
2	45/2-4-20	20°	3000	4	400	60
3	45/2-3-15	15°	3000	3	400	58
4	45/2-2,2-10	10°	3000	2,2	400	46
5	45/2-2,2-5	5°	3000	2,2	400	46

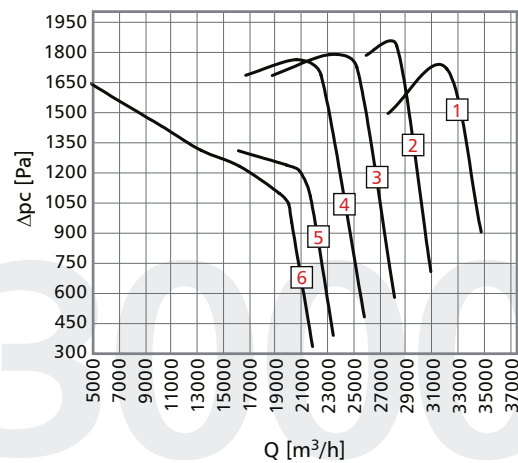
mcr Monsun-50/2-...



no.	size	k	n	P	Un	W
1*	50/2-11-0	0°	3000	11	400	129
2*	50/2-11-5	5°	3000	11	400	129
3	50/2-7,5-10	10°	3000	7,5	400	100
4	50/2-7,5-15	15°	3000	7,5	400	100
5	50/2-5,5-20	20°	3000	5,5	400	92
6	50/2-5,5-25	25°	3000	5,5	400	92
7	50/2-4-30	30°	3000	4	400	70

* - on inquiry

mcr Monsun-56/2-...

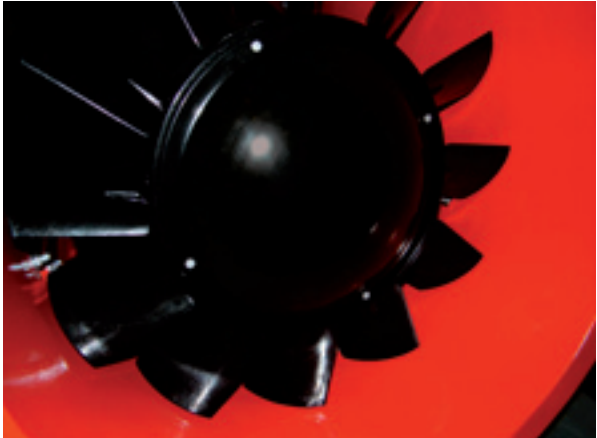


no.	size	k	n	P	Un	W
1	56/2-15-0	0°	3000	15	400	147
2	56/2-15-5	5°	3000	15	400	147
3	56/2-11-10	10°	3000	11	400	136
4	56/2-11-15	15°	3000	11	400	136
5	56/2-7,5-20	20°	3000	7,5	400	107
6	56/2-7,5-25	25°	3000	7,5	400	107
7	56/2-5,5-30	30°	3000	5,5	400	99

FAN MARKING

mcr MonSun - 50 / 4 - 1,5 - 15 - F400 / SW

- accessories
- fire resistance class [F...]
- blade angle [°]
- motor power [kW]
- number of pole pairs
- rated fan diameter [x10] [mm]
- fan type



FIRE PROTECTION SYSTEMS

- ▶ fireproof partitions
- ▶ smoke and heat exhaust systems
- ▶ fire ventilation systems
- ▶ fire protection of building structures



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