BDD/BDD6 - Double Fan Row

Product description

Application
The Alfa Laval dry coolers can be used in refrigeration, air conditioning equipment and in Industrial Cooling (cooling of water or other different fluids), Power, Process and General Industry.

Standard design
Coil
Innovative heat exchanger gives excellent heat transfer with minimized coolant charge thanks to the new fins corrugation, developed by Alfa Laval, combined with two different tube sizes 1/2" (BDD series) and 5/8" (BDD6 series). The BDD/BDD6 has two rows of fan motors. With the standard execution, the heat exchanger is manufactured from copper tubes and aluminium fins with spacing 2.1 mm. The BDD/BDD6 series are provided with double connections giving the opportunity for two independent lines. Each manifold provided with draining and venting nozzles. Each heat exchanger undergoes a pressure and leaking test with dry air at 11 bar.

Casing
Casework made with galvanized steel sheets painted (corrosion resistance class C4). New design frame provides high rigidity also for heavy applications. New system protects perfectly the heat exchanger tubes during transportation and operation against vibration and thermal expansion. Support manufactured in galvanized steel, with optimised length to permit uniform air suction in the coil.

Benefits
- Footprint: Optimized footprint with higher capacity.
- 630, 800, 910, 1000 mm fan
  - More performance available
  - Low power consumption fan motor
  - More noise level options
  - Flexible design
- All parts are painted in accordance with RAL 9002
  - No cut edges
  - Higher corrosion resistance, double surface treatment
  - External Corrosion Class C4
- Coil design: Increased heat transfer thanks to innovative fin corrugation
- Flanges UNI EN 1092-1: simple and accurate piping connection.
- Casing: Strong casing with new design
- High Energy Efficiency: best performance with low energy consumption
  - maintains performance during outside temperature peaks.
- Coil treatment: corrosion resistance
- Vibration Dampers: for reducing vibrations
- Electrical parts
  - Switch on/off: Local safety switch is wired to isolate the fan, and is also available for EMC switches.
  - Terminal Box: all fans wired for an easy electrical connection
  - Switchboard
- Cabling: ready to install
- Frequency Converter design: units can run under frequency control (when air temperature is below the design, it allows energy saving, noise reduction and longer fan motor life)
- Fan step control:
  - Energy saving
  - Cheapest method of controlling performance

Options
- Non-standard fin spacing: for heavy dusty environment
- Spray water device
  - Smaller units can be selected.

- Fan speed control
  - Energy saving
  - Noise reduction when the air temperature is below the design temperature.
  - Variable and efficient speed control according to the heat rejected
  - Better performance control
- Special fans
  - 480/3ph-60Hz IP54: High adaptability for every market
  - IP 55: High protection fan for use in tropical or desert areas
  - High temperature Electric Motors: for use when the air temperature is higher than permitted for the use of standard fans.

Fans

On the BDD and BDD6, 800, 910, 1000 mm with three-phase motor 400V-50Hz. The motors are with external rotor, protection class IP54 according to DIN 40050. AlfaBlue BDD/BDD6 Integrated thermal protection by thermo contacts provides reliable protection against thermal overload. These Dry Coolers are available in five noise levels fan motor, (S) standard, (L) low, (Q) quiet, (R) residential and the new (T) high performance fan. Dry coolers BDD/BDD6 800 mm fans are available in 4 noises level fan motor, (S), (L), (Q) (R). Dry Coolers BDD/BDD6 910 are available in 5 noises level fan motor, (T) , (S) , (L) , (Q) and (R). Dry Coolers BDD/BDD6 1000 are available in 3 noises level fan motor, (L), (Q) and (R). New bell mouths optimize the performance of the fan motors and minimize the noise level. Each fan chamber is separated by internal baffle plates which enables optimal capacity control by separate running of the fans.
The fans are suitable for operation in air temperatures between -40°C and +40°C.
For air temperatures lower than +20°C, the full load current (FLC) can be calculated using the correction factor table. The overload protection should have a 20% margin to accommodate fan motor supplier variations.

T [°C]	20	10	0	-10	-15	-20	-25	-30
Fc	1	1,04	1,08	1,12	1,14	1,16	1,18	1,2

Model	Capacity [kW]		Airflow [m³/h]		Pressure Drop fluid [kPa]		Lp [dB(A)]*		Motor (3/400V-50Hz)		Fans	Surface	Tube volume	E.E.C.**		Conn. Size	
	Δ	Y	Δ	Y	Δ	Y	Δ	Y	Δ	Y	N° x D [mm]	m²	dm³	Δ	Y	Inlet	Outlet
Ø 800																	
BDDS 802 A	196,8	171,4	86375	67511	52	41	56	51			4x800	512,9	44	E	D	2x3"	2x3"
BDDS 802 B	251,4	212,1	82528	63667	92	68	56	51			4x800	769,3	66	D	C	2x3"	2x3"
BDDS 802 C	281,9	231,1	78902	60202	68	47	56	51			4x800	1025,7	87	D	C	2x3"	2x3"
BDDS 802 D	300,8	241,1	75556	57121	95	64	56	51			4x800	1282,2	109	D	C	2x3"	2x3"
BDDS 803 A	294,6	256,6	129469	101171	53	41	58	53			6x800	765,7	66	E	D	2x3"	2x3"
BDDS 803 B	369,6	312,4	123657	95370	38	29	58	53			6x800	1148,5	99	D	D	2x3"	2x3"
BDDS 803 C	423,8	347,7	118187	90146	94	66	58	53			6x800	1531,4	132	D	C	2x3"	2x3"
BDDS 803 D	448,2	359,3	113142	85509	66	45	58	53			6x800	1914,2	165	D	C	2x3"	2x3"
BDDS 804 A	399,1	347,4	172562	134831	119	93	59	54			8x800	1018,5	88	E	D	2x4"	2x4"
BDDS 804 B	500,5	422,3	164785	127071	87	64	59	54	P=2000W I_n=4.0A n=880min-1	P=1250W I_n=2.3A n=660min-1	8x800	1527,8	132	D	D	2x4"	2x4"
BDDS 804 C	561,3	460,2	157470	120090	64	45	59	54			8x800	2037,0	176	D	C	2x4"	2x4"
BDDS 804 D	594,1	476,5	150728	113895	48	32	59	54			8x800	2546,3	220	D	C	2x4"	2x4"
BDDS 805 A	483,0	420,8	215655	168490	30,1	24	60	55			10x800	1271,3	110	E	E	2x4"	2x4"
BDDS 805 B	606,4	512,9	205913	158773	22	16	60	55			10x800	1907,0	164	D	D	2x4"	2x4"
BDDS 805 C	707,4	580,1	196753	150033	120	84	60	55			10x800	2542,7	219	D	C	2x4"	2x4"
BDDS 805 D	748,3	599,6	188313	142282	89	60	60	55			10x800	3178,3	274	D	C	2x4"	2x4"
BDDS 806 A	587,2	511,5	258748	202148	50,9	40	61	56			12x800	1524,2	132	E	D	2x4"	2x4"
BDDS 806 B	736,7	622,7	247041	190474	37	28	61	56			12x800	2286,2	197	D	D	2x4"	2x4"
BDDS 806 C	827,4	679,7	236036	179977	27	19	61	56			12x800	3048,3	263	D	C	2x4"	2x4"
BDDS 806 D	877,5	704,6	225898	170668	20	14	61	56			12x800	3810,4	328	D	C	2x4"	2x4"
BDDL 802 A	169,9	150,5	66511	54300	40	32	49	45			4x800	512,9	44	D	C	2x3"	2x3"
BDDL 802 B	212,0	182,3	63614	51149	68	52	49	45			4x800	769,3	66	C	C	2x3"	2x3"
BDDL 802 C	233,0	195,3	60848	48339	48	35	49	45			4x800	1025,7	87	C	C	2x3"	2x3"
BDDL 802 D	245,0	200,8	58274	45857	66	46	49	45			4x800	1282,2	109	C	B	2x3"	2x3"
BDDL 803 A	254,4	225,3	99697	81371	41	33	51	47			6x800	765,7	66	D	C	2x3"	2x3"
BDDL 803 B	312,3	268,5	95319	76617	29	22	51	47			6x800	1148,5	99	C	C	2x3"	2x3"
BDDL 803 C	350,3	293,5	91143	72383	66	49	51	47			6x800	1531,4	132	C	C	2x3"	2x3"
BDDL 803 D	365,3	299,4	87263	68646	46	33	51	47			6x800	1914,2	165	C	B	2x3"	2x3"
BDDL 804 A	327,6	290,4	132883	108442	12	10	52	48			8x800	1018,5	88	D	C	2x4"	2x4"
BDDL 804 B	422,2	362,7	127024	102084	64	49	52	48	P=1050W I_n=2.4A n=680min-1	P=770W I_n=1.5A n=530min-1	8x800	1527,8	132	C	C	2x4"	2x4"
BDDL 804 C	464,1	388,9	121439	96426	45	33	52	48			8x800	2037,0	176	C	C	2x4"	2x4"
BDDL 804 D	484,4	397,2	116252	91434	33	23	52	48			8x800	2546,3	220	C	B	2x4"	2x4"
BDDL 805 A	417,3	369,7	166068	135512	23,2	18,75	53	49			10x800	1271,3	110	D	E	2x4"	2x4"
BDDL 805 B	512,8	441,1	158728	127551	16	13	53	49			10x800	1907,0	164	C	C	2x4"	2x4"
BDDL 805 C	585,1	489,7	151733	120468	85	62	53	49			10x800	2542,7	219	C	C	2x4"	2x4"
BDDL 805 D	609,7	499,5	145241	114223	62	43	53	49			10x800	3178,3	274	C	B	2x4"	2x4"
BDDL 806 A	507,2	449,2	199253	162582	39,2	31,66	54	50			12x800	1524,2	132	D	E	2x4"	2x4"
BDDL 806 B	622,6	535,3	190432	153018	28	21	54	50			12x800	2286,2	197	C	C	2x4"	2x4"
BDDL 806 C	685,5	574,9	182028	144511	20	14	54	50			12x800	3048,3	263	C	C	2x4"	2x4"
BDDL 806 D	716,4	588,1	174229	137011	14	10	54	50			12x800	3810,4	328	C	B	2x4"	2x4"
BDDQ 802 A	128,4	107,8	41159	31868	58	42	40	33			4x800	512,9	44	B	A	2x3"	2x3"
BDDQ 802 B	150,5	121,8	39047	29823	67	46	40	33			4x800	769,3	66	A	A	2x3"	2x3"
BDDQ 802 C	159,4	125,6	37077	28059	72	48	40	33			4x800	1025,7	87	A	A	2x3"	2x3"
BDDQ 803 A	192,9	161,9	61687	47750	74	54	42	35			6x800	765,7	66	B	A	2x3"	2x3"
BDDQ 803 B	224,2	181,7	58497	44666	49	34	42	35			6x800	1148,5	99	B	A	2x3"	2x3"
BDDQ 803 C	238,6	188,0	55525	42010	73	48	42	35			6x800	1531,4	132	A	A	2x3"	2x3"
BDDQ 804 A	255,7	214,7	82215	63631	55	40	43	36			8x800	1018,5	88	B	A	2x4"	2x4"
BDDQ 804 B	297,2	241,0	77947	59509	34	24	43	36	P=370W I_n=1.2A n=440min-1	P=200W I_n=0.5A n=340min-1	8x800	1527,8	132	B	A	2x4"	2x4"
BDDQ 804 C	317,8	250,3	73973	55961	74	49	43	36			8x800	2037,0	176	A	A	2x4"	2x4"
BDDQ 805 A	322,5	270,6	102743	79512	102	75	44	37			10x800	1271,3	110	B	A	2x4"	2x4"
BDDQ 805 B	374,4	303,3	97396	74352	64	44	44	37			10x800	1907,0	164	A	A	2x4"	2x4"
BDDQ 805 C	394,9	311,3	92421	69912	43	28	44	37			10x800	2542,7	219	A	A	2x4"	2x4"
BDDQ 806 A	377,1	316,7	123270	95393	23	17	45	38			12x800	1271,3	110	B	A	2x4"	2x4"
BDDQ 806 B	439,2	356,3	116845	89195	15	10	45	38			12x800	1907,0	164	B	A	2x4"	2x4"
BDDQ 806 C	475,9	375,0	110869	83863	71	46	45	38			12x800	3048,3	263	A	A	2x4"	2x4"
BDDR 802 A	115,5	82,4	35183	22093	48	26	36	25			4x800	512,9	44	A	A	2x3"	2x3"
BDDR 802 B	132,6	89,2	33164	20482	53	26	36	25			4x800	769,3	66	A	A	2x3"	2x3"
BDDR 803 A	173,5	123,7	52725	33098	61	34	38	27			6x800	765,7	66	A	A	2x3"	2x3"
BDDR 803 B	199,5	134,0	49677	30670	89	44	38	27			6x800	1148,5	99	A	A	2x3"	2x3"
BDDR 804 A	230,0	164,1	70266	44103	45	25	39	28	P=250W I_n=0.62A n=380min-1	P=110W I_n=0.27A n=240min-1	8x800	1018,5	88	A	A	2x4"	2x4"
BDDR 804 B	265,7	178,5	66190	40857	87	43	39	28			8x800	1527,8	132	A	A	2x4"	2x4"
BDDR 805 A	289,9	206,7	87807	55107	84	46	40	29			10x800	1271,3	110	A	A	2x4"	2x4"
BDDR 805 B	330,1	222,0	82702	51045	52	26	40	29			10x800	1907,0	164	A	A	2x4"	2x4"
BDDR 806 A	339,3	242,5	105347	66112	19	11	41	30			12x800	1271,3	110	A	A	2x4"	2x4"
BDDR 806 B	398,1	267,4	99215	61232	86	43	41	30			12x800	1907,0	164	A	A	2x4"	2x4"

Nominal capacities according to standard EN1048 (water Tair=25°C, Tin=40°C,Tout=35°C).
*See the General Contents for more details.
**Energy Efficiency Class: see "General Contents" for more details.

