



Fan casing - 40 mm insulation with EC motor type BFA-R EC

Sound insulated duct fan (40 mm insulation), centrifugal fan with EC motor

Application

- **BFA-R EC** fans are used for ventilation in many applications where low noise levels have to be respected, such as offices, restaurants, technical rooms or other
- The **BFA-R EC** can be controlled by an external analogue signal (0-10 V): ideal for realising a control in function of CO₂, temperature, constant pressure or humidity
- 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
- Only suction fan, completely synthetic
- Isolation class motor B for diameter 355 and 400, class F for all other diameters
- Protection classes:
 - BFA-R 125 - 200 EC K 01 et BFA-R 355 - 500 EC K 01: IP54 for the motor protection class and the whole fan
 - BFA-R 250 - 315 EC K 01: motor protection class IP33, IP54 for the whole fan
 - BFA-R 450 - 500 EC K 01: motor protection class IP55, IP54 for the whole fan
- Terminal box IP66 with cable glands

Accessories

- Potentiometer, type **ESCP010**
- Flexible connection, type **BMK**

Text for tender

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

Order example

BFA-R 125 EC K 01 + ESCP010

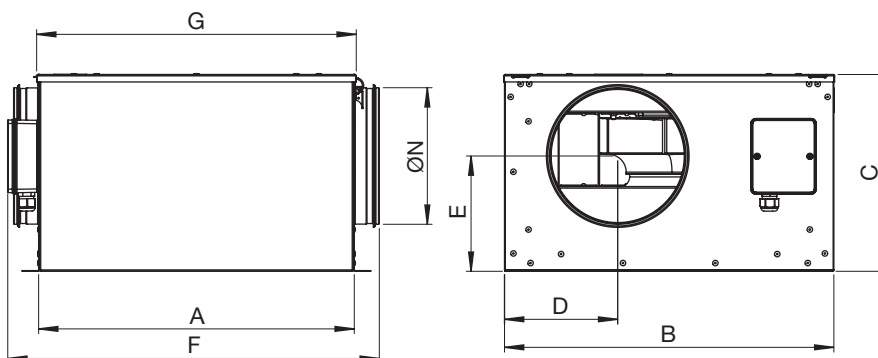
Explanation:

- BFA** = type of fan
- R** = mounted roof
- 125** = diameter
- EC** = type of motor
- K 01** = versie
- ESCP010** = potentiometer

Air performance data								
	Q [m ³ /h]							
	100 Pa	150 Pa	200 Pa	250 Pa	300 Pa	400 Pa	500 Pa	600 Pa
BFA-R 125 EC K 01	435	410	390	375	350	300	250	200
BFA-R 160 EC K 01	510	475	450	430	400	335	265	190
BFA-R 200 EC K 01	745	691	630	580	535	410	250	-
BFA-R 250 EC K 01	1138	1078	1016	948	874	745	623	500
BFA-R 315 EC K 01	1650	1573	1465	1395	1300	1125	900	750
BFA-R 355 EC K 01	1680	1497	1300	1142	900	600	-	-
BFA-R 400 EC K 01	1855	1612	1399	1185	925	590	-	-
BFA-R 450 EC K 01	3735	3495	3168	2913	2646	2254	1709	1263
BFA-R 500 EC K 01	3960	3658	3374	3114	2850	2232	1655	1219

Technical data											
	U [V]	P [W]	I [A]	η_t [%]	T _m [°C]	T _u [°C]	T _o [°C]	n [rpm]	Lwa [dB (A)]		
									Lwa 5	Lwa 6	Lwa 2
BFA-R 125 EC K 01	1x230	106	0.89	33.0	60	60	-30	3440	63	78	64
BFA-R 160 EC K 01	1x230	104	0.88	35.0	60	60	-30	3466	66	81	62
BFA-R 200 EC K 01	1x230	118	1.02	38.7	60	60	-30	2878	64	79	61
BFA-R 250 EC K 01	1x230	204	1.8	41.6	70	70	-30	2870	77	89	73
BFA-R 315 EC K 01	1x230	274	1.91	44.8	55	55	-30	2620	76	90	73
BFA-R 355 EC K 01	1x230	165	1.39	47.2	60	60	-25	1295	64	73	60
BFA-R 400 EC K 01	1x230	165	1.40	48.7	60	60	-25	1298	66	75	61
BFA-R 450 EC K 01	1x230	507	2.30	49.1	50	50	-25	1585	77	85	70
BFA-R 500 EC K 01	1x230	506	2.33	48.8	50	50	-25	1593	77	86	69

- η_t = Maximum total return
- T_m = Maximum air temperature
- T_u = Maximum casing temperature
- T_o = Minimum working 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 EC K 01	124	378	380	232	119	136	460	384	11.80
BFA-R 160 EC K 01	159	378	380	232	136	133	460	384	11.90
BFA-R 200 EC K 01	199	460	480	287	165	168	542	466	18.70
BFA-R 250 EC K 01	249	460	480	287	190	148	571	466	18.60
BFA-R 315 EC K 01	314	510	540	387	216	208	617	516	25.00
BFA-R 355 EC K 01	354	650	680	492	234	273	757	656	40.40
BFA-R 400 EC K 01	399	650	680	492	256	263	797	656	40.00
BFA-R 450 EC K 01	449	800	780	547	276	283	946	805	65.30
BFA-R 500 EC K 01	499	800	780	587	302	293	946	805	67.3