

AC Square Motors

Catalogue-2014/05 E



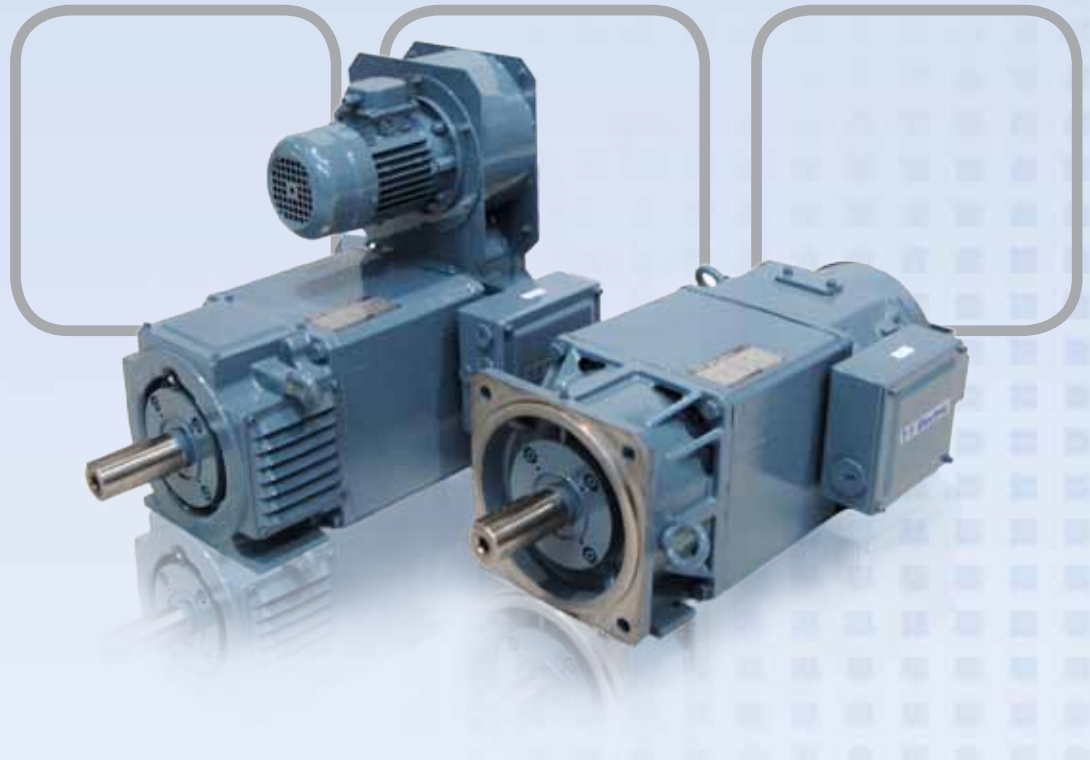
AMP

Series 112 - 355

10-1300 kW

13-1750 HP

64-8280 Nm
(at 1500rpm)



t-telectric.com

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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 10 to 1300 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
315	A,B,C
355	A,B,C,D

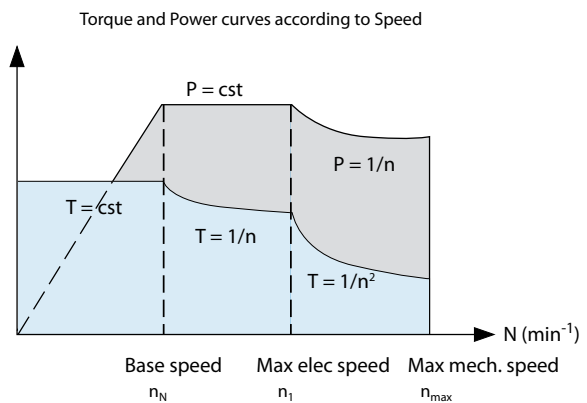
Example :

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.

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. 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/s ²	Displ μm	Vel mm/s	Acc m/s ²	Displ μm	Vel mm/s	Acc m/s ²
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 (AMP112 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 (AMP112 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 maintain 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 IE2.

Blower is supplied without filter as standard.

Filter on request.

Mounting forms

IP23/IP55 Radial ventilation	IP54/IP55 Axial ventilation
112-180: IM1001/B3 or IM2001/B35 225-355: IM1001	112-180: 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 multicolor motor cable, shielded, high frequency bonding connections between the installation and known earth reference points).