Model	Capacity [kW]		Airflow [m³/h]		Pressure Drop fluid [kPa]		Lp [dB(A)]*		Motor (3/400V-50Hz)		Fans	Surface	Tube volume	E.E.C.**		Conn. Size	
	Δ	Y	Δ	Y	Δ	Y	Δ	Y	Δ	Y	N° x D [mm]	m²	dm³	Δ	Y	Inlet	Outlet
Ø 910																	
BDDT 902 A	258,4	233,4	127089	104682	33,94	28,34	62	57	P=3600W I_n=7.2A n=890min-1	P=2500W, I_n=4.3A n=700min-1	4 x 900	614	52,9	E	E	2x3"	2x3"
BDDT 902 B	340,4	300,1	122421	99251	83,3	67,1	62	57			4 x 900	921	79,4	E	D	2x3"	2x3"
BDDT 902 C	388,7	334,0	117301	93969	65,1	50,1	62	57			4 x 900	1228	105,8	E	D	2x3"	2x3"
BDDT 902 D	416,6	350,1	112224	89107	47,2	34,7	62	57			4 x 900	1535	132,3	D	D	2x3"	2x3"
BDDT 903 A	375,06	339,37	190549	156917	13,87	11,69	64	59			6 x 900	917,4	79,1	E	E	2x4"	2x4"
BDDT 903 B	509,3	448,9	183482	148714	80,7	65,0	64	59			6 x 900	1376,1	118,6	E	D	2x4"	2x4"
BDDT 903 C	581,2	499,1	175746	140749	61,5	46,9	64	59			6 x 900	1834,8	158,1	E	D	2x4"	2x4"
BDDT 903 D	623,0	523,8	168088	133430	46,3	34,4	64	59			6 x 900	2293,5	197,6	D	D	2x4"	2x4"
BDDT 904 A	514,49	464,7	254009	209151	32,34	27,01	65	60			8 x 900	1220,8	105,2	E	E	2x4"	2x4"
BDDT 904 B	659,4	581,1	244541	198176	24,4	19,5	65	60			8 x 900	1831,1	157,8	E	D	2x4"	2x4"
BDDT 904 C	754,0	648,1	234189	187529	18,7	14,3	65	60			8 x 900	2441,5	210,3	E	D	2x4"	2x4"
BDDT 904 D	810,6	681,7	223952	177752	14,3	10,5	65	60			8 x 900	3051,9	262,9	E	D	2x4"	2x4"
BDDT 905 A	653,94	590,46	317468	261385	61,52	51,34	66	61			10 x 900	1524,2	131,3	E	E	2x4"	2x4"
BDDT 905 B	837,4	737,7	305600	247638	46,4	37,1	66	61			10 x 900	2286,2	197	E	D	2x4"	2x4"
BDDT 905 C	956,5	821,6	292632	234309	35,4	27,0	66	61			10 x 900	3048,3	262,6	E	D	2x4"	2x4"
BDDT 905 D	1027,7	863,1	279815	222073	27,2	19,8	66	61			10 x 900	3810,4	328,2	D	D	2x4"	2x4"
BDDS 902 A	213,8	185,9	89290	70202	24,3	19,0	58	53	P=1650W I_n=3.5A n=860min-1	P=1000W I_n=1.8A n=660min-1	4 x 900	614	52,9	D	C	2x3"	2x3"
BDDS 902 B	274,0	231,4	86131	67097	57,0	42,2	58	53			4 x 900	921	79,4	C	C	2x3"	2x3"
BDDS 902 C	306,0	252,2	82981	64128	42,7	30,2	58	53			4 x 900	1228	105,8	C	B	2x3"	2x3"
BDDS 902 D	326,6	263,6	79949	61367	69,8	47,8	58	53			4 x 900	1535	132,3	C	B	2x3"	2x3"
BDDS 903 A	329,0	285,9	133872	105241	76,5	59,6	60	55			6 x 900	917,4	79,1	D	C	2x4"	2x4"
BDDS 903 B	410,0	346,3	129101	100555	55,3	41,0	60	55			6 x 900	1376,1	118,6	C	C	2x4"	2x4"
BDDS 903 C	457,9	377,3	124348	96077	40,5	28,6	60	55			6 x 900	1834,8	158,1	C	C	2x4"	2x4"
BDDS 903 D	490,7	395,8	119776	91918	92,6	63,4	60	55			6 x 900	2293,5	197,6	C	B	2x4"	2x4"
BDDS 904 A	425,9	370,4	178455	140279	23,1	18,1	61	56			8 x 900	1220,8	105,2	D	C	2x4"	2x4"
BDDS 904 B	531,4	449,8	172071	134011	16,7	12,5	61	56			8 x 900	1831,1	157,8	D	C	2x4"	2x4"
BDDS 904 C	617,0	508,3	165714	128026	89,8	63,9	61	56			8 x 900	2441,5	210,3	C	B	2x4"	2x4"
BDDS 904 D	651,2	525,6	159603	122469	66,7	45,7	61	56			8 x 900	3051,9	262,9	C	B	2x4"	2x4"
BDDS 905 A	541,0	470,2	223037	175317	44,0	34,3	62	57			10 x 900	1524,2	131,3	D	C	2x4"	2x4"
BDDS 905 B	674,8	570,3	215040	167468	31,9	23,6	62	57			10 x 900	2286,2	197	D	C	2x4"	2x4"
BDDS 905 C	754,1	622,0	207080	159975	23,3	16,5	62	57			10 x 900	3048,3	262,6	C	C	2x4"	2x4"
BDDS 905 D	797,3	644,7	199429	153020	17,2	11,8	62	57			10 x 900	3810,4	328,2	C	B	2x4"	2x4"
BDDL 902 A	184,3	147,4	66252,0	46731	54,9	37,2	51	44	P=900W I_n=2.2A n=640min-1	P=470W I_n=1.05A n=440min-1	4 x 900	614	52,9	C	B	2x3"	2x3"
BDDL 902 B	223,1	170,4	63696,0	44207	39,6	24,6	51	44			4 x 900	921	79,4	C	B	2x3"	2x3"
BDDL 902 C	246,2	181,2	61293,0	42028	62,8	36,6	51	44			4 x 900	1228	105,8	B	B	2x3"	2x3"
BDDL 902 D	255,3	182,8	59058,0	40125	45,2	25,1	51	44			4 x 900	1535	132,3	B	B	2x3"	2x3"
BDDL 903 A	276,0	220,8	99326,0	70043	56,1	38,0	53	46			6 x 900	917,4	79,1	C	B	2x4"	2x4"
BDDL 903 B	333,9	255,1	95469,0	66240	38,4	23,8	53	46			6 x 900	1376,1	118,6	C	B	2x4"	2x4"
BDDL 903 C	370,0	272,2	91846,0	62961	87,3	50,8	53	46			6 x 900	1834,8	158,1	B	B	2x4"	2x4"
BDDL 903 D	383,4	274,3	88479,0	60099	60,0	33,3	53	46			6 x 900	2293,5	197,6	B	B	2x4"	2x4"
BDDL 904 A	357,6	286,3	132400,0	93354	17,0	11,5	54	47			8 x 900	1220,8	105,2	C	B	2x4"	2x4"
BDDL 904 B	450,4	343,7	127243,0	88274	85,9	53,2	54	47			8 x 900	1831,1	157,8	C	B	2x4"	2x4"
BDDL 904 C	490,9	361,3	122400,0	83893	60,0	35,0	54	47			8 x 900	2441,5	210,3	B	B	2x4"	2x4"
BDDL 904 D	509,2	364,5	117901,0	80073	43,2	24,0	54	47			8 x 900	3051,9	262,9	B	B	2x4"	2x4"
BDDL 905 A	454,1	363,5	165473,0	116665	32,3	21,9	55	48			10 x 900	1524,2	131,3	C	B	2x4"	2x4"
BDDL 905 B	550,0	420,3	159016,0	110307	22,2	13,7	55	48			10 x 900	2286,2	197	C	B	2x4"	2x4"
BDDL 905 C	600,9	443,4	152953,0	104826	15,5	9,1	55	48			10 x 900	3048,3	262,6	B	B	2x4"	2x4"
BDDL 905 D	639,9	457,5	147322,0	100046	80,4	44,6	55	48			10 x 900	3810,4	328,2	B	B	2x4"	2x4"
BDDQ 902 A	141,7	120,6	43194	34357	81,0	60,8	41	35	P=330W I_n=0.83A n=440min-1	P=185W I_n=0.38A n=330min-1	4 x 900	614	52,9	A	A	2x3"	2x3"
BDDQ 902 B	163,8	135,0	41374	32490	50,9	36,2	41	35			4 x 900	921	79,4	A	A	2x3"	2x3"
BDDQ 902 C	173,6	139,4	39651	30819	66,3	45,1	41	35			4 x 900	1228	105,8	A	A	2x3"	2x3"
BDDQ 903 A	209,4	178,3	64753	51496	34,6	26,0	43	37			6 x 900	917,4	79,1	A	A	2x4"	2x4"
BDDQ 903 B	246,1	202,8	62008	48683	69,0	49,0	43	37			6 x 900	1376,1	118,6	A	A	2x4"	2x4"
BDDQ 903 C	259,2	208,3	59409	46165	46,6	31,7	43	37			6 x 900	1834,8	158,1	A	A	2x4"	2x4"
BDDQ 904 A	282,5	240,4	86313	68635	77,4	58,1	44	38			8 x 900	1220,8	105,2	A	A	2x4"	2x4"
BDDQ 904 B	326,6	269,2	82642	64875	48,7	34,6	44	38			8 x 900	1831,1	157,8	A	A	2x4"	2x4"
BDDQ 904 C	344,1	276,6	79168	61512	32,1	21,9	44	38			8 x 900	2441,5	210,3	A	A	2x4"	2x4"
BDDQ 905 A	344,8	293,7	107873	85774	20,0	15,0	45	39			10 x 900	1524,2	131,3	A	A	2x4"	2x4"
BDDQ 905 B	410,8	338,4	103276	81066	90,6	64,4	45	39			10 x 900	2286,2	197	A	A	2x4"	2x4"
BDDQ 905 C	432,4	347,3	98926	76858	59,7	40,6	45	39			10 x 900	3048,3	262,6	A	A	2x4"	2x4"
BDDR 902 A	135,1	97,9	40313	25977	74,4	41,9	40	30	P=270W I_n=0.70A n=390min-1	P=140W I_n=0.32A n=250min-1	4 x 900	614	52,9	A	A	2x3"	2x3"
BDDR 902 B	154,8	106,3	38514	24430	46,1	23,8	40	30			4 x 900	921	79,4	A	A	2x3"	2x3"
BDDR 903 A	199,6	144,9	60432	38932	31,8	18,0	42	32			6 x 900	917,4	79,1	A	A	2x4"	2x4"
BDDR 903 B	232,6	159,6	57719	36602	62,4	32,2	42	32			6 x 900	1376,1	118,6	A	A	2x4"	2x4"
BDDR 904 A	269,3	195,2	80552	51887	71,1	40,1	43	33			8 x 900	1220,8	105,2	A	A	2x4"	2x4"
BDDR 904 B	308,7	212,0	76924	48774	44,0	22,7	43	33			8 x 900	1831,1	157,8	A	A	2x4"	2x4"
BDDR 905 A	328,8	239,0	100671	64842	18,3	10,5	44	34			10 x 900	1524,2	131,3	A	A	2x4"	2x4"
BDDR 905 B	388,3	266,4	96128	60946	82,0	42,2	44	34			10 x 900	2286,2	197	A	A	2x4"	2x4"

Nominal capacities according to standard EN1048 (water Tair=25°C, Tin=40°C,Tout=35°C).
*See the General Contents for more details.
**Energy Efficiency Class: see "General Contents" for more details.

