AC Square Motors

Catalogue-2023/01 EU

AMP
Series 112 - 355
17-1600 kW
23-2145 HP
108-10187 Nm
(at 1500rpm)

T-T Electric

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General information

T-T Electric proposes a series of square frame ac motors for variable speed drives applications.
This asynchronous motor has been developed and designed to achieve the same dynamic performance as for DC motors series.

The AC square motor complies with IEC600 34 standards and responds to the requirements for most industrial applications. Its flexible square frame design facilitates its integration into all types of machinery.

AMP are 3 phase asynchronous squirrel cage 4 pole motors manufactured in degree of protection IP23 and IP54/55. 9 sizes (112-132-160-180-225-250-280-315-355) are proposed covering a power range from 17 to 1600 kW at 1500 rpm.

TYPE OF DESIGNATION

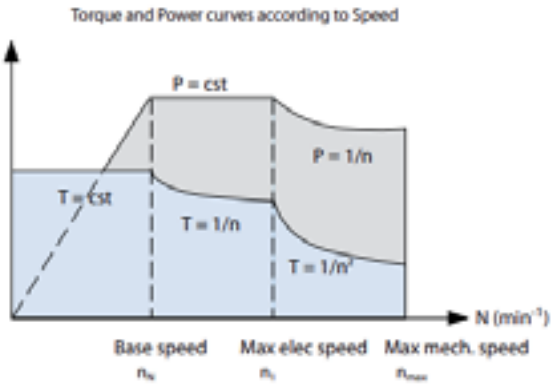
Frame Size	Core Length
112	A,B,C
132	A,B,C
160	A,B,C
180	A,B,C
225	A,B,C
250	A,B,C
280	A,B,C,D
315	A,B,C,D
355	A,B,C,D,E

Example :

AMP 180 – 4 B
AMP : type of motor
180 : frame size / centre height in mm
4 : number of poles
B : core length

OPERATING CURVES

The mechanical and technical characteristics of AMP motors can be compared to DC motors.



Basic design

Standards IEC600 34-1

Insulation
Class H

Temperature rise
Class F

Stator
Fully laminated square frame, low loss lamination, insulated on both faces, welded together. The number of air channels through the iron core ensure a good heat transfer.

Winding
Conceived in order to withstand voltage peaks (du/dt) generated by the inverter. AMP 280 to 355 are wound with enamelled wires double fiber glass coated.

Thermal protection
PTC 150°C thermistors (3 in series) in stator winding. PTC signal cable terminals are located in the terminal box.

Rotor
Consists of a core of laminations with the same magnetic properties as the stator laminations, and a squirrel cage made of die-cast aluminium or copper bars for larger frames (315 and 355). The skewed rotor core has an optimized number of slots and cooling channels for smooth running, high performance and good heat transfer.

Vibration Class and balancing
AMP motors are manufactured as standard to meet vibration class A and balanced with half key.
Class B is available on request.

Vibrations are expressed in mm/s, rms, using free suspension method and measured under no load.

Vibration Grade	Center height - mm								
	112 ≤ H ≤ 132			132 < H ≤ 280			H > 280		
	Displ µm	Vel mm/s	Acc m/s²	Displ µm	Vel mm/s	Acc m/s²	Displ µm	Vel mm/s	Acc m/s²
A	25	1.6	2.5	35	2.2	3.5	45	2.8	4.4
B	11	0.7	1.1	18	1.1	1.7	29	1.8	2.8

Cooling and terminal box position
Standard in IP23 (AMP112 to AMP355):
Cooling by radial mounted 3-phase fan blower located on top at N-End of the motor. Terminal box on the Right Hand Side (facing D-end). Cable outlet towards D-End.

Standard in IP54 (AMP132 to AMP180):
Cooling by axial compact mounted 3-phase fan blower, induced draught, located at the back of the motor. Terminal box on top of the motor. Cable outlet towards D-End.

Standard in IP55 (AMP132 to AMP355):
Cooling by axial mounted 3-phase fan blower located at the back of the motor. Terminal box on top of the motor. Cable outlet towards D-End. Cooling by radial mounted fan blower is possible. Advantage: possibilities to easily maint brakes, encoder assemblies

Other cooling forms (in IC666, IC86W with heat exchanger) and positions for fan, terminal box and cable outlet are available on request.
Power supply for blower has to be precised at the order.
Motors for blower are efficiency IE3 from 0.75 kW.
Blower is supplied without filter as standard.
Filter on request.

Mounting forms

Standard IP23/IP55 Radial ventilation	Standard IP54/IP55 Axial ventilation
112-355: IM1001/B3	132-180 : IM 2001 / B35 225-355 : IM1001/ B3

Standard flange, see view 1b on IEC flange chart page 12.
Other flange, see flange chart page 12.

Bearings
Grease lubricated ball bearings provided as standard for direct drive application. For pulley-belt drive, please contact our sales office.

Bearing protection ring
Modern variable speed drives with their fast rising voltage pulses and high switching frequencies can cause current pulses through the bearings whose repeated discharging can gradually erode the bearing races.
To prevent these damages specific rules need to be respected (symmetrical multicolour motor cable, shielded, high frequency bonding connections between the installation and knows earth reference points).
T-T Electric strongly recommend as a minimum the use of a bearing protection ring for motors above 100Kw. This ring is fixed on the Dend end shield and the conductive micro fibers in contact all around the rotor shaft channel harmful shaft voltages away from the bearings to around. The best solution is a bearing protection ring Dend side and an insulated bearing Nend side which cut the path to the leakage current.

Terminal box input cables
Provided with plugged holes: 2 for main supply and 1 for accessories.
Dimensions according to table below.

Type	Size
AMP112-132	2 x ϕ 40.5 + 1 x ϕ 20.5
AMP160	2 x ϕ 63.5 + 1 x ϕ 20.5
AMP180	1 blank removable face
AMP225	1 blank removable face
AMP250	1 blank removable face
AMP280	1 blank removable face
AMP315	1 blank removable face
AMP355	1 blank removable face

Basic design

Earth connection
Terminal box is equipped with a grounding stud.
From 180 frame size each foot of the motor has a threaded hole to do external earth connection.

Space heaters
On request motor can be equipped with space heaters, 1 per end shield, connected in parallel according to following characteristics.
Power supply 230V - 50 Hz.

	IP23	IP54/IP55
AMP112	2*40W	2*25W
AMP132	2*40W	2*25W
AMP160	2*50W	2*50W
AMP180	2*50W	2*50W
AMP225	2*80W	2*65W
AMP250	2*80W	2*65W
AMP280	2*100W	2*65W
AMP315	2*100W	2*100W
AMP355	2*150W	2*100W

Rotor locking device
AMP 280, 315, 355 are equipped with a rotor locking device for transport.
AMP180, 225 & 250 are equipped with a rotor locking device when a roller bearing is mounted.

Painting
The standard AMP surface finish has excellent resistance properties.
Thickness ≥ 60 microns
The painting system is suitable for humid environments.
Standard colour of the motor is RAL7015, machine grey.

Motor Size		112	132	160	180	225	250	280	315	355
Stator	Material	Magnetic lamination								
	Stator winding	Copper wire with special insulation for inverter supply								
End shields	Material	Cast Iron								
Bearing	D-End/ND-End	6308	6310	6312	6215	6220	6222	6224	6228	6230
		2RS C3				C3	C3	C3	C3	C3
	Lubrication	Greased for life				Regreasable				
	Bearing protection ring	strongly recommended > 100 kW								
	Axially locked bearings	N-End side								
Terminal box		Steel				Cast Iron	Steel			
Flange		Steel or cast iron								
Cooling system		Aluminium motor + Steel fan housing								
Rotor		Magnetic lamination								
		and pressure die-cast aluminium								
Balancing method		Half key balancing								

Derating and tolerances

Ambient temperature and altitude
Motors are designed to operate between -5°C to maximum 40°C ambient température and at a maximum altitude of 1000 m above sea level.
If ambient temperature or altitude is higher the motor torque/power is derated according to the table below:

	Temperature (°C)			
Altitude (m)	**30**	**40**	**50**	**60**
1000	1	1	0.9	0.8
2000	1	0.93	0.85	0.75
3000	0.93	0.85	0.77	0.64
4000	0.85	0.73	0.65	0.5

Duty
Motor power output can be increased depending on duty types defined by IEC600 34-1.
Correction factors are given in the table below:

Duty	**Operating time**		
S2	**10'**	**30'**	**60'**
	1.6	1.3	1.1
	Cyclic duration factor		
	25%	**40%**	**60%**
S3	1.4	1.2	1.1
S6	1.4	1.3	1.2

The maximum constant power speed n1 will be reduced based on the type of duty and the required overload.

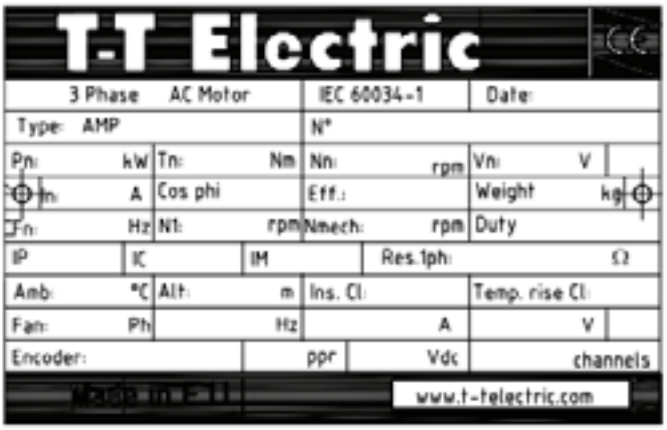
Overload capacity:
IEC standard 600 34-1: 160% FLT/FLC for 1 minute every 10 minutes.

Electrical and mechanical tolerances

	Efficiency by summation losses	**Efficiency by input-output test**	**Power factor**	**Slip**	**Max torque**	**Inertia**	**Noise level**
PN (kW) <150	-15% (1-η)	-15% (1-η)	-1/6 (1-cos φ)	+/-20%	-10%	±10%	+3dB(A)
PN (kW) >150	-10% (1- η)	-15% (1-η)	-1/6 (1-cos φ)	+/-20%	-10%	±10%	+3dB(A)

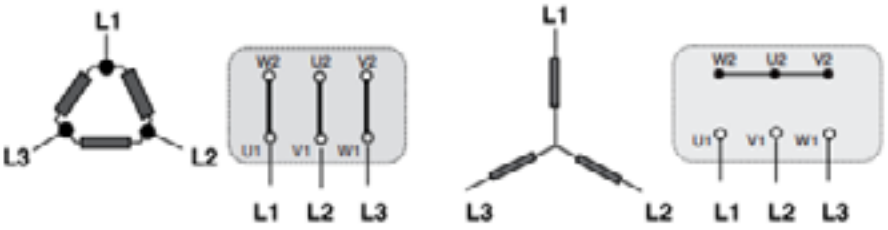
Tolerances are in accordance with IEC 600 34-1 and based on test procedure in accordance with IEC 600 34-2.

AMP nameplate



Power supply connection

The AMP motor and its fan blower AC motor have separate terminal boxes with 6 terminals inside. Connection can be star or delta according to nameplate information.



Delta Connection **Star Connection**

Frame size AMP	112	132	160	180	225	250	280	315	355
Cooling forms									
IC06 (IP23) Force ventilated	S	S	S	S	S	S	S	S	S
IC17 (IP23) Single pipe ventilated	x	x	x	x	x	x	x	x	x
IC37 (IP54) Double pipe ventilated	x	x	x	x	x	x	x	x	x
IC416 (IP54) Totally enclosed, fan cooled		S	S	S	S	S	S	S	S
Other cooling forms available on request									
Mounting Forms									
IM1001 Horizontal foot (radial ventilation)	S	S	S	S	S	S	S	S	S
IM1001 Horizontal foot (axial ventilation)				S	S	S	S	S	S
IM1002 Horizontal foot, double shaft extension	x	x	x	x	x	x	x	x	x
IM2001 Horizontal foot and flange (radial ventilation)	x	x	x	x	x	x	x	x	x
IM2001 Horizontal foot and flange (axial ventilation)	S	S	S	S	x	x	x	x	x
IM2011/2031 Vertical foot and flange	x	x	x	x	x	x	x	x	x
IM 3001/3011/3031 Horizontal/ Vertical flange	R	R	R	R	R	R	R	R	R
Modifications and accessories									
Air filter (in IP23)	S	S	S	S	S	S	S	S	S
Air sound absorber	x	x	x	x	x	x	x	x	x
Air pressure switch	x	x	x	x	x	x	x	x	x
PTC 150°C - 3 in series	S	S	S	S	S	S	S	S	S
Other temperature sensor	x	x	x	x	x	x	x	x	x
Bearing monitoring nipple	x	x	x	x	x	x	x	x	x
Special shaft	x	x	x	x	x	x	x	x	x
Shaft seal, D-End	x	x	x	x	x	x	x	x	x
Vibration class B	x	x	x	x	x	x	x	x	x
Roller bearing D-End	x	x	x	x	x	x	x	x	x
AEGIS bearing protection ring	x	x	x	x	x	x	x	x	x
Insulated bearing, N-End	x	x	x	x	x	x	x	x	x
Disk Brake	x	x	x	x	x	x	x	x	x
Heating element	x	x	x	x	x	x	x	x	x
Special paint (RAL colour)	x	x	x	x	x	x	x	x	x
Reinforced impregnation	x	x	x	x	x	x	x	x	x
Special corrosion protection	x	x	x	x	x	x	x	x	x
Special winding for 690V nominal voltage	x	x	x	x	x	x	S	S	S
Nema	R	R	R	R	R	R	R	R	R
Encoder									
Programmable	x	x	x	x	x	x	x	x	x
Not reprogrammable	x	x	x	x	x	x	x	x	x

S: standard x : possible R : on request

Encoder

AMP motors can be supplied with through hollow shaft encoder

Standard encoders are:
- programmable according to process requirements:
  - Electrical interface: 5…32 V, TTL/8-30 VDC HTL
  - Number of lines: up to 65536
- fixed settings:
  - HTL or TTL
  - 1024 or 2048 ppr
  - Max speed 6000 RPM

Motors with radial fan are delivered with complete connector (male + female) M23 12-pin directly on the encoder.
Motors with axial fan are delivered with connection to the motor N-End shield via M23 12-pin complete connector (male + female)

Other types and high speed encoders are available on request.

High speed design option

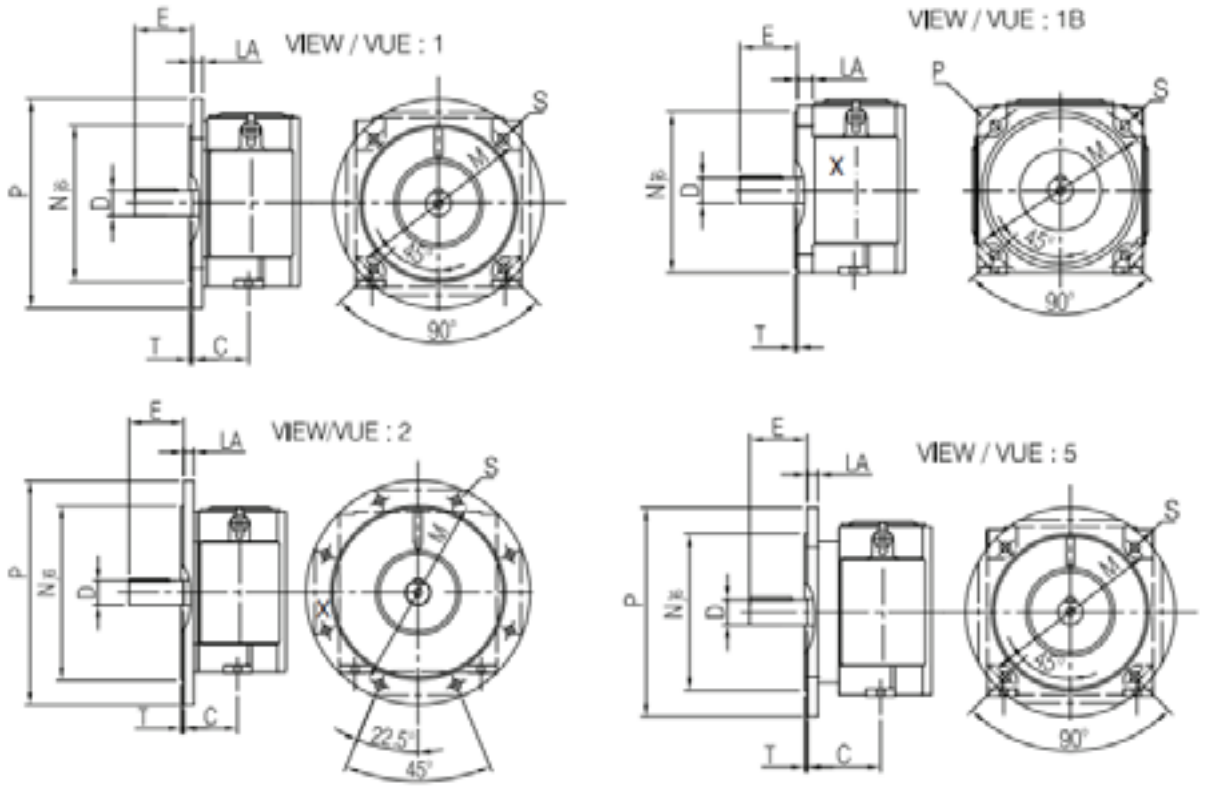
The maximum reachable mechanical speed (indicated in pages 14 to 81 .Motor characteristics part) is limited by the standard bearing.

To reach higher speeds or maximum speed indicated in brackets, we propose different high speed options (2z bearings, massive cages, hybrid bearings)

Please contact our sales department for more information.

Flange dimensions

On request AMP can be equiped with integrated or bolted flange



AMP	Flange size	LA	M	N	P	S	T	C	View for AV	View for RV
112	F215	15	215	180	250	15	4	70	N.A	1B
	F265	15	265	230	300	15	4	70		1B
	F300	15	300	250	350	19	5	70		1
	F350	15	350	300	400	19	5	70		1
132	F265	15	265	230	300	15	4	89	1B	1B
	F300**	15	300	250	350	19	5	89	1B	1B
	F350	15	350	300	400	19	5	89	1	1
160	F300*	19	300	250	350	19	5	130*	1B	5
	F350**	19	350	300	400	19	5	108	1B	1B
	F400	19	400	350	450	19	5	108	2	2
180	F300	19	300	250	350	19	5	121	1B	1
	F350**	19	350	300	400	19	5	21	1B	1B
	F400	19	400	350	450	19	5	121	2	2
225	F400	19	400	350	450	19	5	149	2	2
	F500	19	500	450	550	19	5	149	2	2
	F600	19	600	550	660	24	6	149	2	2
250	F400	23	400	350	450	19	5	168	N.A	2
280	F500	23	500	450	550	19	5	190		2
	F600	23	600	550	660	24	6	190		2
	F740	23	740	680	800	24	6	190		2
315	F500	30	500	450	550	24	6	216		2
	F600	30	600	550	660	24	6	216		2
	F740	30	740	680	800	24	6	216		2
355	F600	42	600	550	660	24	6	254		2
	F740	42	740	680	800	24	6	254		2

* Special shaft required - C dimension change from 108 to 130
** The values in red are the recommanded standard flanges

AV : Axial ventilation
RV : Radial ventilation

NA : Not assigned

Permissible radial loads

The tables give the permissible radial loads in Newtons, assuming zero axial force.
Radial force is applied at the middle of the shaft end. The values are based on normal conditions at 50 Hz and 100 Hz for bearing life of 20000 hours.
Motors are foot mounted IM B3 horizontal position.

Ball bearings

Type	Distance from shaft shoulder (mm)	1500 rpm (N)	3000 rpm (N)	4500 rpm (N)
AMP112-4 6308 2RSC3	40	2500	2000	1750
AMP132-4 6310 2RSC3	55	3900	3100	2700 (4300 rpm)
AMP160-4 6312 2RSC3	55	5000	4000	
AMP180-4 6215 2RSC3	70	4000	3250	
AMP180-4 6216 2RSC3	70	4300	3400	
AMP225-4 6220 C3	85	7500	6000	5200
AMP250-4 6222 C3	105	9000	7000	6400 (4300 rpm)
AMP280-4 6224 C3	105	8500	6800	
AMP315-4 6228 C3	105	9800	7800	
AMP355-4 6230 C3	125	10300	8200	

Roller bearings

Type	Distance from shaft shoulder (mm)	1500 rpm (N)	3000 rpm (N)	4500 rpm (N)	6000 rpm (N)
AMP112-4 NU308 ECP	40	7300	6000	300	4900
AMP132-4 NU310 ECP	55	10000	8200	7200	6600
AMP160-4 NU312 ECP	55	13600	11100	9800	8900
AMP180-4 NU215 ECP	70	11500	9500	8500	7800
AMP180-4 NU216 ECP	70	12600	10200	9100	
AMP225-4 NU220 ECP	85	22500	18300	16200	
AMP250-4 NU222 ECP	105	26000	21500		
AMP280-4 NU224 ECP	105	31000	25000		
AMP315-4 NU228 ECP	105	36000	28500		
AMP355-4 NU230 ECP	125	40000	33500 (2800 rpm)		

Motor Characteristics

Degree of Protection	IP23 S	**Cooling**	IC06
Rotor Inertia J (kgm²)	0.033	**Motor weight (kg)**	85
Maximum mechanical speed n_{max}(rpm)	5000 (11200)*	**Sound Pressure level (db(A)) at 50 Hz**	72
D-End Bearing	6308 2RSC3	**N-End bearing**	6308 2RSC3
Vibration Class	A	**Mounting**	IM1001
Insulation class	H	**Temperature rise Class**	F
Motor Nominal voltage (V)	400	**Thermal Protection**	PTC 150°C

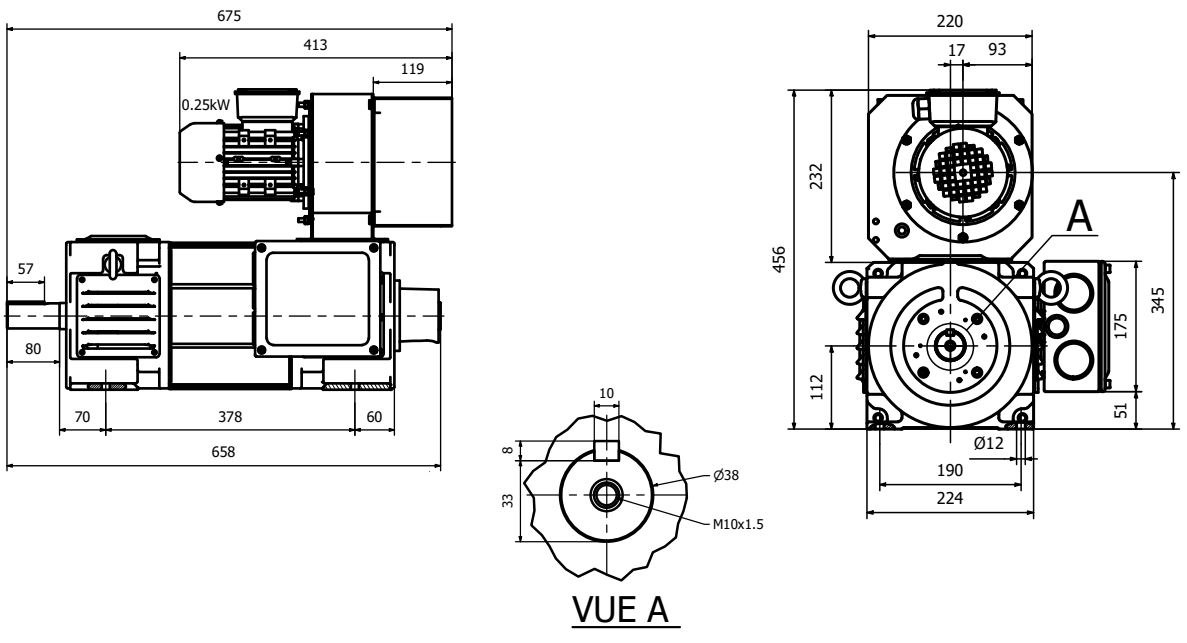
* On request (high speed option)

Blower characteristics (Voltage/frequency supply to precise in order)

Frequency (Hz)	50/60	**Number of phases**	3
Voltage (V)	400/460	**Mounting**	Radial
Speed (rpm)	2800/3360	**Type of cooling fan**	Force draught
Power (kW)	0.25/0.25	**Internal Static Air Pressure Drop (Pa)**	500
Current (A)	0.77/0.67	**Required cooling Air flow (m³/h)**	300

Electrical Data (at 400V)

n_N rpm	P_N kW	T_N Nm	I_N A	n_1 rpm	cos ϕ	η	f_N Hz
500	5	96	12	800	0,8	0,77	17,3
1000	13	124	29	1600	0,8	0,82	34,6
1200	14	111	30	1920	0,8	0,84	41,6
1500	17	108	36	2400	0,8	0,86	52
1800	19	101	39	2880	0,81	0,87	62
2000	20	96	40	3200	0,81	0,88	69
2400	22	88	44	3840	0,81	0,89	83,2
3000	23	73	46	4800	0,81	0,9	104



Motor Characteristics

Degree of Protection	IP23 S	**Cooling**	IC06
Rotor Inertia J (kgm²)	0.041	**Motor weight (kg)**	90
Maximum mechanical speed n_{max}(rpm)	5000 (9500)*	**Sound Pressure level (db(A)) at 50 Hz**	72
D-End Bearing	6308 2RSC3	**N-End bearing**	6308 2RSC3
Vibration Class	A	**Mounting**	IM1001
Insulation class	H	**Temperature rise Class**	F
Motor Nominal voltage (V)	400	**Thermal Protection**	PTC 150°C

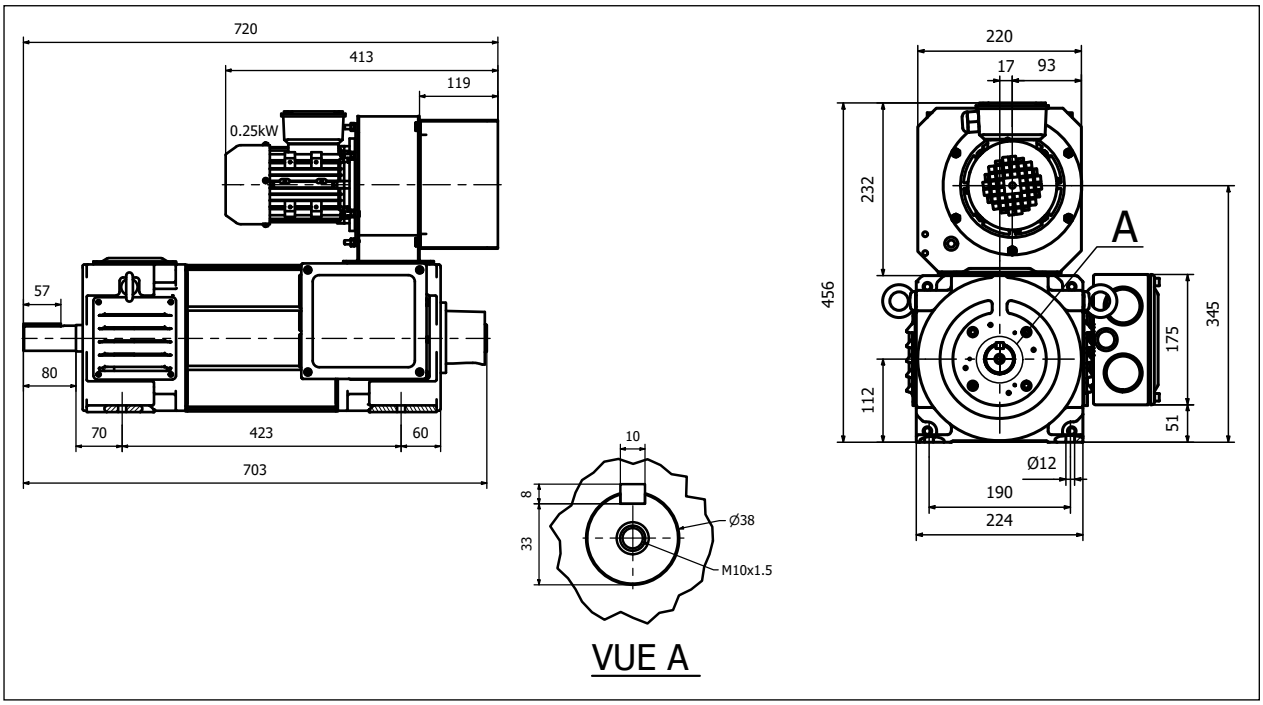
* On request (high speed option)

Blower characteristics (Voltage/frequency supply to precise in order)

Frequency (Hz)	50/60	**Number of phases**	3
Voltage (V)	400/460	**Mounting**	Radial
Speed (rpm)	2800/3360	**Type of cooling fan**	Force draught
Power (kW)	0.25/0.25	**Internal Static Air Pressure Drop (Pa)**	500
Current (A)	0.77/0.67	**Required cooling Air flow (m3/h)**	300

Electrical Data (at 400V)

n_N rpm	**P_N** kW	**T_N** Nm	**I_N** A	**n_1** rpm	**cos ϕ**	**η**	**f_N** Hz
500	6	115	14	800	0,8	0,79	17,4
1000	15	143	32	1600	0,8	0,84	34,7
1200	17	135	36	1920	0,8	0,86	41,7
1500	21	134	43	2400	0,8	0,88	52,1
1800	24	127	48	2880	0,81	0,89	62,5
2000	25	119	49	3200	0,81	0,9	69,5
2400	27	107	53	3840	0,81	0,91	83,2
3000	28	89	54	4800	0,81	0,92	104,2



Motor Characteristics

Degree of Protection	IP23 S	**Cooling**	IC06
Rotor Inertia J (kgm²)	0.047	**Motor weight (kg)**	120
Maximum mechanical speed n_{max}(rpm)	5000 (7900)*	**Sound Pressure level (db(A)) at 50 Hz**	72
D-End Bearing	6308 2RSC3	**N-End bearing**	6308 2RSC3
Vibration Class	A	**Mounting**	IM1001
Insulation class	H	**Temperature rise Class**	F
Motor Nominal voltage (V)	400	**Thermal Protection**	PTC 150°C

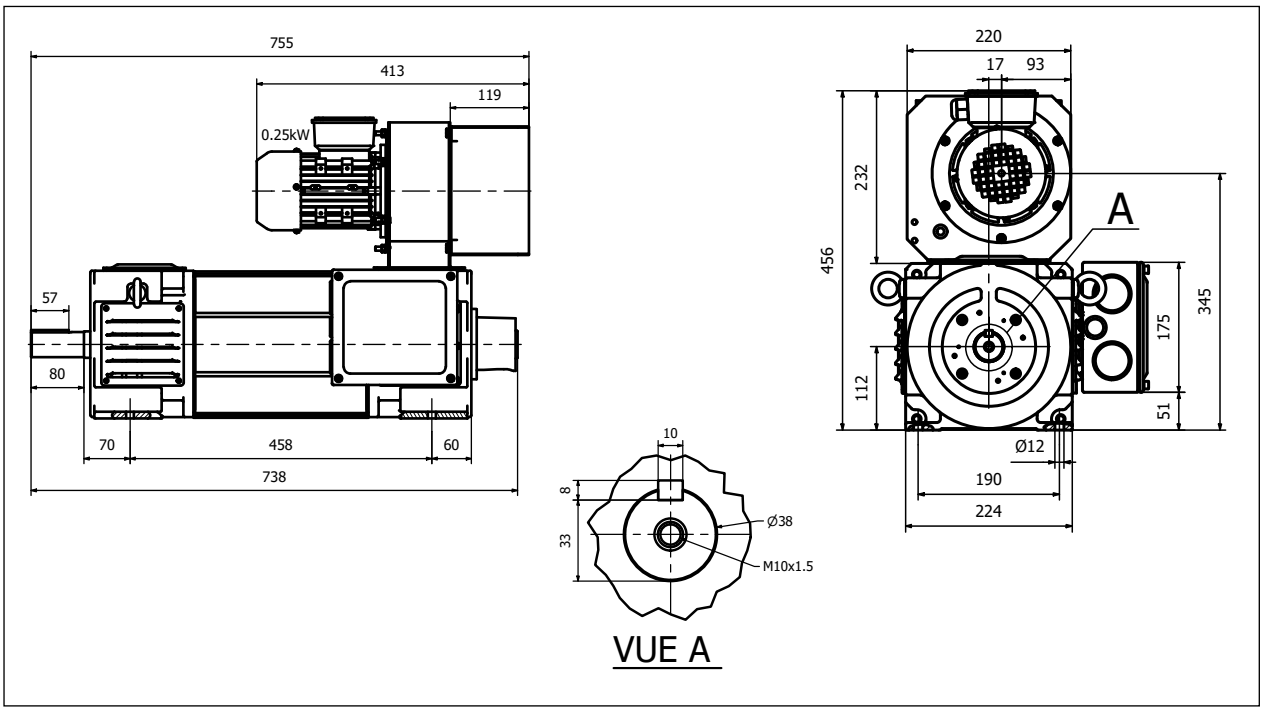
* On request (high speed option)

Blower characteristics (Voltage/frequency supply to precise in order)

Frequency (Hz)	50/60	**Number of phases**	3
Voltage (V)	400/460	**Mounting**	Radial
Speed (rpm)	2810/3360	**Type of cooling fan**	Force draught
Power (kW)	0.25/0.25	**Internal Static Air Pressure Drop (Pa)**	500
Current (A)	0.77/0.67	**Required cooling Air flow (m³/h)**	300

Electrical Data (at 400V)

n_N rpm	P_N kW	T_N Nm	I_N A	n_1 rpm	cos ϕ	η	f_N Hz
500	7	134	16	800	0,8	0,8	17,3
1000	17	162	36	1600	0,8	0,85	34,6
1200	19	151	39	1920	0,8	0,87	41,6
1500	23	146	47	2400	0,8	0,89	52
1800	27	143	54	2880	0,8	0,9	62,4
2000	28	134	55	3200	0,81	0,91	69,3
2400	31	123	60	3840	0,81	0,92	83,2
3000	33	105	63	4800	0,81	0,93	104



Motor Characteristics

Degree of Protection	IP23 S	**Cooling**	IC06
Rotor Inertia J (kgm²)	0.08	**Motor weight (kg)**	166
Maximum mechanical speed n_{max}(rpm)	4300 (10900)*	**Sound Pressure level (db(A)) at 50 Hz**	74
D-End Bearing	6310 2RSC3	**N-End bearing**	6310 2RSC3
Vibration Class	A	**Mounting**	IM1001
Insulation class	H	**Temperature rise Class**	F
Motor Nominal voltage (V)	400	**Thermal Protection**	PTC 150°C

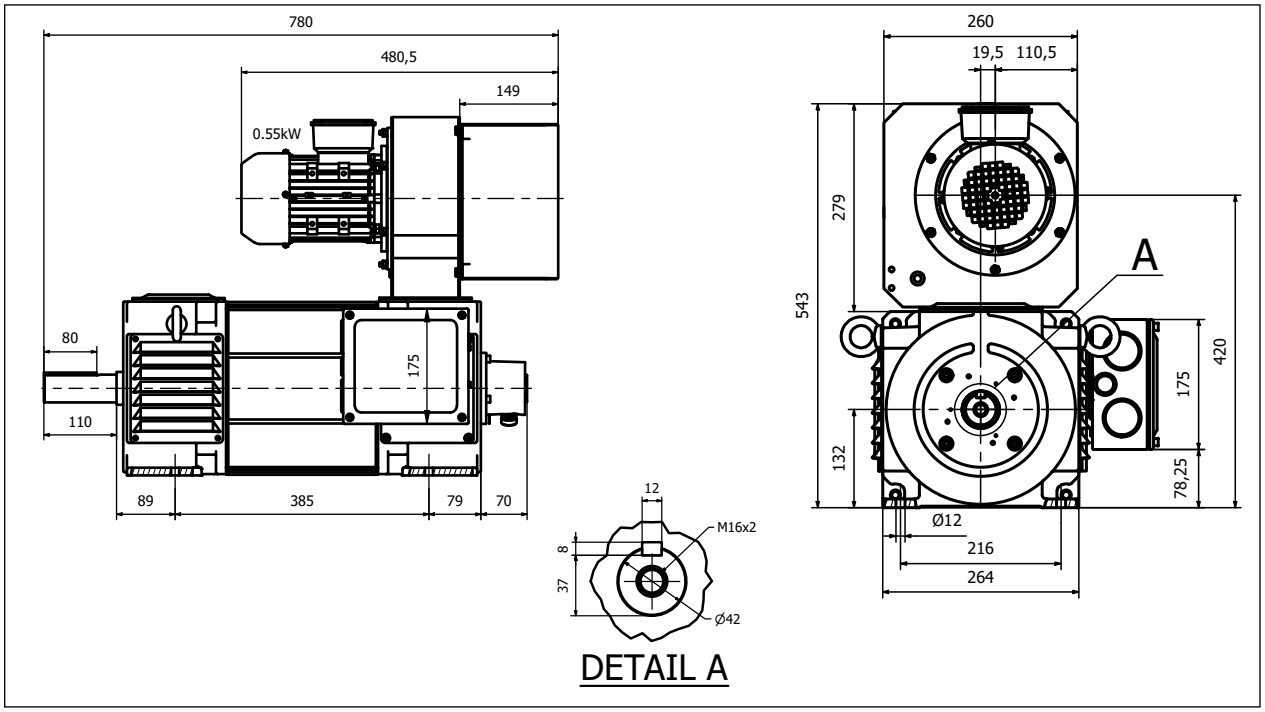
* On request (high speed option)

