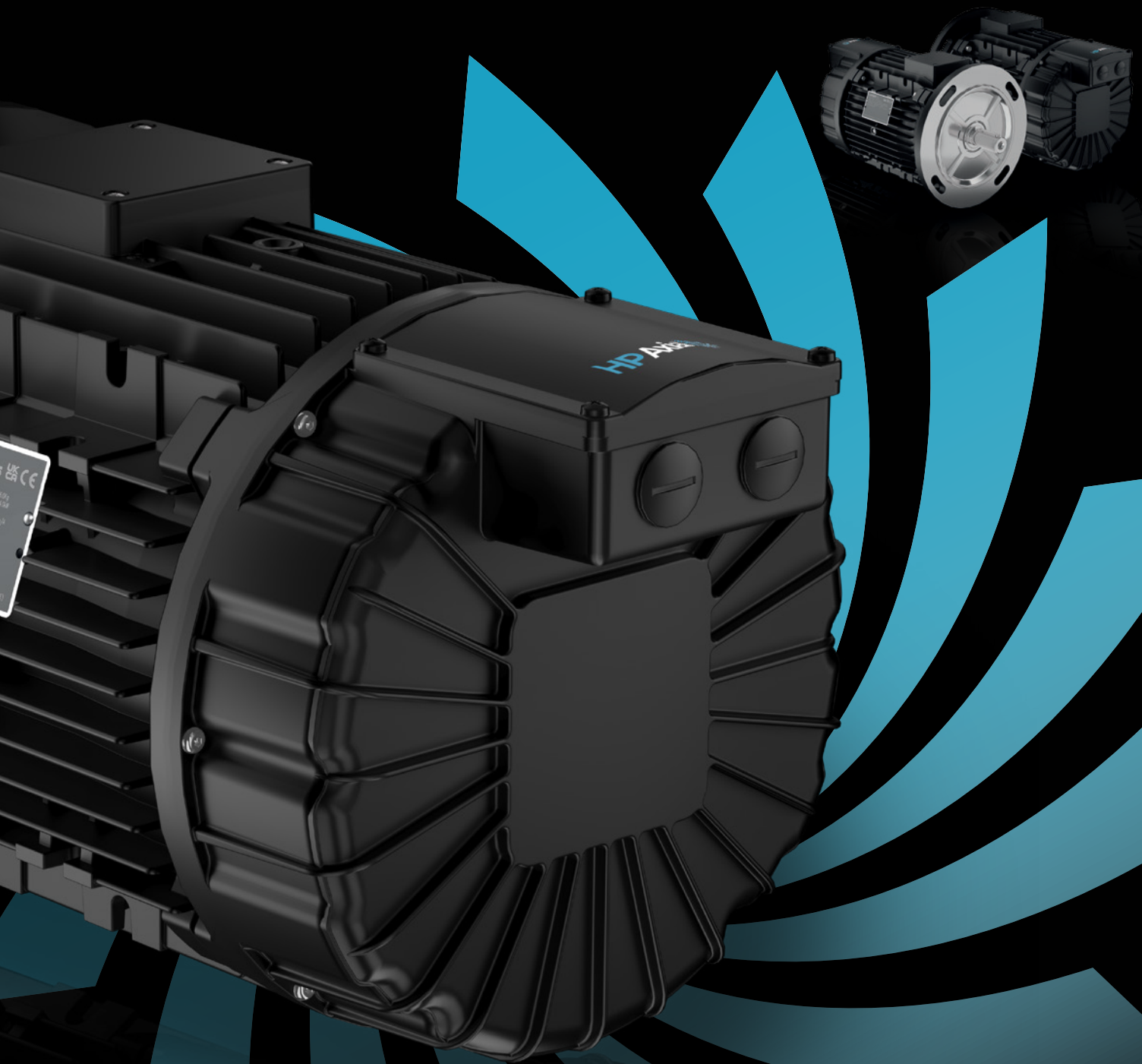


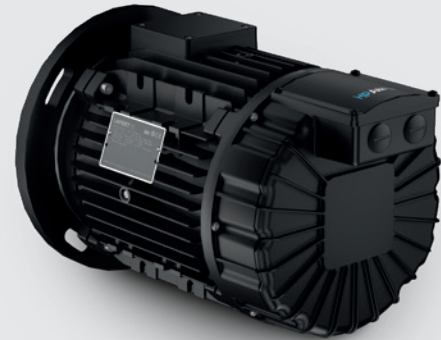
# HP Axial



**HP Axial** is the latest axially integrated motor-drive package combining a PM (permanent magnet) synchronous motor with a VFD (variable frequency drive) mounted on the NDE (non-drive side) motor side. The motor range leverages both brushless servo motor and AC induction motor technologies, increasing power density and allowing for **significant size and weight reductions of up to 50%**.