Model	Capacity [kW]		Airflow [m³/h]		Pressure Drop fluid [kPa]		Lp [dB(A)]*		Motor (3/400V-50Hz)		Fans	Surface	Tube volume	E.E.C.**		Conn. Size	
	Δ	Y	Δ	Y	Δ	Y	Δ	Y	Δ	Y	N° x D [mm]	m²	dm³	Δ	Y	Inlet	Outlet
Ø 1000																	
BDDL1002A	247,99	217,49	117369	92038	31,56	25,01	59	54	P=2200W I_n=4.2A n=670min-1	P=1500W I_n=2.7A n=530min-1	4x1000	614	52,9	D	D	2x3"	2x3"
BDDL1002B	282,98	230,24	90525	66620	60,43	41,84	59	54			4x1000	921	79,4	D	D	2x3"	2x3"
BDDL1002C	310,38	245,39	84645	61893	43,71	28,79	59	54			4x1000	1228	105,8	D	D	2x3"	2x3"
BDDL1002D	325,23	251,31	79511	57952	69,22	43,94	59	54			4x1000	1535	132,3	D	D	2x3"	2x3"
BDDL1003A	360,41	316,29	175877	137896	13,01	10,32	61	56			6x1000	917,4	79,1	D	D	2x4"	2x4"
BDDL1003B	423,3	344,42	135600	99775	58,56	40,55	61	56			6x1000	1376,1	118,6	D	D	2x4"	2x4"
BDDL1003C	464,08	366,93	126749	92668	41,29	27,19	61	56			6x1000	1834,8	158,1	D	D	2x4"	2x4"
BDDL1003D	481,15	372,32	119028	86750	29,57	18,81	61	56			6x1000	2293,5	197,6	D	D	2x4"	2x4"
BDDL1004A	493,6	432,9	234384	183754	30,05	23,82	62	57			8x1000	1220,8	105,2	D	D	2x4"	2x4"
BDDL1004B	548,3	447,23	180675	132929	17,63	12,35	62	57			8x1000	1831,1	157,8	D	D	2x4"	2x4"
BDDL1004C	602,85	477,65	168851	123442	12,55	8,3	62	57			8x1000	2441,5	210,3	D	D	2x4"	2x4"
BDDL1004D	647,8	500,62	158544	115546	66,03	41,93	62	57			8x1000	3051,9	262,9	D	D	2x4"	2x4"
BDDL1005B	696,42	566,98	225749	166083	33,74	23,38	63	58			10x1000	2286,2	197	D	D	2x4"	2x4"
BDDL1005C	764,34	604,69	210953	154216	23,87	15,7	63	58			10x1000	3048,3	262,6	D	D	2x4"	2x4"
BDDL1005D	792,98	614,27	198060	144342	17,07	10,88	63	58			10x1000	3810,4	328,2	D	D	2x4"	2x4"
BDDQ 1002A	200,43	163,53	76192	54791	63,72	44,49	45	38	P=860W I_n=2A n=420 min-1	P=500W I_n=9.7A n=310 min-1	4x1000	614	52,9	C	B	2x3"	2x3"
BDDQ 1002B	237,52	183,97	69672	48916	44,23	28,01	45	38			4x1000	921	79,4	B	B	2x3"	2x3"
BDDQ 1002C	252,54	189,64	63336	44375	65,71	39,65	45	38			4x1000	1228	105,8	B	D	2x3"	2x3"
BDDQ 1003A	300,1	244,8	114156	82053	64,98	45,35	47	40			6x1000	917,4	79,1	C	B	2x4"	2x4"
BDDQ 1003B	355,22	275,14	104311	73220	42,84	27,14	47	40			6x1000	1376,1	118,6	B	B	2x4"	2x4"
BDDQ 1003C	373,34	280,81	94766	66403	28,04	16,96	47	40			6x1000	1834,8	158,1	B	E	2x4"	2x4"
BDDQ 1004A	388,57	317,35	152120	109315	19,67	13,75	48	41			8x1000	1220,8	105,2	C	B	2x4"	2x4"
BDDQ 1004B	479,06	370,62	138949	97523	95,88	60,51	48	41			8x1000	1831,1	157,8	B	B	2x4"	2x4"
BDDQ 1004C	502,69	377,61	126195	88430	62,62	37,81	48	41			8x1000	2441,5	210,3	B	E	2x4"	2x4"
BDDQ 1005A	493,41	402,67	190084	136577	37,37	26,1	49	42			10x1000	1524,2	131,3	C	B	2x4"	2x4"
BDDQ 1005B	584,59	453,24	173587	121827	24,69	15,69	49	42			10x1000	2286,2	197	B	B	2x4"	2x4"
BDDQ 1005C	614,96	463,09	157623	110457	16,17	9,8	49	42			10x1000	3048,3	262,6	B	E	2x4"	2x4"
BDDR 1002A	186,3	139,2	67468	42964	56,01	33,65	43	34	P=670W I_n=1.4A n=380 min-1	P=330W I_n=0.67A n=250 min-1	4x1000	614	52,9	B	B	2x3"	2x3"
BDDR 1002B	219,9	154,9	61296	38563	86,23	46,14	43	34			4x1000	921	79,4	B	A	2x3"	2x3"
BDDR 1003A	279,0	208,5	101081	64352	57,12	34,31	45	36			6x1000	917,4	79,1	B	B	2x4"	2x4"
BDDR 1003B	324,7	229,2	91759	57722	36,51	19,71	45	36			6x1000	1376,1	118,6	B	A	2x4"	2x4"
BDDR 1004A	361,4	270,7	134692	85738	17,31	10,45	46	37			8x1000	1220,8	105,2	B	B	2x4"	2x4"
BDDR 1004B	437,9	308,6	122221	76881	82,25	44	46	37			8x1000	1831,1	157,8	B	A	2x4"	2x4"
BDDR 1005A	458,8	343,2	168304	107125	32,86	19,78	47	38			10x1000	1524,2	131,3	B	B	2x4"	2x4"
BDDR 1005B	534,4	377,8	152683	96039	21,05	11,38	47	38			10x1000	2286,2	197	B	A	2x4"	2x4"

Nominal capacities according to standard EN1048 (water Tair=25°C, Tin=40°C,Tout=35°C).

*See the General Contents for more details.

**Energy Efficiency Class: see "General Contents" for more details.

Model	Capacity [kW]		Airflow [m³/h]		Pressure Drop fluid [kPa]		Lp [dB(A)]*		Motor (3/400V-50Hz)		Fans	Surface	Tube volume	E.E.C.**		Conn. Size	
	Δ	Y	Δ	Y	Δ	Y	Δ	Y	Δ	Y	N° x D [mm]	m²	dm³	Δ	Y	Inlet	Outlet
Ø 800																	
BDD6S 802 A	185.4	159.2	85251	66370	54.3	41.5	56	51			4x800	479.6	77	E	D	2xDN80	2xDN80
BDD6S 802 B	235.3	196.5	80929	62122	63.6	46.5	56	51			4x800	719.3	116	E	D	2xDN80	2xDN80
BDD6S 802 C	264.1	215.0	76940	58382	44.7	31.3	56	51			4x800	959.0	153	D	D	2xDN80	2xDN80
BDD6S 802 D	280.3	223.3	73324	55123	36.3	24.4	56	51			4x800	1198.9	192	D	D	2xDN80	2xDN80
BDD6S 803 A	274.1	235.5	127770	99447	34.7	26.5	58	53			6x800	715.9	116	E	D	2xDN80	2xDN80
BDD6S 803 B	351.8	293.8	121245	93039	61.3	44.8	58	53			6x800	1073.8	174	E	D	2xDN80	2xDN80
BDD6S 803 C	395.3	321.7	115228	87407	45.4	31.7	58	53			6x800	1431.9	232	D	D	2xDN80	2xDN80
BDD6S 803 D	418.9	333.6	109781	82502	33.6	22.6	58	53			6x800	1789.8	291	D	D	2xDN80	2xDN80
BDD6S 804 A	372.6	320.0	170288	132524	78.4	59.9	59	54	P=2000W In=4.0A n=880min-1	P=1250W In=2.3A n=660min-1	8x800	952.3	155	E	D	2xDN100	2xDN100
BDD6S 804 B	468.4	391.2	161559	123956	60.2	44.0	59	54			8x800	1428.5	232	E	D	2xDN100	2xDN100
BDD6S 804 C	526.4	428.5	153515	116430	45.7	31.9	59	54			8x800	1904.6	310	D	D	2xDN100	2xDN100
BDD6S 804 D	565.3	449.4	146237	109881	75.4	50.3	59	54			8x800	2380.8	387	D	D	2xDN100	2xDN100
BDD6S 805 B	577.9	483.0	201873	154873	35.1	25.7	60	55			10x800	1783.0	289	E	D	2xDN100	2xDN100
BDD6S 805 C	664.8	539.9	191801	145454	85.5	58.7	60	55			10x800	2377.4	386	D	D	2xDN100	2xDN100
BDD6S 805 D	703.9	559.7	182693	137260	60.8	40.6	60	55			10x800	2971.7	483	D	D	2xDN100	2xDN100
BDD6S 806 B	701.4	585.8	242186	185789	59.0	43.2	61	56			12x800	2137.6	347	E	D	2xDN100	2xDN100
BDD6S 806 C	788.0	641.0	230088	174477	43.7	30.3	61	56			12x800	2850.2	463	D	D	2xDN100	2xDN100
BDD6S 806 D	835.1	665.1	219149	164639	32.3	21.8	61	56			12x800	3562.7	578	D	D	2xDN100	2xDN100
BDD6L 802 A	160.3	140.4	65670	53359	73.1	57.9	49	45			4x800	479.6	77	D	C	2xDN80	2xDN80
BDD6L 802 B	197.1	167.9	62398	49894	46.8	35.2	49	45			4x800	719.3	116	C	C	2xDN80	2xDN80
BDD6L 802 C	220.4	183.3	59340	46872	75.0	54.6	49	45			4x800	959.0	153	C	C	2xDN80	2xDN80
BDD6L 802 D	230.8	188.1	56551	44251	59.9	41.7	49	45			4x800	1198.9	192	C	C	2xDN80	2xDN80
BDD6L 803 A	239.1	209.4	98425	79951	63.5	50.3	51	47			6x800	715.9	116	D	C	2xDN80	2xDN80
BDD6L 803 B	294.8	251.1	93483	74724	45.1	33.9	51	47			6x800	1073.8	174	C	C	2xDN80	2xDN80
BDD6L 803 C	329.2	273.7	88870	70173	63.7	46.2	51	47			6x800	1431.9	232	C	C	2xDN80	2xDN80
BDD6L 803 D	344.0	280.4	84668	66231	44.3	30.9	51	47			6x800	1789.8	291	C	C	2xDN80	2xDN80
BDD6L 804 A	318.0	278.5	131180	106542	59.3	46.9	52	48	P=1050W In=2.4A n=680min-1	P=770W In=1.5A n=530min-1	8x800	952.3	155	D	C	2xDN100	2xDN100
BDD6L 804 B	392.5	334.2	124567	99554	44.3	33.3	52	48			8x800	1428.5	232	C	C	2xDN100	2xDN100
BDD6L 804 C	439.0	365.1	118399	93474	71.2	51.7	52	48			8x800	1904.6	310	C	C	2xDN100	2xDN100
BDD6L 804 D	459.1	374.1	112784	88210	52.2	36.4	52	48			8x800	2380.8	387	C	C	2xDN100	2xDN100
BDD6L 805 B	484.7	412.9	155651	124384	25.9	19.5	53	49			10x800	1783.0	289	C	C	2xDN100	2xDN100
BDD6L 805 C	547.3	454.9	147928	116775	60.4	43.7	53	49			10x800	2377.4	386	C	C	2xDN100	2xDN100
BDD6L 805 D	571.9	466.0	140900	110189	42.1	29.4	53	49			10x800	2971.7	483	C	C	2xDN100	2xDN100
BDD6L 806 B	587.9	500.6	186735	149214	43.5	32.7	54	50			12x800	2137.6	347	C	C	2xDN100	2xDN100
BDD6L 806 C	649.4	540.0	177457	140075	31.1	22.4	54	50			12x800	2850.2	463	C	C	2xDN100	2xDN100
BDD6L 806 D	690.3	562.2	169015	132168	70.1	48.8	54	50			12x800	3562.7	578	C	C	2xDN100	2xDN100
BDD6Q 802 A	116.8	97.3	40541	31248	41.8	30.5	40	33			4x800	479.6	77	B	A	2xDN80	2xDN80
BDD6Q 802 B	139.4	112.4	38175	29029	64.3	43.8	40	33			4x800	719.3	116	B	A	2xDN80	2xDN80
BDD6Q 802 C	147.9	116.4	36023	27154	37.4	24.5	40	33			4x800	959.0	153	B	A	2xDN80	2xDN80
BDD6Q 803 A	174.3	145.3	60753	46815	36.4	26.5	42	35			6x800	715.9	116	B	A	2xDN80	2xDN80
BDD6Q 803 B	207.6	167.3	57181	43470	43.6	29.7	42	35			6x800	1073.8	174	B	A	2xDN80	2xDN80
BDD6Q 803 C	222.0	174.6	53937	40649	47.9	31.4	42	35			6x800	1431.9	232	B	A	2xDN80	2xDN80
BDD6Q 804 A	235.5	196.2	80965	62381	81.3	59.2	43	36	P=370W In=1.2A n=440min-1	P=200W In=0.5A n=340min-1	8x800	952.3	155	B	A	2xDN100	2xDN100
BDD6Q 804 B	277.2	223.4	76187	57911	53.1	36.2	43	36			8x800	1428.5	232	B	A	2xDN100	2xDN100
BDD6Q 804 C	296.8	233.4	71851	54144	70.0	45.8	43	36			8x800	1904.6	310	B	A	2xDN100	2xDN100
BDD6Q 805 A	293.0	244.1	101177	77947	63.6	46.3	44	37			10x800	1188.7	194	B	A	2xDN100	2xDN100
BDD6Q 805 B	345.3	278.1	95193	72352	43.8	29.5	44	37			10x800	1783.0	289	B	A	2xDN100	2xDN100
BDD6Q 805 C	370.5	291.4	89764	67638	65.8	43.1	44	37			10x800	2377.4	386	B	A	2xDN100	2xDN100
BDD6Q 806 A	347.6	289.8	121388	93513	35.0	25.6	45	38			12x800	1188.7	194	B	A	2xDN100	2xDN100
BDD6Q 806 B	417.1	336.0	114198	86793	72.8	49.5	45	38			12x800	1783.0	289	B	A	2xDN100	2xDN100
BDD6Q 806 C	443.1	348.6	107678	81133	49.8	32.6	45	38			12x800	2850.2	463	B	A	2xDN100	2xDN100
BDD6R 802 A	105.9	74.9	34583	21604	71.0	38.4	36	25			4x800	479.6	77	B	A	2xDN80	2xDN80
BDD6R 802 B	122.4	82.2	32353	19862	50.8	25.2	36	25			4x800	719.3	116	A	A	2xDN80	2xDN80
BDD6R 803 A	158.1	111.8	51818	32360	60.1	32.5	38	27			6x800	715.9	116	B	A	2xDN80	2xDN80
BDD6R 803 B	183.6	123.2	48454	29736	59.6	29.6	38	27			6x800	1073.8	174	A	A	2xDN80	2xDN80
BDD6R 804 A	207.6	147.1	69053	43116	27.9	15.2	39	28	P=250W In=0.62A n=380min-1	P=110W In=0.27 An=240min-1	8x800	952.3	155	B	A	2xDN100	2xDN100
BDD6R 804 B	243.5	163.4	64555	39610	41.9	20.8	39	28			8x800	1428.5	232	A	A	2xDN100	2xDN100
BDD6R 805 A	262.5	185.6	86288	53872	52.7	28.5	40	29			10x800	1188.7	194	B	A	2xDN100	2xDN100
BDD6R 805 B	303.3	203.6	80656	49484	34.6	17.2	40	29			10x800	1783.0	289	A	A	2xDN100	2xDN100
BDD6R 806 A	311.2	220.5	103523	64627	28.8	15.7	41	30			12x800	1188.7	194	B	A	2xDN100	2xDN100
BDD6R 806 B	366.3	245.6	96757	59358	57.4	28.5	41	30			12x800	1783.0	289	A	A	2xDN100	2xDN100

Nominal capacities according to standard EN1048 (water Tair=25°C, Tin=40°C,Tout=35°C).*See the General Contents for more details.**Energy Efficiency Class: see "General Contents" for more details.