Blower characteristics (Voltage/frequency supply to precise in order)

Frequency (Hz)	50/60	**Number of phases**	3
Voltage (V)	400/460	**Mounting**	Radial
Speed (rpm)	2800/3360	**Type of cooling fan**	Force draught
Power (kW)	0.55/0.55	**Internal Static Air Pressure Drop (Pa)**	500
Current (A)	1.4/1.22	**Required cooling Air flow (m3/h)**	400

Electrical Data (at 400V)

n_N rpm	P_N kW	T_N Nm	I_N A	n_1 rpm	cos ϕ	η	f_N Hz
500	13	248	29	800	0,8	0,8	17,3
1000	24	229	51	1600	0,8	0,85	34,6
1200	29	231	60	1920	0,8	0,87	41,6
1500	36	229	73	2400	0,8	0,89	52
1800	41	218	82	2880	0,8	0,9	62,4
2000	44	210	86	3200	0,81	0,91	69,3
2400	47	187	91	3840	0,81	0,92	83,2
3000	50	159	96	4800*	0,81	0,93	104



Motor Characteristics

Degree of Protection	IP23 S	**Cooling**	IC06
Rotor Inertia J (kgm²)	0.09	**Motor weight (kg)**	175
Maximum mechanical speed n_{max}(rpm)	4300 (9400)*	**Sound Pressure level (db(A)) at 50 Hz**	74
D-End Bearing	6310 2RSC3	**N-End bearing**	6310 2RSC3
Vibration Class	A	**Mounting**	IM1001
Insulation class	H	**Temperature rise Class**	F
Motor Nominal voltage (V)	400	**Thermal Protection**	PTC 150°C

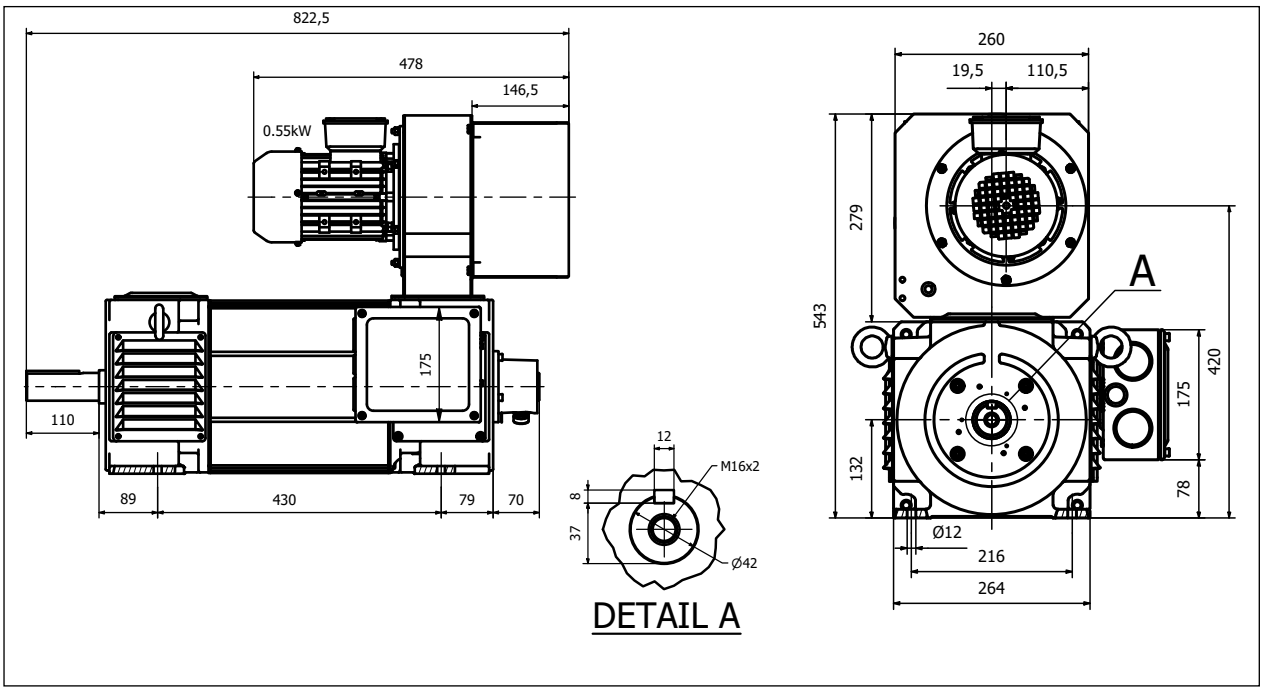
* On request (high speed option)

Blower characteristics (Voltage/frequency supply to precise in order)

Frequency (Hz)	50/60	**Number of phases**	3
Voltage (V)	400/460	**Mounting**	Radial
Speed (rpm)	2800/3360	**Type of cooling fan**	Force draught
Power (kW)	0.55/0.55	**Internal Static Air Pressure Drop (Pa)**	500
Current (A)	1.4/1.22	**Required cooling Air flow (m³/h)**	400

Electrical Data (at 400V)

n_N rpm	P_N kW	T_N Nm	I_N A	n_1 rpm	cos ϕ	η	f_N Hz
500	15	287	34	800	0,79	0,81	18,5
1000	28	267	59	1600	0,8	0,86	35,1
1200	34	271	69	1920	0,81	0,88	41,7
1500	41	261	80	2400	0,82	0,9	52,1
1800	47	249	91	2880	0,82	0,91	62,5
2000	49	234	94	3200	0,82	0,92	68,5
2400	54	215	102	3840	0,82	0,93	83,4
3000	58	185	109	4800*	0,82	0,94	101,9



Motor Characteristics

Degree of Protection	IP23 S	**Cooling**	IC06
Rotor Inertia J (kgm²)	0.11	**Motor weight (kg)**	205
Maximum mechanical speed n_{max}(rpm)	4300 (7800)*	**Sound Pressure level (db(A)) at 50 Hz**	74
D-End Bearing	6310 2RSC3	**N-End bearing**	6310 2RSC3
Vibration Class	A	**Mounting**	IM1001
Insulation class	H	**Temperature rise Class**	F
Motor Nominal voltage (V)	400	**Thermal Protection**	PTC 150°C

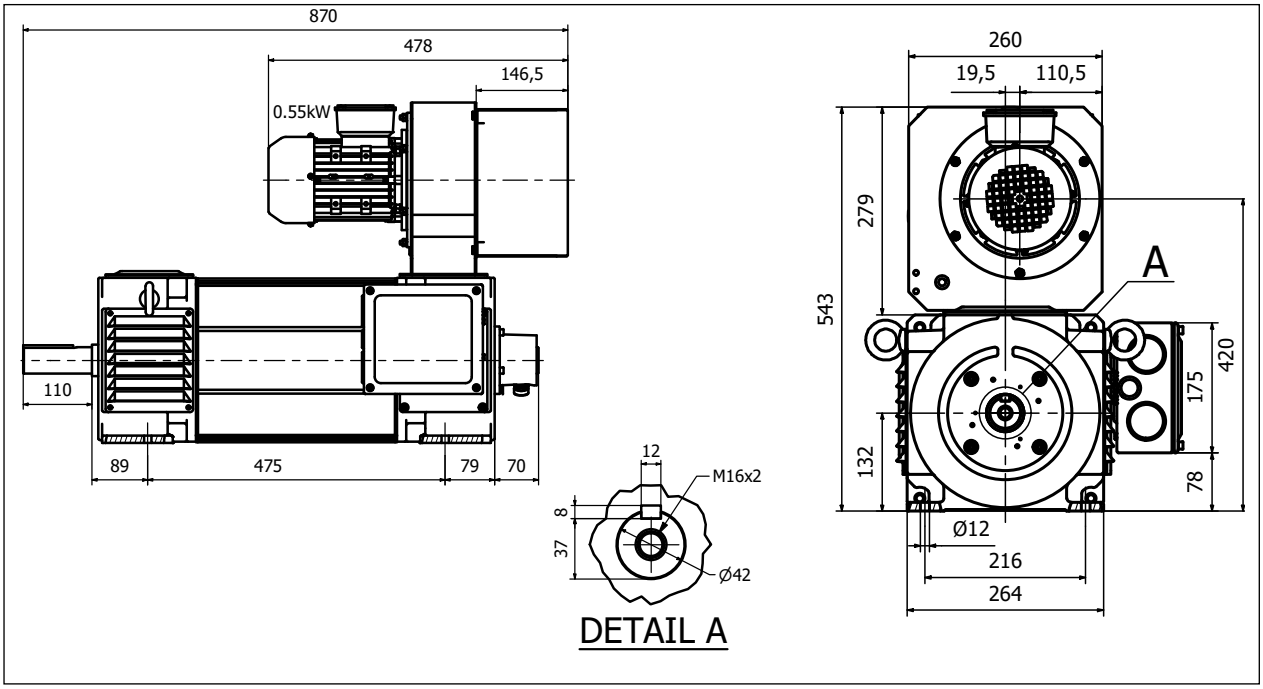
* On request (high speed option)

Blower characteristics (Voltage/frequency supply to precise in order)

Frequency (Hz)	50/60	**Number of phases**	3
Voltage (V)	400/460	**Mounting**	Radial
Speed (rpm)	2800/3360	**Type of cooling fan**	Force draught
Power (kW)	0.55/0.55	**Internal Static Air Pressure Drop (Pa)**	500
Current (A)	1.4/1.22	**Required cooling Air flow (m3/h)**	400

Electrical Data (at 400V)

n_N rpm	P_N kW	T_N Nm	I_N A	n_1 rpm	cos ϕ	η	f_N Hz
500	16	304	36	800	0,79	0,81	18,9
1000	31	296	65	1600	0,8	0,86	35,8
1200	37	294	75	1920	0,81	0,88	41,7
1500	45	287	88	2400	0,82	0,9	52,1
1800	53	281	103	2880	0,82	0,91	62,5
2000	55	263	105	3200	0,82	0,92	68,9
2400	60	239	114	3840	0,82	0,93	83,3
3000	63	201	117	4800*	0,82	0,95	101,9



Motor Characteristics

Degree of Protection	IP23 S	**Cooling**	IC06
Rotor Inertia J (kgm²)	0.24	**Motor weight (kg)**	290
Maximum mechanical speed n_{max}(rpm)	3400 (9500)*	**Sound Pressure level (db(A)) at 50 Hz**	76
D-End Bearing	6312 2RSC3	**N-End bearing**	6312 2RSC3
Vibration Class	A	**Mounting**	IM1001
Insulation class	H	**Temperature rise Class**	F
Motor Nominal voltage (V)	400	**Thermal Protection**	PTC 150°C

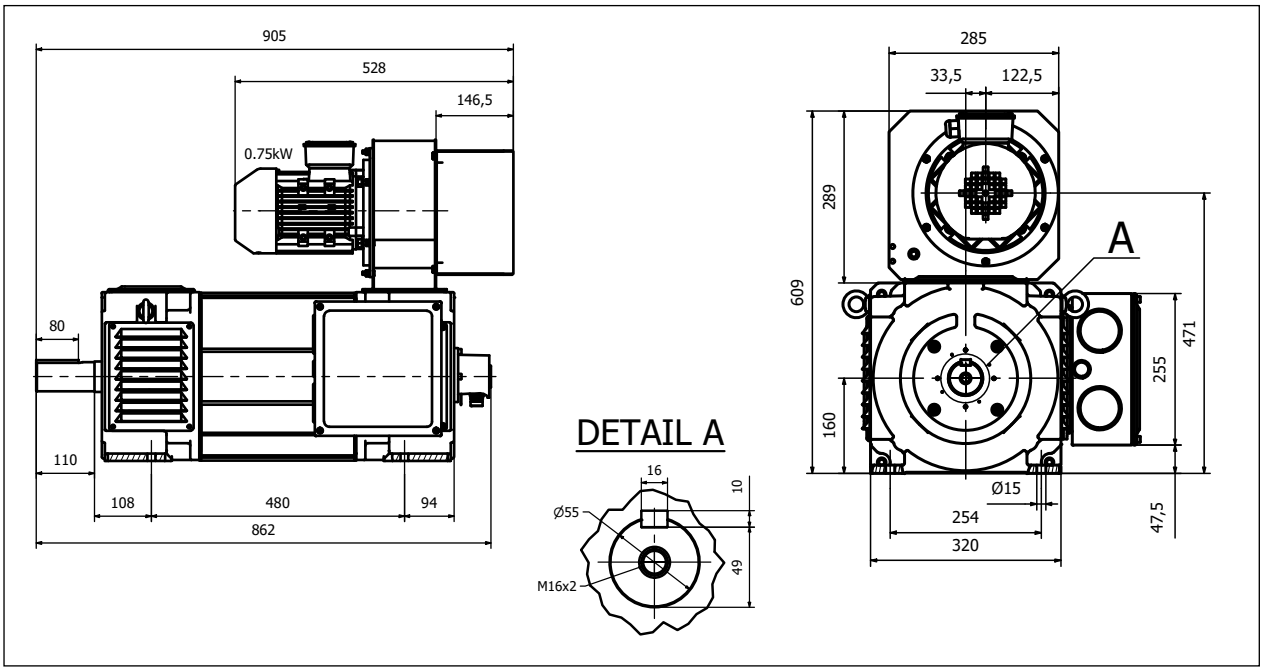
* On request (high speed option)

Blower characteristics (Voltage/frequency supply to precise in order)

Frequency (Hz)	50/60	**Number of phases**	3
Voltage (V)	400/460	**Mounting**	Radial
Speed (rpm)	2865/3438	**Type of cooling fan**	Force draught
Power (kW)	0.75/0.75	**Internal Static Air Pressure Drop (Pa)**	850
Current (A)	1.64/1.49	**Required cooling Air flow (m³/h)**	900

Electrical Data (at 400V)

n_N rpm	P_N kW	T_N Nm	I_N A	n_1 rpm	cos ϕ	η	f_N Hz
500	26	497	56	800	0,8	0,84	18
1000	51	487	103	1600	0,8	0,89	34,6
1200	60	478	119	1920	0,8	0,91	41
1500	74	471	144	2400	0,8	0,93	51,3
1800	87	462	169	2880	0,8	0,93	61,5
2000	91	435	175	3200	0,8	0,94	68
2400	97	386	184	3840*	0,8	0,95	82
3000	103	328	194	4800*	0,8	0,96	101,5



Motor Characteristics

Degree of Protection	IP23 S	**Cooling**	IC06
Rotor Inertia J (kgm²)	0.29	**Motor weight (kg)**	335
Maximum mechanical speed n_{max}(rpm)	3400 (7700)*	**Sound Pressure level (db(A)) at 50 Hz**	76
D-End Bearing**	6312 2RSC3	**N-End bearing**	6312 2RSC3
Vibration Class	A	**Mounting**	IM1001
Insulation class	H	**Temperature rise Class**	F
Motor Nominal voltage (V)	400	**Thermal Protection**	PTC 150°C

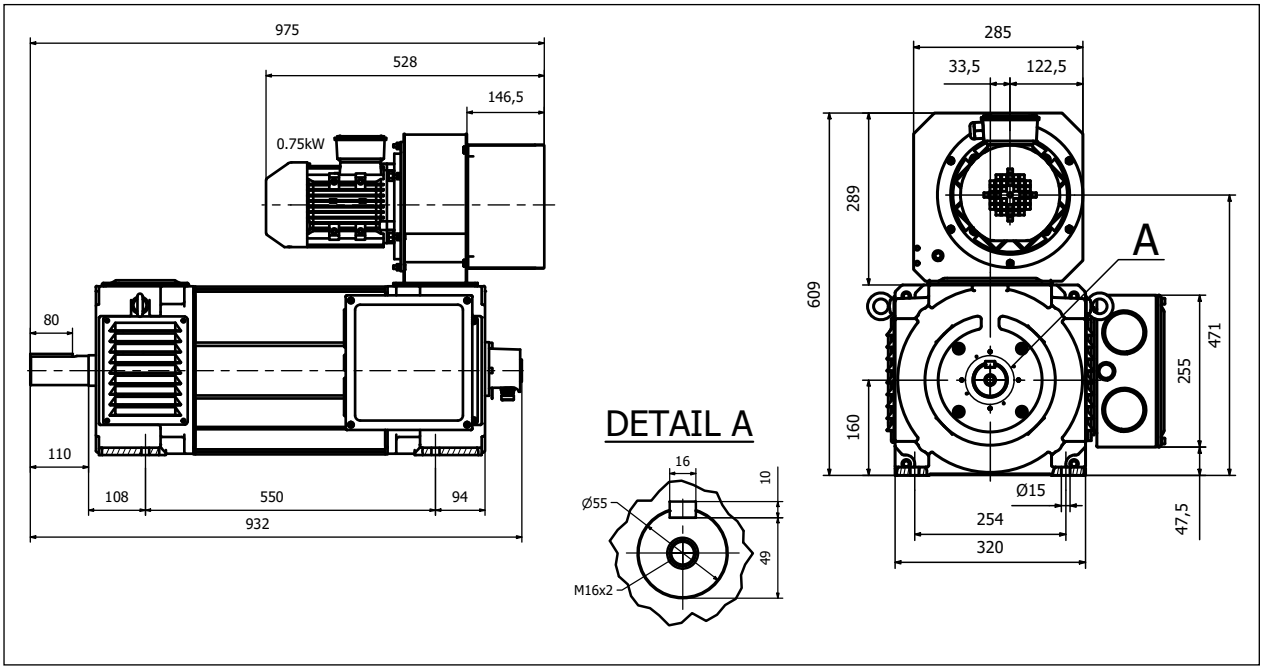
* On request (high speed option)
**Bearing protection ring recommended > 100kW

Blower characteristics (Voltage/frequency supply to precise in order)

Frequency (Hz)	50/60	**Number of phases**	3
Voltage (V)	400/460	**Mounting**	Radial
Speed (rpm)	2865/3438	**Type of cooling fan**	Force draught
Power (kW)	0.75/0.75	**Internal Static Air Pressure Drop (Pa)**	850
Current (A)	1.64/1.49	**Required cooling Air flow (m³/h)**	900

Electrical Data (at 400V)

n_N rpm	P_N kW	T_N Nm	I_N A	n_1 rpm	cos ϕ	η	f_N Hz
500	31	592	65	800	0,82	0,84	18
1000	58	554	116	1600	0,81	0,89	34,7
1200	69	549	133	1920	0,82	0,91	41
1500	85	541	161	2400	0,82	0,93	51,4
1800	101	536	189	2880	0,82	0,94	61,5
2000	104	497	193	3200	0,82	0,95	68,3
2400	112	446	205	3840*	0,83	0,95	82,2
3000	118	376	214	4800*	0,83	0,96	101,5



Motor Characteristics

Degree of Protection	IP23 S	**Cooling**	IC06
Rotor Inertia J (kgm²)	0.33	**Motor weight (kg)**	370
Maximum mechanical speed n_{max}(rpm)	3400 (6500)*	**Sound Pressure level (db(A)) at 50 Hz**	76
D-End Bearing**	6312 2RSC3	**N-End bearing**	6312 2RSC3
Vibration Class	A	**Mounting**	IM1001
Insulation class	H	**Temperature rise Class**	F
Motor Nominal voltage (V)	400	**Thermal Protection**	PTC 150°C

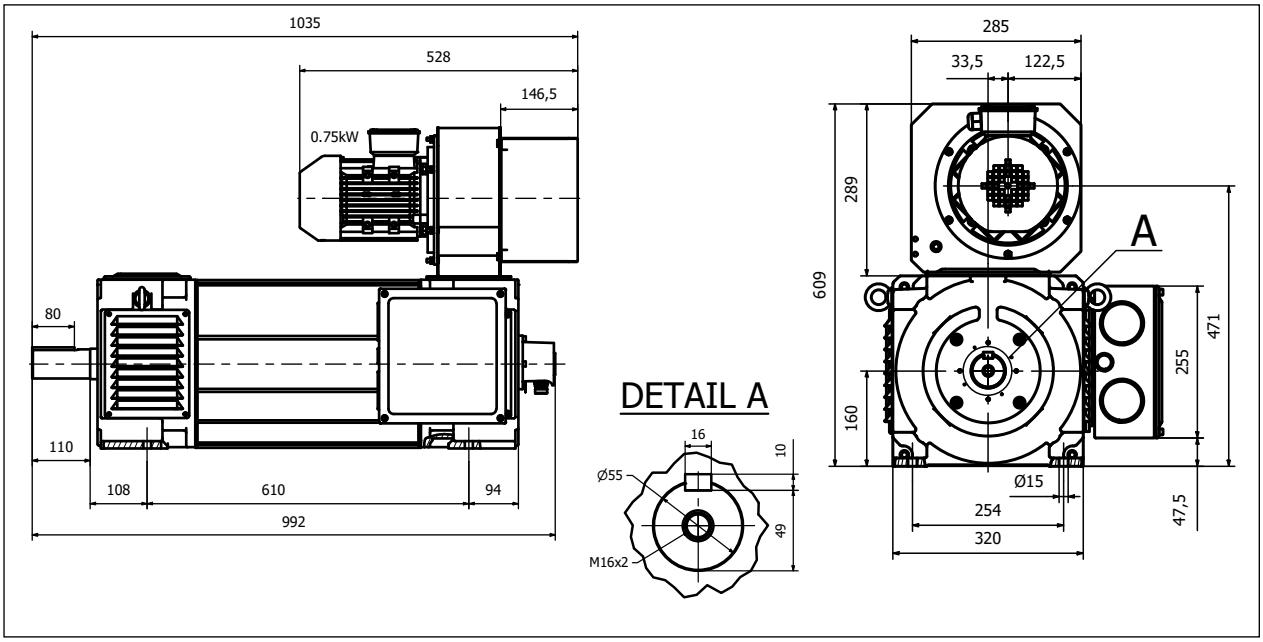
* On request (high speed option)
**Bearing protection ring recommended > 100kW

Blower characteristics (Voltage/frequency supply to precise in order)

Frequency (Hz)	50/60	**Number of phases**	3
Voltage (V)	400/460	**Mounting**	Radial
Speed (rpm)	2865/3438	**Type of cooling fan**	Force draught
Power (kW)	0.75/0.75	**Internal Static Air Pressure Drop (Pa)**	850
Current (A)	1.64/1.49	**Required cooling Air flow (m³/h)**	900

Electrical Data (at 400V)

n_N rpm	P_N kW	T_N Nm	I_N A	n_1 rpm	cos ϕ	η	f_N Hz
500	35	669	77	800	0,78	0,84	18,9
1000	70	669	144	1600	0,79	0,89	35,8
1200	81	645	163	1920	0,79	0,91	41,6
1500	100	637	196	2400	0,79	0,93	52,1
1800	117	621	227	2880	0,79	0,94	62,5
2000	122	583	232	3200	0,8	0,95	68,9
2400	133	529	253	3840*	0,8	0,95	83
3000	139	442	261	4800*	0,8	0,96	101,9



Motor Characteristics

Degree of Protection	IP23 S	**Cooling**	IC06
Rotor Inertia J (kgm²)	0.54	**Motor weight (kg)**	365
Maximum mechanical speed n_{max}(rpm)	3200 (8500)*	**Sound Pressure level (db(A)) at 50 Hz**	78
D-End Bearing**	6215 2RSC3	**N-End bearing**	6215 2RSC3
Vibration Class	A	**Mounting**	IM1001
Insulation class	H	**Temperature rise Class**	F
Motor Nominal voltage (V)	400	**Thermal Protection**	PTC 150°C

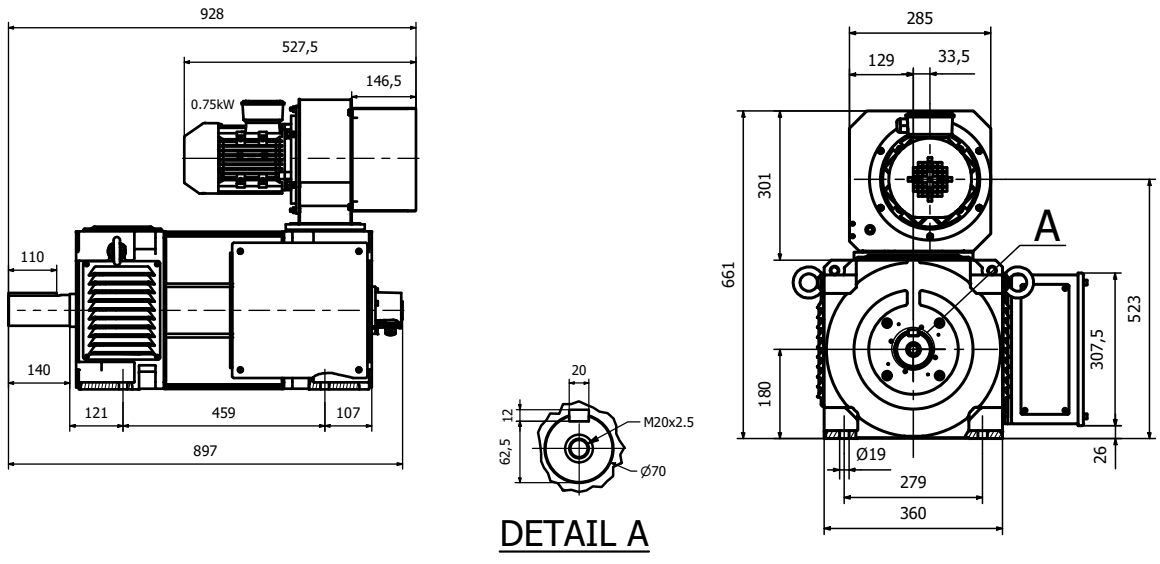
* On request (high speed option)
**Bearing protection ring recommended > 100kW

Blower characteristics (Voltage/frequency supply to precise in order)

Frequency (Hz)	50/60	**Number of phases**	3
Voltage (V)	400/460	**Mounting**	Radial
Speed (rpm)	2865/3462	**Type of cooling fan**	Force draught
Power (kW)	0.75/2.2	**Internal Static Air Pressure Drop (Pa)**	900
Current (A)	1.64/3.76	**Required cooling Air flow (m³/h)**	1300

Electrical Data (at 400V)

n_N rpm	P_N kW	T_N Nm	I_N A	n_1 rpm	cos ϕ	η	f_N Hz
500	40	764	82	800	0,84	0,84	17,5
1000	80	764	156	1600	0,83	0,89	34,3
1200	94	748	180	1920	0,83	0,91	40,6
1500	116	739	214	2400	0,84	0,93	50,8
1800	136	722	249	2880	0,84	0,94	60,8
2000	142	678	257	3200*	0,84	0,95	67,7
2400	154	613	279	3840*	0,84	0,95	81,2
3000	159	506	284	4800*	0,85	0,95	101



Motor Characteristics

Degree of Protection	IP23 S	**Cooling**	IC06
Rotor Inertia J (kgm²)	0.74	**Motor weight (kg)**	450
Maximum mechanical speed n_{max}(rpm)	3200 (7000)*	**Sound Pressure level (db(A)) at 50 Hz**	78
D-End Bearing**	6215 2RSC3	**N-End bearing**	6215 2RSC3
Vibration Class	A	**Mounting**	IM1001
Insulation class	H	**Temperature rise Class**	F
Motor Nominal voltage (V)	400	**Thermal Protection**	PTC 150°C

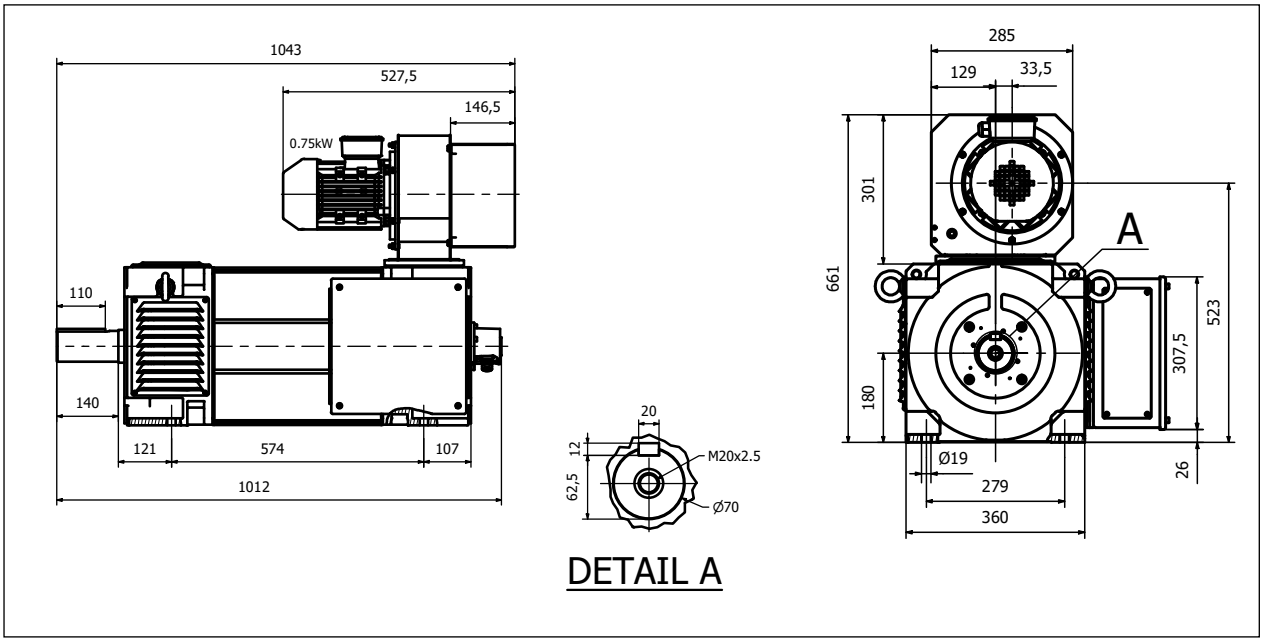
* On request (high speed option)
**Bearing protection ring recommended > 100kW

Blower characteristics (Voltage/frequency supply to precise in order)

Frequency (Hz)	50/60	**Number of phases**	3
Voltage (V)	400/460	**Mounting**	Radial
Speed (rpm)	2865/3462	**Type of cooling fan**	Force draught
Power (kW)	0.75/2.2	**Internal Static Air Pressure Drop (Pa)**	900
Current (A)	1.64/3.76	**Required cooling Air flow (m³/h)**	1300

Electrical Data (at 400V)

n_N rpm	P_N kW	T_N Nm	I_N A	n_1 rpm	cos ϕ	η	f_N Hz
500	50	955	101	800	0,84	0,85	17,3
1000	98	936	187	1600	0,84	0,9	34
1200	115	915	215	1920	0,84	0,92	40,6
1500	140	891	253	2400	0,85	0,94	50,7
1800	165	875	298	2880	0,85	0,94	60,8
2000	172	821	307	3200*	0,85	0,95	67,4
2400	187	744	334	3840*	0,85	0,95	81,1
3000	196	624	347	4800*	0,85	0,96	101



Motor Characteristics

Degree of Protection	IP23 S	**Cooling**	IC06
Rotor Inertia J (kgm²)	0.94	**Motor weight (kg)**	545
Maximum mechanical speed n_{max}(rpm)	3200 (5200)*	**Sound Pressure level (db(A)) at 50 Hz**	78
D-End Bearing**	6215 2RSC3	**N-End bearing**	6215 2RSC3
Vibration Class	A	**Mounting**	IM1001
Insulation class	H	**Temperature rise Class**	F
Motor Nominal voltage (V)	400	**Thermal Protection**	PTC 150°C

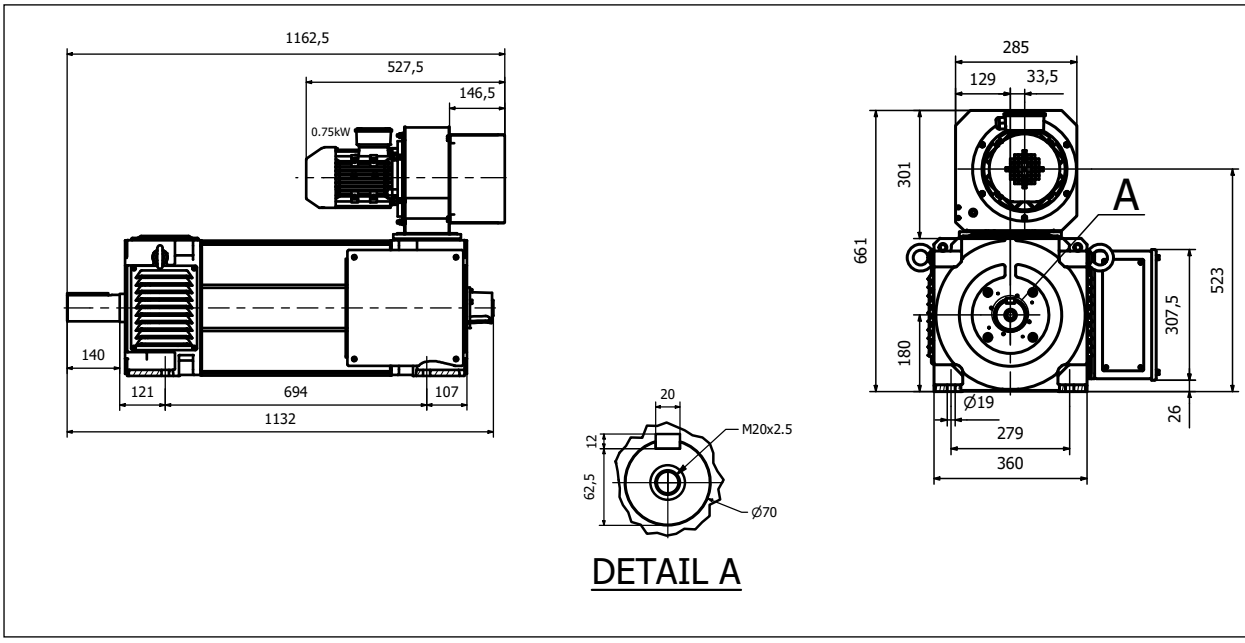
* On request (high speed option)
**Bearing protection ring recommended > 100kW

Blower characteristics (Voltage/frequency supply to precise in order)

Frequency (Hz)	50/60	**Number of phases**	3
Voltage (V)	400/460	**Mounting**	Radial
Speed (rpm)	2865/3462	**Type of cooling fan**	Force draught
Power (kW)	0.75/2.2	**Internal Static Air Pressure Drop (Pa)**	900
Current (A)	1.64/3.76	**Required cooling Air flow (m³/h)**	1300

Electrical Data (at 400V)

n_N rpm	P_N kW	T_N Nm	I_N A	n_1 rpm	cos ϕ	η	f_N Hz
500	56	1070	115	800	0,83	0,85	17,5
1000	110	1053	210	1600	0,84	0,9	34,2
1200	129	1029	242	1920	0,84	0,92	40,7
1500	159	1012	287	2400	0,85	0,94	50,9
1800	187	992	338	2880	0,85	0,94	61,1
2000	195	931	349	3200*	0,85	0,95	67,6
2400	211	840	377	3840*	0,85	0,95	81,3
3000	223	710	390	4800*	0,86	0,96	100,9



Motor Characteristics

Degree of Protection	IP23 S	**Cooling**	IC06
Rotor Inertia J (kgm²)	1.72	**Motor weight (kg)**	705
Maximum mechanical speed n_{max}(rpm)	3800 (6500)*	**Sound Pressure level (db(A)) at 50 Hz**	80
D-End Bearing**	6220C3	**N-End bearing**	6220C3
Vibration Class	A	**Mounting**	IM1001
Insulation class	H	**Temperature rise Class**	F
Motor Nominal voltage (V)	400	**Thermal Protection**	PTC 150°C

