

- Inline duct fan
- Circular
- Monophase
- EC-motor
- 1~230 Vac



Circular duct fans with EC motor type ETAMASTER EC

- Very compact helico-centrifugal duct fan with energy-efficient EC motor and corrosion-resistant housing

Application

- **ETAMASTER EC** fans are designed for use with round channels. Since the diameter of the channel is hardly exceeded by the fan housing, the **ETAMASTER EC** fan can be used in confined spaces.
- The specially designed 3-dimensionally shaped rotor and stator blades ensure that they are correctly inflowed, so that the pressure profile on the surface of the blade is achieved much more effectively and with fewer losses. The highly efficient stator will also ensure that lost energy due to rotation-loaded flow at the rotor output (dynamic pressure) is converted into usable energy (static pressure). This combination results in a duct fan with the highest efficiency of its kind, as a result of which the **ETAMASTER EC** fans will reduce the operational costs enormously.
- Because the motor is built into the stator hub, outside the air flow, the **ETAMASTER EC** fans can be used for slightly polluted air.
- The EC technology (Electronic Commutation) is an intelligent technology that, by using the internal electronic control, eliminates slip losses in the motor and ensures that the motor always runs at the optimum voltage. This EC technology also guarantees that the efficiency of the energy used is many times higher, so that energy consumption is also much lower compared to AC motors.
- The **ETAMASTER EC** fan is equipped with an energy-efficient EC motor, saving up to 35% compared to an ETAMASTER with a normal AC motor.
- The EC technology makes easy speed control possible, without loss of efficiency. This means that the energy consumption of the **ETAMASTER EC** will also be many times lower at partial load compared to the AC motor.
- They are used for ventilation in offices, schools, parking garages, industrial applications.

Composition

- The compact housing has a mounting base and integrated connection box
- The housing is made of plastic (PPFG30) RAL 7012
- Helico centrifugal turbine with guide vanes for high efficiency
- EC motor with life-lubricated ball bearings

- Motor insulation class:
 - ETAMASTER 150L EC 01 to ETAMASTER 355 EC 01: F
 - ETAMASTER 355 EC 02 to.m. ETAMASTER 400 EC 01: B
- Motor protection class:
 - ETAMASTER 150L EC 01 to ETAMASTER 200 EC 01: IP54
 - ETAMASTER 250 EC 01 to ETAMASTER 355 EC 01: IP33
 - ETAMASTER 355 EC 02 to.m. ETAMASTER 400 EC 01: IP20
- IP protection class of entire fan: IPX4
- Connection box IP44 with cable gland
- Internal electronic temperature monitoring

Accessories

- Mounting clamp, type **BMK**
- Protective grille, type **BSV**
- Potentiometer, type **MTP010**
- 3-position switches 0-10V, type **MSS-D**

Air performance data												
	Q [m³/h]											
	50Pa	100Pa	150Pa	200Pa	250Pa	300Pa	400Pa	500Pa	600Pa	700Pa	800Pa	900Pa
ETAMASTER 150L EC 01	735	684	625	558	455	185	-	-	-	-	-	-
ETAMASTER 160L EC 01	762	708	650	593	529	204	-	-	-	-	-	-
ETAMASTER 200 EC 01	1218	1118	1013	907	766	383	125	-	-	-	-	-
ETAMASTER 250 EC 01	1721	1647	1575	1494	1399	1302	375	106	-	-	-	-
ETAMASTER 250 EC 02	2112	2044	1971	1896	1818	1735	1557	1325	441	288	-	-
ETAMASTER 280 EC 01	2353	2245	2131	2019	1902	1775	1465	545	230	-	-	-
ETAMASTER 315 EC 01	2805	2634	2462	2277	2071	1885	1179	524	-	-	-	-
ETAMASTER 355 EC 01	3082	2817	2544	2263	2014	1639	499	-	-	-	-	-
ETAMASTER 355 EC 02	4662	4520	4367	4207	4049	3887	3546	3178	2662	1130	857	383
ETAMASTER 400 EC 01	5532	5342	5135	4935	4722	4494	3951	3459	2257	1220	661	-