T-T Electric strongly recommend 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 ground.

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
AMP160-180	2 x φ 63.5 + 1 x φ 20.5
AMP225	3 blank removable faces
AMP250	1 blank removable face
AMP280	1 blank removable face
AMP315	1 blank removable face
AMP355	1 blank removable face

Earth connection

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

Basic design

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.

The painting system is suitable for humid environments.

Standard colour of the motor is blue according to Munsell 8B 4.5/3.25 (similar to RAL5024).

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	6214	6216	6220	6222	6224	6226	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 copper bars		
		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 temperature 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:

Altitude (m)	Temperature (°C)			
	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		
	10'	30'	60'
S2	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 n_1 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%	\pm 10%	+3dB(A)
PN (kW) >150	-10% (1- η)	-15% (1- η)	-1/6 (1-cos ϕ)	+/-20%	-10%	\pm 10%	+3dB(A)

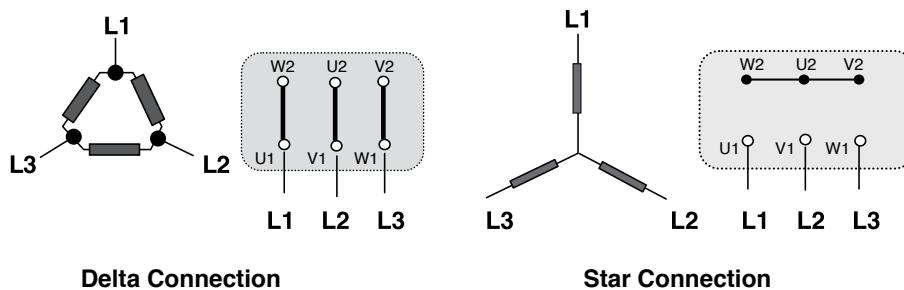
Tolerances are in accordance with IEC 600 34-1 and based on test procedure in accordance with IEC 600 34-2.

AMP nameplate

T-T Electric				CE	
3 Phase AC Motor		IEC 60034-1		Date:	
Type: AMP			N°		
P _n : kW	T _n : Nm	N _n : rpm	V _n : V		
I _n : A	Cos phi	Eff.:	Weight	kg	
F _n : Hz	N1: rpm	N _{mech} : rpm	Duty		
IP	IC	IM	Res.1ph:	Ω	
Amb: °C	Alt: m	Ins. Cl:	Temp. rise Cl:		
Fan: Ph	Hz	A	V		
Encoder:	ppr	Vdc	channels		
Made in EU			www.t-telectric.com		

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.



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	S
<i>Other cooling forms available on request</i>									
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
Grounding brush radial cooling	x	x	x	x	x	x	x	x	x
Grounding brush axial cooling	R	R	R	R	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 are equipped with through hollow shaft encoder

Encoders on stock are:

- programmable according to process requirements:
 - Electrical interface: 5...32 V, TTL/ HTL
 - Number of lines: up to 65536
- fixed settings:
 - HTL or TTL
 - 1024 or 2048 ppr

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)