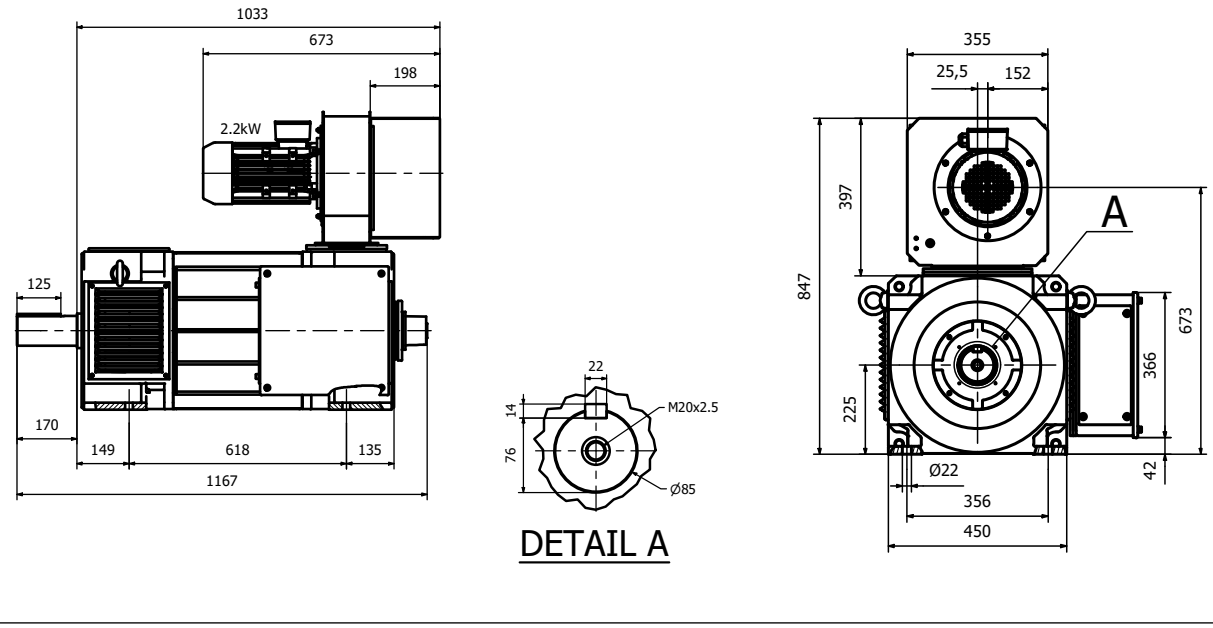
* On request (high speed option)
**Bearing protection ring recommended > 100kW

Blower characteristics (Voltage/frequency supply to precise in order)

Frequency (Hz)	50/60	**Number of phases**	3
Voltage (V)	400/460	**Mounting**	Radial
Speed (rpm)	2895/3474	**Type of cooling fan**	Force draught
Power (kW)	2.2/2.2	**Internal Static Air Pressure Drop (Pa)**	1200
Current (A)	4.35/3.76	**Required cooling Air flow (m³/h)**	2200

Electrical Data (at 400V)

n_N rpm	P_N kW	T_N Nm	I_N A	n_1 rpm	cos ϕ	η	f_N Hz
500	84	1604	168	800	0,84	0,86	17,2
1000	164	1566	310	1600	0,84	0,91	34
1200	192	1528	355	1920	0,84	0,93	40,5
1500	235	1496	420	2400	0,85	0,95	50,6
1800	276	1464	493	2880	0,85	0,95	60,7
2000	288	1375	509	3200	0,85	0,96	67,3
2400	314	1249	555	3840*	0,85	0,96	81
3000	330	1051	577	4800*	0,86	0,96	100,8



Motor Characteristics

Degree of Protection	IP23 S	**Cooling**	IC06
Rotor Inertia J (kgm²)	2.29	**Motor weight (kg)**	860
Maximum mechanical speed n_{max}(rpm)	3800 (5300)*	**Sound Pressure level (db(A)) at 50 Hz**	80
D-End Bearing**	6220C3	**N-End bearing**	6220C3
Vibration Class	A	**Mounting**	IM1001
Insulation class	H	**Temperature rise Class**	F
Motor Nominal voltage (V)	400	**Thermal Protection**	PTC 150°C

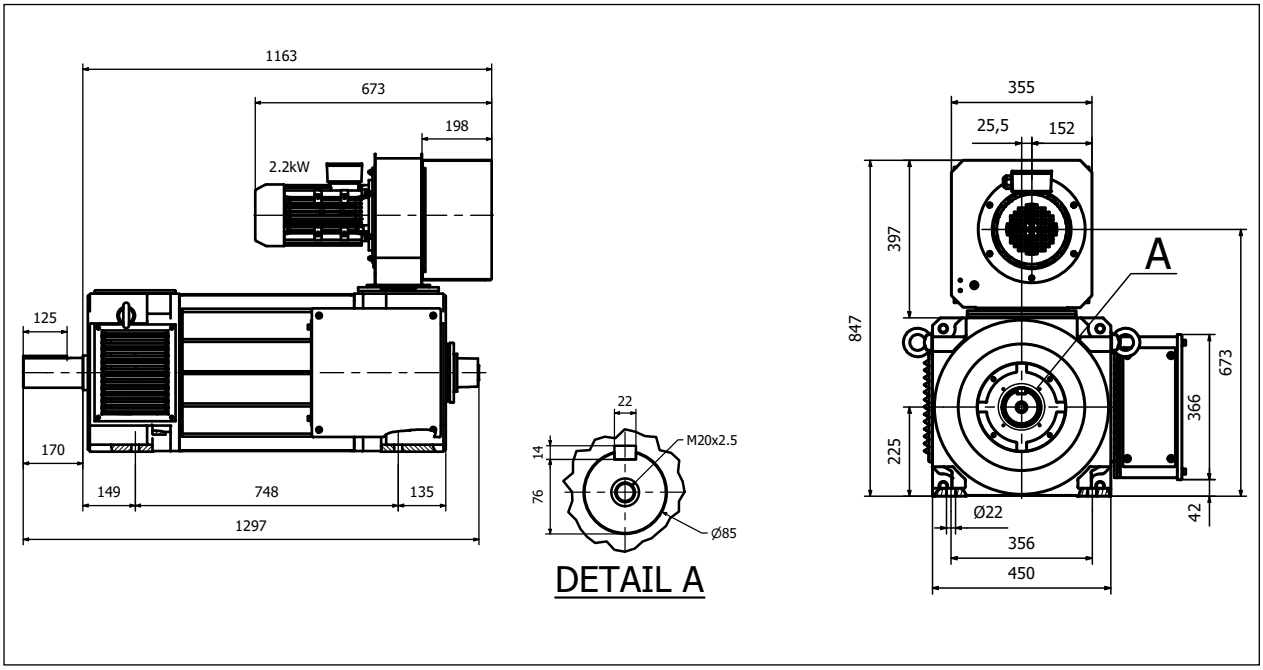
* On request (high speed option)
**Bearing protection ring recommended > 100kW

Blower characteristics (Voltage/frequency supply to precise in order)

Frequency (Hz)	50/60	**Number of phases**	3
Voltage (V)	400/460	**Mounting**	Radial
Speed (rpm)	2895/3474	**Type of cooling fan**	Force draught
Power (kW)	2.2/2.2	**Internal Static Air Pressure Drop (Pa)**	1200
Current (A)	4.35/3.76	**Required cooling Air flow (m³/h)**	2200

Electrical Data (at 400V)

n_N rpm	P_N kW	T_N Nm	I_N A	n_1 rpm	cos ϕ	η	f_N Hz
500	103	1967	206	800	0,84	0,86	17,1
1000	201	1920	375	1600	0,85	0,91	33,9
1200	237	1886	433	1920	0,85	0,93	40,4
1500	292	1859	522	2400	0,85	0,95	50,5
1800	342	1815	611	2880	0,85	0,95	60,6
2000	358	1709	633	3200	0,85	0,96	67,2
2400	387	1540	685	3840*	0,85	0,96	80,8
3000	408	1299	713	4800*	0,86	0,96	100,8



Motor Characteristics

Degree of Protection	IP23 S	**Cooling**	IC06
Rotor Inertia J (kgm²)	2.55	**Motor weight (kg)**	920
Maximum mechanical speed n_{max}(rpm)	3800 (4600)*	**Sound Pressure level (db(A)) at 50 Hz**	80
D-End Bearing**	6220C3	**N-End bearing**	6220C3
Vibration Class	A	**Mounting**	IM1001
Insulation class	H	**Temperature rise Class**	F
Motor Nominal voltage (V)	400	**Thermal Protection**	PTC 150°C

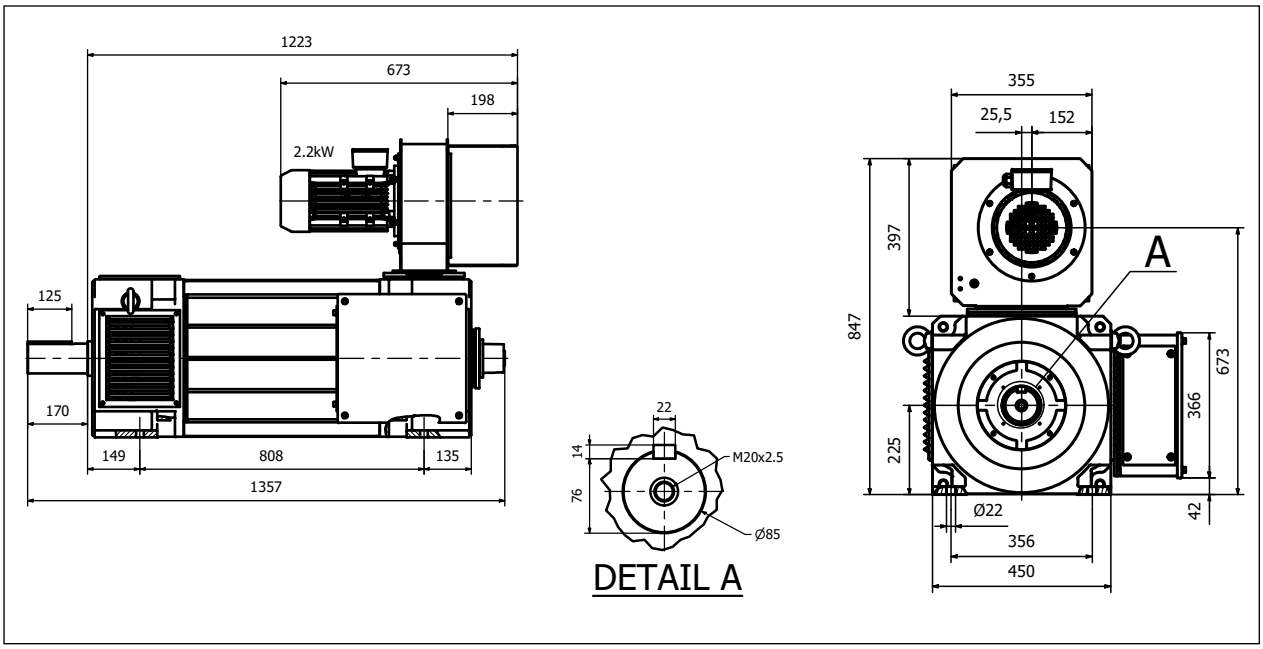
* On request (high speed option)
**Bearing protection ring recommended > 100kW

Blower characteristics (Voltage/frequency supply to precise in order)

Frequency (Hz)	50/60	**Number of phases**	3
Voltage (V)	400/460	**Mounting**	Radial
Speed (rpm)	2895/3474	**Type of cooling fan**	Force draught
Power (kW)	2.2/2.2	**Internal Static Air Pressure Drop (Pa)**	1200
Current (A)	4.35/3.76	**Required cooling Air flow (m³/h)**	2200

Electrical Data (at 400V)

n_N rpm	P_N kW	T_N Nm	I_N A	n_1 rpm	cos ϕ	η	f_N Hz
500	118	2254	236	800	0,84	0,86	17,3
1000	232	2216	443	1600	0,83	0,91	34
1200	273	2173	511	1920	0,83	0,93	40,6
1500	335	2133	606	2400	0,84	0,95	50,7
1800	394	2090	713	2880	0,84	0,95	60,7
2000	412	1967	745	3200	0,84	0,95	67,3
2400	444	1767	803	3840*	0,84	0,95	81
3000	469	1493	830	4400*	0,85	0,96	101



Motor Characteristics

Degree of Protection	IP23	**Cooling**	IC06
Rotor Inertia J (kgm²)	2.8	**Motor weight (kg)**	1090
Maximum mechanical speed n_{max}(rpm)	3400 (5700)*	**Sound Pressure level (db(A)) at 50 Hz**	82
D-End Bearing**	6222C3	**N-End bearing**	6222C3
Vibration Class	A	**Mounting**	IM1001
Insulation class	H	**Temperature rise Class**	F
Motor Nominal voltage (V)	400	**Thermal Protection**	PTC 150°C

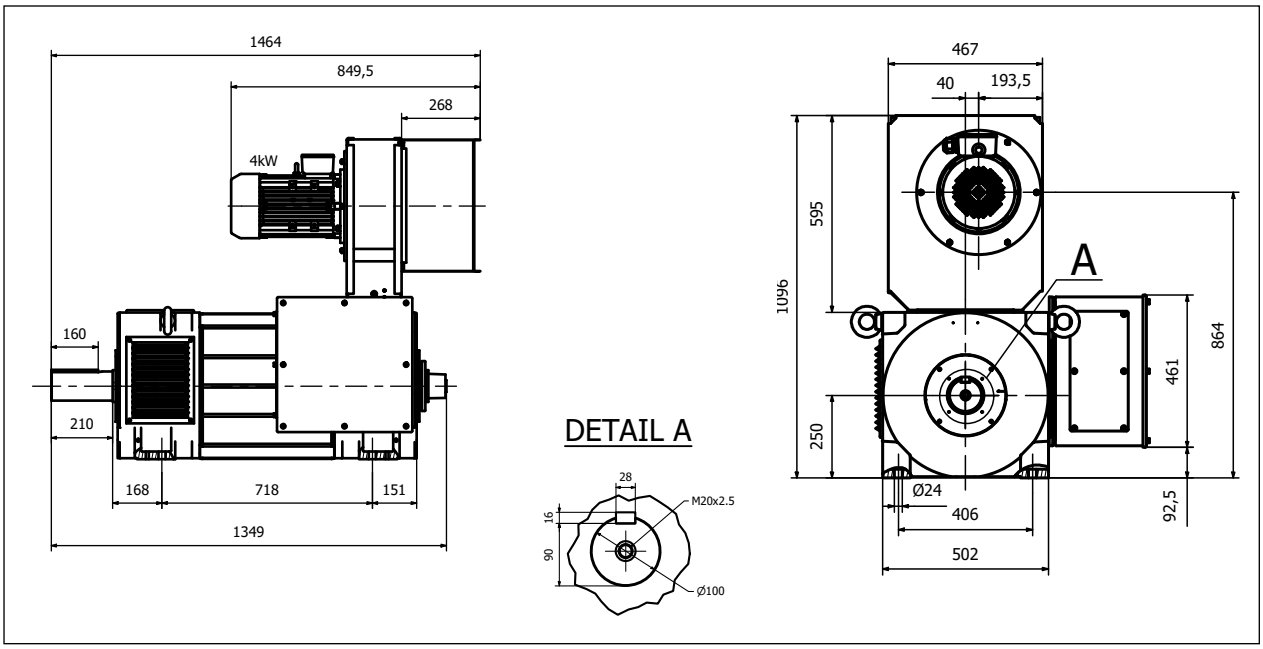
* On request (high speed option)
**Bearing protection ring recommended > 100kW

Blower characteristics (Voltage/frequency supply to precise in order)

Frequency (Hz)	50/60	**Number of phases**	3
Voltage (V)	400/460	**Mounting**	Radial
Speed (rpm)	2895/3498	**Type of cooling fan**	Force draught
Power (kW)	4/4.6	**Internal Static Air Pressure Drop (Pa)**	2100
Current (A)	7.45/7.45	**Required cooling Air flow (m³/h)**	2700

Electrical Data (at 400V)

n_N rpm	P_N kW	T_N Nm	I_N A	n_1 rpm	cos ϕ	η	f_N Hz
500	121	2311	242	800	0,84	0,86	16,8
1000	239	2283	451	1600	0,84	0,91	33,6
1200	280	2228	517	1920	0,84	0,93	40,4
1500	344	2190	615	2400	0,85	0,95	50,5
1800	405	2149	724	2880	0,85	0,95	60,6
2000	422	2015	747	3200	0,85	0,96	67,3
2400	456	1815	807	3840*	0,85	0,96	80,8
2600	458	1682	801	4160*	0,86	0,96	87,5



Motor Characteristics

Degree of Protection	IP23	**Cooling**	IC06
Rotor Inertia J (kgm²)	3.4	**Motor weight (kg)**	1260
Maximum mechanical speed n_{max}(rpm)	3400 (4600)*	**Sound Pressure level (db(A)) at 50 Hz**	82
D-End Bearing**	6222C3	**N-End bearing**	6222C3
Vibration Class	A	**Mounting**	IM1001
Insulation class	H	**Temperature rise Class**	F
Motor Nominal voltage (V)	400	**Thermal Protection**	PTC 150°C

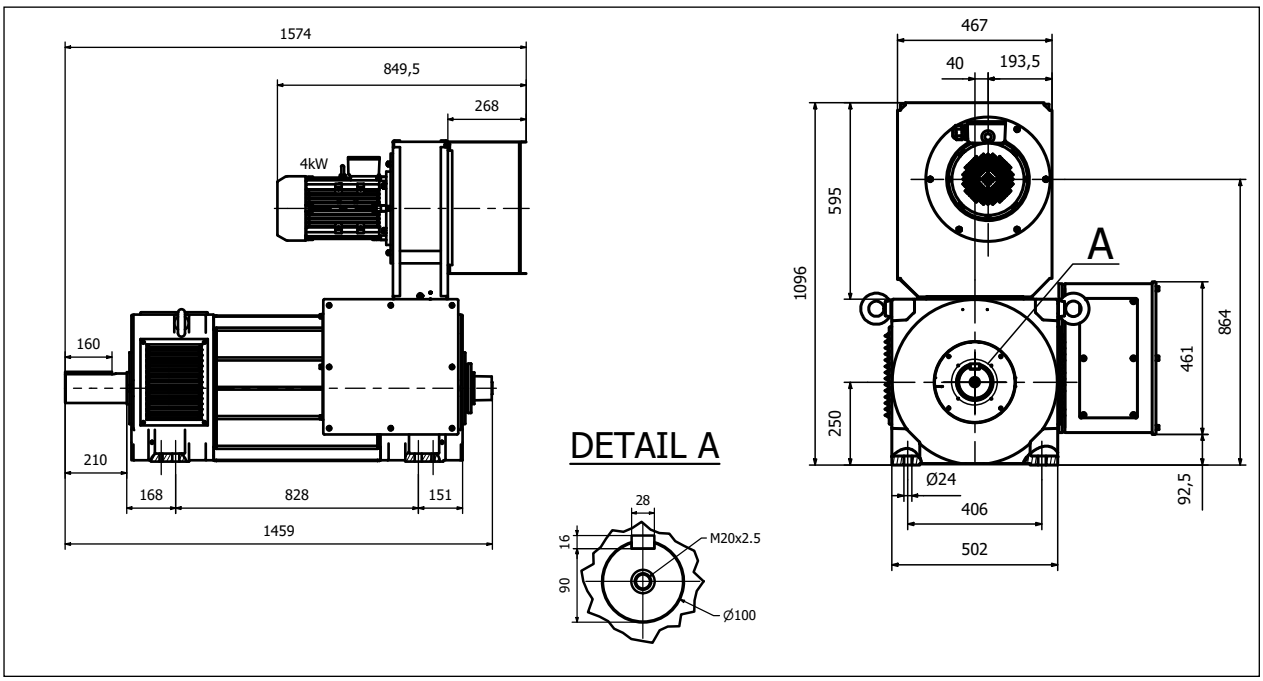
* On request (high speed option)
**Bearing protection ring recommended > 100kW

Blower characteristics (Voltage/frequency supply to precise in order)

Frequency (Hz)	50/60	**Number of phases**	3
Voltage (V)	400/460	**Mounting**	Radial
Speed (rpm)	2895/3498	**Type of cooling fan**	Force draught
Power (kW)	4/4.6	**Internal Static Air Pressure Drop (Pa)**	2100
Current (A)	7.45/7.45	**Required cooling Air flow (m³/h)**	2700

Electrical Data (at 400V)

n_N rpm	P_N kW	T_N Nm	I_N A	n_1 rpm	cos ϕ	η	f_N Hz
500	142	2712	284	800	0,84	0,86	16,8
1000	278	2655	525	1600	0,84	0,91	33,6
1200	327	2602	604	1920	0,84	0,93	40,4
1500	401	2553	717	2400	0,85	0,95	50,5
1800	472	2504	844	2880	0,85	0,95	60,6
2000	491	2345	869	3200	0,85	0,96	67,3
2400	533	2121	943	3840*	0,85	0,96	80,8
2600	535	1965	935	4160*	0,86	0,96	87.5



Motor Characteristics

Degree of Protection	IP23	**Cooling**	IC06
Rotor Inertia J (kgm²)	3.8	**Motor weight (kg)**	1390
Maximum mechanical speed n_{max}(rpm)	3400 (4100)*	**Sound Pressure level (db(A)) at 50 Hz**	82
D-End Bearing**	6222C3	**N-End bearing**	6222C3
Vibration Class	A	**Mounting**	IM1001
Insulation class	H	**Temperature rise Class**	F
Motor Nominal voltage (V)	400	**Thermal Protection**	PTC 150°C

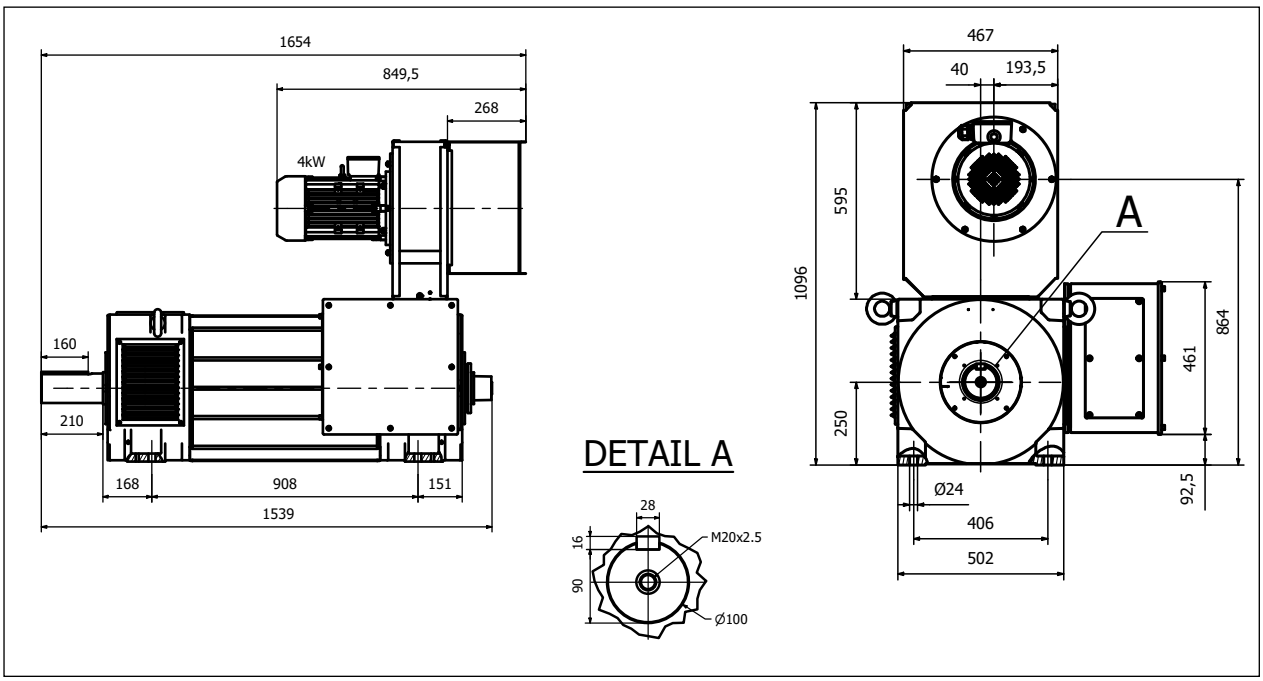
* On request (high speed option)
**Bearing protection ring recommended > 100kW

Blower characteristics (Voltage/frequency supply to precise in order)

Frequency (Hz)	50/60	**Number of phases**	3
Voltage (V)	400/460	**Mounting**	Radial
Speed (rpm)	2895/3498	**Type of cooling fan**	Force draught
Power (kW)	4/4,6	**Internal Static Air Pressure Drop (Pa)**	2100
Current (A)	7.45/7.45	**Required cooling Air flow (m³/h)**	2700

Electrical Data (at 400V)

n_N rpm	P_N kW	T_N Nm	I_N A	n_1 rpm	cos ϕ	η	f_N Hz
500	164	3132	328	800	0,84	0,86	16,8
1000	322	3075	608	1600	0,84	0,91	33,6
1200	380	3024	702	1920	0,84	0,93	40,4
1500	465	2961	831	2400	0,85	0,95	50,5
1800	547	2902	978	2880	0,85	0,95	60,6
2000	570	2722	1008	3200	0,85	0,96	67,3
2400	617	2455	1091	3840*	0,85	0,96	80,8
2600	620	2277	1084	3900*	0,86	0,96	87.5



Motor Characteristics

Degree of Protection	IP23 S	**Cooling**	IC06
Rotor Inertia J (kgm²)	4.17	**Motor weight (kg)**	1160
Maximum mechanical speed n_{max}(rpm)	3200 (5400)*	**Sound Pressure level (db(A)) at 50 Hz**	84
D-End Bearing**	6224C3	**N-End bearing**	6224C3
Vibration Class	A	**Mounting**	IM1001
Insulation class	H	**Temperature rise Class**	F
Motor Nominal voltage (V)	400***	**Thermal Protection**	PTC 150°C

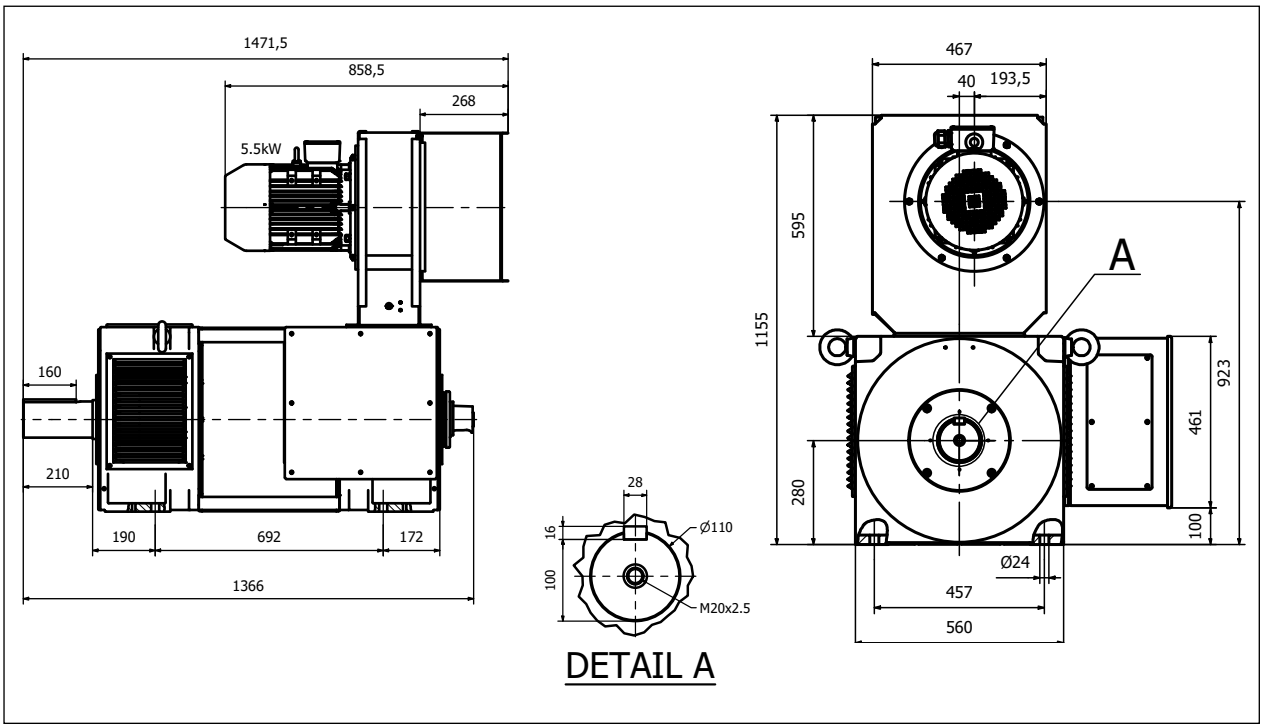
* On request (high speed option)
**Bearing protection ring recommended > 100kW
*** 690V possible on request

Blower characteristics (Voltage/frequency supply to precise in order)

Frequency (Hz)	50/60	**Number of phases**	3
Voltage (V)	400/460	**Mounting**	Radial
Speed (rpm)	2925/3510	**Type of cooling fan**	Force draught
Power (kW)	5.5/7.5	**Internal Static Air Pressure Drop (Pa)**	2600
Current (A)	10.1/11.86	**Required cooling Air flow (m³/h)**	3600

Electrical Data (at 400V)

n_N rpm	P_N kW	T_N Nm	I_N A	n_1 rpm	cos ϕ	η	f_N Hz
500	138	2636	273	800	0,85	0,86	17,1
1000	270	2579	498	1600	0,86	0,91	33,7
1200	317	2523	572	1920	0,86	0,93	40,3
1500	389	2477	679	2400	0,87	0,95	50,4
1800	458	2430	800	2880	0,87	0,95	60,5
2000	477	2278	833	3200	0,87	0,95	67,1



Motor Characteristics

Degree of Protection	IP23 S	**Cooling**	IC06
Rotor Inertia J (kgm²)	5.5	**Motor weight (kg)**	1510
Maximum mechanical speed n_{max}(rpm)	3200 (4600)*	**Sound Pressure level (db(A)) at 50Hz**	84
D-End Bearing**	6224C3	**N-End bearing**	6224C3
Vibration Class	A	**Mounting**	IM1001
Insulation class	H	**Temperature rise Class**	F
Motor Nominal voltage (V)	400***	**Thermal Protection**	PTC 150°C

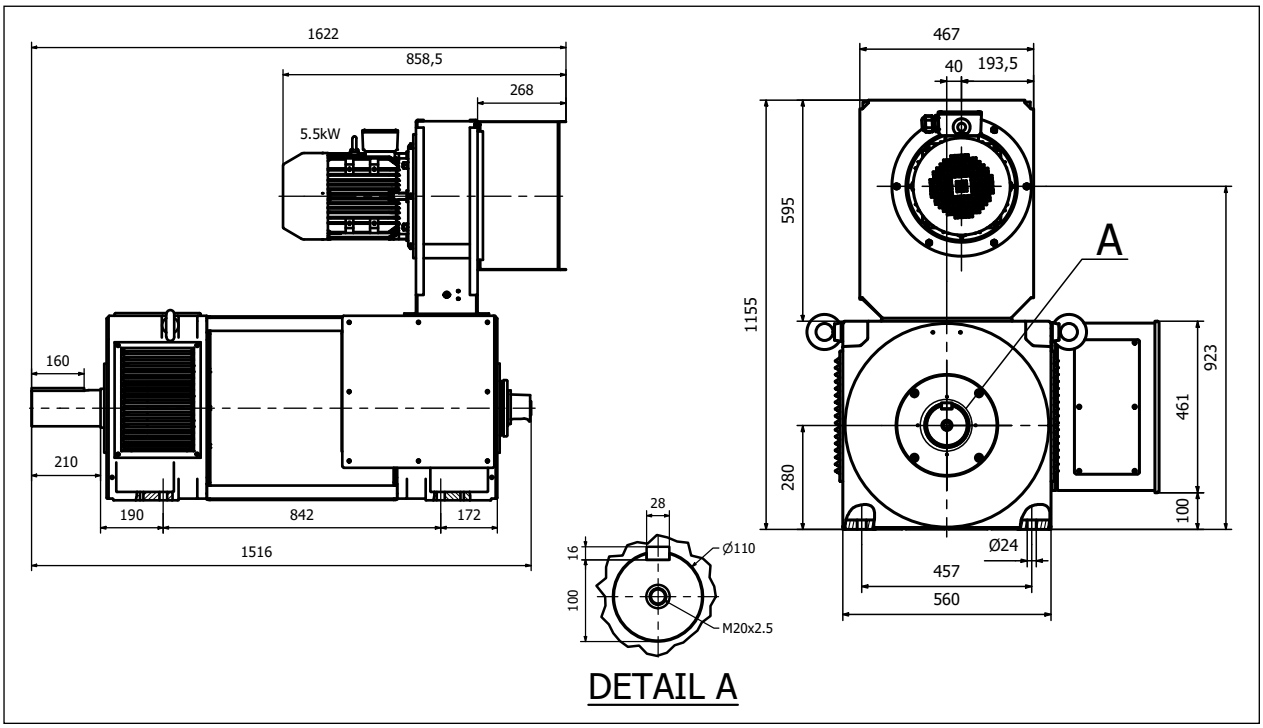
* On request (high speed option)
**Bearing protection ring recommended > 100kW
*** 690V possible on request

Blower characteristics (Voltage/frequency supply to precise in order)

Frequency (Hz)	50/60	**Number of phases**	3
Voltage (V)	400/460	**Mounting**	Radial
Speed (rpm)	2925/3510	**Type of cooling fan**	Force draught
Power (kW)	5.5/7.5	**Internal Static Air Pressure Drop (Pa)**	2600
Current (A)	10.1/11.86	**Required cooling Air flow (m³/h)**	3600

Electrical Data (at 400V)

n_N rpm	P_N kW	T_N Nm	I_N A	n_1 rpm	cos ϕ	η	f_N Hz
500	185	3534	353	800	0,87	0,87	17,1
1000	362	3457	645	1600	0,88	0,92	33,7
1200	425	3382	742	1920	0,88	0,94	40,3
1500	522	3323	892	2400	0,88	0,96	50,4
1800	612	3247	1046	2880	0,88	0,96	60,5
2000	640	3056	1093	3200	0,88	0,96	67,1



Motor Characteristics

Degree of Protection	IP23 S	**Cooling**	IC06
Rotor Inertia J (kgm²)	6.2	**Motor weight (kg)**	1800
Maximum mechanical speed n_{max}(rpm)	3200 (4200)*	**Sound Pressure level (db(A)) at 50Hz**	84
D-End Bearing**	6224C3	**N-End bearing**	6224C3
Vibration Class	A	**Mounting**	IM1001
Insulation class	H	**Temperature rise Class**	F
Motor Nominal voltage (V)	400***	**Thermal Protection**	PTC 150°C

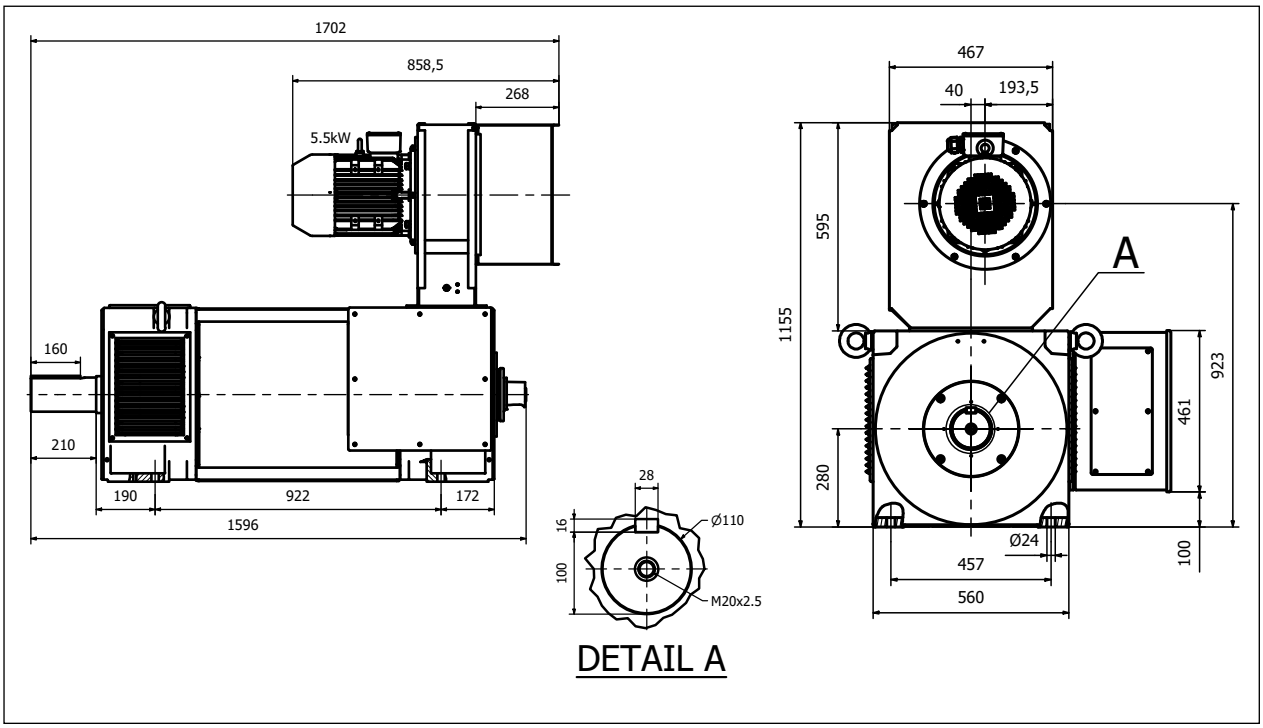
* On request (high speed option)
**Bearing protection ring recommended > 100kW
*** 690V possible on request