Model	Capacity [kW]		Airflow [m³/h]		Pressure Drop fluid [kPa]		Lp [dB(A)]*		Motor (3/400V-50Hz)		Fans	Surface	Tube volume	E.E.C.**		Conn. Size	
	Δ	Y	Δ	Y	Δ	Y	Δ	Y	Δ	Y	N° x D [mm]	m²	dm³	Δ	Y	Inlet	Outlet
Ø 910																	
BDD6T 902 A	249.2	222.2	125834	103133	55.5	45.3	62	57			4 x 900	574.1	93	E	E	2xDN80	2xDN80
BDD6T 902 B	323.8	281.5	120228	96928	77.1	60.2	62	57			4 x 900	861.1	140	E	E	2xDN80	2xDN80
BDD6T 902 C	369.4	314.1	114352	91110	63.9	47.9	62	57			4 x 900	1148.2	186	E	D	2xDN80	2xDN80
BDD6T 902 D	395.3	329.9	108733	85905	46.2	33.4	62	57			4 x 900	1435.2	233	E	D	2xDN80	2xDN80
BDD6T 903 A	375.6	334.8	188648	154576	71.9	58.7	64	59			6 x 900	857.8	139	E	E	2xDN100	2xDN100
BDD6T 903 B	481.3	418.5	180167	145210	57.1	44.6	64	59			6 x 900	1286.7	209	E	E	2xDN100	2xDN100
BDD6T 903 C	548.9	466.8	171297	136445	44.6	33.4	64	59			6 x 900	1715.5	278	E	D	2xDN100	2xDN100
BDD6T 903 D	596.6	497.6	162830	128614	75.2	54.4	64	59	P=3600W In=7.2A n=890min-1	P=2500W In=4.3A n=700min-1	6 x 900	2144.4	348	E	D	2xDN100	2xDN100
BDD6T 904 A	496.2	442.5	251461	206018	52.9	43.2	65	60			8 x 900	1141.4	185	E	E	2xDN100	2xDN100
BDD6T 904 B	635.4	552.6	240104	193491	39.9	31.2	65	60			8 x 900	1712.1	278	E	E	2xDN100	2xDN100
BDD6T 904 C	724.6	616.4	228240	181779	30.4	22.8	65	60			8 x 900	2282.8	370	E	D	2xDN100	2xDN100
BDD6T 904 D	794.1	662.3	216925	171322	72.5	52.5	65	60			8 x 900	2853.5	463	E	D	2xDN100	2xDN100
BDD6T 905 A	590.1	526.8	314300	257500	12.90	10.6	66	61			10 x 900	1425.1	231	E	E	2xDN100	2xDN100
BDD6T 905 B	806.0	700.6	300041	241772	75.4	58.9	66	61			10 x 900	2137.6	347	E	E	2xDN100	2xDN100
BDD6T 905 C	918.1	780.5	285183	227112	57.3	43.0	66	61			10 x 900	2850.2	462	E	D	2xDN100	2xDN100
BDD6T 905 D	983.3	819.8	271021	214030	43.6	31.3	66	61			10 x 900	3562.7	578	E	D	2xDN100	2xDN100
BDD6S 902 A	202.6	174.1	88388	69302	38.5	29.4	58	53			4 x 900	574.1	93	D	D	2xDN80	2xDN80
BDD6S 902 B	257.4	215.4	84761	65792	51.8	37.7	58	53			4 x 900	861.1	140	D	C	2xDN80	2xDN80
BDD6S 902 C	288.6	236.1	81216	62510	41.2	28.8	58	53			4 x 900	1148.2	186	D	C	2xDN80	2xDN80
BDD6S 902 D	307.9	247.3	77870	59520	51.0	34.6	58	53			4 x 900	1435.2	233	C	C	2xDN80	2xDN80
BDD6S 903 A	305.3	262.3	132510	103881	49.9	38.1	60	55			6 x 900	857.8	139	D	D	2xDN100	2xDN100
BDD6S 903 B	382.5	320.6	127034	98586	38.0	28.0	60	55			6 x 900	1286.7	209	D	C	2xDN100	2xDN100
BDD6S 903 C	435.6	356.0	121686	93640	64.4	44.5	60	55			6 x 900	1715.5	278	D	C	2xDN100	2xDN100
BDD6S 903 D	460.6	369.8	116644	89139	47.5	32.2	60	55	P=1650W In=3.5A n=860min-1	P=1000W In=1.8A n=660min-1	6 x 900	2144.4	348	C	C	2xDN100	2xDN100
BDD6S 904 A	403.6	346.8	176632	138460	36.7	28.1	61	56			8 x 900	1141.4	185	D	D	2xDN100	2xDN100
BDD6S 904 B	505.3	423.6	169305	131379	26.6	19.6	61	56			8 x 900	1712.1	278	D	C	2xDN100	2xDN100
BDD6S 904 C	580.4	474.3	162155	124769	65.0	45.0	61	56			8 x 900	2282.8	370	D	C	2xDN100	2xDN100
BDD6S 904 D	613.2	492.3	155417	118757	45.8	31.1	61	56			8 x 900	2853.5	463	C	C	2xDN100	2xDN100
BDD6S 905 A	520.0	447.6	226800	178000	71.4	54.7	62	57			10 x 900	1425.1	231	E	E	2xDN100	2xDN100
BDD6S 905 B	641.0	536.5	211577	164172	50.7	36.9	62	57			10 x 900	2137.6	347	D	C	2xDN100	2xDN100
BDD6S 905 C	717.6	587.2	202624	155898	37.0	25.8	62	57			10 x 900	2850.2	462	D	C	2xDN100	2xDN100
BDD6S 905 D	759.8	610.5	194190	148375	27.5	18.7	62	57			10 x 900	3562.7	578	C	C	2xDN100	2xDN100
BDD6L 902 A	170.6	134.5	65502	45964	55.4	36.4	51	44			4 x 900	574.1	93	C	B	2xDN80	2xDN80
BDD6L 902 B	209.9	159.0	62638	43228	61.7	38.0	51	44			4 x 900	861.1	140	C	B	2xDN80	2xDN80
BDD6L 902 C	230.1	168.6	59985	40902	41.1	23.9	51	44			4 x 900	1148.2	186	C	B	2xDN80	2xDN80
BDD6L 902 D	242.7	173.0	57553	38897	77.4	42.7	51	44			4 x 900	1435.2	233	C	B	2xDN80	2xDN80
BDD6L 903 A	253.0	199.5	98195	68887	35.8	23.5	53	46			6 x 900	857.8	139	C	B	2xDN100	2xDN100
BDD6L 903 B	314.2	237.7	93874	64766	59.9	36.6	53	46			6 x 900	1286.7	209	C	B	2xDN100	2xDN100
BDD6L 903 C	344.6	252.6	89875	61267	42.0	24.4	53	46			6 x 900	1715.5	278	C	B	2xDN100	2xDN100
BDD6L 903 D	362.4	258.4	86214	58253	57.7	31.8	53	46	P=900W In=2.2A n=640min-1	P=470W In=1.05A n=440min-1	6 x 900	2144.4	348	C	B	2xDN100	2xDN100
BDD6L 904 A	334.4	263.9	130886	91809	26.3	17.3	54	47			8 x 900	1141.4	185	C	B	2xDN100	2xDN100
BDD6L 904 B	418.5	316.6	125109	86305	59.0	36.0	54	47			8 x 900	1712.1	278	C	B	2xDN100	2xDN100
BDD6L 904 C	459.2	336.5	119766	81632	42.4	24.7	54	47			8 x 900	2282.8	370	C	B	2xDN100	2xDN100
BDD6L 904 D	483.6	344.7	114874	77608	68.2	37.6	54	47			8 x 900	2853.5	463	C	B	2xDN100	2xDN100
BDD6L 905 A	433.9	343.7	169500	119400	51.8	34.3	55	48			10 x 900	1425.1	231	E	E	2xDN100	2xDN100
BDD6L 905 B	517.9	392.2	156345	107843	34.7	21.3	55	48			10 x 900	2137.6	347	C	B	2xDN100	2xDN100
BDD6L 905 C	578.9	423.5	149656	101997	79.7	45.9	55	48			10 x 900	2850.2	462	C	B	2xDN100	2xDN100
BDD6L 905 D	602.8	429.8	143535	96963	55.2	30.4	55	48			10 x 900	3562.7	578	C	B	2xDN100	2xDN100
BDD6Q 902 A	129.1	109.2	42663	33800	59.4	44.1	41	35			4 x 900	574.1	93	B	A	2xDN80	2xDN80
BDD6Q 902 B	151.3	124.3	40616	31745	34.5	24.4	41	35			4 x 900	861.1	140	A	A	2xDN80	2xDN80
BDD6Q 902 C	162.6	130.4	38712	29941	52.3	35.4	41	35			4 x 900	1148.2	186	A	A	2xDN80	2xDN80
BDD6Q 903 A	192.9	163.1	63952	50656	52.0	38.6	43	37			6 x 900	857.8	139	B	A	2xDN100	2xDN100
BDD6Q 903 B	228.3	187.4	60865	47559	60.8	43.1	43	37			6 x 900	1286.7	209	A	A	2xDN100	2xDN100
BDD6Q 903 C	244.1	195.6	57996	44845	67.3	45.6	43	37	P=330W In=0.83A n=440min-1	P=185W In=0.38A n=330min-1	6 x 900	1715.5	278	A	A	2xDN100	2xDN100
BDD6Q 904 A	256.7	217.1	85241	67512	48.7	36.2	44	38			8 x 900	1141.4	185	B	A	2xDN100	2xDN100
BDD6Q 904 B	304.8	250.3	81113	63374	74.3	52.6	44	38			8 x 900	1712.1	278	A	A	2xDN100	2xDN100
BDD6Q 904 C	324.3	260.0	77279	59748	50.0	33.9	44	38			8 x 900	2282.8	370	A	A	2xDN100	2xDN100
BDD6Q 905 A	317.6	269.0	106531	84368	29.9	22.4	45	39			10 x 900	1425.1	231	B	A	2xDN100	2xDN100
BDD6Q 905 B	380.0	312.0	101361	79188	61.4	43.5	45	39			10 x 900	2137.6	347	A	A	2xDN100	2xDN100
BDD6Q 905 C	404.5	324.3	96562	74651	42.4	28.7	45	39			10 x 900	2850.2	462	A	A	2xDN100	2xDN100
BDD6R 902 A	122.8	88.4	39785	25508	54.4	30.4	40	30			4 x 900	574.1	93	A	A	2xDN80	2xDN80
BDD6R 902 B	142.8	98.0	37772	23829	31.0	16.0	40	30			4 x 900	861.1	140	A	A	2xDN80	2xDN80
BDD6R 903 A	183.6	132.2	59635	38226	47.6	26.6	42	32			6 x 900	857.8	139	A	A	2xDN100	2xDN100
BDD6R 903 B	215.5	147.7	56601	35697	54.8	28.3	42	32	P=270W In=0.70A n=390min-1	P=140W In=0.32A n=250min-1	6 x 900	1286.7	209	A	A	2xDN100	2xDN100
BDD6R 904 A	244.3	175.9	79486	50943	44.6	24.9	43	33			8 x 900	1141.4	185	A	A	2xDN100	2xDN100
BDD6R 904 B	287.7	197.2	75429	47565	66.9	34.6	43	33			8 x 900	1712.1	278	A	A	2xDN100	2xDN100
BDD6R 905 A	302.5	218.0	99336	63660	27.6	15.4	44	34			10 x 900	1425.1	231	A	A	2xDN100	2xDN100
BDD6R 905 B	358.7	245.9	94257	59433	55.3	28.6	44	34			10 x 900	2137.6	347	A	A	2xDN100	2xDN100

Nominal capacities according to standard EN1048 (water Tair=25°C, Tin=40°C,Tout=35°C).*See the General Contents for more details.**Energy Efficiency Class: see "General Contents" for more details.