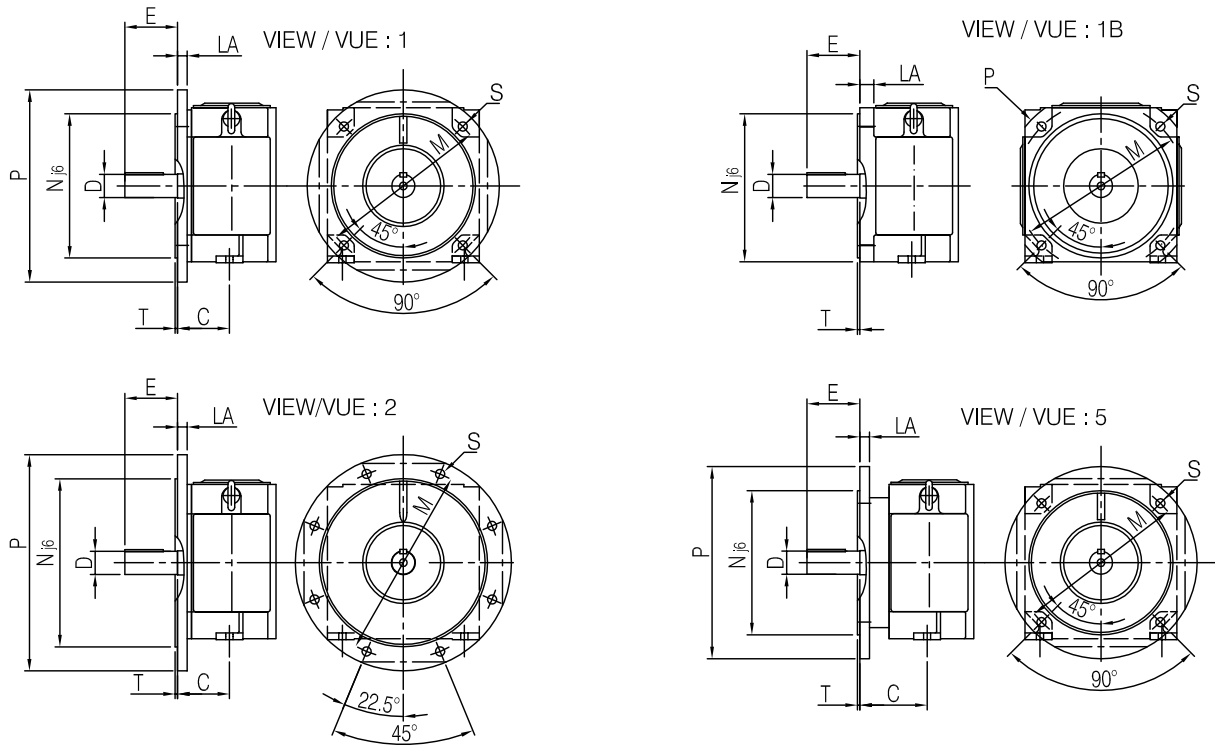


PIN	Colour of wires	Signal TTL, HTL
6	Brown	\overline{A}
5	White	A
1	Black	\overline{B}
8	Pink	B
4	Yellow	\overline{Z}
3	Lilac	Z
10	Blue	GND
12	Red	+Us
9	Screen	Screen
2	-	N.C.
11	-	N.C.

Other types of encoder are available on request.

Flange dimensions

On request AMP can be equipped 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	1b**	1b**
	F265	15	265	230	300	15	4	70	1b**	1b**
	F300	15	300	250	350	19	5	70	1	1
	F350	15	350	300	400	19	5	70	1	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	51	300	250	350	19	5	121	1b**	1
	F350	19	350	300	400	19	5	121	1b**	1b**
	F400	19	400	350	450	19	5	121	2	2
225	F400	62	400	350	450	19	5	149	2	2
	F500	19	500	400	550	19	5	149	2	2
	F600	19	600	550	660	24	6	149	2	2
250	F400	37	400	350	450	19	5	168	N.A.	2
	F500	19	500	400	550	19	5	168		2
	F600	22	600	550	660	24	6	168		2
280	F500	43	500	450	550	19	5	190		2
	F600	18	600	550	660	24	6	190		2
	F740	22	740	680	800	24	6	190		2
315	F500	48	500	450	550	24	6	216		2
	F600	48	600	550	660	24	6	216		2
	F740	22	740	680	800	24	6	216		2
355	F600	68	600	550	660	24	6	254		2
	F740	22	740	680	800	24	6	254		2

* special shaft required – C dimension change from 108 to 130

** recommended standard flange

AV : Axial ventilation

RV : Radial ventilation

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)
AMP112-4 6308 2RSC3	40	2500	1800
AMP132-4 6310 2RSC3	55	3000	2200
AMP160-4 6214 2RSC3	55	3800	3000
AMP180-4 6216 2RSC3	70	4200	3200
AMP225-4 6220 C3	85	7000	5200
AMP250-4 6222 C3	105	7500	5700
AMP280-4 6224 C3	105	8000	6000
AMP315-4 6226 C3	105	8500	6500
AMP355-4 6230 C3	125	9000	6700 (2800 rpm)

Roller bearings

Type	Distance from shaft shoulder (mm)	1500 rpm (N)	3000 rpm (N)
AMP112-4 NU308 ECP	40	6500	5000
AMP132-4 NU310 ECP	55	8000	6700
AMP160-4 NU214 ECP	55	10000	8000
AMP180-4 NU216 ECP	70	12000	9500
AMP225-4 NU220 ECP	85	21000	17000
AMP250-4 NU220 ECP	105	28000	22000
AMP280-4 NU224 ECP	105	32000	26500
AMP315-4 NU226 ECP	105	35000	28000
AMP355-4 NU230 ECP	125	42000	35000 (2500 rpm)