Blower characteristics (Voltage/frequency supply to precise in order)

Frequency (Hz)	50/60	**Number of phases**	3
Voltage (V)	400/460	**Mounting**	Radial
Speed (rpm)	2925/3510	**Type of cooling fan**	Force draught
Power (kW)	5.5/7.5	**Internal Static Air Pressure Drop (Pa)**	2600
Current (A)	10.1/11.86	**Required cooling Air flow (m³/h)**	3600

Electrical Data (at 400V)

n_N rpm	P_N kW	T_N Nm	I_N A	n_1 rpm	cos ϕ	η	f_N Hz
500	194	3705	383	800	0,84	0,87	17
1000	382	3648	705	1600	0,85	0,92	33,7
1200	449	3573	811	1920	0,85	0,94	40,3
1500	551	3508	975	2400	0,85	0,96	50,4
1800	648	3438	1146	2880	0,85	0,96	60,5
2000	676	3228	1196	3200	0,85	0,96	67,1



Motor Characteristics

Degree of Protection	IP 23 S	**Cooling**	IC06
Rotor Inertia J (kgm²	6.7	**Motor weight (kg)**	1900
Maximum mechanical speed n_{max}(rpm)	3200 (3700)*	**Sound Pressure level (db(A)) at 50 Hz**	84
D-End Bearing**	6224 C3	**N-End bearing**	6224 C3
Vibration Class	A	**Mounting**	IM1001
Insulation class	H	**Temperature rise Class**	F
Motor Nominal voltage (V)	400***	**Thermal Protection**	PTC 150°C

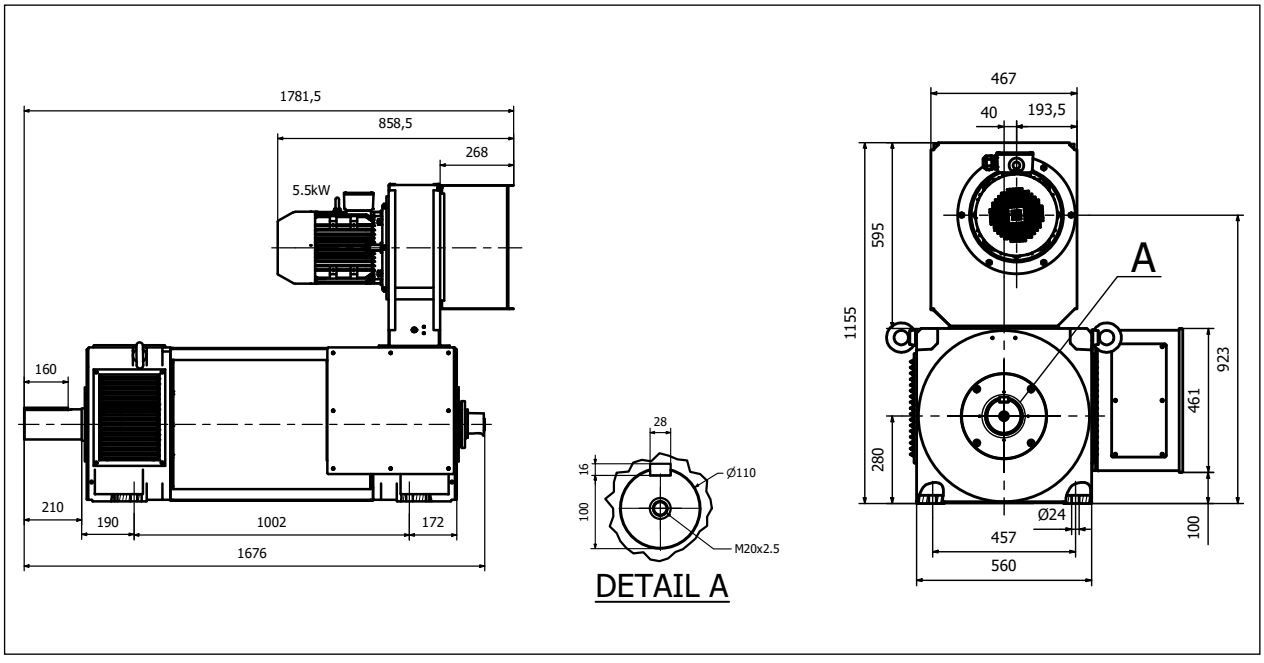
* On request (high speed option)
**Bearing protection ring recommended > 100kW
*** 690V possible on request

Blower characteristics (Voltage/frequency supply to precise in order)

Frequency (Hz)	50/60	**Number of phases**	3
Voltage (V)	400/460	**Mounting**	Radial
Speed (rpm)	2925/3510	**Type of cooling fan**	Force draught
Power (kW)	5.5/7.5	**Internal Static Air Pressure Drop (Pa)**	2600
Current (A)	10.1/11.86	**Required cooling Air flow (m³/h)**	3600

Electrical Data (at 400V)

n_N rpm	P_N kW	T_N Nm	I_N A	n_1 rpm	cos ϕ	η	f_N Hz
500	217	4145	429	800	0,85	0,86	17
1000	426	4068	786	1600	0,86	0,91	33,7
1200	502	3995	906	1920	0,86	0,93	40,3
1500	615	3916	1074	2400	0,87	0,95	50,4
1800	723	3836	1263	2880	0,87	0,95	60,5
2000	754	3600	1317	3200	0,87	0,95	67,1



Motor Characteristics

Degree of Protection	IP23 S	**Cooling**	IC06
Rotor Inertia J (kgm²)	9.30	**Motor weight (kg)**	2120
Maximum mechanical speed n_{max}(rpm)	3000 (4300)*	**Sound Pressure level (db(A)) at 50Hz**	85
D-End Bearing**	6228C3	**N-End bearing**	6228C3
Vibration Class	A	**Mounting**	IM1001
Insulation class	H	**Temperature rise Class**	F
Motor Nominal voltage (V)	400***	**Thermal Protection**	PTC 150°C

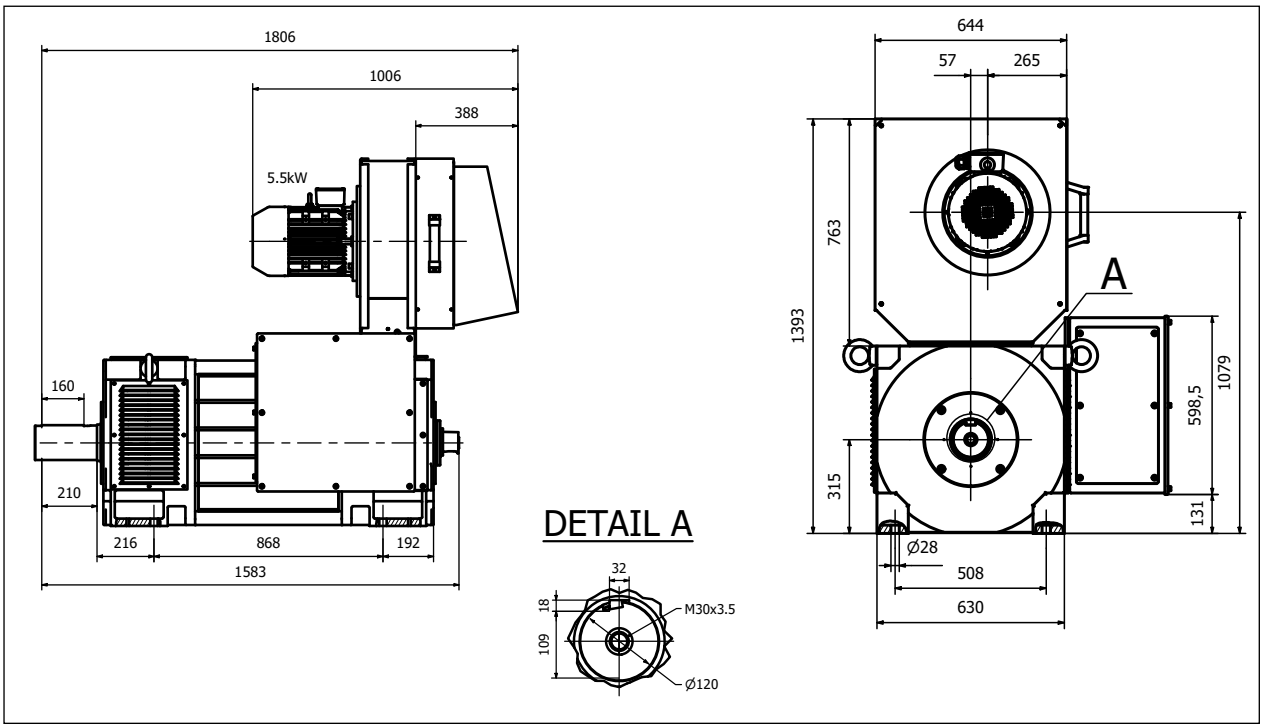
* On request (high speed option)
**Bearing protection ring recommended > 100kW
*** 690V possible on request

Blower characteristics (Voltage/frequency supply to precise in order)

Frequency (Hz)	50/60	**Number of phases**	3
Voltage (V)	400/460	**Mounting**	Radial
Speed (rpm)	2925/3510	**Type of cooling fan**	Force draught
Power (kW)	5.5/7.5	**Internal Static Air Pressure Drop (Pa)**	3500
Current (A)	10.1/11.86	**Required cooling Air flow (m³/h)**	4400

Electrical Data (at 400V)

n_N rpm	P_N kW	T_N Nm	I_N A	n_1 rpm	cos ϕ	η	f_N Hz
500	212	4049	419	800	0,85	0,86	17,1
1000	416	3973	767	1600	0,86	0,91	33,7
1200	490	3900	884	1920	0,86	0,93	40,3
1500	600	3820	1048	2400	0,87	0,95	50,4
1800	705	3740	1231	2880	0,87	0,95	60,5
2000	736	3514	1285	3200*	0,87	0,95	67,1



Motor Characteristics

Degree of Protection	IP23 S	**Cooling**	IC06
Rotor Inertia J (kgm²)	11.73	**Motor weight (kg)**	2540
Maximum mechanical speed n_{max}(rpm)	3000 (3600)*	**Sound Pressure level (db(A)) at 50Hz**	85
D-End Bearing**	6228C3	**N-End bearing**	6228C3
Vibration Class	A	**Mounting**	IM1001
Insulation class	H	**Temperature rise Class**	F
Motor Nominal voltage (V)	400***	**Thermal Protection**	PTC 150°C

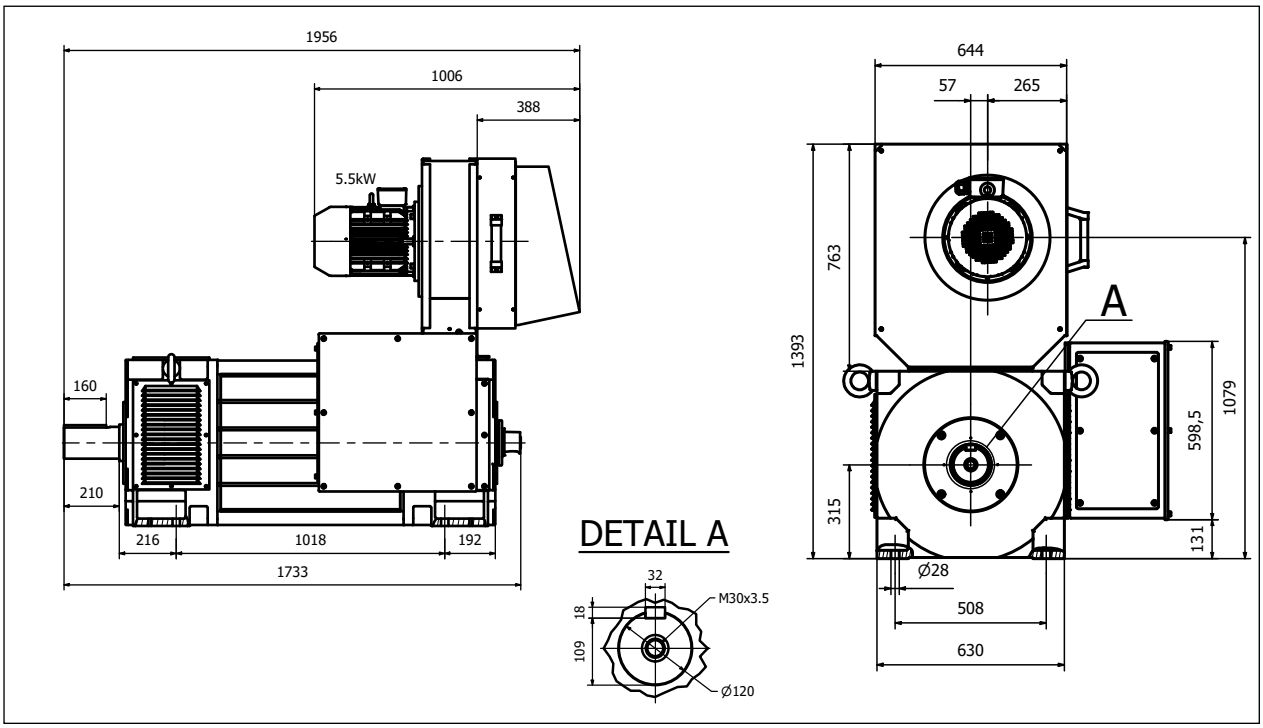
* On request (high speed option)
**Bearing protection ring recommended > 100kW
*** 690V possible on request

Blower characteristics (Voltage/frequency supply to precise in order)

Frequency (Hz)	50/60	**Number of phases**	3
Voltage (V)	400/460	**Mounting**	Radial
Speed (rpm)	2925/3510	**Type of cooling fan**	Force draught
Power (kW)	5.5/7.5	**Internal Static Air Pressure Drop (Pa)**	3500
Current (A)	10.1/11.86	**Required cooling Air flow (m³/h)**	4400

Electrical Data (at 400V)

n_N rpm	P_N kW	T_N Nm	I_N A	n_1 rpm	cos ϕ	η	f_N Hz
500	272	5195	519	800	0,87	0,87	17,1
1000	534	5100	963	1600	0,87	0,92	33,7
1200	628	4998	1108	1920	0,87	0,94	40,3
1500	770	4902	1331	2400	0,87	0,96	50,4
1800	906	4807	1566	2880	0,87	0,96	60,5
2000	945	4512	1633	3200*	0,87	0,96	67,1



Motor Characteristics

Degree of Protection	IP23 S	**Cooling**	IC06
Rotor Inertia J (kgm²)	13.6	**Motor weight (kg)**	2930
Maximum mechanical speed n_{max}(rpm)	3000	**Sound Pressure level (db(A)) at 50Hz**	85
D-End Bearing**	6228C3	**N-End bearing**	6228C3
Vibration Class	A	**Mounting**	IM1001
Insulation class	H	**Temperature rise Class**	F
Motor Nominal voltage (V)	400***	**Thermal Protection**	PTC 150°C

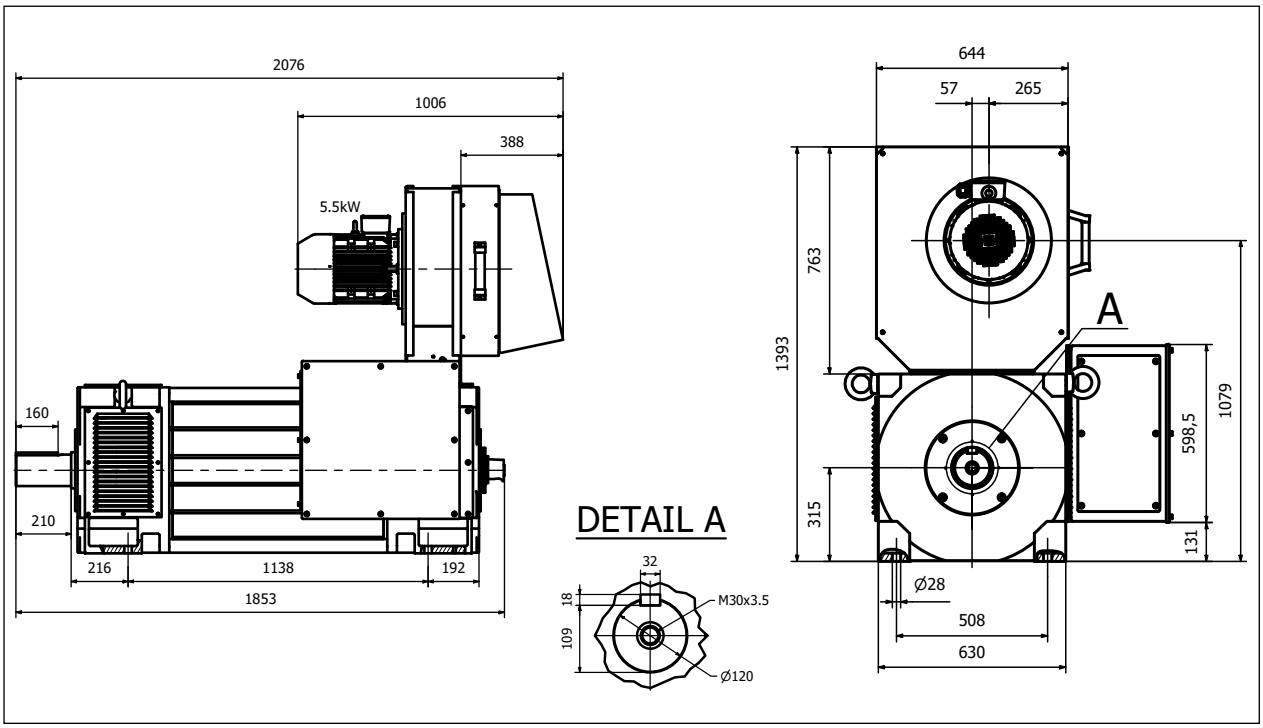
* On request (high speed option)
**Bearing protection ring recommended > 100kW
*** 690V possible on request

Blower characteristics (Voltage/frequency supply to precise in order)

Frequency (Hz)	50/60	**Number of phases**	3
Voltage (V)	400/460	**Mounting**	Radial
Speed (rpm)	2925/3510	**Type of cooling fan**	Force draught
Power (kW)	5.5/7.5	**Internal Static Air Pressure Drop (Pa)**	3500
Current (A)	10.1/11.86	**Required cooling Air flow (m³/h)**	4400

Electrical Data (at 400V)

n_N rpm	P_N kW	T_N Nm	I_N A	n_1 rpm	cos ϕ	η	f_N Hz
500	318	6074	628	800	0,84	0,87	17
1000	624	5959	1152	1600	0,85	0,92	33,7
1200	734	5841	1326	1920	0,85	0,94	40,3
1500	900	5730	1573	2400	0,86	0,96	50,4
1800	1058	5613	1850	2600	0,86	0,96	60,5
2000	1104	5272	1930	2600	0,86	0,96	67,1



Motor Characteristics

Degree of Protection	IP 23 S	**Cooling**	IC06
Rotor Inertia J (kgm²	16.5	**Poids moteur (kg)**	3100
Maximum mechanical speed n_{max}(rpm)	2600	**Sound Pressure level (db(A)) at 50 Hz**	85
D-End Bearing**	6228 C3	**N-End bearing**	6228 C3
Vibration Class	A	**Mounting**	IM1001
Insulation class	H	**Temperature rise Class**	F
Motor Nominal voltage (V)	400***	**Thermal Protection**	PTC 150°C

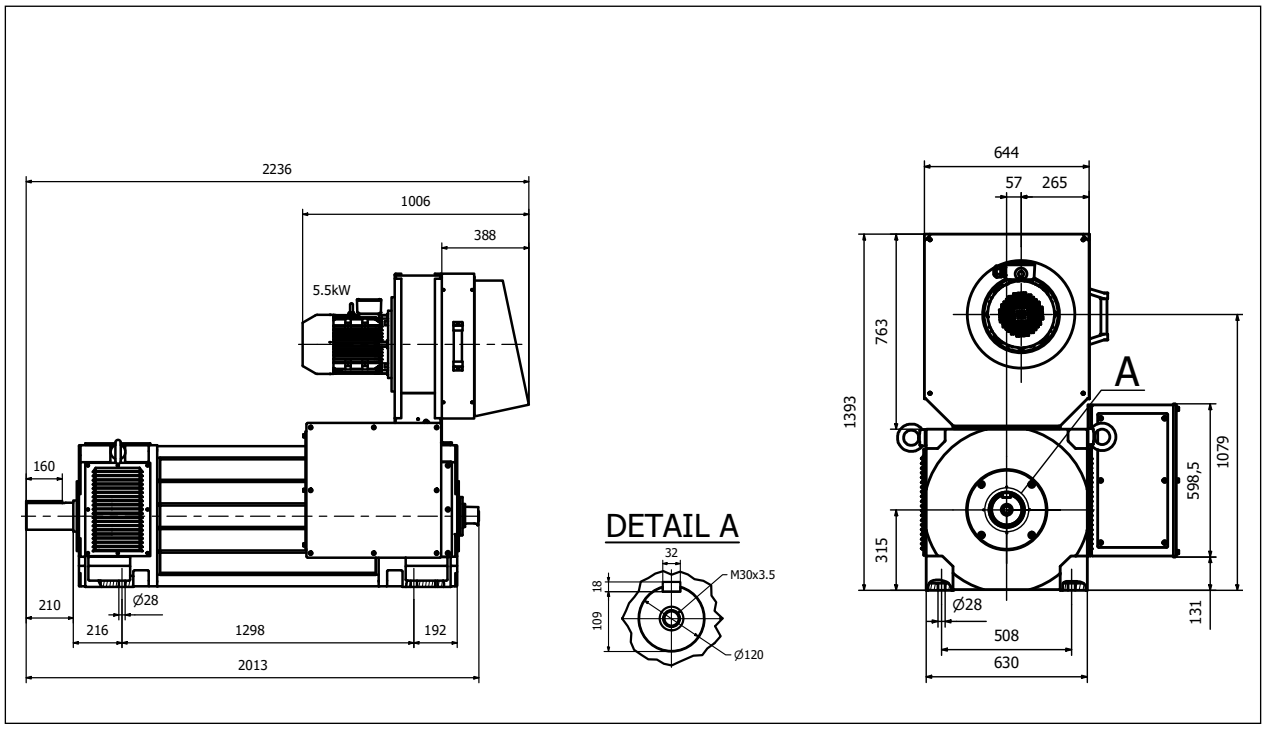
* On request (high speed option)
**Bearing protection ring recommended > 100kW
*** 690V possible on request

Blower characteristics (Voltage/frequency supply to precise in order)

Frequency (Hz)	50/60	**Number of phases**	3
Voltage (V)	400/460	**Mounting**	Radial
Speed (rpm)	2925/3510	**Type of cooling fan**	Force draught
Power (kW)	5.5/7.5	**Internal Static Air Pressure Drop (Pa)**	2600
Current (A)	10.1/11.86	**Required cooling Air flow (m³/h)**	3600

Electrical Data (at 400V)

n_N rpm	P_N kW	T_N Nm	I_N A	n_1 rpm	cos ϕ	η	f_N Hz
500	382	7296	755	800	0,84	0,87	17
1000	750	7163	1384	1600	0,85	0,92	33,7
1200	881	7011	1592	1920	0,85	0,94	40,3
1500	1080	6876	1888	2400	0,86	0,96	50,4
1800	1270	6738	2220	2600	0,86	0,96	60,5
2000	1325	6327	2317	2600	0,86	0,96	67,1



Motor Characteristics

Degree of Protection	IP23 S	**Cooling**	IC06
Rotor Inertia J (kgm²)	13.36	**Motor weight (kg)**	2050
Maximum mechanical speed n_{max}(rpm)	2800 (4200)*	**Sound Pressure level (db(A)) at 50 Hz**	86
D-End Bearing**	6230 C3	**N-End bearing**	6230 C3
Vibration Class	A	**Mounting**	IM1001
Insulation class	H	**Temperature rise Class**	F
Motor Nominal voltage (V)	400***	**Thermal Protection**	PTC 150°C

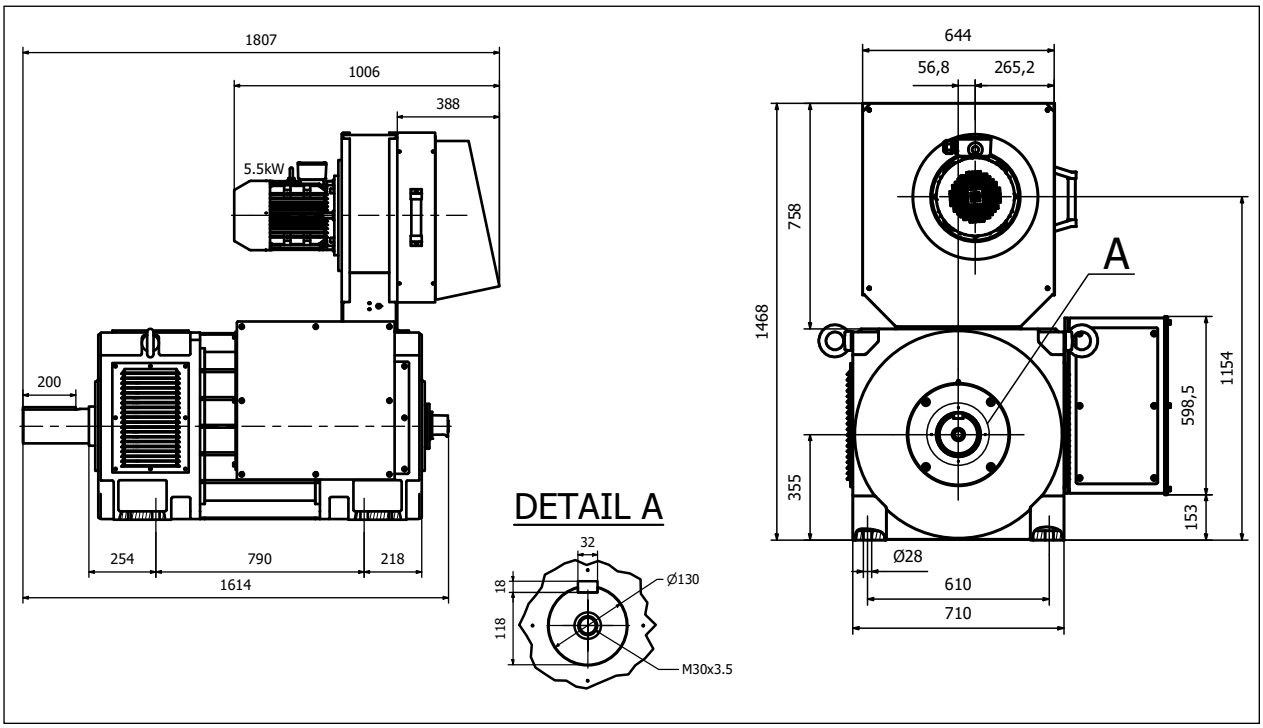
* On request (high speed option)
** Insulated bearing or similar solution recommended above 100 kW
*** 690V possible on request

Blower characteristics (Voltage/frequency supply to precise in order)

Frequency (Hz)	50/60	**Number of phases**	3
Voltage (V)	400/460	**Mounting**	Radial
Speed (rpm)	2925/1752	**Type of cooling fan**	Force draught
Power (kW)	5.5/11	**Internal Static Air Pressure Drop (Pa)**	3300
Current (A)	10.1/17.05	**Required cooling Air flow (m³/h)**	4700

Electrical Data (at 400V)

n_N rpm	P_N kW	T_N Nm	I_N A	n_1 rpm	cos ϕ	η	f_N Hz
500	233	4450	471	800	0,86	0,83	17
1000	457	4364	824	1600	0,87	0,92	33,6
1200	538	4282	950	1920	0,87	0,94	40,2
1500	659	4196	1126	2400	0,88	0,96	50,3
1800	774	4107	1322	2880*	0,88	0,96	60,4
2000	808	3858	1381	3200*	0,88	0,96	66,9



Motor Characteristics

Degree of Protection	IP23 S	**Cooling**	IC06
Rotor Inertia J (kgm²)	17.63	**Motor weight (kg)**	2560
Maximum mechanical speed n_{max}(rpm)	2800 (4200)*	**Sound Pressure level (db(A)) at 50 Hz**	86
D-End Bearing**	6230 C3	**N-End bearing**	6230 C3
Vibration Class	A	**Mounting**	IM1001
Insulation class	H	**Temperature rise Class**	F
Motor Nominal voltage (V)	400***	**Thermal Protection**	PTC 150°C

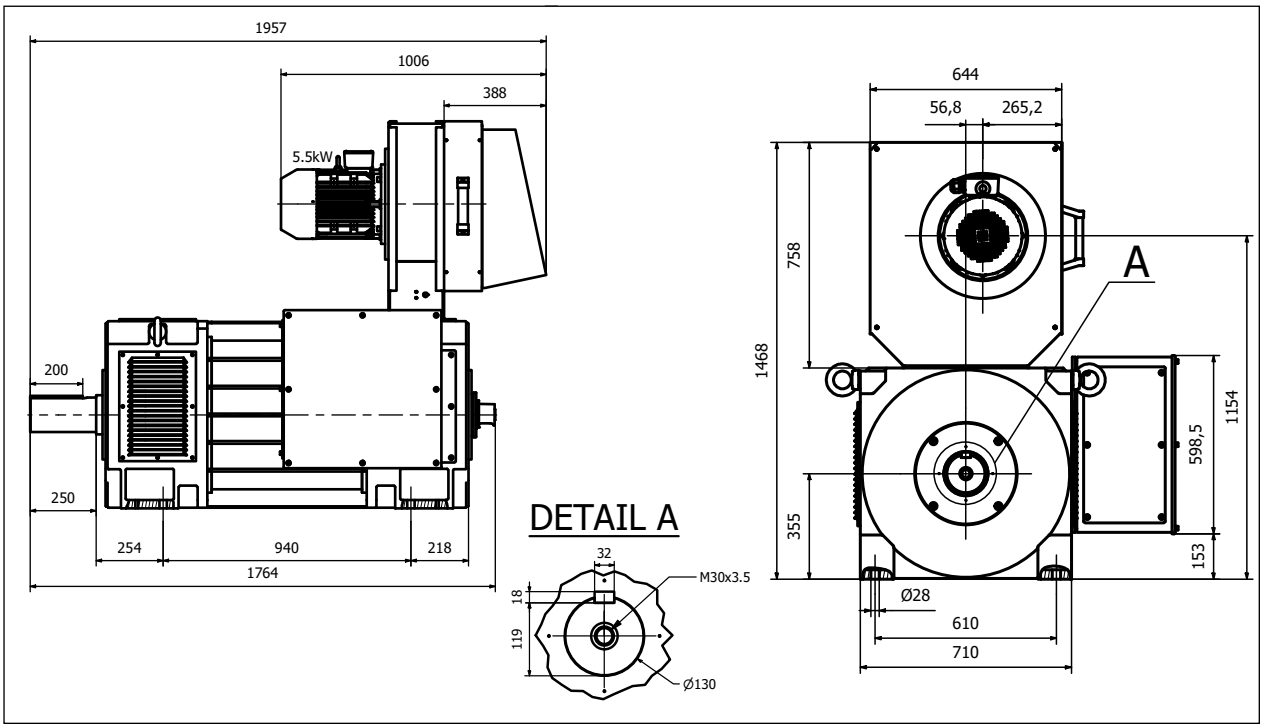
* On request (high speed option)
** Insulated bearing or similar solution recommended above 100 kW
*** 690V possible on request

Blower characteristics (Voltage/frequency supply to precise in order)

Frequency (Hz)	50/60	**Number of phases**	3
Voltage (V)	400/460	**Mounting**	Radial
Speed (rpm)	2925/1752	**Type of cooling fan**	Force draught
Power (kW)	5.5/11	**Internal Static Air Pressure Drop (Pa)**	3300
Current (A)	10.1/17.05	**Required cooling Air flow (m³/h)**	4700

Electrical Data (at 400V)

n_N rpm	P_N kW	T_N Nm	I_N A	n_1 rpm	cos ϕ	η	f_N Hz
500	297	5669	607	800	0,85	0,83	17
1000	582	5562	1062	1600	0,86	0,92	33,6
1200	685	5451	1209	1920	0,87	0,94	40,2
1500	840	5348	1452	2400	0,87	0,96	50,3
1800	988	5242	1707	2880*	0,87	0,96	60,4
2000	1030	4920	1781	3200*	0,87	0,96	66,9



Motor Characteristics

Degree of Protection	IP23 S	**Cooling**	IC06
Rotor Inertia J (kgm²)	20.49	**Motor weight (kg)**	2900
Maximum mechanical speed n_{max}(rpm)	2800 (3600)*	**Sound Pressure level (db(A)) at 50 Hz**	86
D-End Bearing**	6230 C3	**N-End bearing**	6230 C3
Vibration Class	A	**Mounting**	IM1001
Insulation class	H	**Temperature rise Class**	F
Motor Nominal voltage (V)	400***	**Thermal Protection**	PTC 150°C

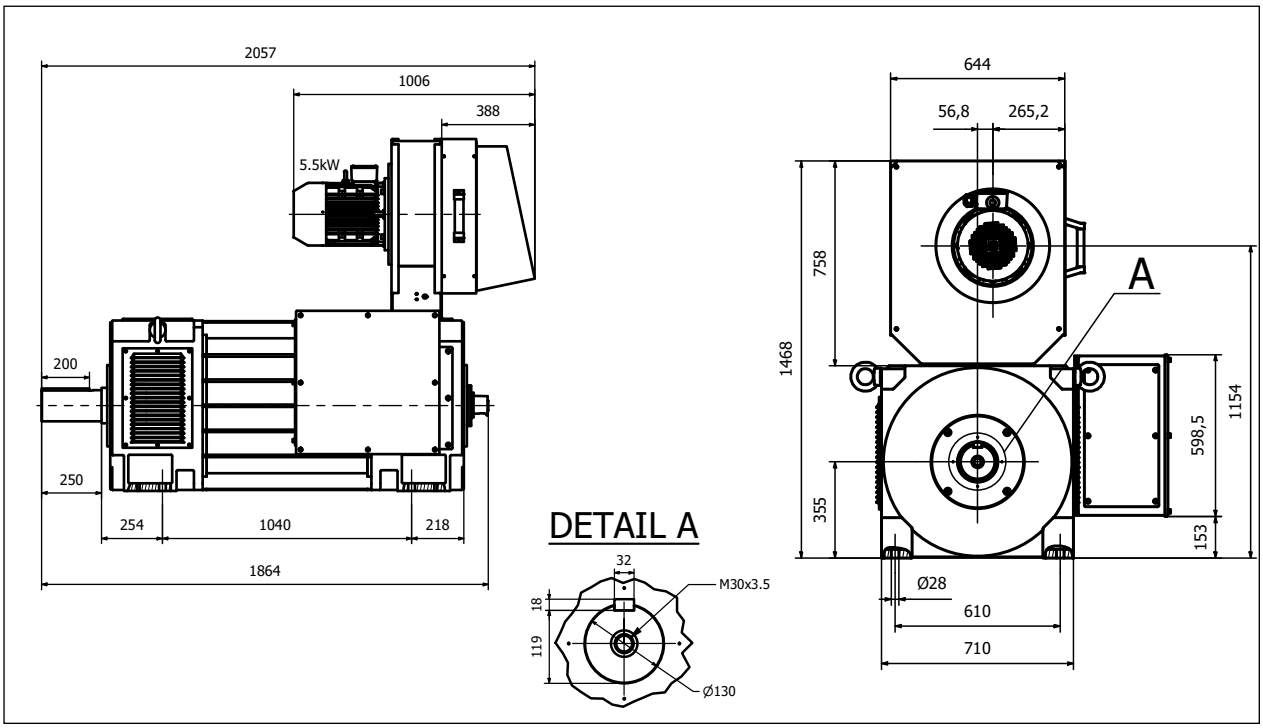
* On request (high speed option)
** Insulated bearing or similar solution recommended above 100 kW
*** 690V possible on request