Model	Capacity [kW]		Airflow [m³/h]		Pressure Drop fluid [kPa]		Lp [dB(A)]*		Motor (3/400V-50Hz)		Fans	Surface	Tube volume	E.E.C.**		Conn. Size	
	Δ	Y	Δ	Y	Δ	Y	Δ	Y	Δ	Y	N° x D [mm]	m²	dm³	Δ	Y	Inlet	Outlet
Ø 1000																	
BDD6L1002A	236.6	204.5	114846	89768	50.6	39.1	59	54	P=2200W In=4.2A n=670min-1	P=1500W In=2.7A n=530min-1	4x1000	574.1	93	E	D	2xDN80	2xDN80
BDD6L1002B	297.6	250.9	105496	81689	66.5	49.5	59	54			4x1000	861.1	140	D	D	2xDN80	2xDN80
BDD6L1002C	330.0	272.1	97519	75075	52.3	37.3	59	54			4x1000	1148.2	186	D	C	2xDN80	2xDN80
BDD6L1002D	347.4	281.5	90824	69653	62.7	43.5	59	54			4x1000	1435.2	233	D	C	2xDN80	2xDN80
BDD6L1003A	356.4	308.1	172071	134475	65.6	50.7	61	56			6x1000	857.8	139	E	D	2xDN100	2xDN100
BDD6L1003B	442.4	373.1	157984	122314	49.2	36.7	61	56			6x1000	1286.7	209	D	D	2xDN100	2xDN100
BDD6L1003C	490.2	404.4	145987	112374	36.5	26.1	61	56			6x1000	1715.5	278	D	D	2xDN100	2xDN100
BDD6L1003D	519.3	420.7	135931	104235	58.3	40.5	61	56			6x1000	2144.4	348	D	C	2xDN100	2xDN100
BDD6L1004A	470.9	407.1	229294	179181	48.2	37.3	62	57			8x1000	1141.4	185	E	D	2xDN100	2xDN100
BDD6L1004B	584.0	492.2	210472	162939	34.4	25.4	62	57			8x1000	1712.1	278	D	D	2xDN100	2xDN100
BDD6L1004C	647.2	533.8	194455	149673	24.9	17.7	62	57			8x1000	2282.8	370	D	D	2xDN100	2xDN100
BDD6L1004D	691.0	559.8	181035	138816	56.2	39.0	62	57			8x1000	2853.5	463	D	C	2xDN100	2xDN100
BDD6L1005B	740.4	624.2	262959	203564	64.9	48.4	63	58			10x1000	2137.6	347	D	D	2xDN100	2xDN100
BDD6L1005C	819.5	675.9	242922	186971	46.9	33.4	63	58			10x1000	2850.2	462	D	C	2xDN100	2xDN100
BDD6L1005D	855.9	693.7	226142	173396	33.8	23.4	63	58			10x1000	3562.7	578	D	C	2xDN100	2xDN100
BDD6Q 1002A	184.9	148.1	74318	52939	63.9	43.2	45	38	P=860W In=2A n=420 min-1	P=500W In=9.7A n=310 min-1	4x1000	574.1	93	C	B	2xDN80	2xDN80
BDD6Q 1002B	220.1	169.0	66863	46815	67.1	42.2	45	38			4x1000	861.1	140	C	B	2xDN80	2xDN80
BDD6Q 1002C	230.3	173.1	60052	42215	41.2	25.1	45	38			4x1000	1148.2	186	C	B	2xDN80	2xDN80
BDD6Q 1003A	274.1	219.6	111330	79267	41.2	27.9	47	40			6x1000	857.8	139	C	B	2xDN100	2xDN100
BDD6Q 1003B	329.1	252.7	100075	70064	65.0	40.9	47	40			6x1000	1286.7	209	C	B	2xDN100	2xDN100
BDD6Q 1003C	344.5	259.1	89831	63162	41.9	25.5	47	40			6x1000	1715.5	278	C	B	2xDN100	2xDN100
BDD6Q 1004A	362.2	290.3	148340	105595	30.3	20.5	48	41			8x1000	1141.4	185	C	B	2xDN100	2xDN100
BDD6Q 1004B	438.1	336.4	133286	93314	64.0	40.2	48	41			8x1000	1712.1	278	C	B	2xDN100	2xDN100
BDD6Q 1004C	458.7	345.0	119609	84109	42.3	25.8	48	41			8x1000	2282.8	370	C	B	2xDN100	2xDN100
BDD6Q 1005A	459.3	367.9	185350	131922	57.3	38.7	49	42			10x1000	1425.1	231	C	B	2xDN100	2xDN100
BDD6Q 1005B	541.9	416.5	166496	116564	37.6	23.7	49	42			10x1000	2137.6	347	C	B	2xDN100	2xDN100
BDD6Q 1005C	578.1	434.1	149386	105056	79.5	48.0	49	42			10x1000	2850.2	462	C	B	2xDN100	2xDN100
BDD6R 1002A	170.9	125.6	65708	41628	55.6	32.5	43	34	P=670W In=1.4A n=380 min-1	P=330W In=0.67A n=250 min-1	4x1000	574.1	93	C	B	2xDN80	2xDN80
BDD6R 1002B	200.1	140.1	58675	36862	56.7	30.0	43	34			4x1000	861.1	140	B	B	2xDN80	2xDN80
BDD6R 1003A	253.3	186.1	98422	62338	35.9	20.8	45	36			6x1000	857.8	139	C	B	2xDN100	2xDN100
BDD6R 1003B	299.2	209.5	87810	55163	54.9	29.0	45	36			6x1000	1286.7	209	B	B	2xDN100	2xDN100
BDD6R 1004A	334.9	246.1	131134	83048	26.4	15.3	46	37			8x1000	1141.4	185	C	B	2xDN100	2xDN100
BDD6R 1004B	398.3	278.8	116944	73463	54.0	28.6	46	37			8x1000	1712.1	278	B	B	2xDN100	2xDN100
BDD6R 1005A	424.5	311.7	163847	103758	49.8	28.9	47	38			10x1000	1425.1	231	C	B	2xDN100	2xDN100
BDD6R 1005B	492.8	345.4	146077	91764	31.8	16.9	47	38			10x1000	2137.6	347	B	B	2xDN100	2xDN100

Nominal capacities according to standard EN1048 (water Tair=25°C, Tin=40°C,Tout=35°C).*See the General Contents for more details.**Energy Efficiency Class: see "General Contents" for more details.

BDD/BDD6 - Double Fan Row

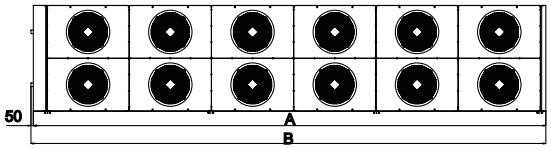
Drawings

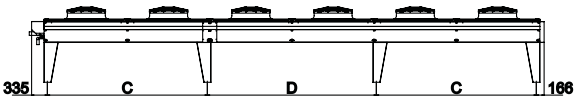
Serie	Weight [kg]		Dimensions (mm)					N° feets	
	BDD	BDD6	A	B	C	D	G	V	H
					Ø 800				
BDD_802A	580	602	3905	3955	3475(V)/3404(H)	-	2290(V)/1220(H)	2	4
BDD_802B	600	623	3905	3955	3475(V)/3404(H)	-	2290(V)/1220(H)	2	4
BDD_802C	646	670	3905	3955	3475(V)/3404(H)	-	2290(V)/1220(H)	2	4
BDD_802D	711	738	3905	3955	3475(V)/3404(H)	-	2290(V)/1220(H)	2	4
BDD_803A	713	740	5655	5705	5225(V)/5154(H)	-	2290(V)/1220(H)	2	4
BDD_803B	820	851	5655	5705	5225(V)/5154(H)	-	2290(V)/1220(H)	2	4
BDD_803C	920	955	5655	5705	5225(V)/5154(H)	-	2290(V)/1220(H)	2	4
BDD_803D	1012	1050	5655	5705	5225(V)/5154(H)	-	2290(V)/1220(H)	2	4
BDD_804A	1020	1058	7405	7455	3475(V)/3404(H)	3500	2290(V)/1220(H)	3	6
BDD_804B	1062	1102	7405	7455	3475(V)/3404(H)	3500	2290(V)/1220(H)	3	6
BDD_804C	1196	1241	7405	7455	3475(V)/3404(H)	3500	2290(V)/1220(H)	3	6
BDD_804D	1316	1365	7405	7455	3475(V)/3404(H)	3500	2290(V)/1220(H)	3	6
BDD_805A	1330	1380	9155	9205	3475(V)/3404(H)	1775	2290(V)/1220(H)	4	8
BDD_805B	1175	1219	9155	9205	3475(V)/3404(H)	1775	2290(V)/1220(H)	4	8
BDD_805C	1473	1528	9155	9205	3475(V)/3404(H)	1775	2290(V)/1220(H)	4	8
BDD_805D	1620	1681	9155	9205	3475(V)/3404(H)	1775	2290(V)/1220(H)	4	8
BDD_806A	1640	1702	10905	10955	3475(V)/3404(H)	3525	2290(V)/1220(H)	4	8
BDD_806B	1396	1448	10905	10955	3475(V)/3404(H)	3525	2290(V)/1220(H)	4	8
BDD_806C	1745	1810	10905	10955	3475(V)/3404(H)	3525	2290(V)/1220(H)	4	8
BDD_806D	1920	1992	10905	10955	3475(V)/3404(H)	3525	2290(V)/1220(H)	4	8
					Ø 910				
BDD_902A	951	987	4605	4655	4175(V)/4104(H)	-	2290(V)/1290(H)	2	4
BDD_902B	870	903	4605	4655	4175(V)/4104(H)	-	2290(V)/1290(H)	2	4
BDD_902C	930	965	4605	4655	4175(V)/4104(H)	-	2290(V)/1290(H)	2	4
BDD_902D	1000	1038	4605	4655	4175(V)/4104(H)	-	2290(V)/1290(H)	2	4
BDD_903A	1050	1089	6705	6755	6275(V)/6204(H)	-	2290(V)/1290(H)	2	4
BDD_903B	1070	1110	6705	6755	6275(V)/6204(H)	-	2290(V)/1290(H)	2	4
BDD_903C	1163	1207	6705	6755	6275(V)/6204(H)	-	2290(V)/1290(H)	2	4
BDD_903D	1249	1296	6705	6755	6275(V)/6204(H)	-	2290(V)/1290(H)	2	4
BDD_904A	1300	1349	8805	8855	4175(V)/4104(H)	4200	2290(V)/1290(H)	3	6
BDD_904B	1438	1492	8805	8855	4175(V)/4104(H)	4200	2290(V)/1290(H)	3	6
BDD_904C	1530	1587	8805	8855	4175(V)/4104(H)	4200	2290(V)/1290(H)	3	6
BDD_904D	1643	1705	8805	8855	4175(V)/4104(H)	4200	2290(V)/1290(H)	3	6
BDD_905A	1625	1686	10905	10955	4175(V)/4104(H)	2125(V)/2196(H)	2290(V)/1290(H)	4	8
BDD_905B	1890	1961	10905	10955	4175(V)/4104(H)	2125(V)/2196(H)	2290(V)/1290(H)	4	8
BDD_905C	2080	2158	10905	10955	4175(V)/4104(H)	2125(V)/2196(H)	2290(V)/1290(H)	4	8
BDD_905D	2234	2318	10905	10955	4175(V)/4104(H)	2125(V)/2196(H)	2290(V)/1290(H)	4	8
					Ø 1000				
BDD_1002A	951	987	4605	4655	4175(V)/4104(H)	-	2290(V)/1290(H)	2	4
BDD_1002B	870	903	4605	4655	4175(V)/4104(H)	-	2290(V)/1290(H)	2	4
BDD_1002C	930	965	4605	4655	4175(V)/4104(H)	-	2290(V)/1290(H)	2	4
BDD_1002D	1000	1038	4605	4655	4175(V)/4104(H)	-	2290(V)/1290(H)	2	4
BDD_1003A	1050	1089	6705	6755	6275(V)/6204(H)	-	2290(V)/1290(H)	2	4
BDD_1003B	1070	1110	6705	6755	6275(V)/6204(H)	-	2290(V)/1290(H)	2	4
BDD_1003C	1163	1207	6705	6755	6275(V)/6204(H)	-	2290(V)/1290(H)	2	4
BDD_1003D	1249	1296	6705	6755	6275(V)/6204(H)	-	2290(V)/1290(H)	2	4
BDD_1004A	1300	1349	8805	8855	4175(V)/4104(H)	4200	2290(V)/1290(H)	3	6
BDD_1004B	1438	1492	8805	8855	4175(V)/4104(H)	4200	2290(V)/1290(H)	3	6
BDD_1004C	1530	1587	8805	8855	4175(V)/4104(H)	4200	2290(V)/1290(H)	3	6
BDD_1004D	1643	1705	8805	8855	4175(V)/4104(H)	4200	2290(V)/1290(H)	3	6
BDD_1005A	1625	1686	10905	10955	4175(V)/4104(H)	2125(V)/2196(H)	2290(V)/1290(H)	4	8
BDD_1005B	1890	1961	10905	10955	4175(V)/4104(H)	2125(V)/2196(H)	2290(V)/1290(H)	4	8
BDD_1005C	2080	2158	10905	10955	4175(V)/4104(H)	2125(V)/2196(H)	2290(V)/1290(H)	4	8
BDD_1005D	2234	2318	10905	10955	4175(V)/4104(H)	2125(V)/2196(H)	2290(V)/1290(H)	4	8

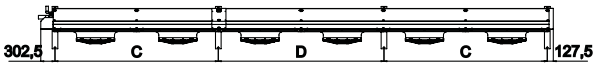
Standard Feet 500 mm.

We reserve the right to change our technical data without prior notice.