Technical data										
	UN V	fN Hz	PN W	η_{fa} %	η_t %	lmax A	ΣLWA_2 dB(A)	ΣLWA_5 dB(A)	ΣLWA_6 dB(A)	
EM 150L EC 01	230, 1~	50	67	47.6	52.6	0.6	56	74	75	
EM 160L EC 01	230, 1~	50	73	47.7	52.8	0.65	55	72	75	
EM 200 EC 01	230, 1~	50	121	42.6	48	1.01	62	77	79	
EM 250 EC 01	230, 1~	50	179	60.2	63.9	1.49	66	76	79	
EM 250 EC 02	230, 1~	50	304	58	62.3	2.1	67	82	86	
EM 280 EC 01	230, 1~	50	267	58.6	62.2	1.86	75	82	83	
EM 315 EC 01	230, 1~	50	282	53.2	56.7	1.96	69	77	80	
EM 355 EC 01	230, 1~	50	261	53.3	56.5	1.82	63	73	76	
EM 355 EC 02	230, 1~	50	731	58.4	62	3.37	65	84	88	
EM 400 EC 01	230, 1~	50	729	61.5	65.3	3.35	64	81	86	

SC_{EC} = EC controller

η_t = Maximum total efficiency

t_m = Maximum temperature of the air

t_u = Maximum ambient temperature

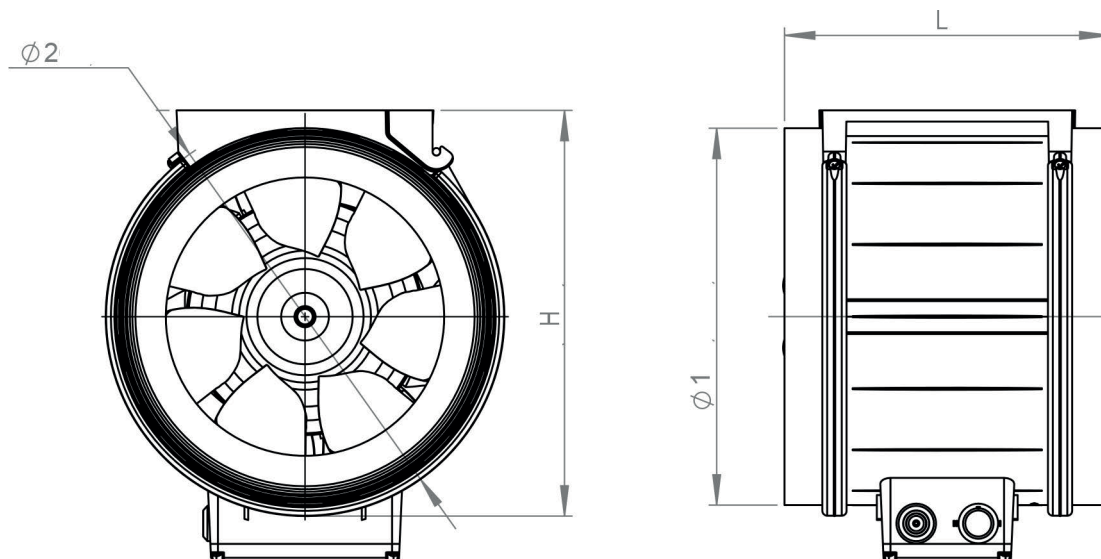
t_o = Minimum operating temperature

Lwa 2 = Sound power level environment

Lwa 5 = Sound power inlet

Lwa 6 = Exhaust sound power

The sound power levels were measured in accordance with DIN 45635 part 2 & 38



	Dimensions				
	Ø1	Ø2	H	L	
	[mm]	[mm]	[mm]	[mm]	[kg]
ETAMASTER 150L EC 01	149	204	210	309	2.4
ETAMASTER 160L EC 01	159	204	210	289	2.6
ETAMASTER 200 EC 01	199	246	252	325	3.2
ETAMASTER 250 EC 01	249	263	268	215	5.7
ETAMASTER 250 EC 02	249	263	268	215	4.1
ETAMASTER 280 EC 01	279	292	291	280	5.6
ETAMASTER 315 EC 01	314	327	325	300	6.9
ETAMASTER 355 EC 01	354	367	365	325	8.7
ETAMASTER 355 EC 02	354	367	365	325	9.8
ETAMASTER 400 EC 01	399	411	410	350	11.7