Blower characteristics (Voltage/frequency supply to precise in order)

Frequency (Hz)	50/60	**Number of phases**	3
Voltage (V)	400/460	**Mounting**	Radial
Speed (rpm)	2925/1752	**Type of cooling fan**	Force draught
Power (kW)	5.5/11	**Internal Static Air Pressure Drop (Pa)**	3300
Current (A)	10.1/17.05	**Required cooling Air flow (m³/h)**	4700

Electrical Data (at 400V)

n_N rpm	P_N kW	T_N Nm	I_N A	n_1 rpm	cos ϕ	η	f_N Hz
500	353	6749	723	800	0,85	0,83	17
1000	693	6618	1265	1600	0,86	0,92	33,6
1200	816	6494	1457	1920	0,86	0,94	40,2
1500	1000	6367	1728	2400	0,87	0,96	50,3
1800	1176	6239	2032	2880*	0,87	0,96	60,4
2000	1227	5857	2120	3200*	0,87	0,96	66,9



Motor Characteristics

Degree of Protection	IP23 S	**Cooling**	IC06
Rotor Inertia J (kgm²)	25,68	**Motor weight (kg)**	3525
Maximum mechanical speed n_{max}(rpm)	2700	**Sound Pressure level (db(A)) at 50 Hz**	86
D-End Bearing**	6230 C3	**N-End bearing**	6230 C3
Vibration Class	A	**Mounting**	IM1001
Insulation class	H	**Temperature rise Class**	F
Motor Nominal voltage (V)	400	**Thermal Protection**	PTC 150°C

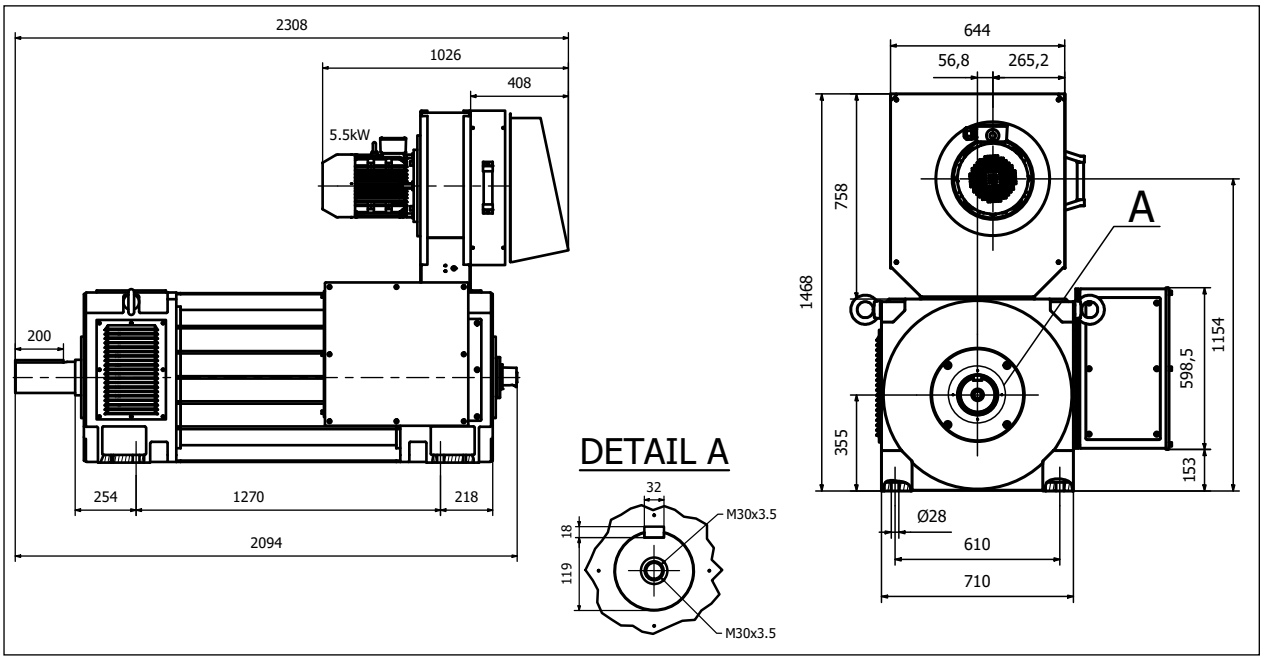
* On request (high speed option)
** Insulated bearing or similar solution recommended above 100 kW
*** 690V possible on request

Blower characteristics (Voltage/frequency supply to precise in order)

Frequency (Hz)	50/60	**Number of phases**	3
Voltage (V)	400/460	**Mounting**	Radial
Speed (rpm)	2925/1752	**Type of cooling fan**	Force draught
Power (kW)	5.5/15	**Internal Static Air Pressure Drop (Pa)**	3300
Current (A)	10.1/23.25	**Required cooling Air flow (m³/h)**	4700

Electrical Data (at 400V)

n_N rpm	P_N kW	T_N Nm	I_N A	n_1 rpm	cos ϕ	η	f_N Hz
500	459	8773	940	800	0,85	0,83	17
1000	901	8608	1644	1600	0,86	0,92	33,6
1200	1061	8442	1894	1920	0,86	0,94	40,2
1500	1300	8277	2247	2400	0,87	0,96	50,3
1800	1529	8111	2642	2700	0,87	0,96	60,4
2000	1595	7615	2756	2700	0,87	0,96	66,9



Motor Characteristics

Degree of Protection	IP23 S	**Cooling**	IC06
Rotor Inertia J (kgm²)	34,16	**Motor weight (kg)**	4485
Maximum mechanical speed n_{max}(rpm)	2000	**Sound Pressure level (db(A)) at 50 Hz**	86
D-End Bearing**	6230 C3	**N-End bearing**	6230 C3
Vibration Class	A	**Mounting**	IM1001
Insulation class	H	**Temperature rise Class**	F
Motor Nominal voltage (V)	400	**Thermal Protection**	PTC 150°C

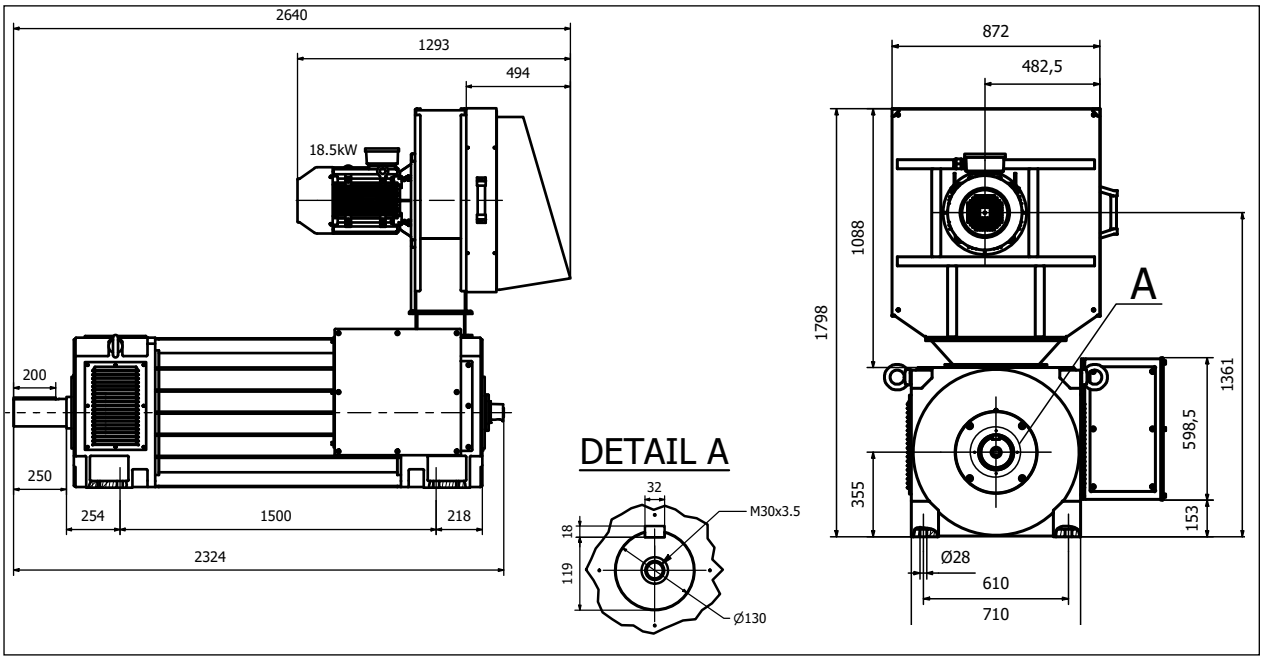
* On request (high speed option)
** Insulated bearing or similar solution recommended above 100 kW
*** 690V possible on request

Blower characteristics (Voltage/frequency supply to precise in order)

Frequency (Hz)	50/60	**Number of phases**	3
Voltage (V)	400/460	**Mounting**	Radial
Speed (rpm)	2925/1752	**Type of cooling fan**	Force draught
Power (kW)	18.5/22	**Internal Static Air Pressure Drop (Pa)**	3300
Current (A)	28.45/34.2	**Required cooling Air flow (m³/h)**	4700

Electrical Data (at 400V)

n_N rpm	P_N kW	T_N Nm	I_N A	n_1 rpm	cos ϕ	η	f_N Hz
500	565	10798	1157	800	0,85	0,83	17
1000	1109	10594	2024	1600	0,86	0,92	33,6
1200	1306	10390	2331	1920	0,86	0,94	40,2
1500	1600	10187	2765	2000	0,87	0,96	50,3



Motor Characteristics

Degree of Protection	IP55	**Cooling**	IC416
Rotor Inertia J (kgm²)	0.08	**Motor weight (kg)**	170
Maximum mechanical speed n_{max}(rpm)	4300 (6700)*	**Sound Pressure level (db(A)) at 50 Hz**	74
D-End Bearing	6310 2RSC3	**N-End bearing**	6310 2RSC3
Vibration Class	A	**Mounting**	IM1001**
Insulation class	H	**Temperature rise Class**	F
Motor Nominal voltage (V)	400	**Thermal Protection**	PTC 150°C

* On request (high speed option)
** IM2001 for axial ventilation

IP54 version, Axial ventilation, Fan characteristics

Frequency (Hz)	50/60	**Number of phases**	1
Voltage (V)	230	**Mounting**	Axial
Speed (rpm)	2607/3130	**Type of cooling fan**	Induced draught
Power (kW)	0.26/0.25		
Current (A)	1.18/1.15		

IP55 version, Axial or radial ventilation, Fan characteristics

(Voltage/frequency supply to precise in order)

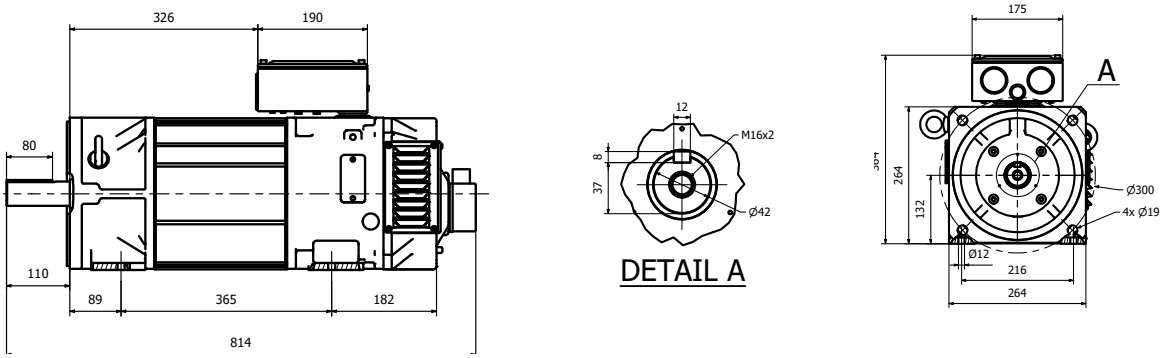
Frequency (Hz)	50/60	**Number of phases**	3
Voltage (V)	400/460	**Mounting**	Radial
Speed (rpm)	2800/3360	**Type of cooling fan**	Force draught
Power (kW)	0.55/0.55	**Internal Static Air Pressure Drop (Pa)**	500
Current (A)	1.4/1.22	**Required cooling Air flow (m³/h)**	400

Electrical Data (at 400V)

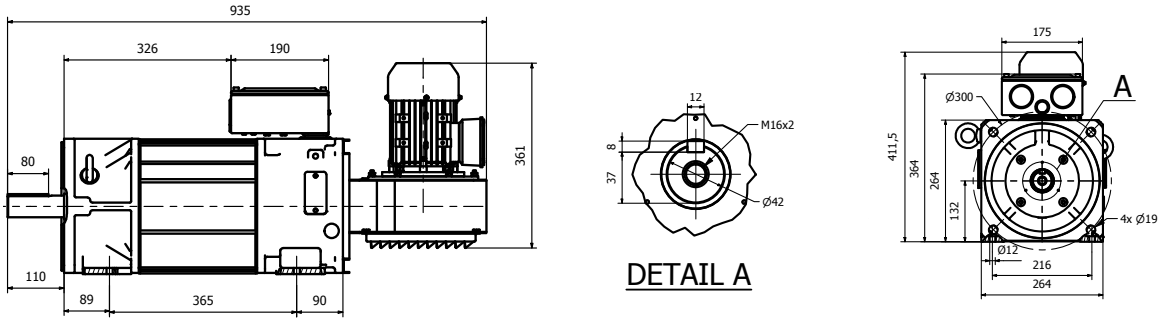
n_N rpm	P_N kW	T_N Nm	I_N A	n_1 rpm	cos ϕ	η	f_N Hz
500	7	134	15	1000	0,81	0,85	18.6
1000	13	126	26	2000	0,82	0,88	35
1200	15	119	30	2400	0,82	0,89	41,5
1500	19	121	37	3000	0,83	0,9	52
1800	22	117	43	3600	0,83	0,9	62
2000	23	110	43	4000	0,84	0,91	68.3
2400	25	99	47	4300	0,85	0,91	83
3000	27	86	49	5000*	0,87	0,92	101.8

* with AMP160 blower characteristics IP55 only drawing on request.

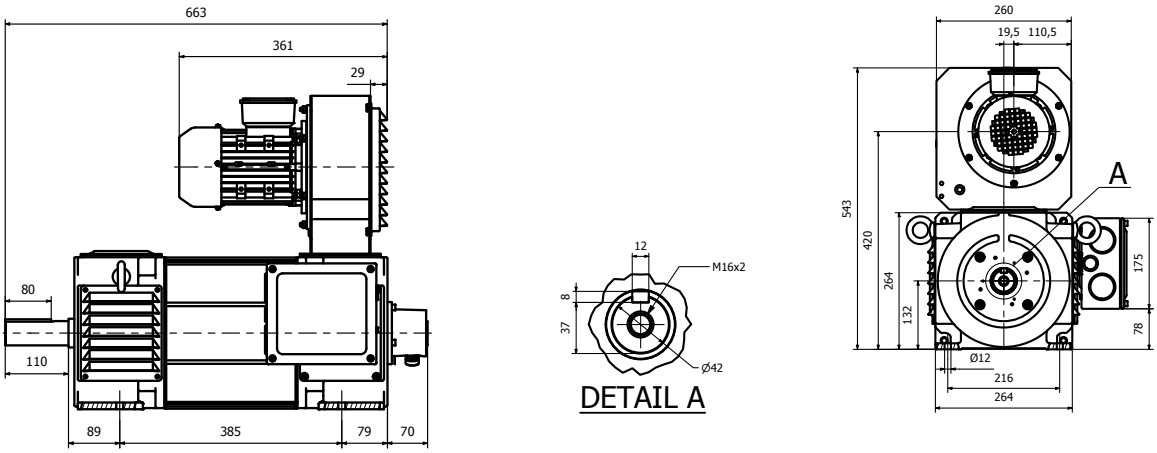
IP54 version, axial ventilation



IP55 version, axial ventilation



IP55 version, radial ventilation



Motor Characteristics

Degree of Protection	IP55	**Cooling**	IC416
Rotor Inertia J (kgm²)	0.09	**Motor weight (kg)**	180
Maximum mechanical speed n_{max}(rpm)	4300 (6700)*	**Sound Pressure level (db(A)) at 50 Hz**	74
D-End Bearing	6310 2RSC3	**N-End bearing**	6310 2RSC3
Vibration Class	A	**Mounting**	IM1001**
Insulation class	H	**Temperature rise Class**	F
Motor Nominal voltage (V)	400	**Thermal Protection**	PTC 150°C

* On request (high speed option)
** IM2001 for axial ventilation

IP54 version, Axial ventilation, Fan characteristics

Frequency (Hz)	50/60	**Number of phases**	1
Voltage (V)	230	**Mounting**	Axial
Speed (rpm)	2607/3130	**Type of cooling fan**	Induced draught
Power (kW)	0.26/0.25		
Current (A)	1.18/1.15		

IP55 version, Axial or radial ventilation, Fan characteristics

(Voltage/frequency supply to precise in order)

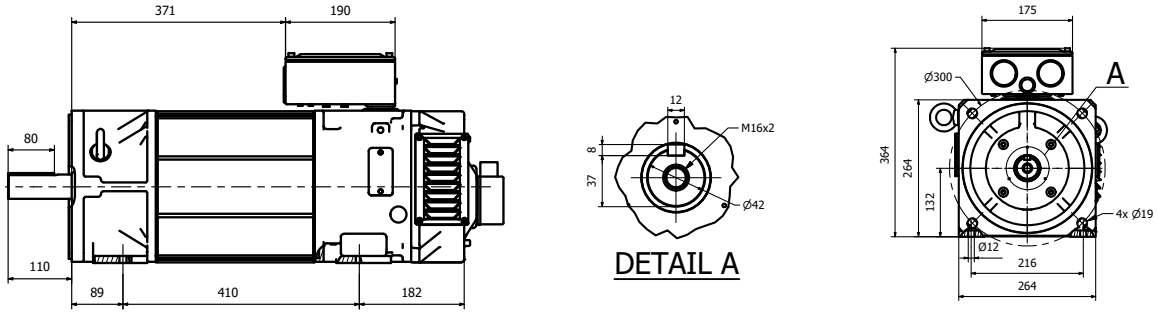
Frequency (Hz)	50/60	**Number of phases**	3
Voltage (V)	400/460	**Mounting**	Radial
Speed (rpm)	2800/3360	**Type of cooling fan**	Force draught
Power (kW)	0.55/0.55	**Internal Static Air Pressure Drop (Pa)**	500
Current (A)	1.4/1.22	**Required cooling Air flow (m³/h)**	400

Electrical Data (at 400V)

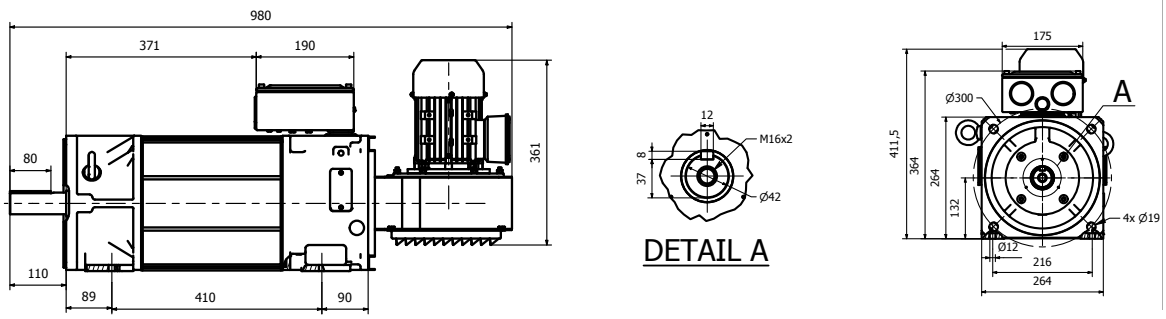
n_N rpm	P_N kW	T_N Nm	I_N A	n_1 rpm	cos ϕ	η	f_N Hz
500	8	148	17	1000	0,79	0,86	19
1000	15	143	30	2000	0,8	0,89	35,7
1200	18	143	36	2400	0,8	0,9	41,8
1500	22	140	43	3000	0,81	0,91	52,4
1800	26	138	51	3600	0,81	0,91	62
2000	27	129	52	4000	0,82	0,92	68,7
2400	29	115	55	4300	0,83	0,92	83,2
***3000**	31	99	57	5000*	0,85	0,93	102,4

* with AMP 160 blower characteristics IP55 only drawing on request

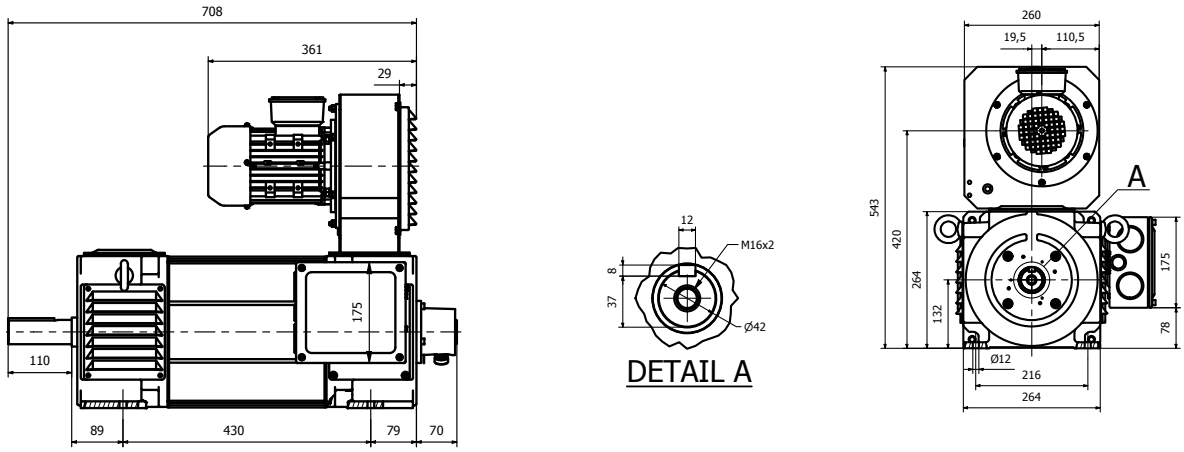
IP54 version, axial ventilation



IP55 version, axial ventilation



IP55 version, radial ventilation



Motor Characteristics

Degree of Protection	IP55	**Cooling**	IC416
Rotor Inertia J (kgm²)	0.11	**Motor weight (kg)**	205
Maximum mechanical speed n_{max}(rpm)	4300 (6700)*	**Sound Pressure level (db(A)) at 50 Hz**	74
D-End Bearing	6310 2RSC3	**N-End bearing**	6310 2RSC3
Vibration Class	A	**Mounting**	IM1001**
Insulation class	H	**Temperature rise Class**	F
Motor Nominal voltage (V)	400	**Thermal Protection**	PTC 150°C

* On request (high speed option)
** IM2001 for axial ventilation

IP54 version, Axial ventilation, Fan characteristics

Frequency (Hz)	50/60	**Number of phases**	1
Voltage (V)	230	**Mounting**	Axial
Speed (rpm)	2607/3130	**Type of cooling fan**	Induced draught
Power (kW)	0.26/0.25		
Current (A)	1.18/1.15		

IP55 version, Axial or radial ventilation, Fan characteristics

(Voltage/frequency supply to precise in order)

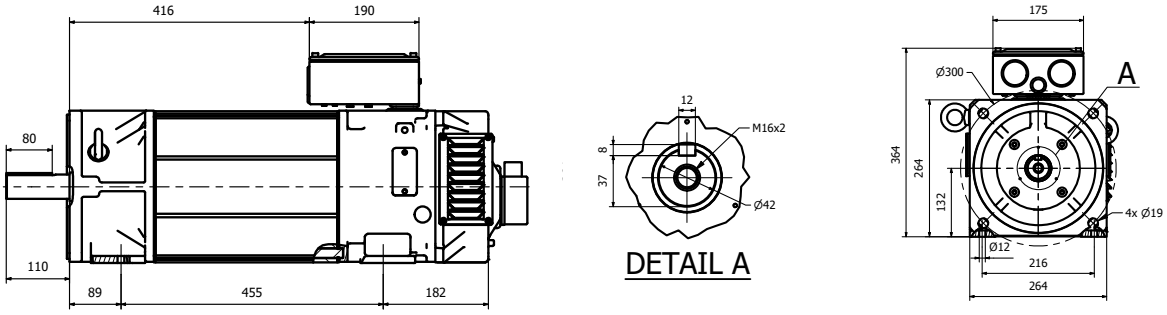
Frequency (Hz)	50/60	**Number of phases**	3
Voltage (V)	400/460	**Mounting**	Radial
Speed (rpm)	2800/3360	**Type of cooling fan**	Force draught
Power (kW)	0.55/0.55	**Internal Static Air Pressure Drop (Pa)**	500
Current (A)	1.4/1.22	**Required cooling Air flow (m³/h)**	400

Electrical Data (at 400V)

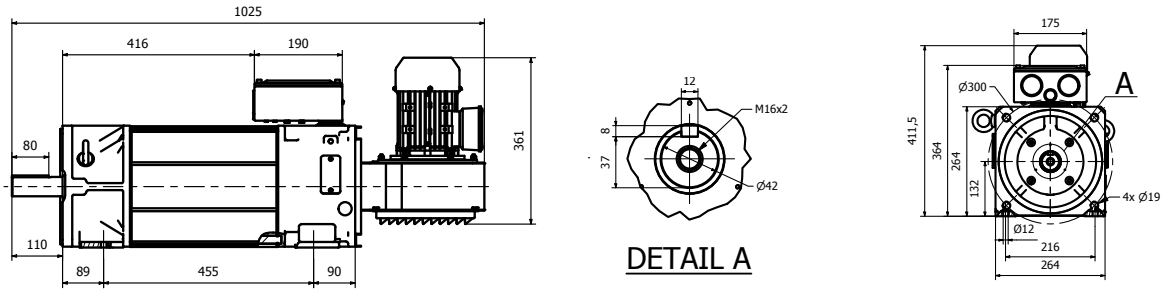
n_N rpm	P_N kW	T_N Nm	I_N A	n_1 rpm	cos ϕ	η	f_N Hz
500	9	175	19	1000	0,81	0,86	18,3
1000	18	172	36	2000	0,82	0,89	35,1
1200	21	167	41	2400	0,82	0,9	41,4
1500	26	166	50	3000	0,83	0,91	51,8
1800	30	159	57	3600	0,83	0,91	62
2000	32	152	60	4000	0,84	0,92	68,4
2400	34	135	63	4300	0,85	0,92	82,8
***3000**	30	115	64	5000*	0,87	0,93	101,7

* with AMP 160 blower characteristics IP55 only drawing on request

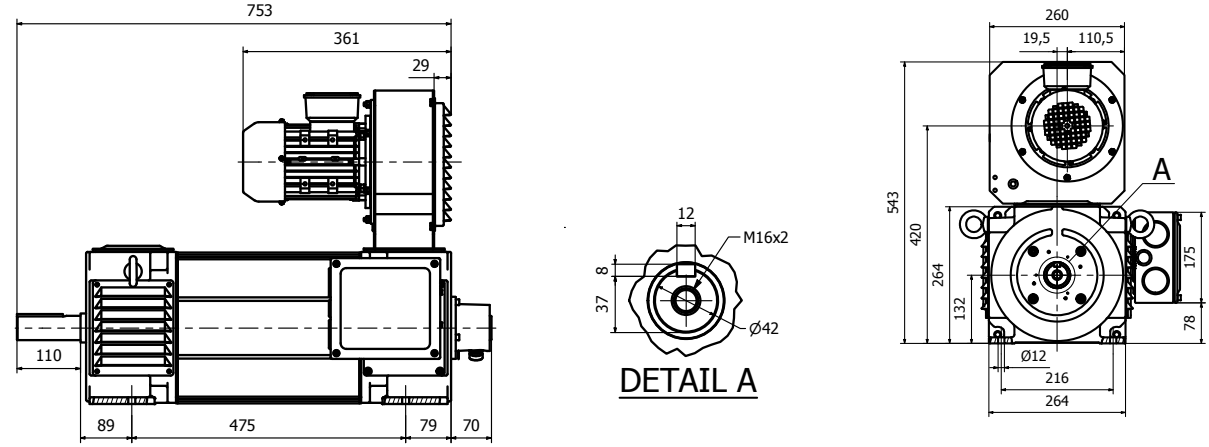
IP54 version, axial ventilation



IP55 version, axial ventilation



IP55 version, radial ventilation



Motor Characteristics

Degree of Protection	IP55	**Cooling**	IC416
Rotor Inertia J (kgm²)	0.24	**Motor weight (kg)**	295
Maximum mechanical speed n_{max}(rpm)	3400 (5600)*	**Sound Pressure level (db(A)) at 50 Hz**	76
D-End Bearing	6312 2RSC3	**N-End bearing**	6312 2RSC3
Vibration Class	A	**Mounting**	IM1001**
Insulation class	H	**Temperature rise Class**	F
Motor Nominal voltage (V)	400	**Thermal Protection**	PTC 150°C

* On request (high speed option)
** IM2001 for axial ventilation

IP54 version, Axial ventilation, Fan characteristics

Frequency (Hz)	50/60	**Number of phases**	3
Voltage (V)	400/460	**Mounting**	Axial
Speed (rpm)	2480/3050	**Type of cooling fan**	Induced draught
Power (kW)	0.79/0.9		
Current (A)	1.3/1.3		

IP55 version, Axial or radial ventilation, Fan characteristics

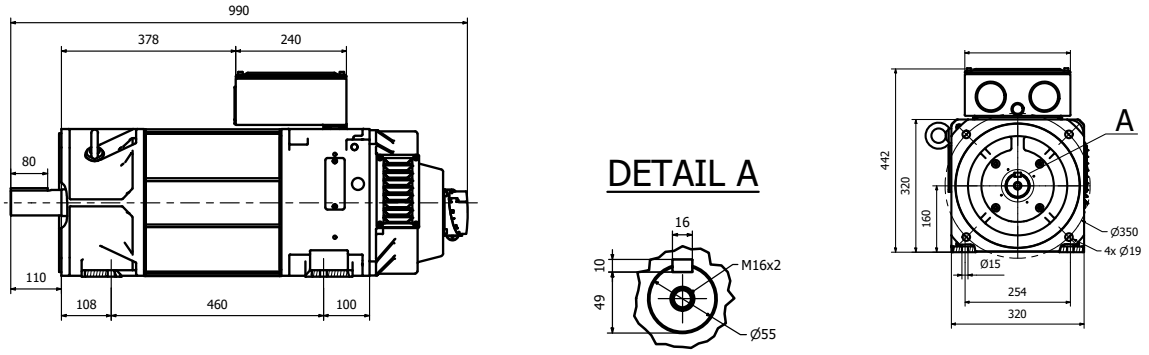
(Voltage/frequency supply to precise in order)

Frequency (Hz)	50/60	**Number of phases**	3
Voltage (V)	400/460	**Mounting**	Radial
Speed (rpm)	2885/3462	**Type of cooling fan**	Force draught
Power (kW)	0.75/0.75	**Internal Static Air Pressure Drop (Pa)**	850
Current (A)	1.64/1.49	**Required cooling Air flow (m³/h)**	900

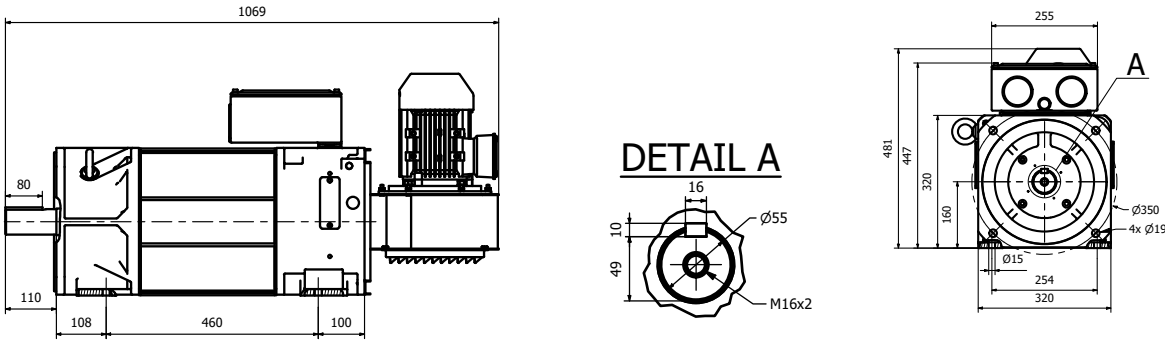
Electrical Data (at 400V)

n_N rpm	P_N kW	T_N Nm	I_N A	n_1 rpm	cos ϕ	η	f_N Hz
500	12	236	26	1000	0,77	0,88	18
1000	24	232	49	2000	0,78	0,91	34,7
1200	29	231	58	2400	0,78	0,92	41,1
1500	35	223	69	3000	0,79	0,93	51,4
1800	41	218	81	3600*	0,79	0,93	61,6
2000	43	205	82	4000*	0,8	0,94	68
2400	46	183	87	4300*	0,81	0,94	82,2
3000	49	156	90	4800*	0,83	0,95	101,4

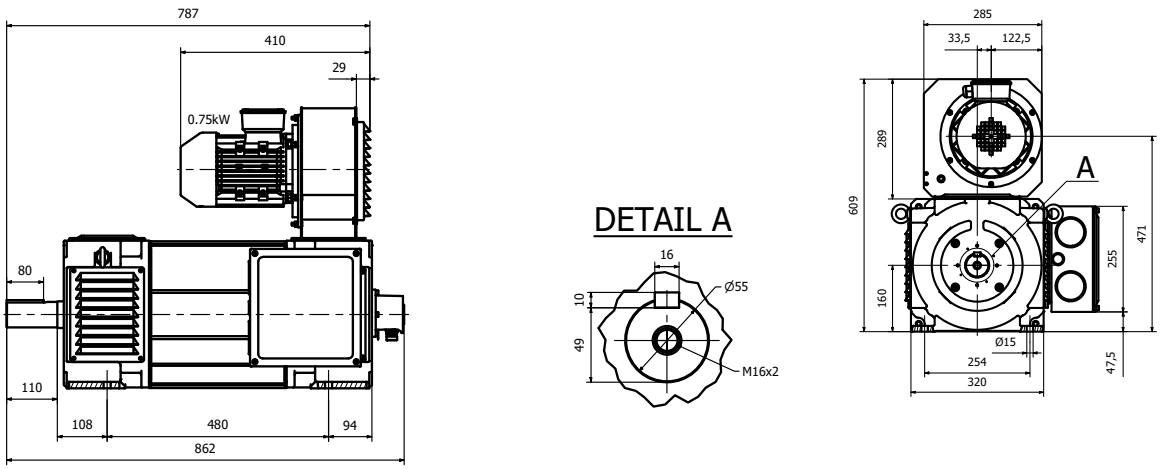
IP54 version, axial ventilation



IP55 version, axial ventilation



IP55 version, radial ventilation



Motor Characteristics

Degree of Protection	IP55	**Cooling**	IC416
Rotor Inertia J (kgm²)	0.29	**Motor weight (kg)**	340
Maximum mechanical speed n_{max}(rpm)	3400 (5600)*	**Sound Pressure level (db(A)) at 50 Hz**	76
D-End Bearing	6312 2RSC3	**N-End bearing**	6312 2RSC3
Vibration Class	A	**Mounting**	IM1001**
Insulation class	H	**Temperature rise Class**	F
Motor Nominal voltage (V)	400	**Thermal Protection**	PTC 150°C

* On request (high speed option)
** IM2001 for axial ventilation

IP54 version, Axial ventilation, Fan characteristics

Frequency (Hz)	50/60	**Number of phases**	3
Voltage (V)	400/460	**Mounting**	Axial
Speed (rpm)	2480/3050	**Type of cooling fan**	Induced draught
Power (kW)	0.79/0.9		
Current (A)	1.3/1.3		

IP55 version, Axial or radial ventilation, Fan characteristics

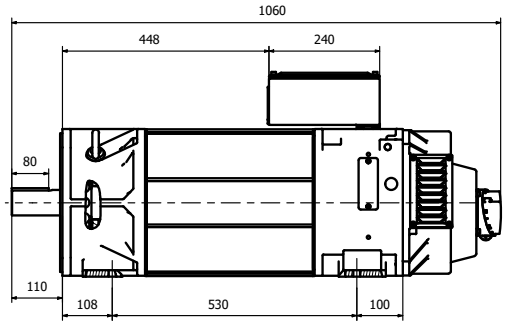
(Voltage/frequency supply to precise in order)