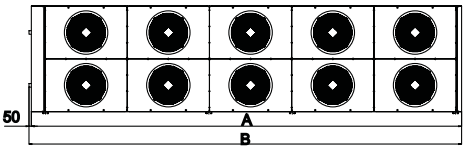
VERTICAL POSITION	HORIZONTAL POSITION

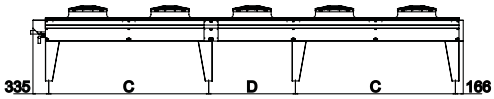


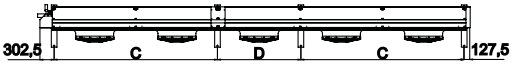




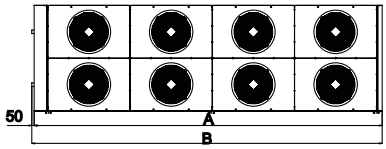
TOP VIEW

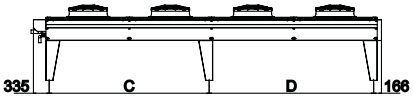


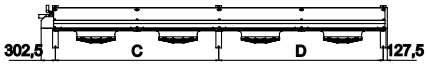




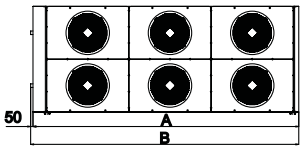
TOP VIEW

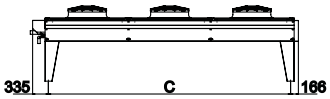


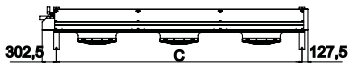




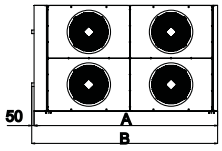
TOP VIEW

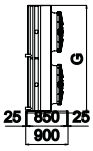


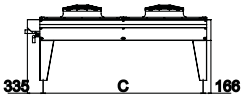


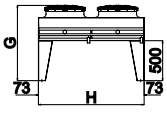


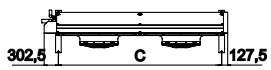
TOP VIEW









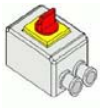


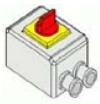
TOP VIEW

BDD/BDD6 - Double Fan Row

Options

Motor fans		
	(a) Fan motor 400 V/3ph - 60Hz, IP54: Q/R for Ø 800/910/1000, S/L only for Ø 800/910 (b) Fan motor 460 V/3ph - 60Hz, IP54: Q/R for Ø 800/910/1000, S/L only for Ø 800/910	**Model:** Ø 800 [a,b] Ø 910[a,b] Ø1000 [a,b]

Local safety switch wired		
	See Electrical Data Page.	**Model:** All Models

Local safety switch EMC		
	See Electrical Data Page.	**Model:** All Models

Terminal Box		
	See Electrical Data Page.	**Model:** All Models

Switchboard and cabling

Function
Switchboard for supply and control of fan motors.
A switchboard can supply up to 8 individual motors or 8 paired motors (i.e. max. of 16 motors).
Switchboard and cabling are supplied as standard for vertical installation of the unit.
If you have different needs, please specify these when placing your order.
Operating conditions
Type of installation: External wall mounted
Protection degree: IP55 door closed
Climate: Normal
Operating temperature: -10 ÷ +35°C (base) -25 ÷ +50°C (with optionals)
Ambient relative humidity: <95%
Altitude: <1000metres above sea level
Electrical data
Insulating nominal voltage: 690V
Operating voltage: 3Ph. 400Vac
Frequency: 50Hz
Auxiliaries voltage: 24-230V
Nominal current: Max 80A
Mechanical data
Material: Pre-painted galvanized steel
Fixing plate: Sheet of steel (min. thickness 15/10 Sendzimir galvanized)
Gasket: Polyurethane
Door: opening more than 180°.
Colour: RAL 7035
Cable gland: metric ISO

Model:
All Models

Switchboard Options

R Anti-condensate resistor 230Vac (operating temperature -25 ÷ + 35°C)
C Cooling fan 230VAC (operating temperature -10 ÷ + 50°C)
F Cooling fan + anti-condensate resistor

Model:
All Models

Switchboard with Fan Speed control

Switchboard and cabling, including an electronic fan speed controller (equipment that checks and regulates the speed rotation of the fan's motor, keeping the temperature for dry coolers within the range of pre-defined values). Constant control of the fan speed is achieved by variation of the electrical supply by phase-cut, as determined by the probe signal. The fan speed controller comes pre-connected to the switchboard. If you have different needs, please specify these when placing your order.

Model:
All Models

Switchboard with Fan Step control

Switchboard and cabling, including an automatic on/off switch that checks and regulates the speed rotation of the fan's motor, keeping the temperature for dry coolers within the range of preset values. Control of the fan speed is achieved by variation of the electrical supply by the ON/OFF device, as determined by the probe signal. The fan step controller comes pre-connected to the switchboard. If you have different needs, please specify these when placing your order.

Model:
All Models

Switchboard with Frequency Converter (Inverter)

See Electrical Data Page.

Model:
All Models

Coil Treatment / Material

Thermoguard for industrial or sea coast application.
Aluminium fins, pre-coated.
Copper fins.
Application Use: More information on corrosion prevention can be found in the Miscellaneous section.

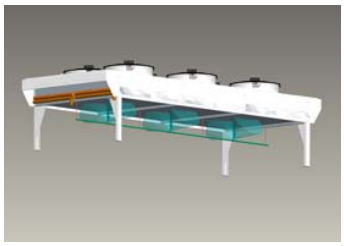
Model:
All Models

Non-standard fin spacing

The standard fin spacing is 2.1mm.
Alternative: 2.5mm and 3.2mm

Model:
All Models

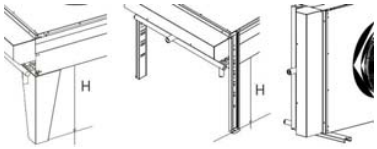
Spray water



Consisting of a pipe system with several fitted spraying nozzles that nebulise water in the air suction of the coil. Spray water comes mounted on delivery.

Model:
All Models

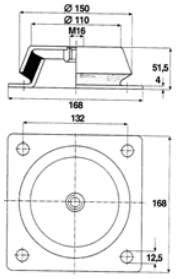
Feet



V Vertical Position
H Horizontal Position (500 and 850mm)
AFeet adjustable from 350 to 950cm

Model:
All Models

Vibration Dampers



Type	H mm	A mm	B mm	C mm	D mm	Weight Kg
Single Row	51.5	132	168	M16	12.5	2.15

Nuts and bolts are not included with these dampers.

Model:
All Models

BDD/BDD6 - Double Fan Row

Electrical Data

Safety Switch

Function

Local safety switch and cabling for each electric fan motor.

General data

Power Supply:
- 400VAC, 50/60Hz
- Max fuse 16A

Number of poles: 3P

Cabinet Material: Plastic Case

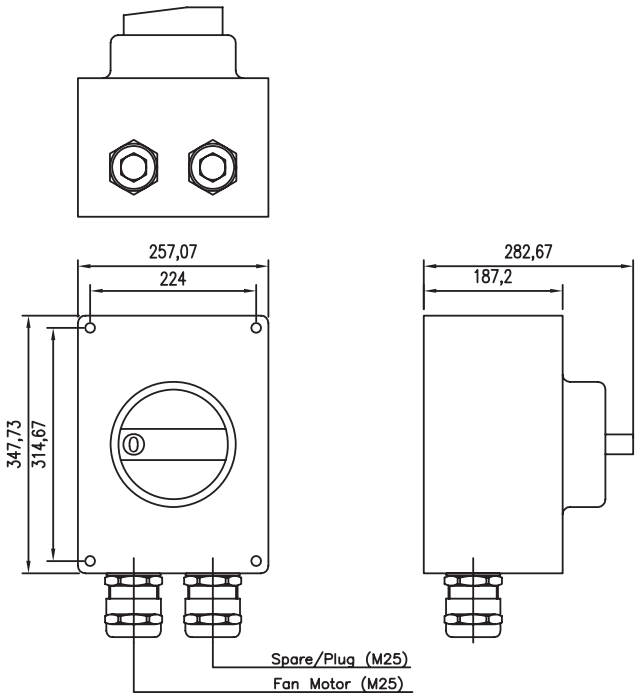
Cabinet Colour: Grey (Yellow-Red Knob)

Protection Class: Min IP65

Ambient Temp.: min. -25°C, max. +50°C

Weight: Approx. 0.4Kg

Dimensions



Safety Switch EMC

Function

Local safety switch and cabling for each electric fan motor.

General data

Power Supply:
- 400VAC, 50/60Hz
- Max fuse 16A

Number of poles: 3P

Cabinet Material: Plastic case with internal copper-painted

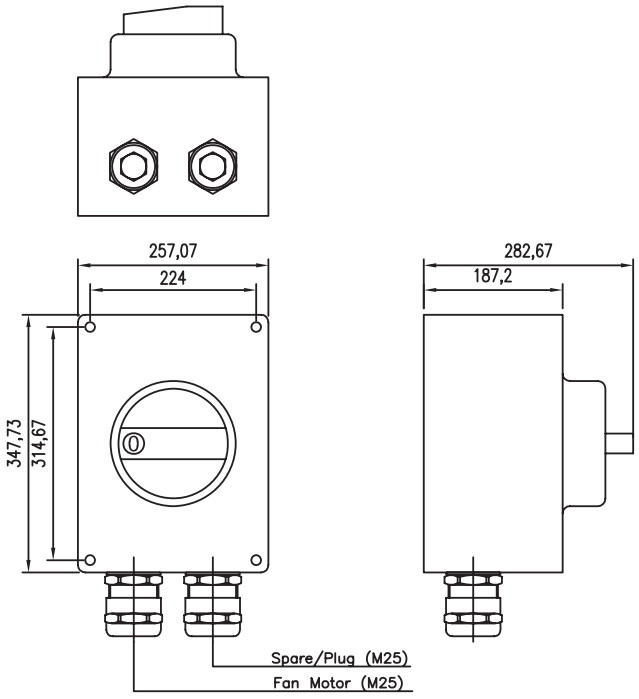
Cabinet Colour: Grey (Yellow-Red Knob)

Protection Class: Min IP65

Ambient Temp.: min. -25°C, max. +50°C

Weight: Approx. 0.4Kg

Dimensions



Terminal Box

Function

Connection box for electric fan motor

General data

Material: Plastic

IP Protection Class: Min RAL 7035

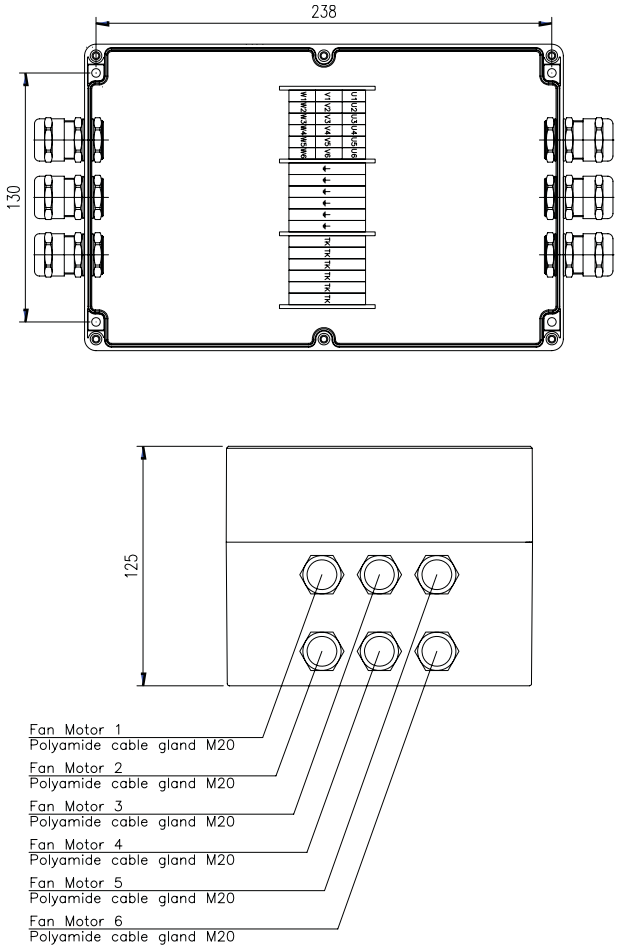
Colour: Grey RAL 7035

Insulation Class: II

Ambient Temp.: min. -40°C, max. +80°C

Weight: Approx. 0.5Kg.

Dimensions



Switch Board (Control Panel)

Function

Basic Version for Horizontal Installation

General data

Cabinet Material: Sheet steel 15/10mm zinc-coated

Internal Plate: Sheet steel 20/10mm zinc-coated

Protection Class: IP 55

Cabinet Colour: RAL 7035, light grey polyester paint

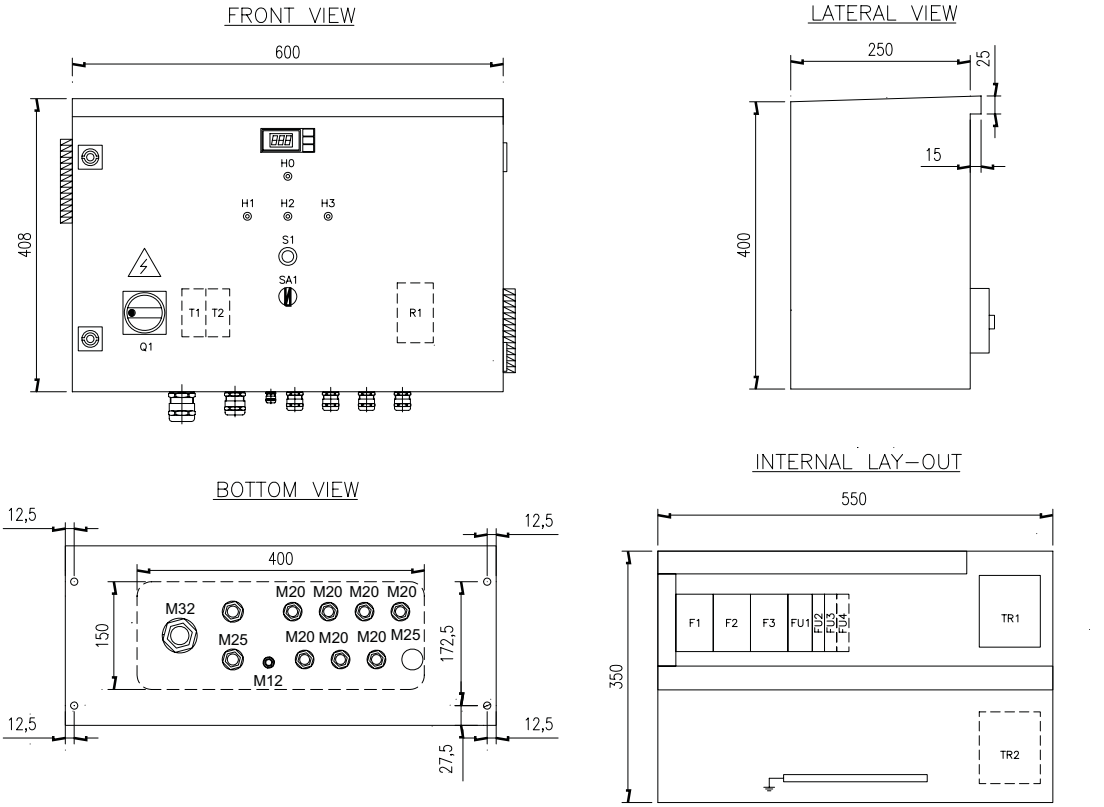
Cabinet Doors: Opening angle 110°

Ambient Temp.:

- min. -10°C, max. +35°C standard
- min. -25°C, max. +35°C with electrical heater
- min. -10°C, max. +50°C with cooling fan
- min. -25°C, max. +50°C with heater and fan

Cables included: Bottom position with cable glands.

