



Fan casing - 40 mm insulation type BFA-R

Acoustically insulated (40 mm/88 kg/m³) centrifugal fan box

Application

- **BFA-R** fans are used for ventilation in many applications where low noise levels have to be respected, such as offices, restaurants, technical rooms or other
- Can be used for air supply or extraction
- Indoor and outdoor installation possible without additional accessories

Composition

- Casing procured from galvanised steel
- Removable panel with mounted roof, fixed with screws for easy inspection of motor
- Isolation: high performance wool (88 kg/m³) with fireclass A1 according to DIN EN13501-1
- Fan with backwards curved blades, made of plastic
- External rotor with maintenance-free ball bearing
- Voltage: 230Vac 1 ph
- Motor isolation class F - protection classes:
 - BFA-R 125 E2 K 01 - BFA-R 250 E2 K 01: motor protection class IP33, IP54 for the whole fan
 - BFA-R 355 E4 K 01 - BFA-R 400 E4 K 01: motor protection class IP44, IP54 for the whole fan
 - BFA-R 450 E4 K 01 - BFA-R 500 E4 K 01: motor protection class IP54, IP54 for the whole fan
- Terminal box IP66 with cable glands
- Thermische beveiliging:
 - BFA-R 125 E2 K 01, BFA-R 160 E2 K 01 and BFA-R 250 E2 K 01: Temperature operated switch mechanism with manual reboot, connected on the inside
 - BFA-R 200 E2 K 01, BFA-R 355 E4 K 01 and BFA-R 400 E4 K 01: Temperature operated switch mechanism with manual reboot, connected on the inside
 - BFA-R 450 E4 K 01 and BFA-R 500 E4 K 01: Temperature operated switch mechanism with manual reboot, to be connected externally by third party

Accessories

- Auto transformer, type **TSC(TK)-1**
- Electronic speed controller, type **ESC(TK)**
- Flexible connection, type **BMK**

Text for tender

- The centrifugal fan box shall be acoustically insulated with 40 mm rock wool fibrewith a density of minimum 88kg/m³. The closed motor shall be of the direct driven type, IP44, insulation class F, with thermal protection and voltage controllable with auto transformer
- **Cairox** Type **BFA-R**

Order example

BFA 125 E2 K 01 + TSC-1-15

BFA = boxfan

R = mounted roof

125 = diameter

E = controlable via transformer speed controller

2 = number of poles

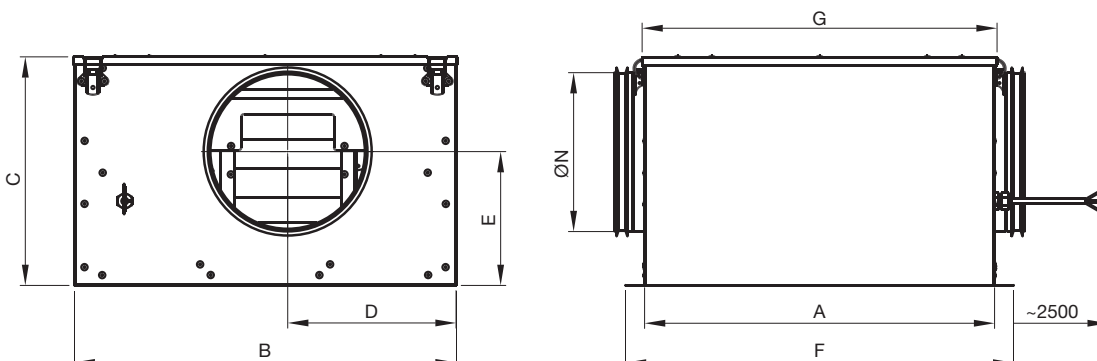
K 01 = version

TSC-1-15 = speed controller

	Air performance data							
	Q [m ³ /h]							
	50 Pa	100 Pa	150 Pa	200 Pa	250 Pa	300 Pa	400 Pa	500 Pa
BFA-R 125 E2 K 01	307	283	243	211	170	130	-	-
BFA-R 160 E2 K 01	356	310	269	226	173	123	-	-
BFA-R 200 E2 K 01	675	614	550	485	422	361	229	-
BFA-R 250 E2 K 01	1044	991	918	830	765	709	585	385
BFA-R 355 E4 K 01	1982	1786	1640	1422	1253	1017	491	-
BFA-R 400 E4 K 01	2208	1977	1750	1532	1323	1046	462	-
BFA-R 450 E4 K 01	3403	3197	2978	2709	2413	2164	1443	800
BFA-R 500 E4 K 01	3639	3375	3126	2830	2552	2275	1497	481

	Technical data											Lwa [dB (A)]		
	U [V]	P [W]	I [A]	SC _T	SC _E **	η _t [%]	t _m [°C]	t _a [°C]	t _o [°C]	n [rpm]	Lwa 5	Lwa 6	Lwa 2	
											Lwa 5	Lwa 6	Lwa 2	
BFA-R 125 E2 K 01	230	50	0.3	TSC-1-15	ESC-15	24.6	70	70	-25	2386	55	68	54	
BFA-R 160 E2 K 01	230	49	0.3	TSC-1-15	ESC-15	25.5	70	70	-25	2420	57	71	54	
BFA-R 200 E2 K 01	230	100	0.5	TSC-1-15	ESC-15	29.1	80	80	-25	2480	64	76	59	
BFA-R 250 E2 K 01	230	171	0.8	TSC-1-15	ESC-15	39	60	55	-25	2680	66	74	59	
BFA-R 355 E4 K 01	230	237	1.3	TSC-1-15	ESC-15	38.5	45	45	-25	1368	66	75	61	
BFA-R 400 E4 K 01	230	242	1.3	TSC-1-15	ESC-15	39.5	40	40	-25	1370	67	76	62	
BFA-R 450 E4 K 01	230	451	2.6	TSCTK-1-40	ESCTK-5	41.3	65	65	-25	1374	73	82	67	
BFA-R 500 E4 K 01	230	466	2.7	TSCTK-1-40	ESCTK-5	41.2	65	65	-25	1382	73	82	67	

- SC_T = Transformer speed controller
- SC_E = Electronic speed controller
 - ** **Caution: an electronic controller can produce a magnetic noise**
- η_t = Maximum total efficiency
- T_m = Maximum air temperature
- T_a = Maximum ambient temperature
- T_o = Minimum operating temperature
- Lwa 2 = Casing sound power level
- Lwa 5 = Sound power level @inlet
- Lwa 6 = Sound power level @outlet
- The sound power levels are measured according to DIN 45635 part 2 & 38



Dimensions									
	Ø N [mm]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	[kg]
BFA-R 125 E2 K 01	124	378	380	232	119	136	426	384	11.6
BFA-R 160 E2 K 01	159	378	380	232	137	133	426	384	11.8
BFA-R 200 E2 K 01	199	460	480	287	165	168	508	466	17.7
BFA-R 250 E2 K 01	249	460	480	287	190	148	508	466	18.9
BFA-R 355 E4 K 01	354	650	680	492	234	273	698	656	41.8
BFA-R 400 E4 K 01	399	650	680	492	256	263	698	656	41.0
BFA-R 450 E4 K 01	449	800	780	547	276	283	847	805	67.5
BFA-R 500 E4 K 01	499	800	780	587	302	293	847	805	69.5