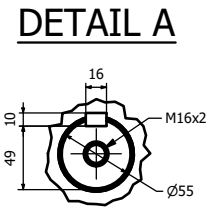
Frequency (Hz)	50/60	**Number of phases**	3
Voltage (V)	400/460	**Mounting**	Radial
Speed (rpm)	2885/3462	**Type of cooling fan**	Force draught
Power (kW)	0.75/0.75	**Internal Static Air Pressure Drop (Pa)**	850
Current (A)	1.64/1.49	**Required cooling Air flow (m³/h)**	900

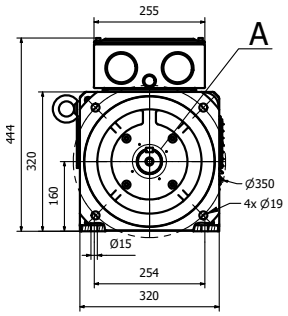
Electrical Data (at 400V)

n_N rpm	P_N kW	T_N Nm	I_N A	n_1 rpm	cos ϕ	η	f_N Hz
500	15	283	30	1000	0,79	0,89	17,7
1000	29	278	57	2000	0,8	0,92	34,4
1200	34	271	66	2400	0,8	0,93	40,8
1500	42	267	80	3000	0,81	0,94	51,1
1800	49	260	93	3600*	0,81	0,94	61,3
2000	52	246	95	4000*	0,82	0,95	67,7
2400	56	223	103	4300*	0,83	0,95	81,7
3000	59	187	104	4800*	0,85	0,96	101,1

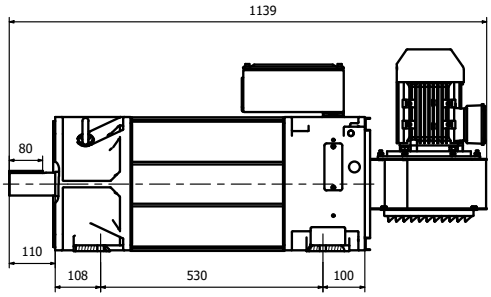
IP54 version, axial ventilation

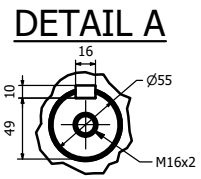


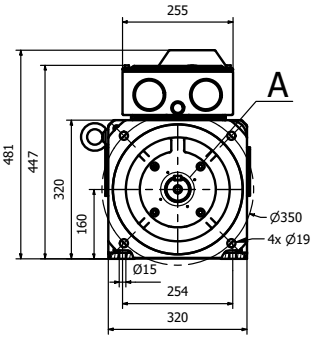




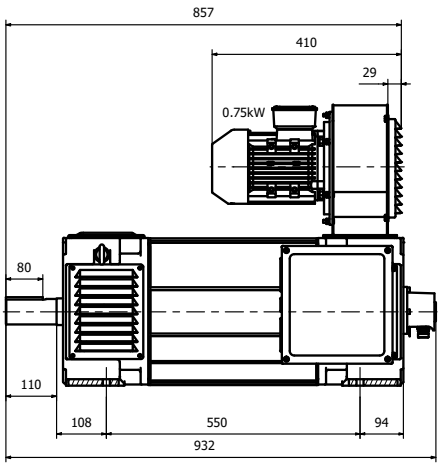
IP55 version, axial ventilation

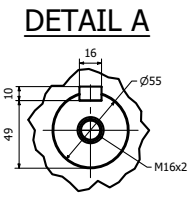


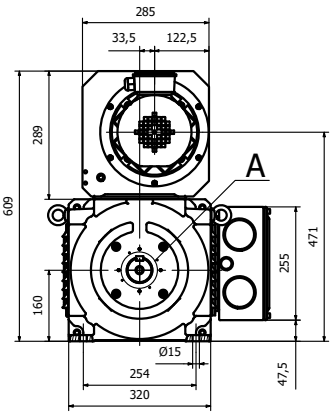




IP55 version, radial ventilation







Motor Characteristics

Degree of Protection	IP55	**Cooling**	IC416
Rotor Inertia J (kgm²)	0.33	**Motor weight (kg)**	375
Maximum mechanical speed n_{max}(rpm)	3400 (5600)*	**Sound Pressure level (db(A)) at 50 Hz**	76
D-End Bearing	6312 2RSC3	**N-End bearing**	6312 2RSC3
Vibration Class	A	**Mounting**	IM1001**
Insulation class	H	**Temperature rise Class**	F
Motor Nominal voltage (V)	400	**Thermal Protection**	PTC 150°C

* On request (high speed option)
** IM2001 for axial ventilation

IP54 version, Axial ventilation, Fan characteristics

Frequency (Hz)	50/60	**Number of phases**	3
Voltage (V)	400/460	**Mounting**	Axial
Speed (rpm)	2480/3050	**Type of cooling fan**	Induced draught
Power (kW)	0.79/0.9		
Current (A)	1.3/1.3		

IP55 version, Axial or radial ventilation, Fan characteristics

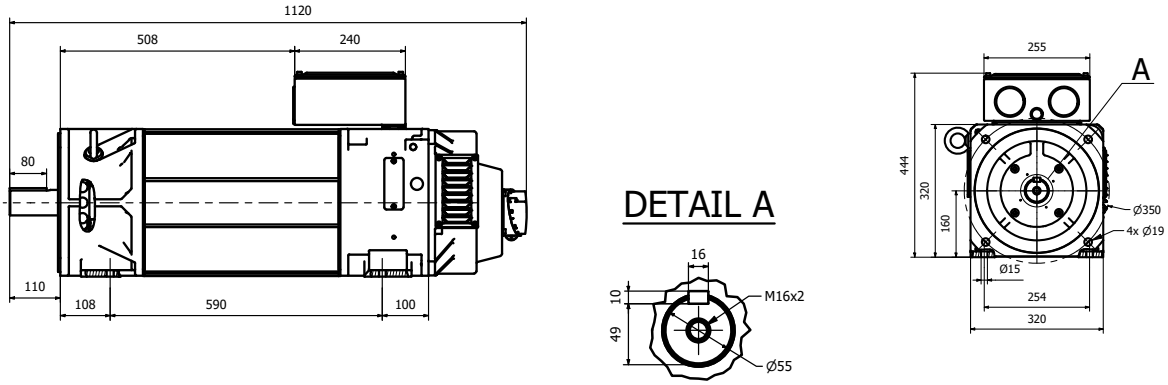
(Voltage/frequency supply to precise in order)

Frequency (Hz)	50/60	**Number of phases**	3
Voltage (V)	400/460	**Mounting**	Radial
Speed (rpm)	2885/3462	**Type of cooling fan**	Force draught
Power (kW)	0.75/0.75	**Internal Static Air Pressure Drop (Pa)**	850
Current (A)	1.64/1.49	**Required cooling Air flow (m³/h)**	900

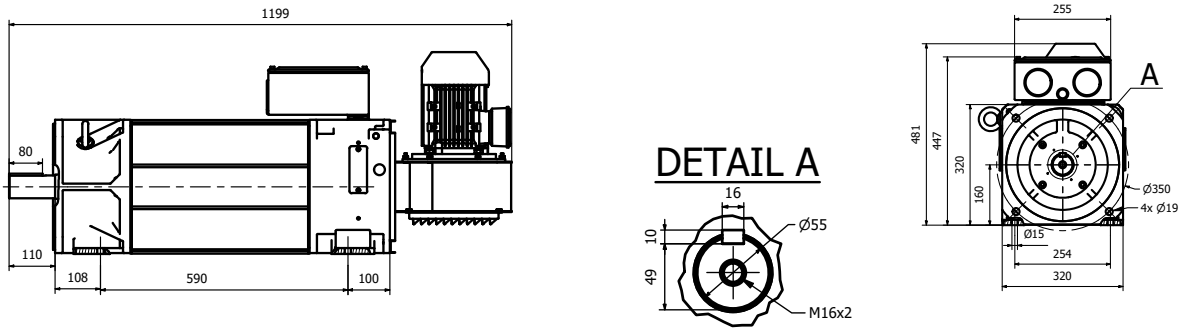
Electrical Data (at 400V)

n_N rpm	P_N kW	T_N Nm	I_N A	n_1 rpm	cos ϕ	η	f_N Hz
500	18	337	41	1000	0,7	0,89	17,6
1000	35	331	77	2000	0,71	0,92	34,3
1200	41	326	90	2400	0,71	0,93	40,8
1500	50	318	107	3000	0,72	0,94	51
1800	59	313	126	3600*	0,72	0,94	61,2
2000	61	293	128	4000*	0,73	0,95	67,6
2400	66	263	136	4300*	0,74	0,95	81,5
3000	70	223	138	4800*	0,76	0,96	101

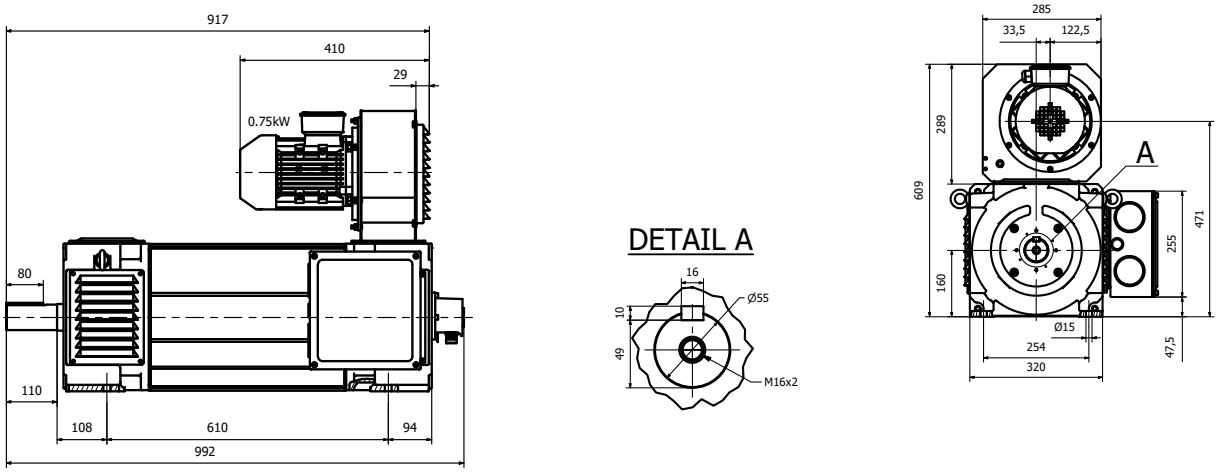
IP54 version, axial ventilation



IP55 version, axial ventilation



IP55 version, radial ventilation



Motor Characteristics

Degree of Protection	IP55	**Cooling**	IC416
Rotor Inertia J (kgm²)	0.54	**Motor weight (kg)**	370
Maximum mechanical speed n_{max}(rpm)	3200 (5300)*	**Sound Pressure level (db(A)) at 50 Hz**	78
D-End Bearing	6216*** 2RSC3	**N-End bearing**	6216*** 2RSC3
Vibration Class	A	**Mounting**	IM1001**
Insulation class	H	**Temperature rise Class**	F
Motor Nominal voltage (V)	400	**Thermal Protection**	PTC 150°C

** IM2001 for axial ventilation
*** Radial Ventilation 6215 2RS C3

IP54 version, Axial ventilation, Fan characteristics

Frequency (Hz)	50/60	**Number of phases**	3
Voltage (V)	400/460	**Mounting**	Axial
Speed (rpm)	2480/3050	**Type of cooling fan**	Induced draught
Power (kW)	0.79/0.9		
Current (A)	1.3/1.3		

IP55 version, Axial or radial ventilation, Fan characteristics

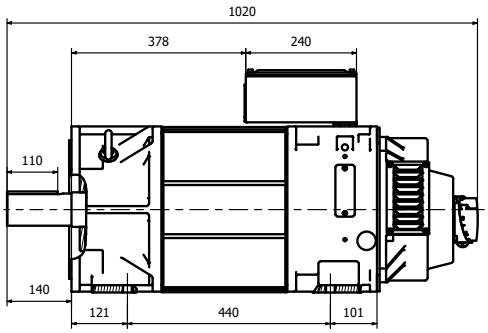
(Voltage/frequency supply to precise in order)

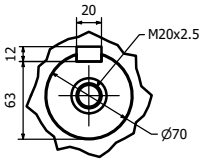
Frequency (Hz)	50/60	**Number of phases**	3
Voltage (V)	400/460	**Mounting**	Radial
Speed (rpm)	2865/3462	**Type of cooling fan**	Force draught
Power (kW)	0.75/2.2	**Internal Static Air Pressure Drop (Pa)**	900
Current (A)	1.64/3.76	**Required cooling Air flow (m³/h)**	1300

Electrical Data (at 400V)

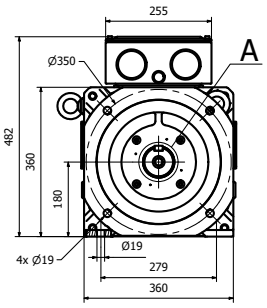
n_N rpm	P_N kW	T_N Nm	I_N A	n_1 rpm	cos ϕ	η	f_N Hz
500	19	363	37	1000	0,83	0,89	17,3
1000	37	353	69	2000	0,84	0,92	34
1200	44	350	81	2400	0,84	0,93	40,6
1500	54	344	98	2800	0,85	0,94	50,7
1800	64	340	116	3200*	0,85	0,94	60,8
2000	66	316	117	3400*	0,86	0,95	67,3
2400	72	287	126	3600*	0,87	0,95	81,1
3000	76	241	128	4200*	0,89	0,96	100,7

IP54 version, axial ventilation

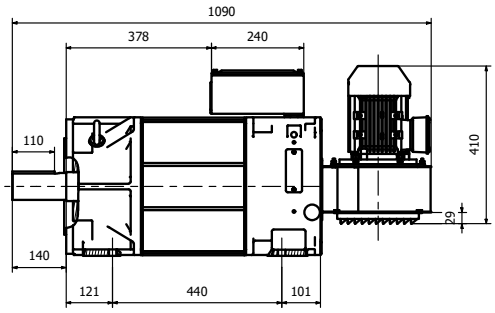


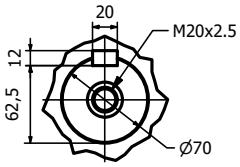


DETAIL A



IP55 version, axial ventilation





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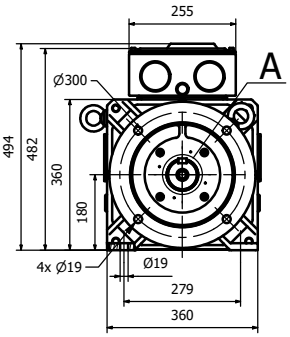
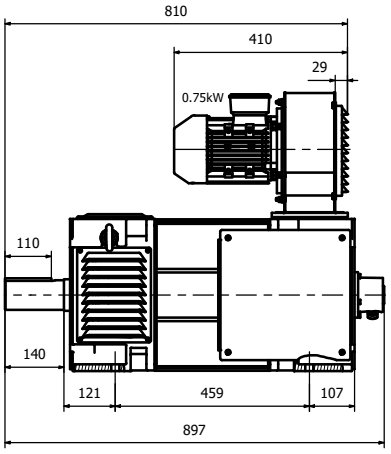
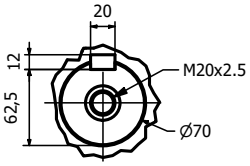
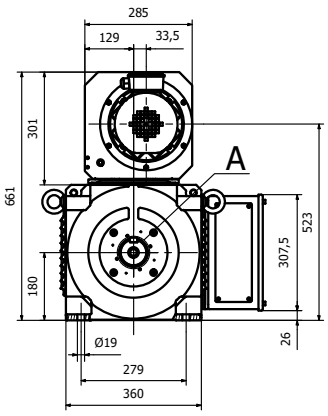


IP55 version, radial ventilation



DETAIL A





Motor Characteristics

Degree of Protection	IP55	**Cooling**	IC416
Rotor Inertia J (kgm²)	0.74	**Motor weight (kg)**	460
Maximum mechanical speed n_{max}(rpm)	3200 (5300)*	**Sound Pressure level (db(A)) at 50 Hz**	78
D-End Bearing**	6216**** 2RSC3	**N-End bearing**	6216**** 2RSC3
Vibration Class	A	**Mounting**	IM1001***
Insulation class	H	**Temperature rise Class**	F
Motor Nominal voltage (V)	400	**Thermal Protection**	PTC 150°C

** bearing protection ring recommended above 100 kW
*** IM2001 for axial ventilation
**** Radial Ventilation 6215 2RS C3

IP54 version, Axial ventilation, Fan characteristics

Frequency (Hz)	50/60	**Number of phases**	3
Voltage (V)	400/460	**Mounting**	Axial
Speed (rpm)	2480/3050	**Type of cooling fan**	Induced draught
Power (kW)	0.79/0.9		
Current (A)	1.3/1.3		

IP55 version, Axial or radial ventilation, Fan characteristics

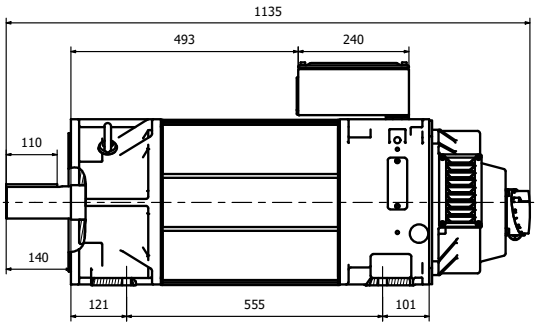
(Voltage/frequency supply to precise in order)

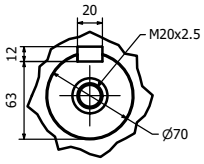
Frequency (Hz)	50/60	**Number of phases**	3
Voltage (V)	400/460	**Mounting**	Radial
Speed (rpm)	2865/3462	**Type of cooling fan**	Force draught
Power (kW)	0.75/2.2	**Internal Static Air Pressure Drop (Pa)**	900
Current (A)	1.64/3.76	**Required cooling Air flow (m³/h)**	1300

Electrical Data (at 400V)

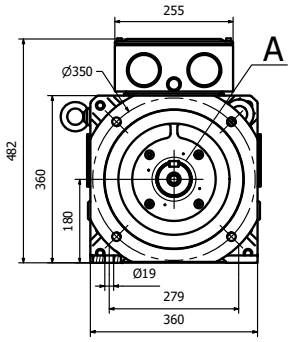
n_N rpm	P_N kW	T_N Nm	I_N A	n_1 rpm	cos ϕ	η	f_N Hz
500	25	478	49	1000	0,83	0,89	17,2
1000	50	478	93	2000	0,84	0,92	33,9
1200	59	470	109	2400	0,84	0,93	40,5
1500	72	458	130	2800	0,85	0,94	50,6
1800	85	451	154	3200*	0,85	0,94	60,7
2000	88	422	156	3400*	0,86	0,95	67,2
2400	95	378	166	3600*	0,87	0,95	81
3000	101	321	170	4200*	0,89	0,96	100,6

IP54 version, axial ventilation

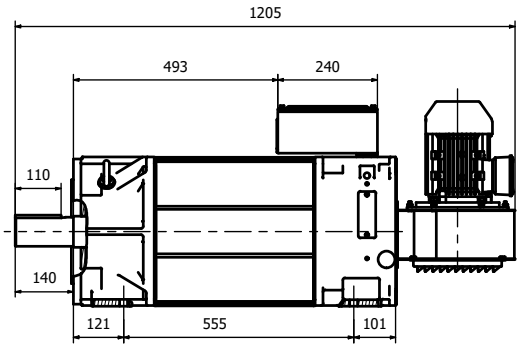


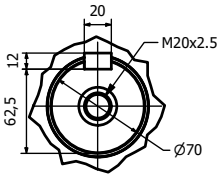


DETAIL A



IP55 version, axial ventilation





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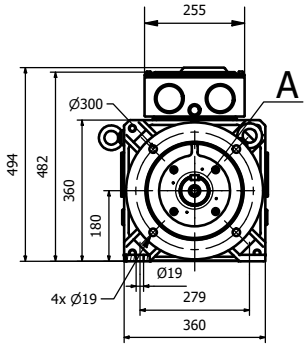
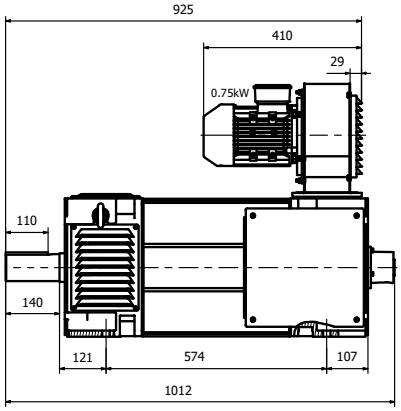
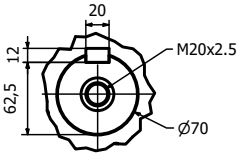
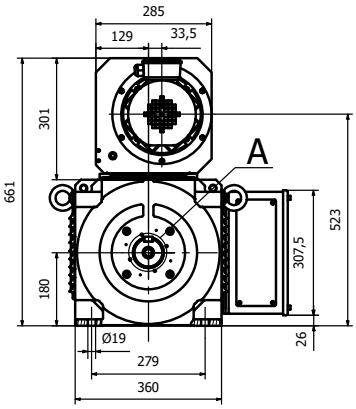


IP55 version, radial ventilation





DETAIL A



Motor Characteristics

Degree of Protection	IP55	**Cooling**	IC416
Rotor Inertia J (kgm²)	0.94	**Motor weight (kg)**	550
Maximum mechanical speed n_{max}(rpm)	3200 (5200)*	**Sound Pressure level (db(A)) at 50 Hz**	78
D-End Bearing**	6216**** 2RSC3	**N-End bearing**	6216**** 2RSC3
Vibration Class	A	**Mounting**	IM1001***
Insulation class	H	**Temperature rise Class**	F
Motor Nominal voltage (V)	400	**Thermal Protection**	PTC 150°C

** bearing protection ring recommended above 100 kW
*** IM2001 for axial ventilation
**** Radial Ventilation 6215 2RS C3

IP54 version, Axial ventilation, Fan characteristics

Frequency (Hz)	50/60	**Number of phases**	3
Voltage (V)	400/460	**Mounting**	Axial
Speed (rpm)	2480/3050	**Type of cooling fan**	Induced draught
Power (kW)	0.79/0.9		
Current (A)	1.3/1.3		

IP55 version, Axial or radial ventilation, Fan characteristics

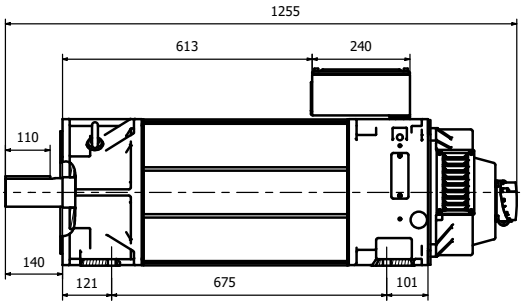
(Voltage/frequency supply to precise in order)

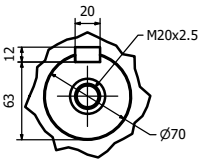
Frequency (Hz)	50/60	**Number of phases**	3
Voltage (V)	400/460	**Mounting**	Radial
Speed (rpm)	2865/3462	**Type of cooling fan**	Force draught
Power (kW)	0.75/2.2	**Internal Static Air Pressure Drop (Pa)**	900
Current (A)	1.64/3.76	**Required cooling Air flow (m³/h)**	1300

Electrical Data (at 400V)

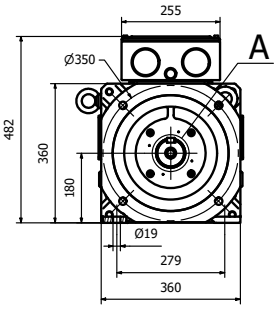
n_N rpm	P_N kW	T_N Nm	I_N A	n_1 rpm	cos ϕ	η	f_N Hz
500	32	611	62	1000	0,84	0,89	17,2
1000	62	592	114	2000	0,85	0,92	33,9
1200	73	581	133	2400	0,85	0,93	40,5
1500	90	573	161	2800	0,86	0,94	50,6
1800	106	562	189	3200*	0,86	0,94	60,7
2000	110	527	193	3400*	0,87	0,95	67,2
2400	119	474	205	3600*	0,88	0,95	80,9
3000	126	401	210	4200*	0,9	0,96	100,6

IP54 version, axial ventilation

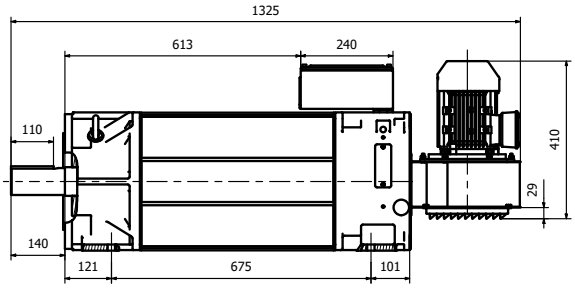


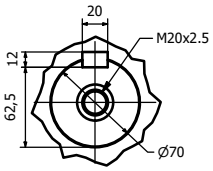


DETAIL A



IP55 version, axial ventilation





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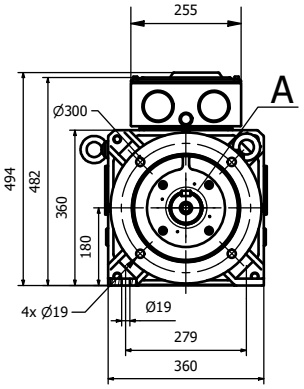
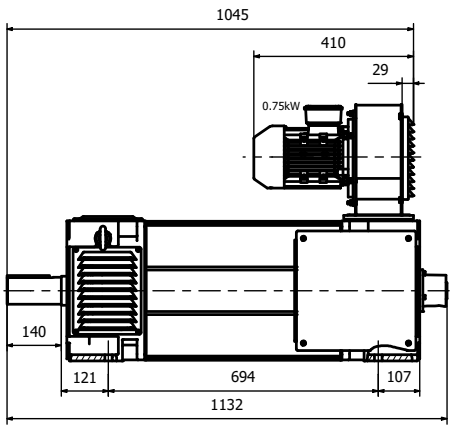


IP55 version, radial ventilation



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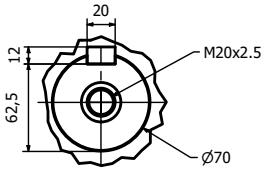
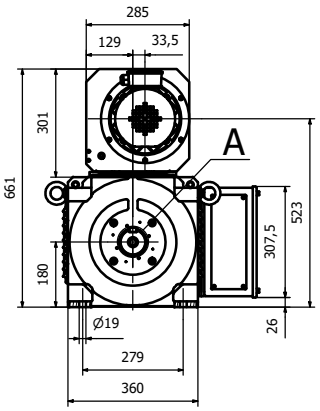




Motor Characteristics

Degree of Protection	IP55	**Cooling**	IC416
Rotor Inertia J (kgm²)	1.72	**Motor weight (kg)**	715
Maximum mechanical speed n_{max}(rpm)	3800	**Sound Pressure level (db(A)) at 50 Hz**	80
D-End Bearing**	6220 C3	**N-End bearing**	6220 C3
Vibration Class	A	**Mounting**	IM1001
Insulation class	H	**Temperature rise Class**	F
Motor Nominal voltage (V)	400	**Thermal Protection**	PTC 150°C

** Bearing protection ring recommended above 100 kW

IP55 version, Axial or radial ventilation, Fan characteristics

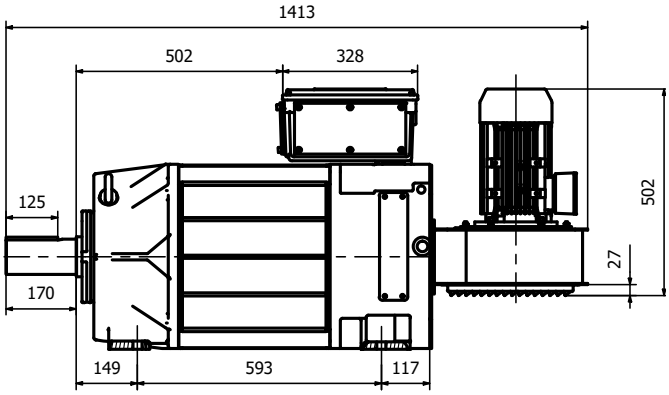
(Voltage/frequency supply to precise in order)

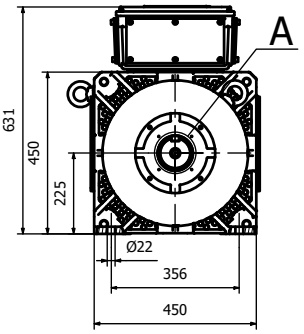
Frequency (Hz)	50/60	**Number of phases**	3
Voltage (V)	400/460	**Mounting**	Radial
Speed (rpm)	2895/3474	**Type of cooling fan**	Force draught
Power (kW)	2.2/2.2	**Internal Static Air Pressure Drop (Pa)**	1200
Current (A)	4.35/3.76	**Required cooling Air flow (m³/h)**	2200

Electrical Data (at 400V)

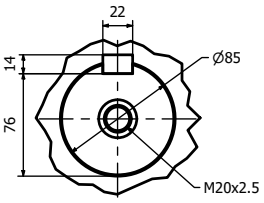
n_N rpm	P_N kW	T_N Nm	I_N A	n_1 rpm	cos ϕ	η	f_N Hz
500	42	802	81	1000	0,83	0,9	17,1
1000	83	793	153	2000	0,84	0,93	33,8
1200	98	780	179	2400	0,84	0,94	40,4
1500	120	764	214	2600	0,85	0,95	50,5
1800	141	748	252	3100	0,85	0,95	60,6
2000	147	702	257	3400	0,86	0,96	67,1
2400	159	633	275	3600	0,87	0,96	80,8
3000	168	535	281	3800	0,89	0,97	100,5

IP55 version, axial ventilation

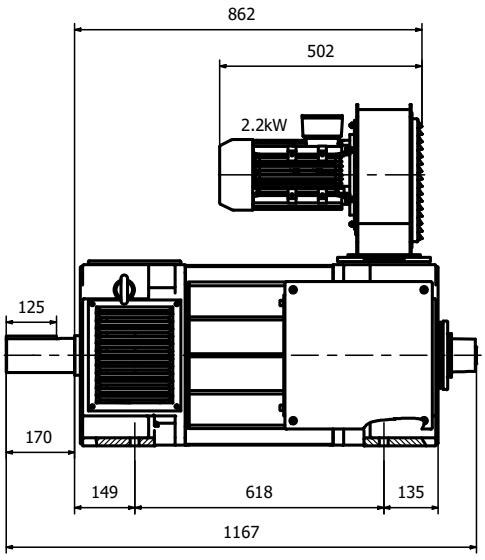


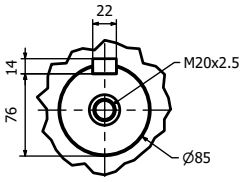


DETAIL A

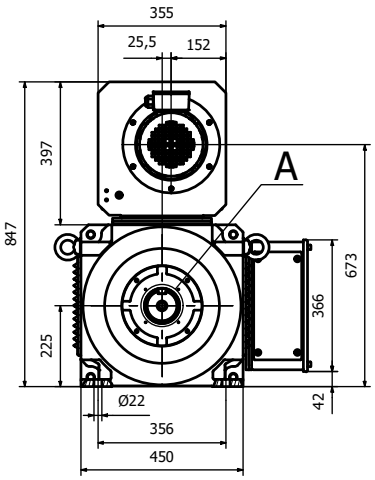


IP55 version, radial ventilation





DETAIL A



Motor Characteristics

Degree of Protection	IP55	**Cooling**	IC416
Rotor Inertia J (kgm²)	2.29	**Motor weight (kg)**	870
Maximum mechanical speed n_{max}(rpm)	3800	**Sound Pressure level (db(A)) at 50 Hz**	80
D-End Bearing**	6220 C3	**N-End bearing**	6220 C3
Vibration Class	A	**Mounting**	IM1001
Insulation class	H	**Temperature rise Class**	F
Motor Nominal voltage (V)	400	**Thermal Protection**	PTC 150°C

** Bearing protection ring recommended above 100 kW

IP55 version, Axial or radial ventilation, Fan characteristics

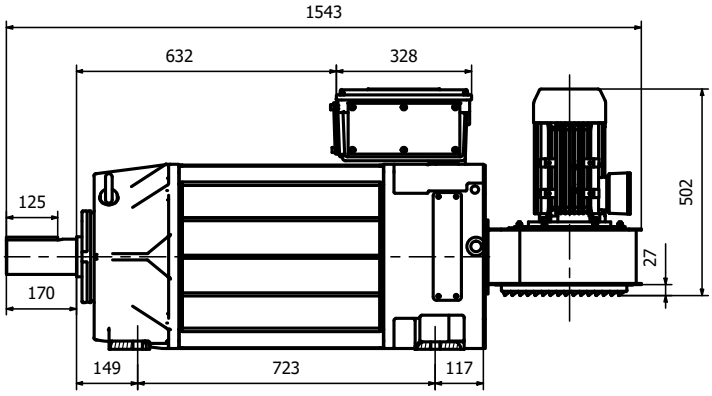
(Voltage/frequency supply to precise in order)

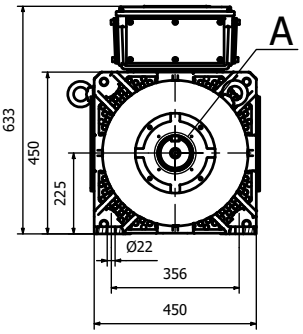
Frequency (Hz)	50/60	**Number of phases**	3
Voltage (V)	400/460	**Mounting**	Radial
Speed (rpm)	2895/3474	**Type of cooling fan**	Force draught
Power (kW)	2.2/2.2	**Internal Static Air Pressure Drop (Pa)**	1200
Current (A)	4.35/3.76	**Required cooling Air flow (m³/h)**	2200

Electrical Data (at 400V)

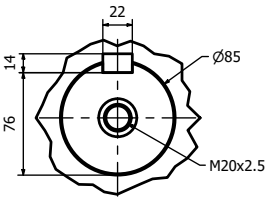
n_N rpm	P_N kW	T_N Nm	I_N A	n_1 rpm	cos ϕ	η	f_N Hz
500	53	1012	101	1000	0,84	0,9	17,1
1000	104	993	190	2000	0,85	0,93	33,8
1200	122	971	220	2400	0,85	0,94	40,4
1500	150	955	265	2600	0,86	0,95	50,5
1800	176	934	311	3100	0,86	0,95	60,6
2000	184	879	318	3400	0,87	0,96	67,1
2400	199	792	340	3600	0,88	0,96	80,8
3000	210	669	347	3800	0,9	0,97	100,5

IP55 version, axial ventilation

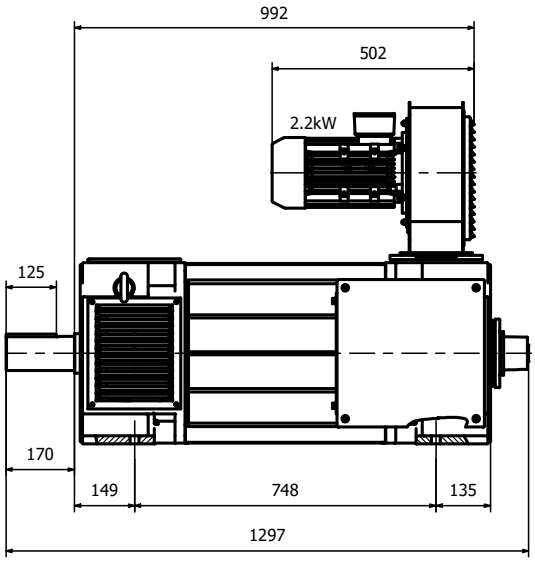


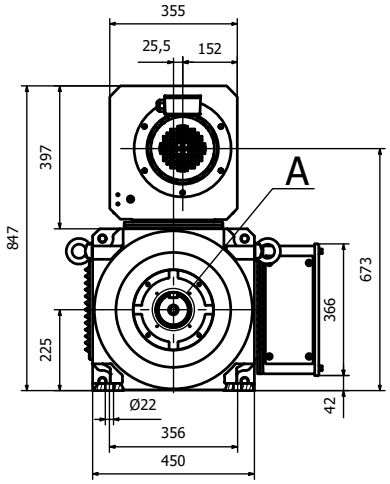


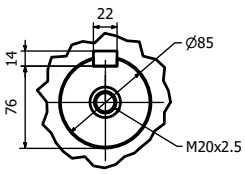
DETAIL A



IP55 version, radial ventilation







DETAIL A

Motor Characteristics

Degree of Protection	IP55	**Cooling**	IC416
Rotor Inertia J (kgm²)	2.55	**Motor weight (kg)**	930
Maximum mechanical speed n_{max}(rpm)	3800	**Sound Pressure level (db(A)) at 50 Hz**	80
D-End Bearing**	6220 C3	**N-End bearing**	6220 C3
Vibration Class	A	**Mounting**	IM1001
Insulation class	H	**Temperature rise Class**	F
Motor Nominal voltage (V)	400	**Thermal Protection**	PTC 150°C