The drive is fully integrated with the motor in a dedicated enclosure **mounted on the NDE side**, providing a very compact design and further reducing overall size and weight.

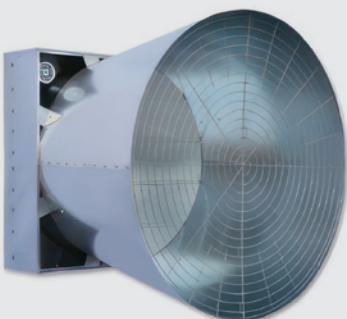


This configuration meets the application needs of **axial fans** where the use of compact motor without protruding elements minimizes the impact on the airflow, thus ensuring a reduction in energy consumption. The **pad mounting design** further reduces the impact on the airflow, making the system more efficient and performant.

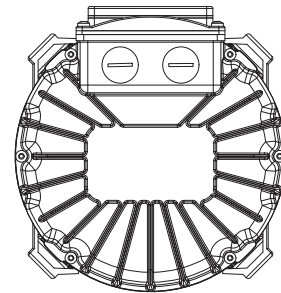
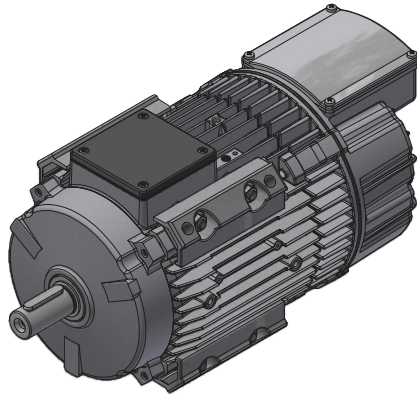
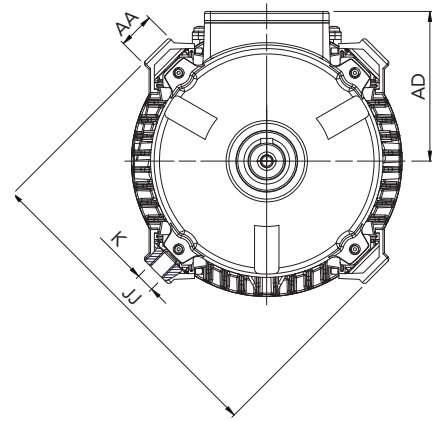
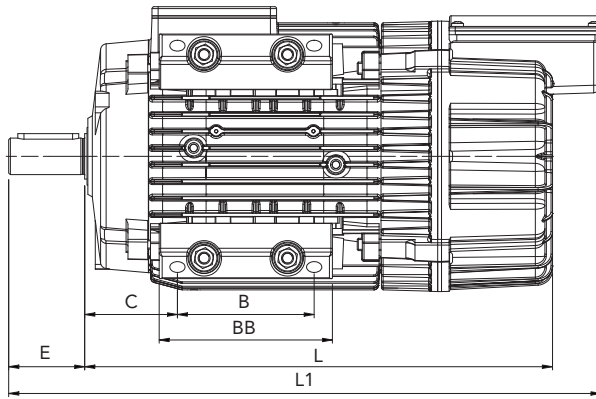
## IES2