Dimensions

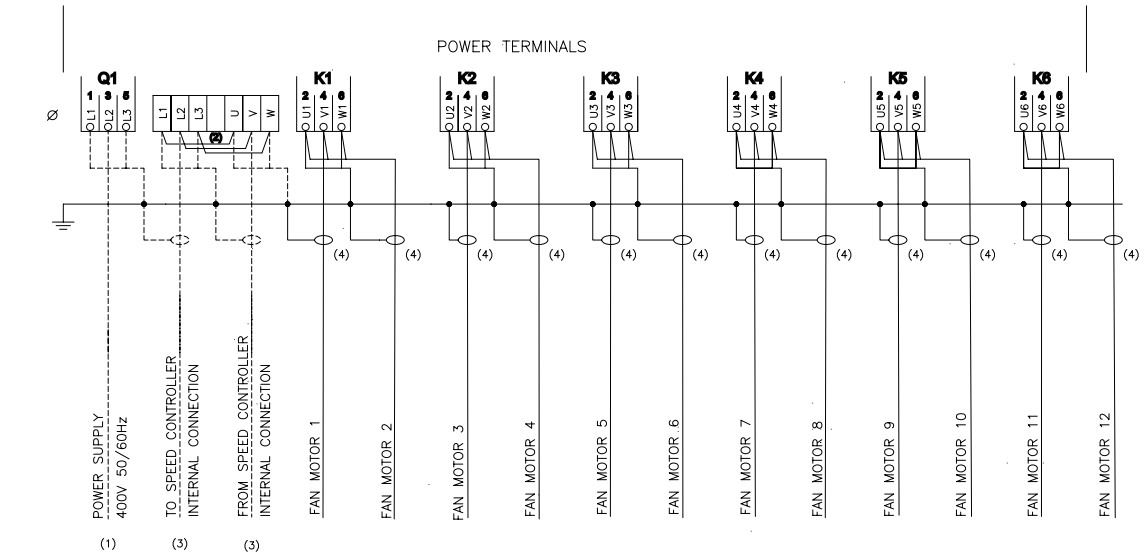


Labels list

H0 VOLTAGE BOARD ON
H1 FAN MOTOR 1-2 RUNNING (OPTION)
H2 FAN MOTOR 3-4 RUNNING (OPTION)
H3 FAN MOTOR 5-6 RUNNING (OPTION)

Q1 MAIN SWITCH
TC1 TEMPERATURE/PRESSURE CONTROLLER (OPTION)
S1 RESET (OPTION)
SA1 MAN - AUT SELECTION (OPTION)

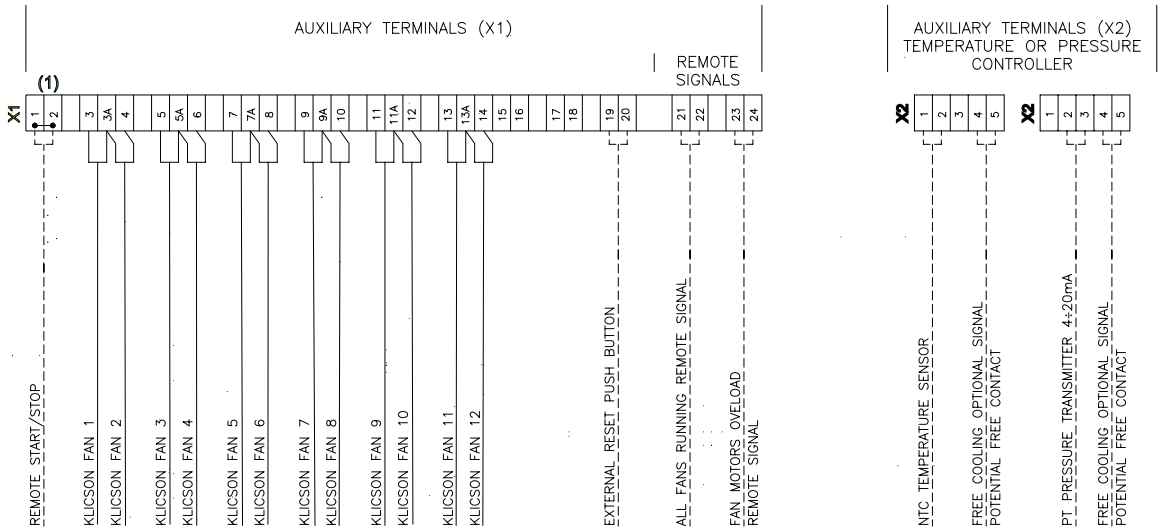
Electric wiring diagram



NOTE :

(1) EXTERNAL SHORT CIRCUIT PROTECTION MAX FUSE .....
(2) REMOVE JUMPERS WHEN SPEED CONTROLLER IS ORDERED
(3) NOT MOUNTED WHEN FAN SPEED CONTROLLER IS ORDERED
(4) SCHIELDED CABLE TO BE USED ONLY WHEN EMC CABLING OPTION IS REQUESTED

_ _ _ _ _ _ _ CABLE NOT INCLUDED IN ALFA LAVAL DELIVERY
_____ CABLE INCLUDED IN ALFA LAVAL DELIVERY



NOTE :

(1) REMOVE JUMPER WHEN USED

Switch Board (Control Panel)

Function

Basic Version for Vertical Installation

General data

Cabinet Material: Sheet steel 15/10mm zinc-coated

Internal Plate: Sheet steel 20/10mm zinc-coated

Protection Class: IP 55

Cabinet Colour: RAL 7035, light grey polyester paint

Cabinet Doors: Opening angle 110°

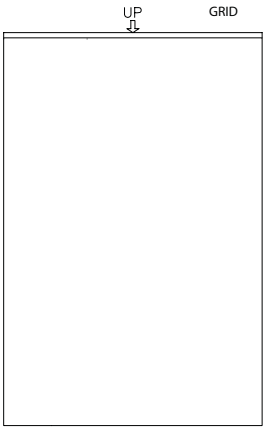
Ambient Temp.:

- min. -10°C, max. +35°C standard
- min. -25°C, max. +35°C with electrical heater
- min. -10°C, max. +50°C with cooling fan
- min. -25°C, max. +50°C with heater and fan

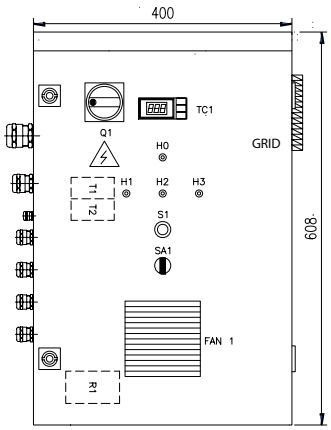
Cables included: Bottom position with cable glands.

Dimensions

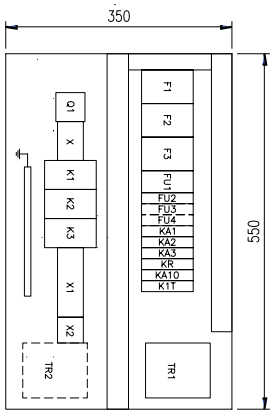
BACK VIEW

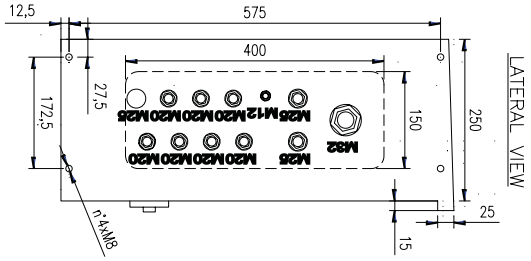


FRONT VIEW



INTERNAL LAY-OUT

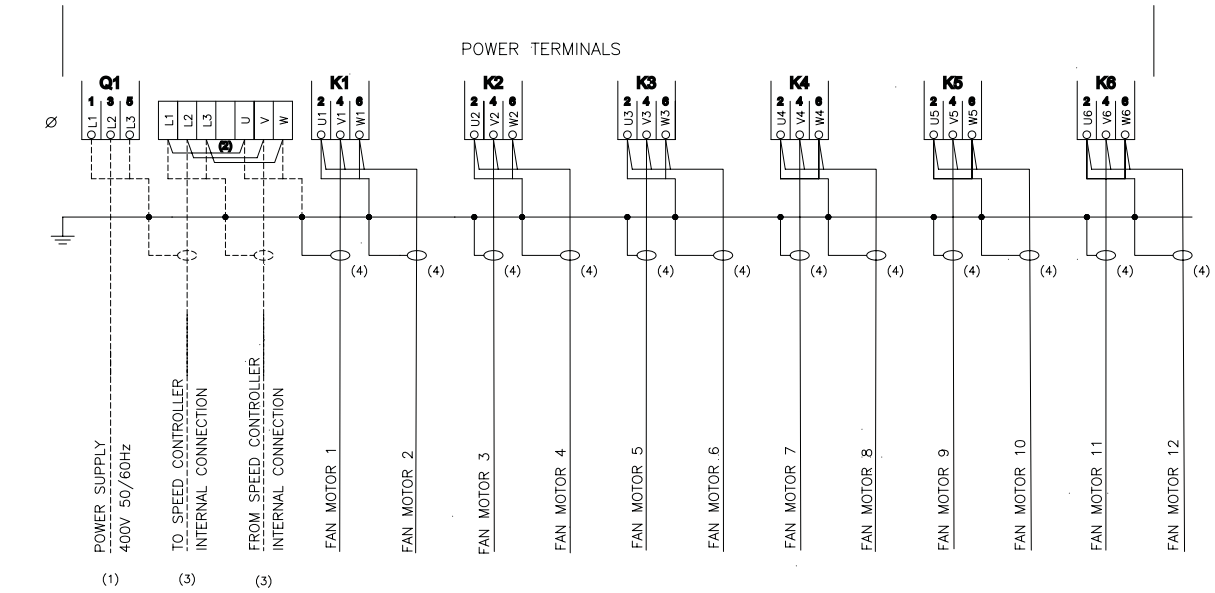




Labels list

H0 VOLTAGE BOARD ON	Q1 MAIN SWITCH
H1 FAN MOTOR 1-2 RUNNING (OPT)	TC1 TEMP/PRES CONTROLLER (OPT)
H2 FAN MOTOR 3-4 RUNNING (OPT)	S1 RESET (OPT)
H3 FAN MOTOR 5-6 RUNNING (OPT)	SA1 MAN - AUT SELECTION (OPT)

Electric wiring diagram



NOTE :

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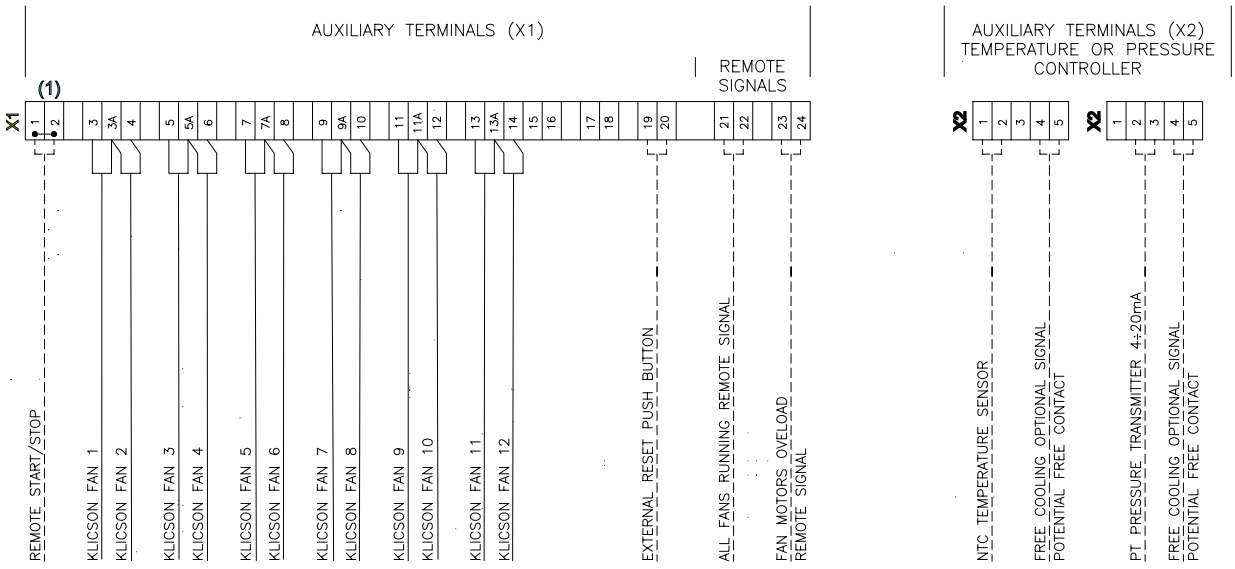
(2) REMOVE JUMPERS WHEN SPEED CONTROLLER IS ORDERED
(3) NOT MOUNTED WHEN FAN SPEED CONTROLLER IS ORDERED
(4) SCHIELDED CABLE TO BE USED ONLY WHEN EMC CABLING OPTION IS REQUESTED

CABLE NOT INCLUDED IN ALFA LAVAL DELIVERY
CABLE INCLUDED IN ALFA LAVAL DELIVERY



NOTE :