** Bearing protection ring recommended above 100 kW

IP55 version, Axial or radial ventilation, Fan characteristics

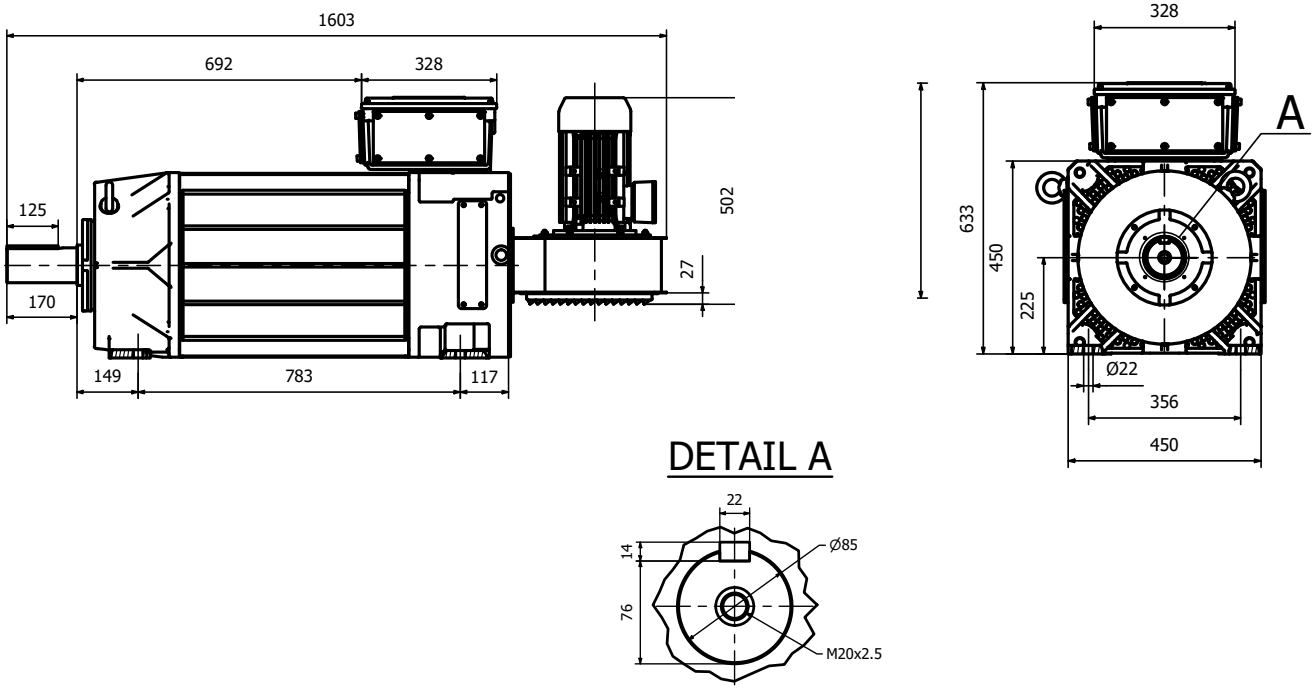
(Voltage/frequency supply to precise in order)

Frequency (Hz)	50/60	**Number of phases**	3
Voltage (V)	400/460	**Mounting**	Radial
Speed (rpm)	2895/3474	**Type of cooling fan**	Force draught
Power (kW)	2.2/2.2	**Internal Static Air Pressure Drop (Pa)**	1200
Current (A)	4.35/3.76	**Required cooling Air flow (m³/h)**	2200

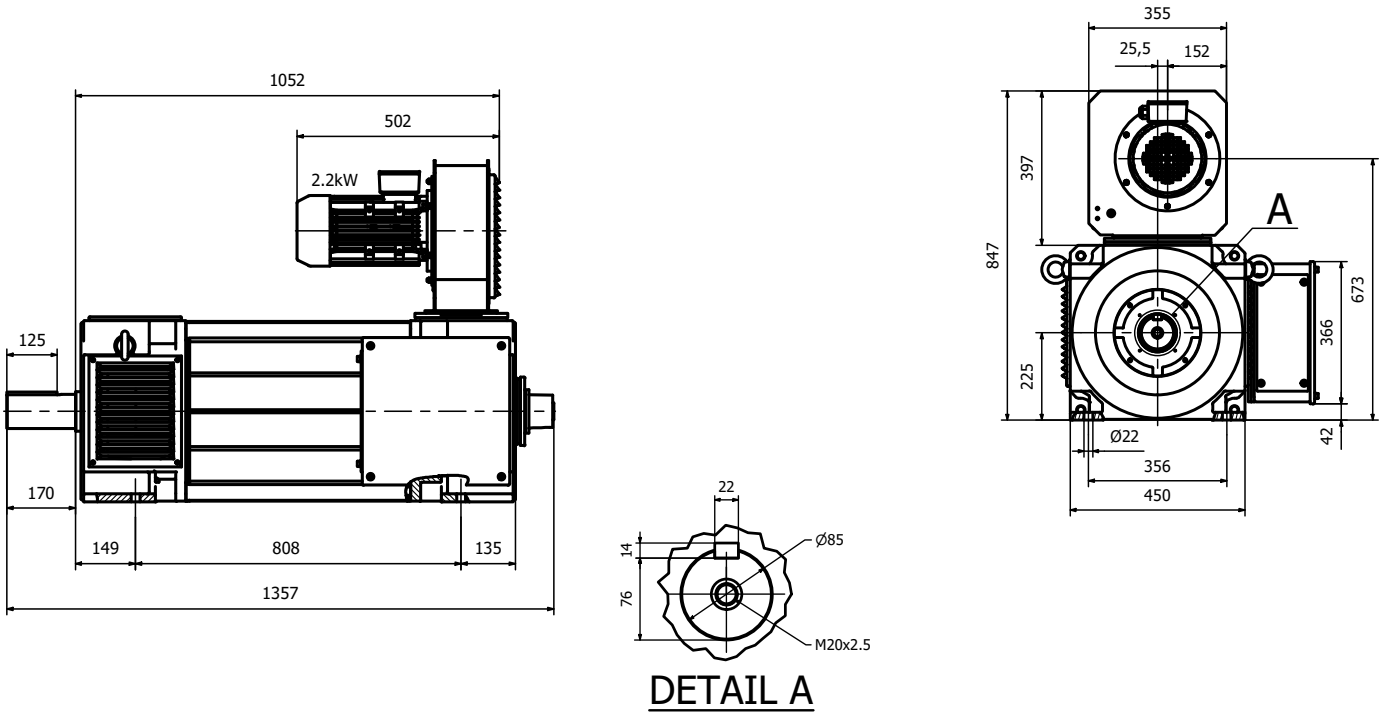
Electrical Data (at 400V)

n_N rpm	P_N kW	T_N Nm	I_N A	n_1 rpm	cos ϕ	η	f_N Hz
500	57	1089	109	1000	0,84	0,9	17,1
1000	111	1060	203	2000	0,85	0,93	33,8
1200	130	1035	235	2400	0,85	0,94	40,4
1500	160	1019	283	2600	0,86	0,95	50,5
1800	188	997	332	3100	0,86	0,95	60,6
2000	196	936	339	3400	0,87	0,96	67,1
2400	212	844	362	3600	0,88	0,96	80,8
3000	224	713	370	3800	0,9	0,97	100,5

IP55 version, axial ventilation



IP55 version, radial ventilation



Motor Characteristics

Degree of Protection	IP55	**Cooling**	IC416
Rotor Inertia J (kgm²)	2.8	**Motor weight (kg)**	1110
Maximum mechanical speed n_{max}(rpm)	3400 (4200)*	**Sound Pressure level (db(A)) at 50 Hz**	82
D-End Bearing**	6222 C3	**N-End bearing**	6222 C3
Vibration Class	A	**Mounting**	IM1001
Insulation class	H	**Temperature rise Class**	F
Motor Nominal voltage (V)	400	**Thermal Protection**	PTC 150°C

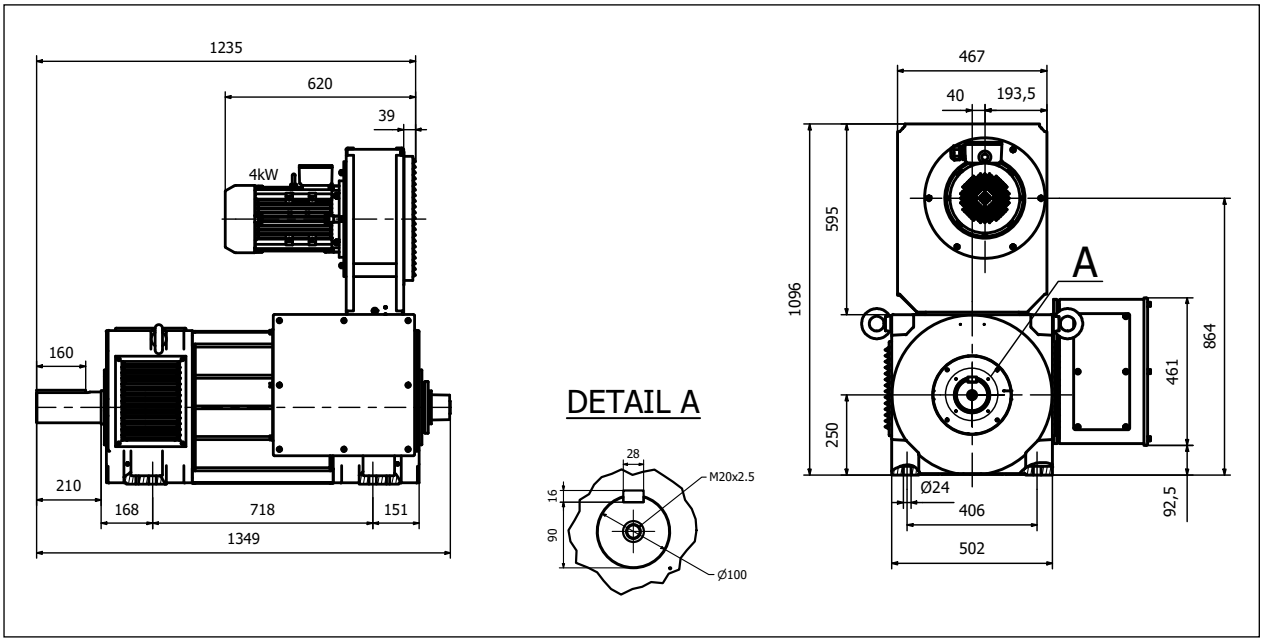
* On request (high speed option)
** Bearing protection ring recommended above 100 kW

Blower characteristics (Voltage/frequency supply to precise in order)

Frequency (Hz)	50/60	**Number of phases**	3
Voltage (V)	400/460	**Mounting**	Radial
Speed (rpm)	2895/3498	**Type of cooling fan**	Force draught
Power (kW)	4/4.6	**Internal Static Air Pressure Drop (Pa)**	2100
Current (A)	7.45/7.45	**Required cooling Air flow (m³/h)**	2700

Electrical Data (at 400V)

n_N rpm	P_N kW	T_N Nm	I_N A	n_1 rpm	cos ϕ	η	f_N Hz
500	58	1114	116	1000	0,84	0,86	16,8
1000	114	1093	216	2000	0,84	0,91	33,6
1200	135	1072	249	2400	0,84	0,93	40,4
1500	165	1051	295	2600	0,85	0,95	50,5
1800	194	1029	347	3100	0,85	0,95	60,6
2000	202	966	358	3400	0,85	0,96	67,3
2400	219	872	388	3600*	0,85	0,96	80,8
2600	220	809	385	4200*	0,86	0,96	87.5



Motor Characteristics

Degree of Protection	IP55	**Cooling**	IC416
Rotor Inertia J (kgm²)	3.4	**Motor weight (kg)**	1280
Maximum mechanical speed n_{max}(rpm)	3400 (4200)*	**Sound Pressure level (db(A)) at 50 Hz**	82
D-End Bearing**	6222 C3	**N-End bearing**	6222 C3
Vibration Class	A	**Mounting**	IM1001
Insulation class	H	**Temperature rise Class**	F
Motor Nominal voltage (V)	400	**Thermal Protection**	PTC 150°C

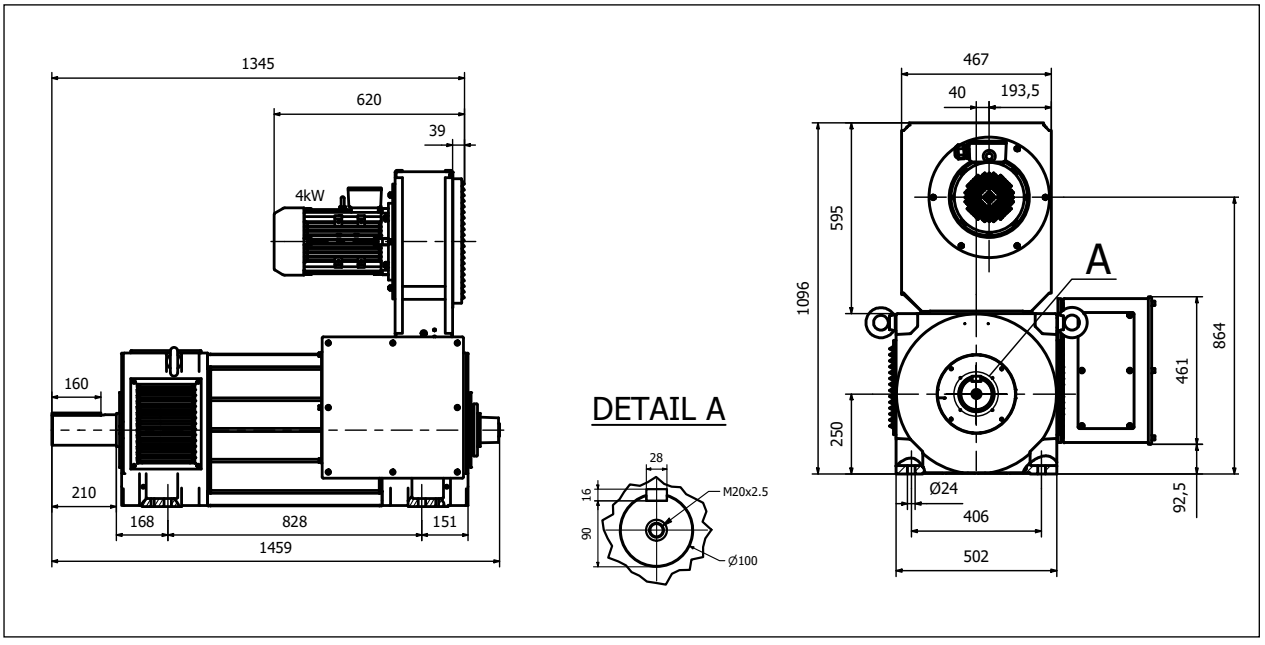
* On request (high speed option)
** Bearing protection ring recommended above 100 kW

Blower characteristics (Voltage/frequency supply to precise in order)

Frequency (Hz)	50/60	**Number of phases**	3
Voltage (V)	400/460	**Mounting**	Radial
Speed (rpm)	2895/3498	**Type of cooling fan**	Force draught
Power (kW)	4/4.6	**Internal Static Air Pressure Drop (Pa)**	2100
Current (A)	7.45/7.45	**Required cooling Air flow (m³/h)**	2700

Electrical Data (at 400V)

n_N rpm	P_N kW	T_N Nm	I_N A	n_1 rpm	cos ϕ	η	f_N Hz
500	68	1302	136	1000	0,84	0,86	16,8
1000	134	1278	253	2000	0,84	0,91	33,6
1200	157	1253	291	2400	0,84	0,93	40,4
1500	193	1229	345	2600	0,85	0,95	50,5
1800	227	1204	406	3100	0,85	0,95	60,6
2000	237	1130	419	3400	0,85	0,96	67,3
2400	256	1020	453	3600*	0,85	0,96	80,8
2600	258	946	450	4200*	0,86	0,96	87.5



Motor Characteristics

Degree of Protection	IP55	**Cooling**	IC416
Rotor Inertia J (kgm²)	3.8	**Motor weight (kg)**	1410
Maximum mechanical speed n_{max}(rpm)	3400 (4100)*	**Sound Pressure level (db(A)) at 50 Hz**	82
D-End Bearing**	6222 C3	**N-End bearing**	6222 C3
Vibration Class	A	**Mounting**	IM1001
Insulation class	H	**Temperature rise Class**	F
Motor Nominal voltage (V)	400	**Thermal Protection**	PTC 150°C

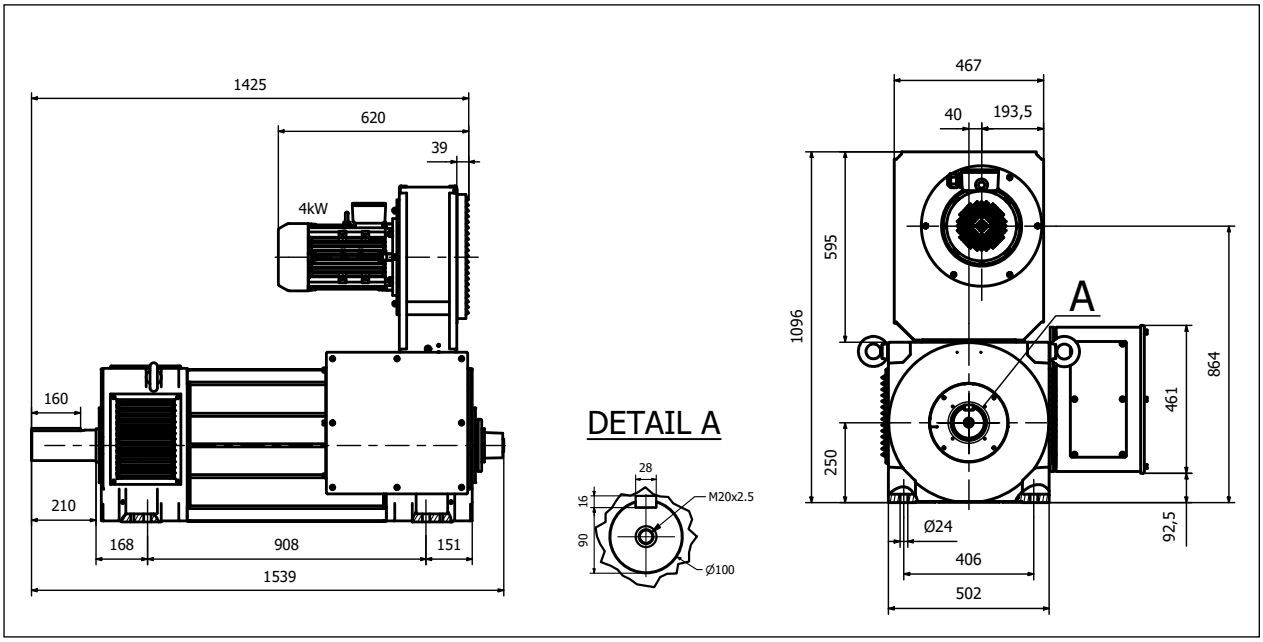
* On request (high speed option)
** Bearing protection ring recommended above 100 kW

Blower characteristics (Voltage/frequency supply to precise in order)

Frequency (Hz)	50/60	**Number of phases**	3
Voltage (V)	400/460	**Mounting**	Radial
Speed (rpm)	2895/3498	**Type of cooling fan**	Force draught
Power (kW)	4/4.6	**Internal Static Air Pressure Drop (Pa)**	2100
Current (A)	7.45/7.45	**Required cooling Air flow (m³/h)**	2700

Electrical Data (at 400V)

n_N rpm	P_N kW	T_N Nm	I_N A	n_1 rpm	cos ϕ	η	f_N Hz
500	80	1518	159	1000	0,84	0,86	16,8
1000	156	1490	295	2000	0,84	0,91	33,6
1200	184	1461	339	2400	0,84	0,93	40,4
1500	225	1433	402	2600	0,85	0,95	50,5
1800	265	1404	473	3100	0,85	0,95	60,6
2000	276	1318	488	3400	0,85	0,96	67,3
2400	299	1189	529	3600*	0,85	0,96	80,8
2600	300	1103	525	3900*	0,86	0,96	87.5



Motor Characteristics

Degree of Protection	IP55	**Cooling**	IC416
Rotor Inertia J (kgm²)	4.17	**Motor weight (kg)**	1180
Maximum mechanical speed n_{max}(rpm)	3200 (4000)*	**Sound Pressure level (db(A)) at 50 Hz**	84
D-End Bearing**	6224 C3	**N-End bearing**	6224 C3
Vibration Class	A	**Mounting**	IM1001
Insulation class	H	**Temperature rise Class**	F
Motor Nominal voltage (V)	400***	**Thermal Protection**	PTC 150°C

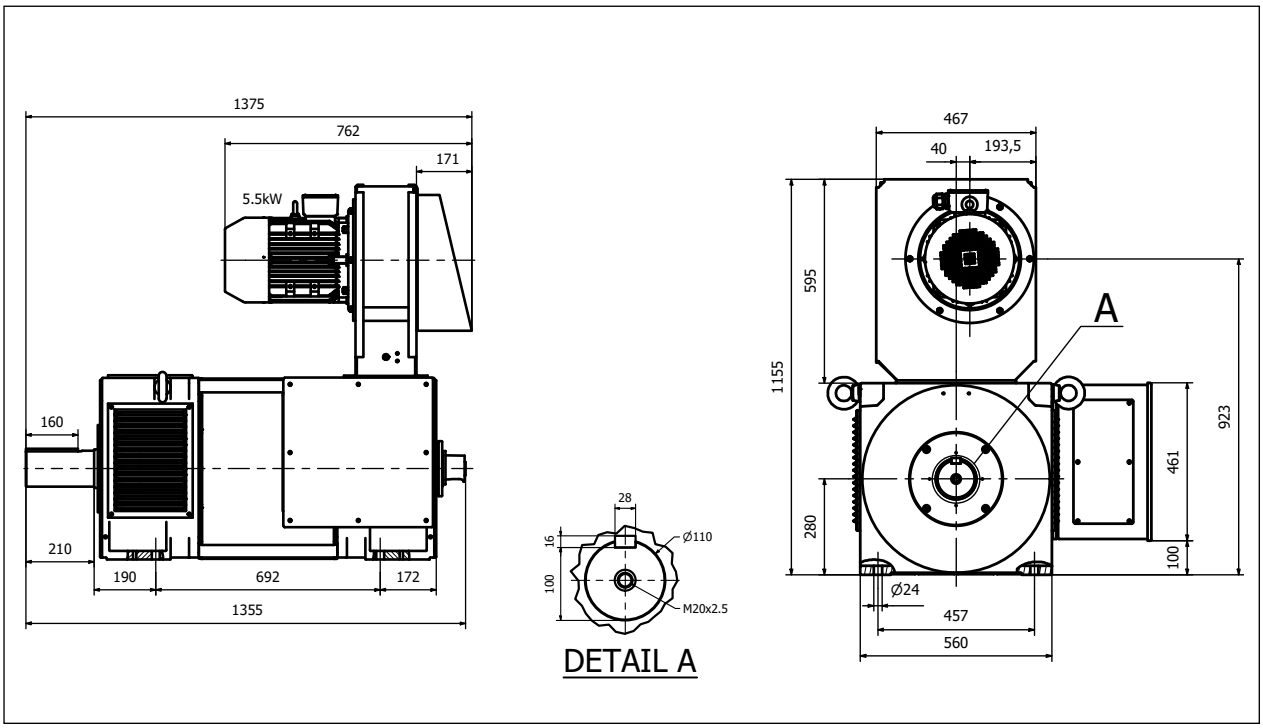
* On request (high speed option)
** bearing protection ring recommended
*** 690V possible on request

Blower characteristics (Voltage/frequency supply to precise in order)

Frequency (Hz)	50/60	**Number of phases**	3
Voltage (V)	400/460	**Mounting**	Radial
Speed (rpm)	2925/3510	**Type of cooling fan**	Force draught
Power (kW)	5.5/7.5	**Internal Static Air Pressure Drop (Pa)**	2600
Current (A)	10./11.86	**Required cooling Air flow (m³/h)**	3600

Electrical Data (at 400V)

n_N rpm	P_N kW	T_N Nm	I_N A	n_1 rpm	cos ϕ	η	f_N Hz
500	66	1261	130	1000	0,85	0,86	17,1
1000	130	1242	240	2000	0,86	0,91	33,7
1200	152	1210	274	2400	0,86	0,93	40,3
1500	187	1191	327	2600	0,87	0,95	50,4
1800	220	1167	384	3100	0,87	0,95	60,5
2000	229	1093	400	3400*	0,87	0,95	67,1



Motor Characteristics

Degree of Protection	IP55	**Cooling**	IC416
Rotor Inertia J (kgm²)	5.5	**Motor weight (kg)**	1530
Maximum mechanical speed n_{max}(rpm)	3200 (4000)*	**Sound Pressure level (db(A)) at 50 Hz**	84
D-End Bearing**	6224 C3	**N-End bearing**	6224 C3
Vibration Class	A	**Mounting**	IM1001
Insulation class	H	**Temperature rise Class**	F
Motor Nominal voltage (V)	400***	**Thermal Protection**	PTC 150°C

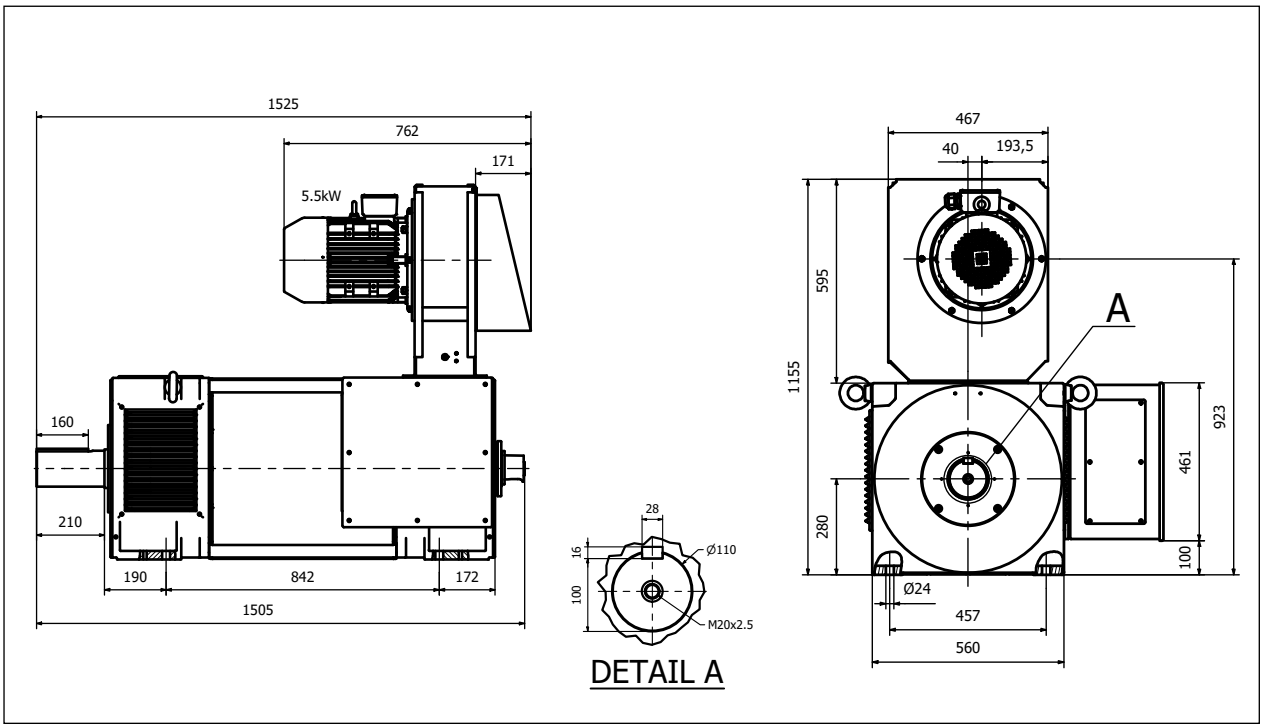
* On request (high speed option)
** bearing protection ring recommended
*** 690V possible on request

Blower characteristics (Voltage/frequency supply to precise in order)

Frequency (Hz)	50/60	**Number of phases**	3
Voltage (V)	400/460	**Mounting**	Radial
Speed (rpm)	2920/3510	**Type of cooling fan**	Force draught
Power (kW)	5.5/7.5	**Internal Static Air Pressure Drop (Pa)**	2600
Current (A)	10.1/11.86	**Required cooling Air flow (m³/h)**	3600

Electrical Data (at 400V)

n_N rpm	P_N kW	T_N Nm	I_N A	n_1 rpm	cos ϕ	η	f_N Hz
500	89	1700	170	1000	0,87	0,87	17,1
1000	175	1671	312	2000	0,88	0,92	33,7
1200	206	1639	359	2400	0,88	0,94	40,3
1500	253	1611	432	2600	0,88	0,96	50,4
1800	298	1581	509	3100	0,88	0,96	60,5
2000	310	1480	530	3400*	0,88	0,96	67,1



Motor Characteristics

Degree of Protection	IP55	**Cooling**	IC416
Rotor Inertia J (kgm²)	6.2	**Motor weight (kg)**	1820
Maximum mechanical speed n_{max}(rpm)	3200 (4000)*	**Sound Pressure level (db(A)) at 50 Hz**	84
D-End Bearing**	6224 C3	**N-End bearing**	6224 C3
Vibration Class	A	**Mounting**	IM1001
Insulation class	H	**Temperature rise Class**	F
Motor Nominal voltage (V)	400***	**Thermal Protection**	PTC 150°C

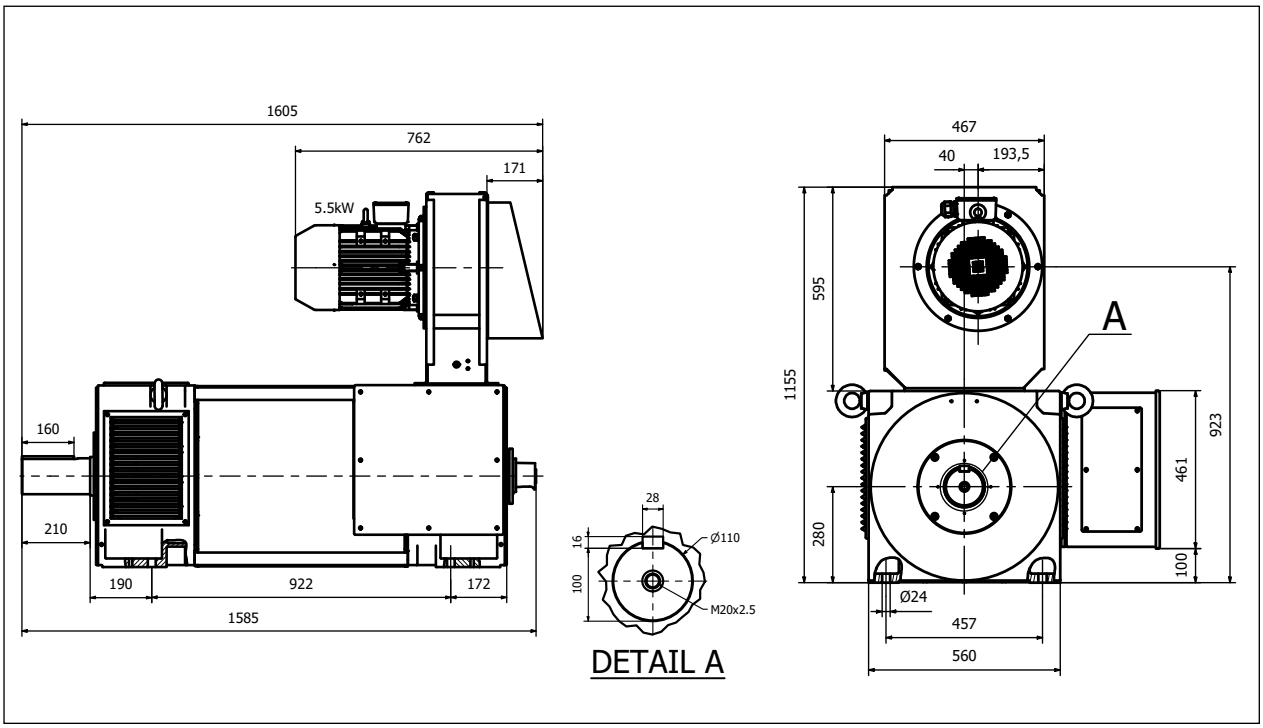
* On request (high speed option)
** bearing protection ring recommended
*** 690V possible on request

Blower characteristics (Voltage/frequency supply to precise in order)

Frequency (Hz)	50/60	**Number of phases**	3
Voltage (V)	400/460	**Mounting**	Radial
Speed (rpm)	2920/3510	**Type of cooling fan**	Force draught
Power (kW)	5.5/7.5	**Internal Static Air Pressure Drop (Pa)**	2600
Current (A)	10.1/11.86	**Required cooling Air flow (m³/h)**	3600

Electrical Data (at 400V)

n_N rpm	P_N kW	T_N Nm	I_N A	n_1 rpm	cos ϕ	η	f_N Hz
500	103	1967	203	1000	0,84	0,87	17,1
1000	202	1929	373	2000	0,85	0,92	33,7
1200	238	1894	430	2400	0,85	0,94	40,3
1500	292	1859	517	2600	0,85	0,96	50,4
1800	343	1820	607	3100	0,85	0,96	60,5
2000	358	1709	633	3400*	0,85	0,96	67,1



Motor Characteristics

Degree of Protection	IP55	**Cooling**	IC416
Rotor Inertia J (kgm²	6.7	**Motor weight (kg)**	1900
Maximum mechanical speed n_{max}(rpm)	3200 (3700)*	**Sound Pressure level (db(A)) at 50 Hz**	84
D-End Bearing**	6224 C3	**N-End bearing**	6224 C3
Vibration Class	A	**Mounting**	IM1001
Insulation class	H	**Temperature rise Class**	F
Motor Nominal voltage (V)	400***	**Thermal Protection**	PTC 150°C

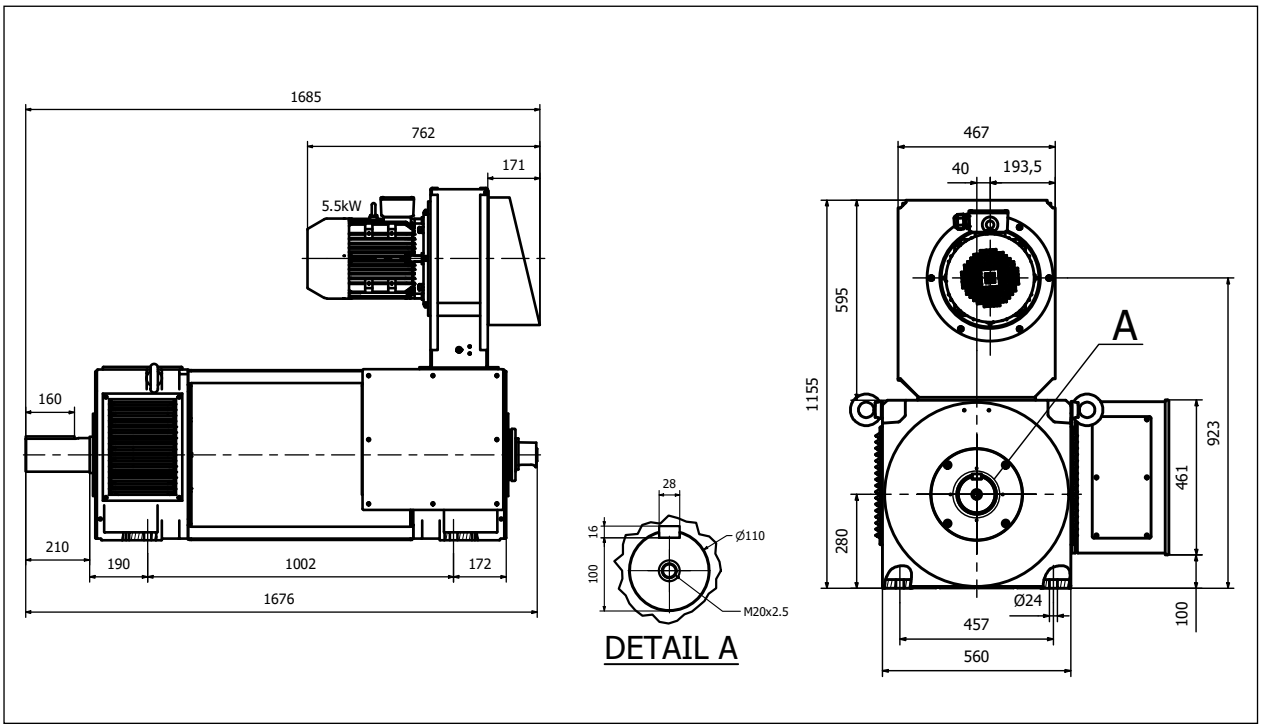
* On request (high speed option)
**Bearing protection ring recommended > 100kW
*** 690V possible on request