### PERFORMANCE DATA | HPA 90 -112

Type	Size	Speed	Rated Power	Rated Torque	Peak Torque	Voltage Constant	Torque Constant	Rated Current	Motor Efficiency IES	Efficiency HPA
									$\eta$ [%]	$\eta$ [%]
		n [rpm]	Pn [kW]	Mn [Nm]	Mpk [Nm]	Ke [Vs]	Kt [Nm/A]	In [Arms]		
HPAX 90 750 16	90	750	0.75	9.5	14.3	3.46	5.99	1.6	79.8	78.3
HPAX 90 750 23	90	750	1.1	14.0	21.0	3.46	5.99	2.3	82.0	80.7
HPAX 90 750 32	90	750	1.5	19.1	28.6	3.46	5.99	3.2	83.7	82.6
HPAX 112 750 47	112	750	2.2	28.0	42.0	3.46	5.99	4.7	85.6	83.3
HPAX 112 750 64	112	750	3	38.2	57.3	3.46	5.99	6.4	86.9	84.9
HPAX 112 750 85	112 XL	750	4	50.9	76.4	3.46	5.99	8.5	88.0	86.4
HPAX 90 1000 16	90	1000	0.75	7.2	10.7	2.6	4.50	1.6	83.9	82.3
HPAX 90 1000 23	90	1000	1.1	10.5	15.8	2.6	4.50	2.3	85.6	84.3
HPAX 90 1000 32	90	1000	1.5	14.3	21.5	2.6	4.50	3.2	86.9	85.8
HPAX 112 1000 47	112	1000	2.2	21.0	31.5	2.6	4.50	4.7	88.3	86.0
HPAX 112 1000 64	112	1000	3	28.6	43.0	2.6	4.50	6.4	89.3	87.3
HPAX 112 1000 85	112 XL	1000	4	38.2	57.3	2.6	4.50	8.5	90.2	88.6
HPAX 90 1500 16	90	1500	0.75	4.8	7.2	1.73	3.00	1.6	86.7	85.1
HPAX 90 1500 23	90	1500	1.1	7.0	10.5	1.73	3.00	2.3	88.1	86.7
HPAX 90 1500 32	90	1500	1.5	9.5	14.3	1.73	3.00	3.2	89.1	88.0
HPAX 112 1500 47	112	1500	2.2	14.0	21.0	1.73	3.00	4.7	90.2	87.8
HPAX 112 1500 64	112	1500	3	19.1	28.6	1.73	3.00	6.4	91.0	89.0
HPAX 112 1500 85	112	1500	4	25.5	38.2	1.73	3.00	8.5	91.8	90.2
HPAX 90 3000 15	90	3000	0.75	2.4	3.6	0.9	1.56	1.5	84.6	83.0
HPAX 90 3000 22	90	3000	1.1	3.5	5.3	0.9	1.56	2.2	86.2	84.8
HPAX 90 3000 31	90	3000	1.5	4.8	7.2	0.9	1.56	3.1	87.4	86.3
HPAX 112 3000 45	112	3000	2.2	7.0	10.5	0.9	1.56	4.5	88.9	86.6
HPAX 112 3000 61	112	3000	3	9.5	14.3	0.9	1.56	6.1	89.9	87.9
HPAX 112 3000 82	112	3000	4	12.7	19.1	0.9	1.56	8.2	90.7	89.1



## DIMENSIONS FRAME SIZE 90 - 112 ALUMINIUM ALLOY FRAME



IEC	B	C	E	BB	L	L1	AA	AD	JJ	K
90	90	61	50	114	310	390	24	99	206	M12
112	100	90	60	124	314	416	24	122	250	M12
112XL	100	90	60	124	334	436	24	122	250	M12

## VARIABLE FREQUENCY DRIVE (VFD) SPECIFICATIONS HPA 90 -112

### MAIN SUPPLY

Supply Frequency	48-62 Hz
Three-phase Supply Voltage	200-240 V ± 10% 380-480 V ± 10%

### OUTPUT RATINGS

Power Ratings	Up to 4 kW
Overload Capacity	150% for 60 seconds *200V three & single-phase input 7 A units 110% overload

### PROGRAMMABLE INPUTS

2 Analog  
2 Digital (+2 optional)

### PROGRAMMABLE OUTPUTS

1 Analog / Digital  
1 Relay

### BUILT IN FIELDBUS

CANopen  
Modbus RTU

### INTERNAL EMC FILTER

√

### INTERNAL BRAKE TRANSISTOR

√  
Only frame size 112, 440V

### PI(D) CONTROL

Internal PI controller  
Standby / sleep function

## HPA RANGE

**IE5 IES2**

- Power rating: 0.75kW to 4kW  
1HP to 5.5HP
- Speed: up to 4500 rpm
- Three-phase Supply Voltage: 200-240V  
380-480V
- Efficiency: Motor IE5 - System IES2
- Frame size: 90, 112
- TEAO design
- Degree of Protection: IP55 (Drive IP66 on request)
- Design flexibility
- PC tool and mobile app for easy set up

**HP Drive**  
TOOLS



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