(1) REMOVE JUMPER WHEN USED

Current Distribution

Function

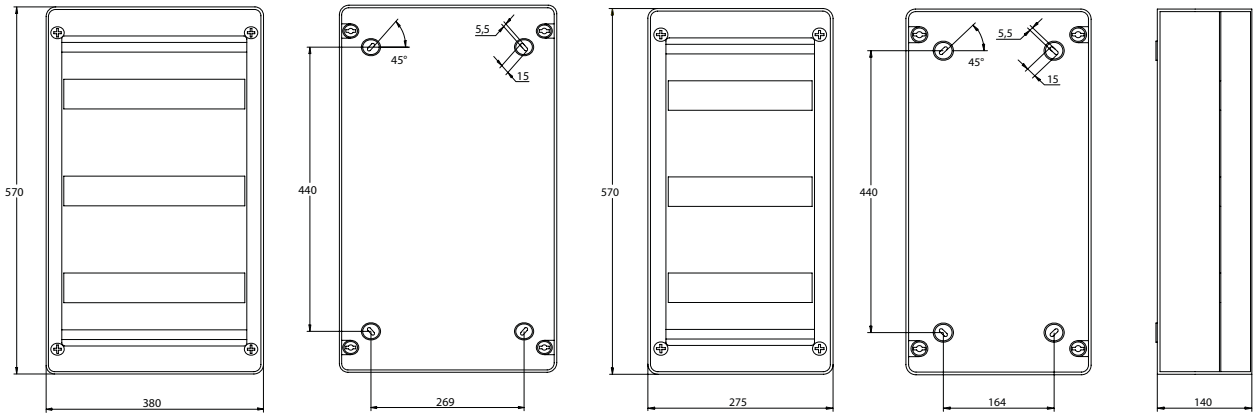
Current distributors are available as optional accessories. Numerous fans can be connected. In combination with Fcontrol frequency inverters, we can deliver the current distribution with both main switch and bypass function. Features: The current distributor is equipped with plastic housing IP54 and motor protection units STDT16E with status signal contacts ZB. It is possible to lock the motor protection units with a padlock and use them as repair switches. Fans are directly connected to the motor protection units. Line protection is guaranteed through the integrated short-circuit release. Terminals for supplying the controller output are also integrated. The current distributors are suitable for external mounting (e.g. direct mounting at refrigeration units). It's easy to see the switch position of the motor protection units through the coloured, transparent plastic door.

General data

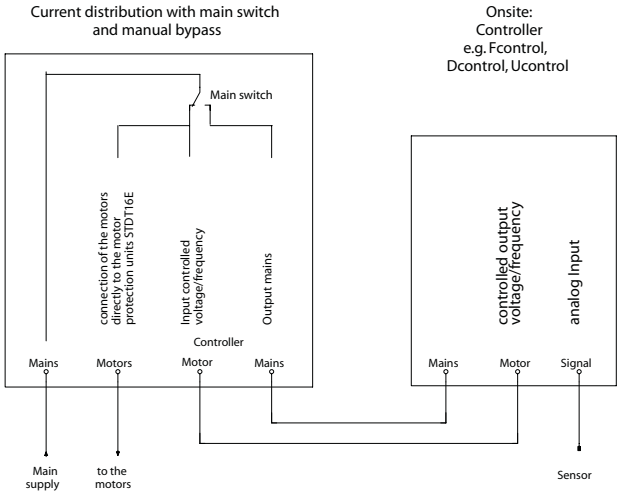
Current distributor with main switch and bypass function:

- The controller is supplied by the current distributor
- Main switch: 100% - 0 -1
- In position 100%, the connection to the controller output is switched off. This version is for Fcontrol frequency inverters .
- Rated current: Up to 80A

Dimensions



Electric wiring diagram



Frequency Converter (Inverter)

Function

Frequency inverter (incl. sine filter) for 3~ motors. Universal controller for refrigeration and air conditioning line input 3~ 208-480V, housing IP54, internal display.

- Speed controller with manual adjustment of output voltage at the unit or via external signal, 2-step operation;
- Temperature control for liquid coolers;
- Pressure control refrigeration (input for refrigerant) for: condensers, dual-circuit condensers;

General data

Equipment/Function

- Integrated SINEFILTER between phase to phase and phase to earth.
- Absolute parallel operation of fans, with no risk of damage to the motor. **Screened motor cables are not required.**
- Integrated process controller (PID free programmable).
- LCD multifunction display with plain language text.
- 2x Analogue Input (0-10 V, 0-20 mA, 4-20 mA, temperature sensor type TF):
  - Analogue 1 for setting of sensor signal.
  - Analogue 2 programmable function for: external set-point, difference value to sensor 1, comparison value (dual-circuit condenser), averaging, and setpoint lowering according to outdoor temperature.
- 1x output 0-10V, programmable function: Constant voltage, proportional modulation, proportional input signal, group control, controller 2.
- 2x digital inputs, programmable function: enable (on / off), external fault, limit output, input 1/2, set-point 1/2, setting internal / external, automatic control / speed manual, reverse control function (“heating” / “cooling”), reset, setting max. speed.
- 2x relay outputs, programmable function: operating indication, fault indication, external fault from digital input, limit modulation, limit input signal, limit offset (deviation actual value setpoint), group control .
- Total motor protection using thermocontact / thermistor connection.
- Interface system with RS485 Interface (MODBUS) or LON® is another alternative option.

Technical data

- Line voltage 3~ 208 BND_480V (-15% / +10%), 50/60Hz.

Rated current*/A	4	8	13	18	22	32	40
Max. line fuse/A	10	10	16	20	25	35	50
Max. heat dissipation*/W	130	210	350	440	540	950	1.100
Weight/Kg	8.8	9.0	22.8	25.4	28.1	29.5	31.8

*at line voltage 400V / 50Hz (for FXDM40A rated current - only possible for fans with cos ϕ < 0.8).

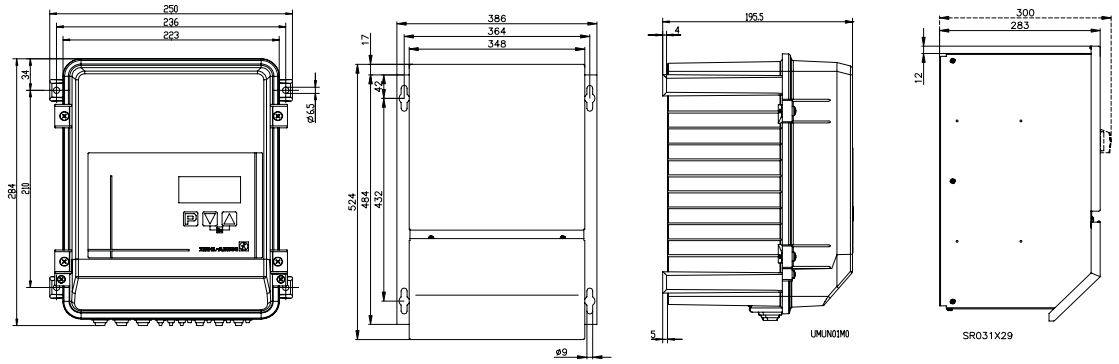
- Maximum output frequency 100Hz (for FXDM40, max. 60Hz).
- Clock frequency 16 kHz.
- Max. permissible ambient temperature 40°C (up to 55°C with derating).
- Voltage supply for sensors +24V ±20% ($I_{max.}$ 120 mA).
- Permissible rel. humidity 85% with no condensation .
- Interference emission EN 61000-6-3 1 (unshielded motor cable).
- Interference immunity EN 61000-6-2.

Settings

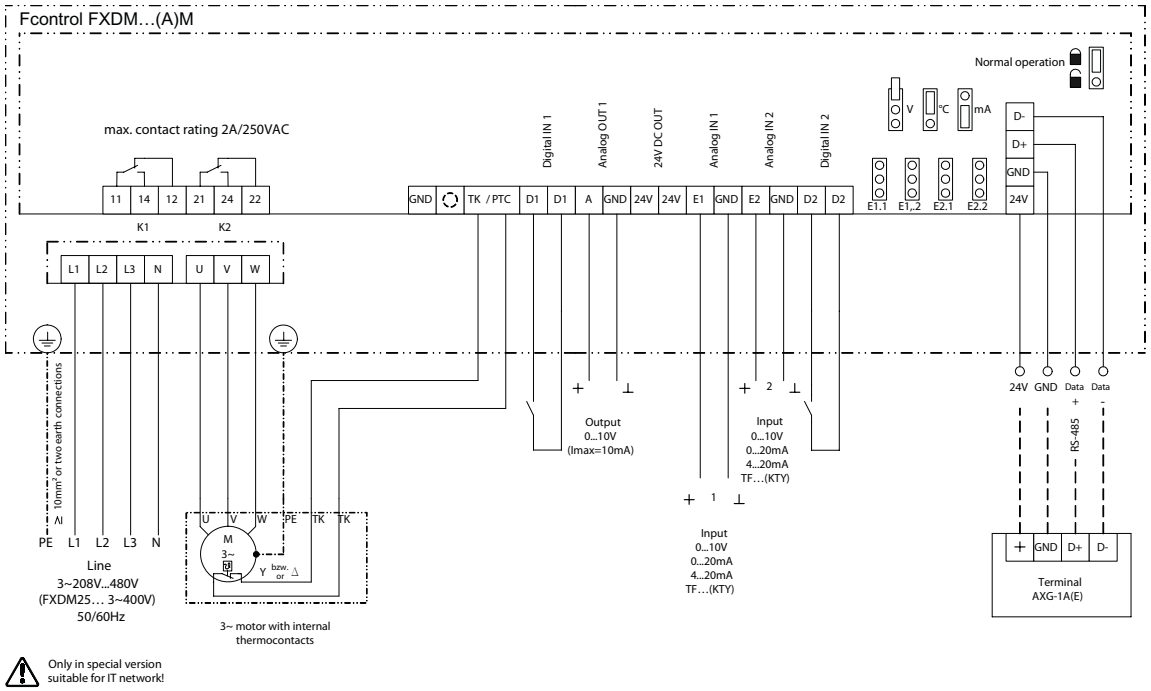
- Quick start-up with pre-programming modes.
- Set-point 1, set-point 2, manual mode.
- Min. and max. speed, speed limitation e.g. for night operation.
- Group control (via relay or 0-10V signal output).
- Limits: Modulation, input signal, offset (deviation set to actual value).
- Set protection, save user settings.
- Readout events memory (checking the fault log).
- Masking up to 3 settable speed ranges.
- Minimum rate of air on / off.
- Edge frequency, max. frequency / voltage, start voltage.
- U/f characteristics: quadratic or linear.
- Menu language: English, German, Italian, Swedish, etc.
- Inverting: Inputs analogue and digital, analogue out, relays.

Dimensions

FXDM4/8 FXDM13..40A



Electric wiring diagram



BDD/BDD6 - Double Fan Row

Code description

Code No.

	1	2	3	4
BDD or BDD6	S	80	2	A

1) Type of noise level (number of dB(A) to reduce compared with "base" version)

	Turbo noise level	Standard noise level	Low noise level	Quiet noise level	Residential noise level
	T	S*	L*	Q*	R*
Fan diameter Ø 800mm	-	base	-7	-16	-20
Fan diameter Ø 910 mm	base	-2	-9	-19	-20
Fan diameter Ø 1 000 mm	-	-	base	-14	-16

2) Fan diameter Ø

80	800 mm
90	910 mm
100	1 000 mm

3) Number of Fans (* available in this version)

1	
2	
3	Ø 800, 910 and 1000mm fan
4	
5	
6	Ø 800mm fan only

4) Number of coil rows

A	2
B	3
C	4
D	5

General Alfa Select Air Legend

Description 1				Description 2	
D	D fan cabling (three phase)	**BSFT**	Basic Switch Board + Speed Control Temp. + Signal	**AL**	Aluminium fin
Y	Y fan cabling (three phase)	**BI**	Basic Switch Board + Frequency Converter (Inverter)	**CU**	Copper fin
D/Y	D/Y fan cabling (three phase), single speed fan motor	**BSI**	Basic Switch Board + Frequency Converter (Inverter) + Signal	**PR**	Pre-coated fin
S	Single phase	**C**	Switch Board + Cooling fan	**SS**	Stainless steel tube
P	Packaged on a pallet	**R**	Switch Board + Resistor	**TH**	Thermoguard treatment
CR	Packaged in a crate	**F**	Switch Board + Cooling fan + Resistor	**CF**	Cataphoresis treatment
BO	Packaged in a box	**PT**	Ammonia pump top	**SC**	Sub-cooling circuit
Feet	Feet-mounted	**PB**	Ammonia pump bottom	**kW**	Spray water kit
SW	Safety Switch	**AL**	Aluminium casing	**FL**	Flanges
CB	Terminal Box	**SS**	Stainless Steel casing	**FH**	Fan ring heater
B	Basic Switch Board	**AP**	Pre-painted Aluminium casing	**IS**	Insulated Drip Tray
BS	Basic Switch Board + Signal	**PL**	Plastic casing	**RH**	Reheating coil
BP	Basic Switch Board + Step Control Pressure	**E**	Electrical defrost	**SR**	Air socket adapter ring
PT	Basic Switch Board + Step Control Temperature	**LE**	Low Electrical defrost	**CW**	Air throw fan cowling
BSP	Basic Switch Board + Step Control Pressure + Signal	**A**	Air Defrost	**ER**	120° elbow reducer
BST	Basic Switch Board + Step Control Temp. + Signal	**HG**	Hot Gas Defrost	**HN**	Hinged fan cowling
BFP	Basic Switch Board + Speed Control Pressure	**HG+E**	Hot Gas Defrost + Electrical Defrost on drip tray		
BFT	Basic Switch Board + Speed Control Temperature	**W**	Water Defrost		
BSFP	Basic Switch Board + Speed Control Pres. + Signal	**W+E**	Water Defrost + Electrical Defrost on drip tray		

Note: valid for the entire product range