Blower characteristics (Voltage/frequency supply to precise in order)

Frequency (Hz)	50/60	**Number of phases**	3
Voltage (V)	400/460	**Mounting**	Radial
Speed (rpm)	2925/3510	**Type of cooling fan**	Force draught
Power (kW)	5.5/7.5	**Internal Static Air Pressure Drop (Pa)**	2600
Current (A)	10.1/11.86	**Required cooling Air flow (m³/h)**	3600

Electrical Data (at 400V)

n_N rpm	P_N kW	T_N Nm	I_N A	n_1 rpm	cos ϕ	η	f_N Hz
500	109	2082	215	1000	0,85	0,86	17
1000	214	2044	395	2000	0,86	0,91	33,7
1200	251	1998	453	2400	0,86	0,93	40,3
1500	308	1961	538	2600	0,87	0,95	50,4
1800	362	1921	632	3100	0,87	0,95	60,5
2000	378	1805	660	3400*	0,87	0,95	67,1



Motor Characteristics

Degree of Protection	IP55	**Cooling**	IC416
Rotor Inertia J (kgm²)	9.30	**Motor weight (kg)**	2140
Maximum mechanical speed n_{max}(rpm)	3000 (3400)*	**Sound Pressure level (db(A)) at 50 Hz**	85
D-End Bearing**	6228 C3	**N-End bearing**	6228 C3
Vibration Class	A	**Mounting**	IM1001
Insulation class	H	**Temperature rise Class**	F
Motor Nominal voltage (V)	400***	**Thermal Protection**	PTC 150°C

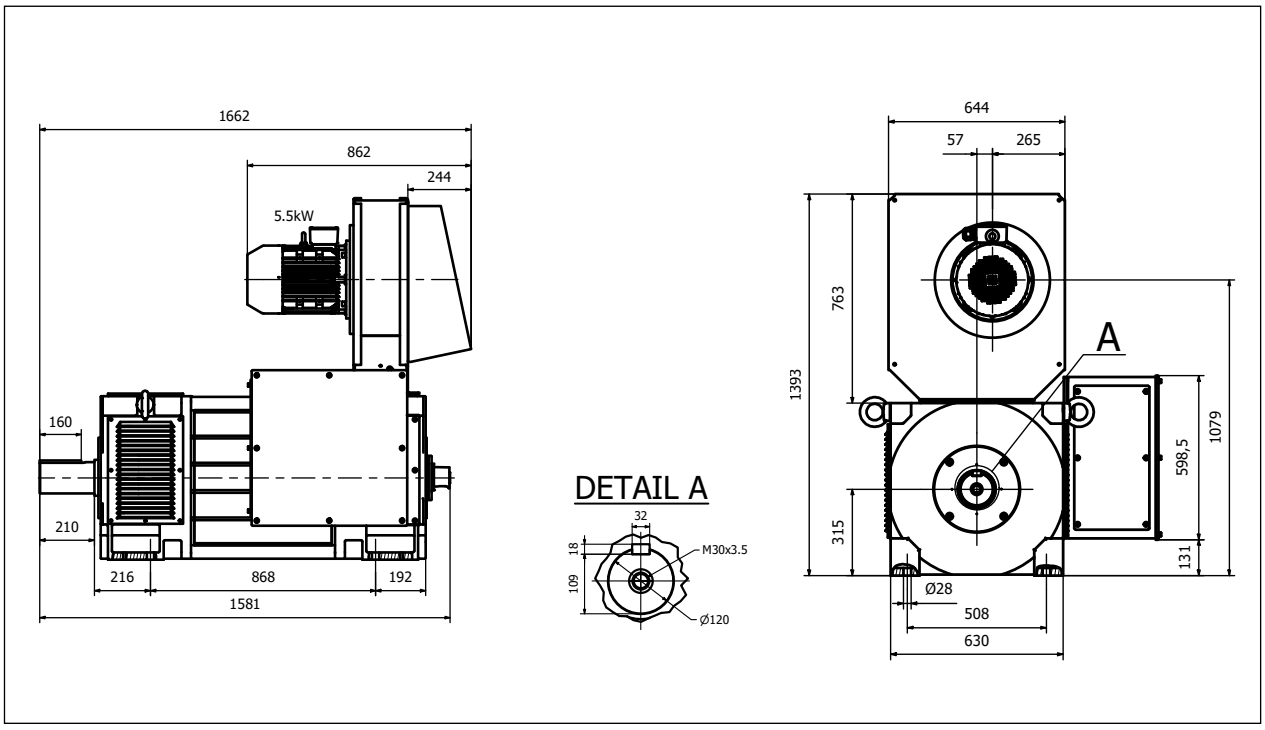
* On request (high speed option)
** bearing protection ring recommended
*** 690V possible on request

Blower characteristics (Voltage/frequency supply to precise in order)

Frequency (Hz)	50/60	**Number of phases**	3
Voltage (V)	400/460	**Mounting**	Radial
Speed (rpm)	2925/3510	**Type of cooling fan**	Force draught
Power (kW)	5.5/7.5	**Internal Static Air Pressure Drop (Pa)**	2600
Current (A)	10.1/11.86	**Required cooling Air flow (m³/h)**	3600

Electrical Data (at 400V)

n_N rpm	P_N kW	T_N Nm	I_N A	n_1 rpm	cos ϕ	η	f_N Hz
500	117	2235	231	1000	0,85	0,86	17,1
1000	229	2187	422	2000	0,86	0,91	33,7
1200	270	2149	487	2400	0,86	0,93	40,3
1500	330	2101	576	2600	0,87	0,95	50,4
1800	388	2059	678	3100*	0,87	0,95	60,5
2000	405	1934	707	3400*	0,87	0,95	67,1



Motor Characteristics

Degree of Protection	IP55	**Cooling**	IC416
Rotor Inertia J (kgm²)	11.73	**Motor weight (kg)**	2560
Maximum mechanical speed n_{max}(rpm)	3000 (3400)*	**Sound Pressure level (db(A)) at 50 Hz**	85
D-End Bearing**	6228 C3	**N-End bearing**	6228 C3
Vibration Class	A	**Mounting**	IM1001
Insulation class	H	**Temperature rise Class**	F
Motor Nominal voltage (V)	400***	**Thermal Protection**	PTC 150°C

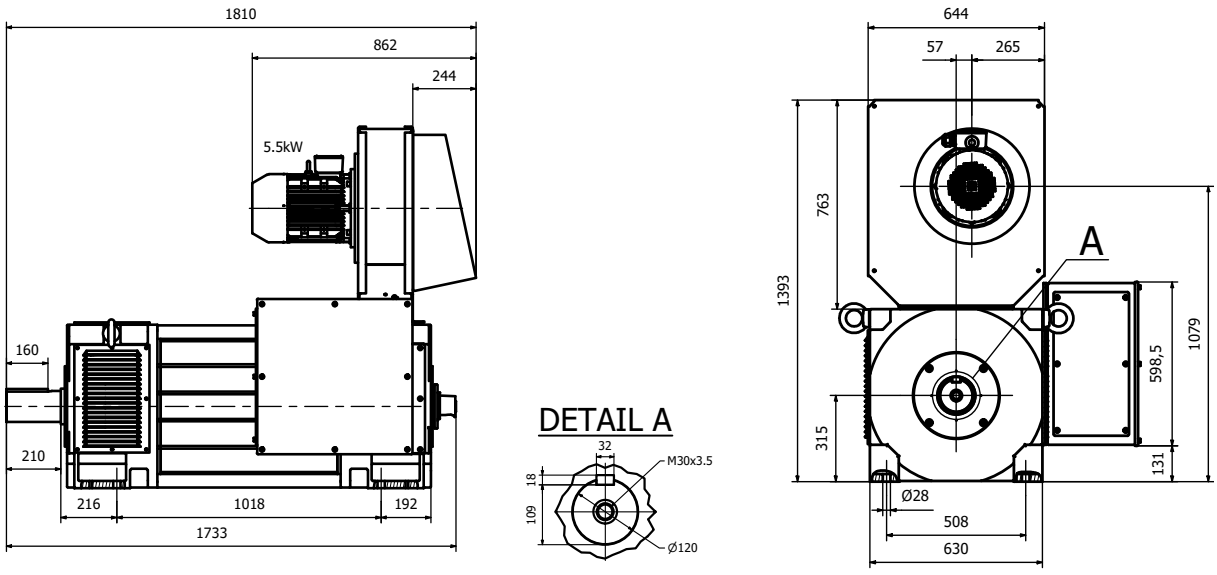
* On request (high speed option)
** bearing protection ring recommended
*** 690V possible on request

Blower characteristics (Voltage/frequency supply to precise in order)

Frequency (Hz)	50/60	**Number of phases**	3
Voltage (V)	400/460	**Mounting**	Radial
Speed (rpm)	2925/3510	**Type of cooling fan**	Force draught
Power (kW)	5.5/7.5	**Internal Static Air Pressure Drop (Pa)**	2600
Current (A)	10.1/11.86	**Required cooling Air flow (m³/h)**	3600

Electrical Data (at 400V)

n_N rpm	P_N kW	T_N Nm	I_N A	n_1 rpm	cos ϕ	η	f_N Hz
500	150	2865	286	1000	0,87	0,87	17,1
1000	294	2808	530	2000	0,87	0,92	33,7
1200	345	2746	609	2400	0,87	0,94	40,3
1500	424	2699	733	2600	0,87	0,96	50,4
1800	498	2642	861	3100*	0,87	0,96	60,5
2000	520	2483	899	3200*	0,87	0,96	67,1



Motor Characteristics

Degree of Protection	IP55	**Cooling**	IC416
Rotor Inertia J (kgm²)	13.6	**Motor weight (kg)**	2910
Maximum mechanical speed n_{max}(rpm)	3000	**Sound Pressure level (db(A)) at 50 Hz**	85
D-End Bearing*	6228 C3	**N-End bearing**	6228 C3
Vibration Class	A	**Mounting**	IM1001
Insulation class	H	**Temperature rise Class**	F
Motor Nominal voltage (V)	400***	**Thermal Protection**	PTC 150°C

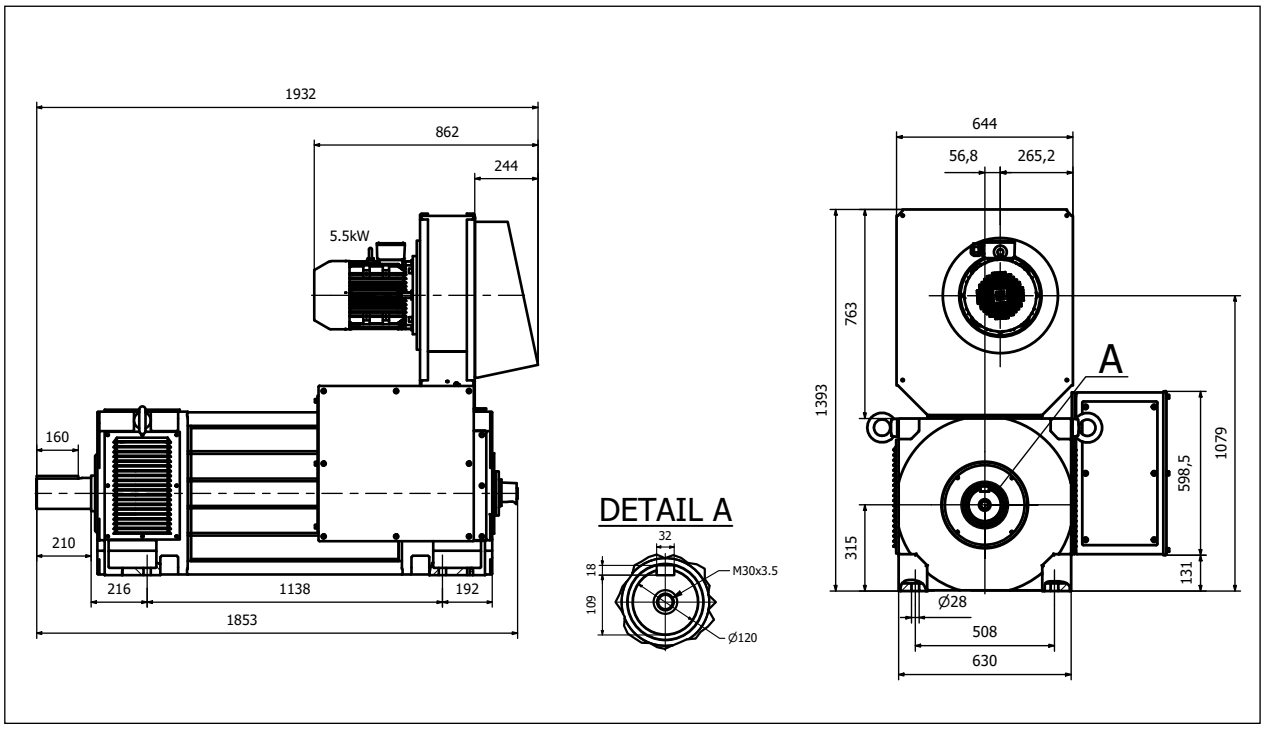
** bearing protection ring recommended
*** 690V possible on request

Blower characteristics (Voltage/frequency supply to precise in order)

Frequency (Hz)	50/60	**Number of phases**	3
Voltage (V)	400/460	**Mounting**	Radial
Speed (rpm)	2925/3510	**Type of cooling fan**	Force draught
Power (kW)	5.5/7.5	**Internal Static Air Pressure Drop (Pa)**	2600
Current (A)	10.1/11.86	**Required cooling Air flow (m³/h)**	3600

Electrical Data (at 400V)

n_N rpm	P_N kW	T_N Nm	I_N A	n_1 rpm	cos ϕ	η	f_N Hz
500	175	3343	346	1000	0,84	0,87	17
1000	343	3276	633	2000	0,85	0,92	33,7
1200	404	3215	730	2400	0,85	0,94	40,3
1500	495	3152	865	2600	0,86	0,96	50,4
1800	582	3088	1017	2600	0,86	0,96	60,5
2000	607	2898	1061	2600	0,86	0,96	67,1



Motor Characteristics

Degree of Protection	IP55	**Cooling**	IC416
Rotor Inertia J (kgm²	16.5	**Poids moteur (kg)**	3100
Maximum mechanical speed n_{max}(rpm)	2600	**Sound Pressure level (db(A)) at 50 Hz**	85
D-End Bearing**	6228 C3	**N-End bearing**	6228 C3
Vibration Class	A	**Mounting**	IM1001
Insulation class	H	**Temperature rise Class**	F
Motor Nominal voltage (V)	400***	**Thermal Protection**	PTC 150°C

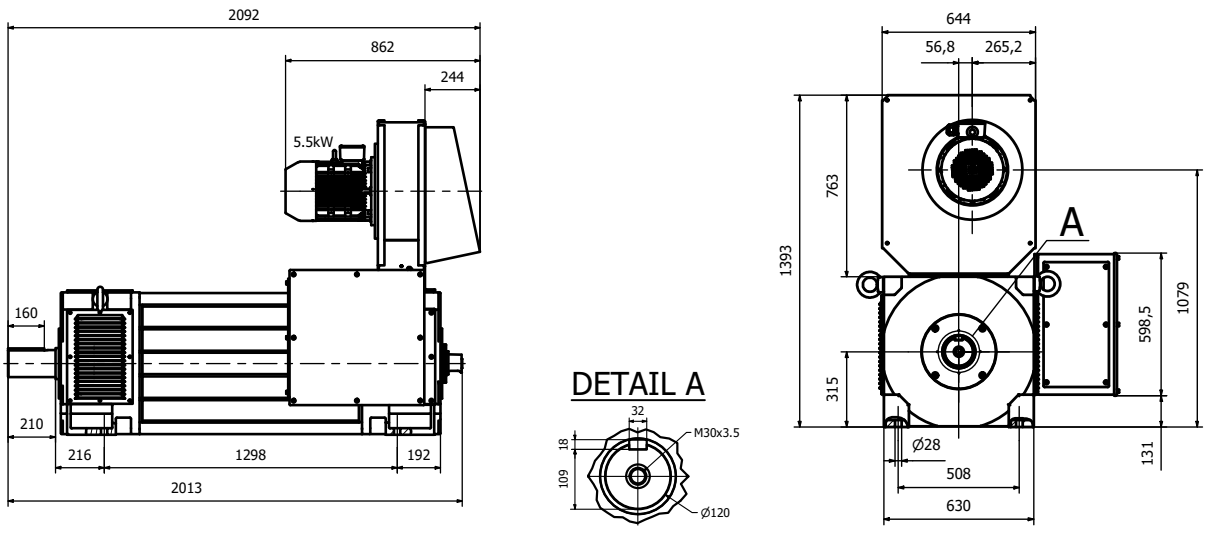
* On request (high speed option)
**Bearing protection ring recommended > 100kW
*** 690V possible on request

Blower characteristics (Voltage/frequency supply to precise in order)

Frequency (Hz)	50/60	**Number of phases**	3
Voltage (V)	400/460	**Mounting**	Radial
Speed (rpm)	2925/3510	**Type of cooling fan**	Force draught
Power (kW)	5.5/7.5	**Internal Static Air Pressure Drop (Pa)**	2600
Current (A)	10.1/11.86	**Required cooling Air flow (m³/h)**	3600

Electrical Data (at 400V)

n_N rpm	P_N kW	T_N Nm	I_N A	n_1 rpm	cos ϕ	η	f_N Hz
500	210	4011	415	1000	0,84	0,87	17
1000	412	3935	761	2000	0,85	0,92	33,7
1200	485	3860	876	2400	0,85	0,94	40,3
1500	594	3782	1039	2600	0,86	0,96	50,4
1800	699	3709	1222	2600	0,86	0,96	60,5
2000	729	3481	1275	2600	0,86	0,96	67,1



Motor Characteristics

Degree of Protection	IP55	**Cooling**	IC416
Rotor Inertia J (kgm²)	13.36	**Motor weight (kg)**	2080
Maximum mechanical speed n_{max}(rpm)	2800 (3000)*	**Sound Pressure level (db(A)) at 50 Hz**	86
D-End Bearing**	6230 C3	**N-End bearing**	6230 C3
Vibration Class	A	**Mounting**	IM1001
Insulation class	H	**Temperature rise Class**	F
Motor Nominal voltage (V)	400***	**Thermal Protection**	PTC 150°C

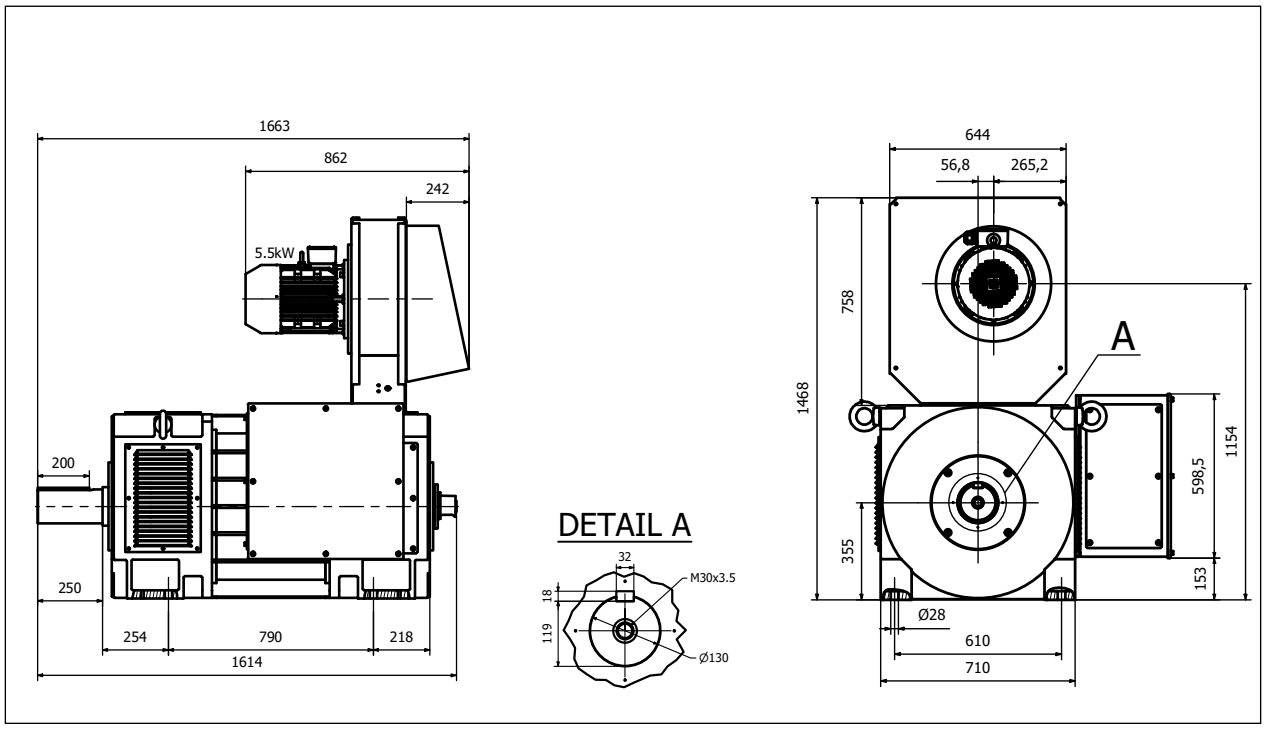
* On request (high speed option)
** bearing protection ring recommended
*** 690V possible on request

Blower characteristics (Voltage/frequency supply to precise in order)

Frequency (Hz)	50/60	**Number of phases**	3
Voltage (V)	400/460	**Mounting**	Radial
Speed (rpm)	2925/3510	**Type of cooling fan**	Force draught
Power (kW)	5.5/11	**Internal Static Air Pressure Drop (Pa)**	2600
Current (A)	10.1/17.05	**Required cooling Air flow (m³/h)**	3600

Electrical Data (at 400V)

n_N rpm	P_N kW	T_N Nm	I_N A	n_1 rpm	cos ϕ	η	f_N Hz
500	119	2273	241	1000	0,86	0,83	17
1000	233	2225	420	2000	0,87	0,92	33,6
1200	274	2181	478	2400	0,88	0,94	40,2
1500	336	2139	574	2600	0,88	0,96	50,3
1800	395	2096	675	3000*	0,88	0,96	60,3
2000	412	1967	704	3000*	0,88	0,96	66,9



Motor Characteristics

Degree of Protection	IP55	**Cooling**	IC416
Rotor Inertia J (kgm²)	17.63	**Motor weight (kg)**	2590
Maximum mechanical speed n_{max}(rpm)	2800 (3000)*	**Sound Pressure level (db(A)) at 50 Hz**	86
D-End Bearing**	6230 C3	**N-End bearing**	6230 C3
Vibration Class	A	**Mounting**	IM1001
Insulation class	H	**Temperature rise Class**	F
Motor Nominal voltage (V)	400***	**Thermal Protection**	PTC 150°C

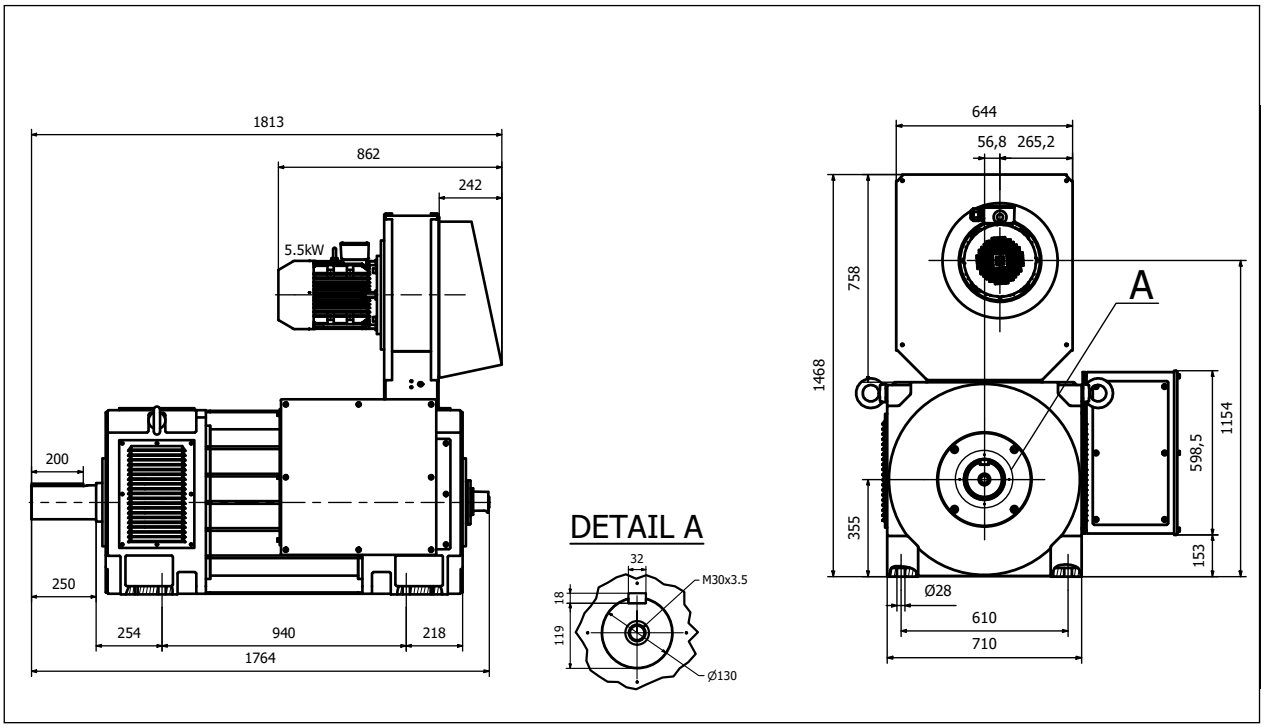
* On request (high speed option)
** bearing protection ring recommended
*** 690V possible on request

Blower characteristics (Voltage/frequency supply to precise in order)

Frequency (Hz)	50/60	**Number of phases**	3
Voltage (V)	400/460	**Mounting**	Radial
Speed (rpm)	2925/3510	**Type of cooling fan**	Force draught
Power (kW)	5.5/11	**Internal Static Air Pressure Drop (Pa)**	2600
Current (A)	10.1/17.05	**Required cooling Air flow (m³/h)**	3600

Electrical Data (at 400V)

n_N rpm	P_N kW	T_N Nm	I_N A	n_1 rpm	cos ϕ	η	f_N Hz
500	163	3113	333	1000	0,85	0,83	17
1000	320	3056	584	2000	0,86	0,92	33,6
1200	377	3000	673	2400	0,86	0,94	40,2
1500	462	2941	798	2600	0,87	0,96	50,3
1800	543	2881	938	3000*	0,87	0,96	60,3
2000	567	2707	980	3000*	0,87	0,96	66,9



Motor Characteristics

Degree of Protection	IP55	**Cooling**	IC416
Rotor Inertia J (kgm²)	20.49	**Motor weight (kg)**	2930
Maximum mechanical speed n_{max}(rpm)	2800 (3000)*	**Sound Pressure level (db(A)) at 50 Hz**	86
D-End Bearing**	6230 C3	**N-End bearing**	6230 C3
Vibration Class	A	**Mounting**	IM1001
Insulation class	H	**Temperature rise Class**	F
Motor Nominal voltage (V)	400***	**Thermal Protection**	PTC 150°C

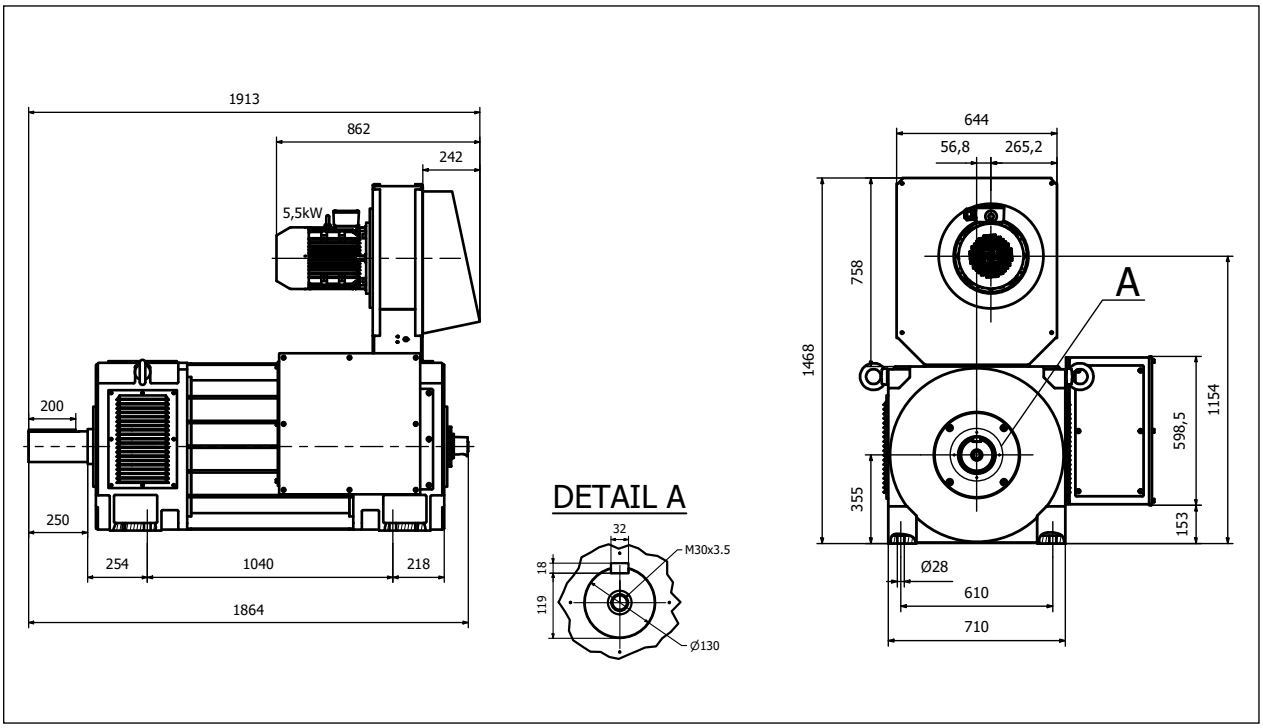
* On request (high speed option)
** bearing protection ring recommended
*** 690V possible on request

Blower characteristics (Voltage/frequency supply to precise in order)

Frequency (Hz)	50/60	**Number of phases**	3
Voltage (V)	400/460	**Mounting**	Radial
Speed (rpm)	2925/3510	**Type of cooling fan**	Force draught
Power (kW)	5.5/11	**Internal Static Air Pressure Drop (Pa)**	2600
Current (A)	10.1/17.05	**Required cooling Air flow (m³/h)**	3600

Electrical Data (at 400V)

n_N rpm	P_N kW	T_N Nm	I_N A	n_1 rpm	cos ϕ	η	f_N Hz
500	194	3705	397	1000	0,85	0,83	16,9
1000	381	3639	695	2000	0,86	0,92	33,6
1200	448	3565	800	2400	0,86	0,94	40,2
1500	550	3502	950	2600	0,87	0,96	50,3
1800	646	3427	1116	3000*	0,87	0,96	60,3
2000	675	3223	1167	3000*	0,87	0,96	66,9



Motor Characteristics

Degree of Protection	IP55	**Cooling**	IC416
Rotor Inertia J (kgm²)	25.68	**Motor weight (kg)**	3555
Maximum mechanical speed n_{max}(rpm)	2700	**Sound Pressure level (db(A)) at 50 Hz**	86
D-End Bearing*	6230 C3	**N-End bearing**	6230 C3
Vibration Class	A	**Mounting**	IM1001
Insulation class	H	**Temperature rise Class**	F
Motor Nominal voltage (V)**	400	**Thermal Protection**	PTC 150°C

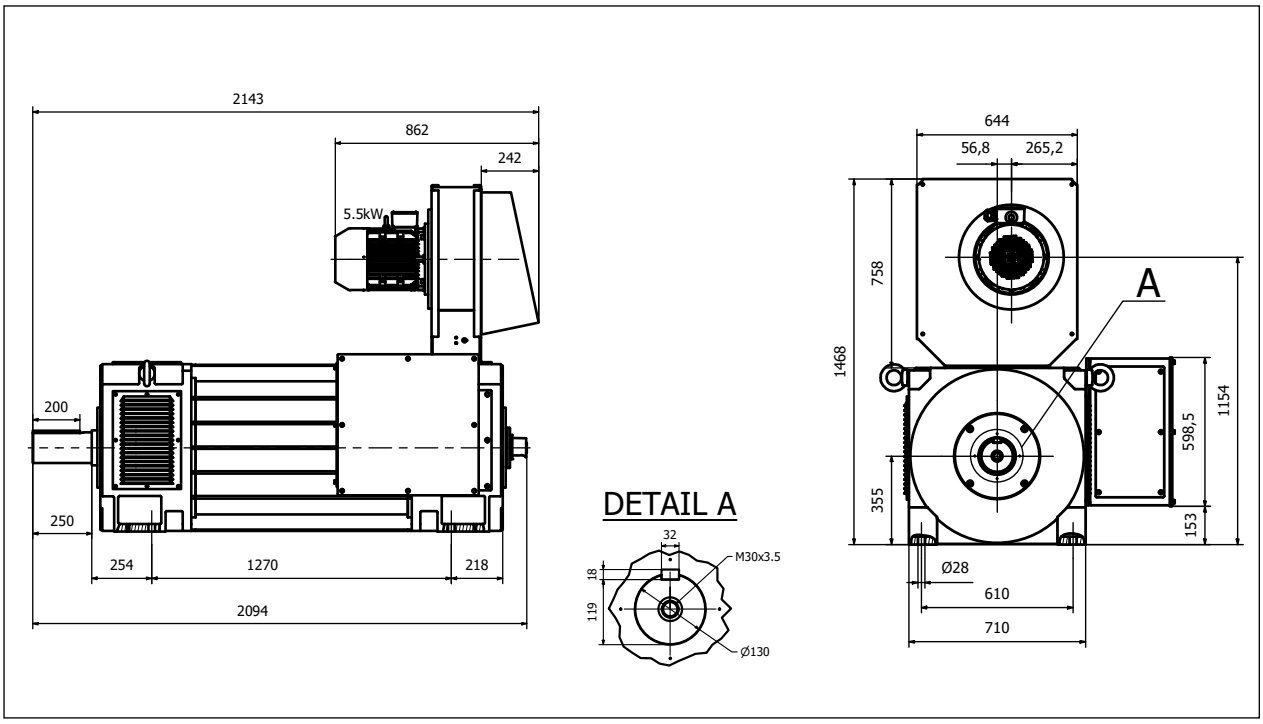
* bearing protection ring recommended
** 690V possible on request

Blower characteristics (Voltage/frequency supply to precise in order)

Frequency (Hz)	50/60	**Number of phases**	3
Voltage (V)	400/460	**Mounting**	Radial
Speed (rpm)	2925/3510	**Type of cooling fan**	Force draught
Power (kW)	5.5/15	**Internal Static Air Pressure Drop (Pa)**	2600
Current (A)	10.1/23.25	**Required cooling Air flow (m³/h)**	3600

Electrical Data (at 400V)

n_N rpm	P_N kW	T_N Nm	I_N A	n_1 rpm	cos ϕ	η	f_N Hz
500	253	4825	517	1000	0,85	0,83	16,9
1000	496	4734	904	2000	0,86	0,92	33,6
1200	583	4643	1042	2400	0,86	0,94	40,2
1500	715	4552	1236	2600	0,87	0,96	50,3
1800	841	4461	1453	2700	0,87	0,96	60,3
2000	877	4188	1516	2700	0,87	0,96	66,9



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T-T Electric is committed to a working partnership with our customers. For mutual benefit, we focus on complete and innovative solutions together.

T-T Electric

France
22 rue du 8 mai 1945
F-95340 PERSAN

Tel: +33 (0) 1 30 28 62 01
Fax: +33 (0) 1 30 28 62 22
E-mail: info@t-telectric.fr