Motor Characteristics

Degree of Protection	IP23 S	Cooling	IC06
Rotor Inertia J (kgm ²)	0.037	Motor weight (kg)	85
Maximum mechanical speed n _{max} (rpm)	5000 (10600)*	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

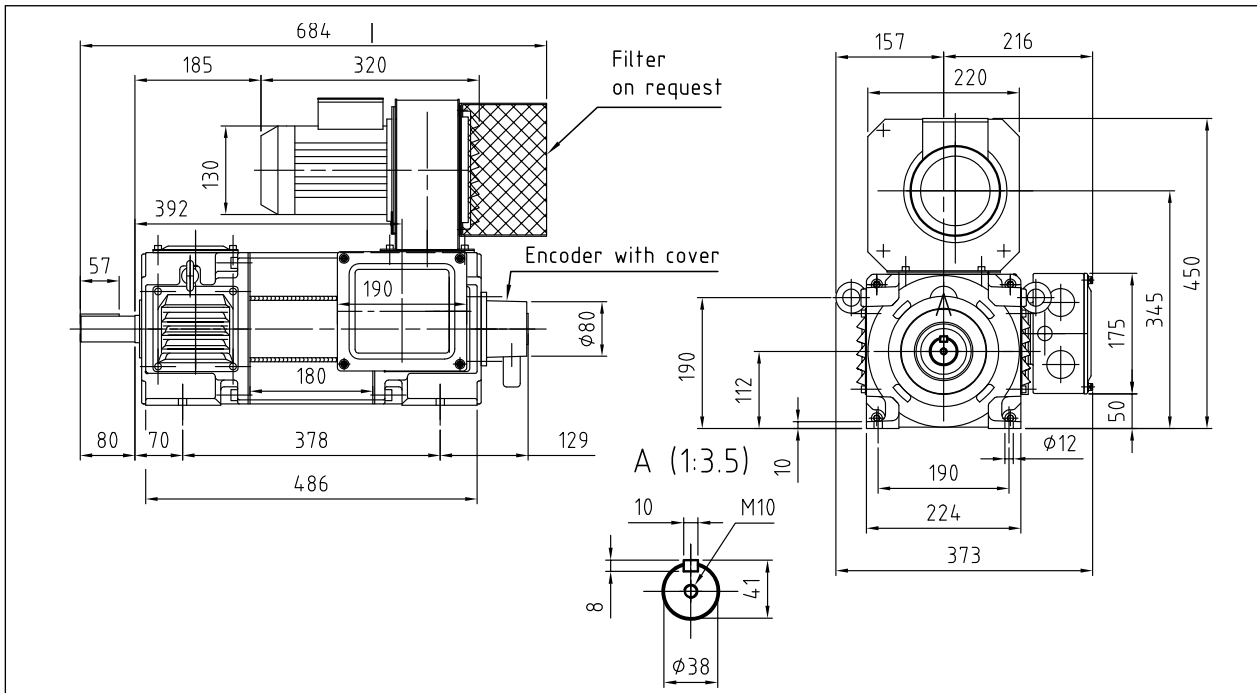
* On request (high speed option)

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)	2810/3411	Type of cooling fan	Force draught
Power (kW)	0.25/0.25	Internal Static Air Pressure Drop (Pa)	500
Current (A)	0.66/0.58	Required cooling Air flow (m ³ /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	20,5
1000	11	105	24	1600	0,8	0,82	37,3
1200	12	96	26	1920	0,8	0,84	43,2
1500	15	96	31	2400	0,8	0,86	54
1800	17,5	93	36	2880	0,81	0,87	64,8
2000	18	86	36	3200	0,81	0,88	70,6
2400	20	80	40	3840	0,81	0,89	86
3000	21	67	42	4800	0,81	0,9	103,8



Motor Characteristics

Degree of Protection	IP23 S	Cooling	IC06
Rotor Inertia J (kgm ²)	0.045	Motor weight (kg)	90
Maximum mechanical speed n _{max} (rpm)	5000 (8700)*	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

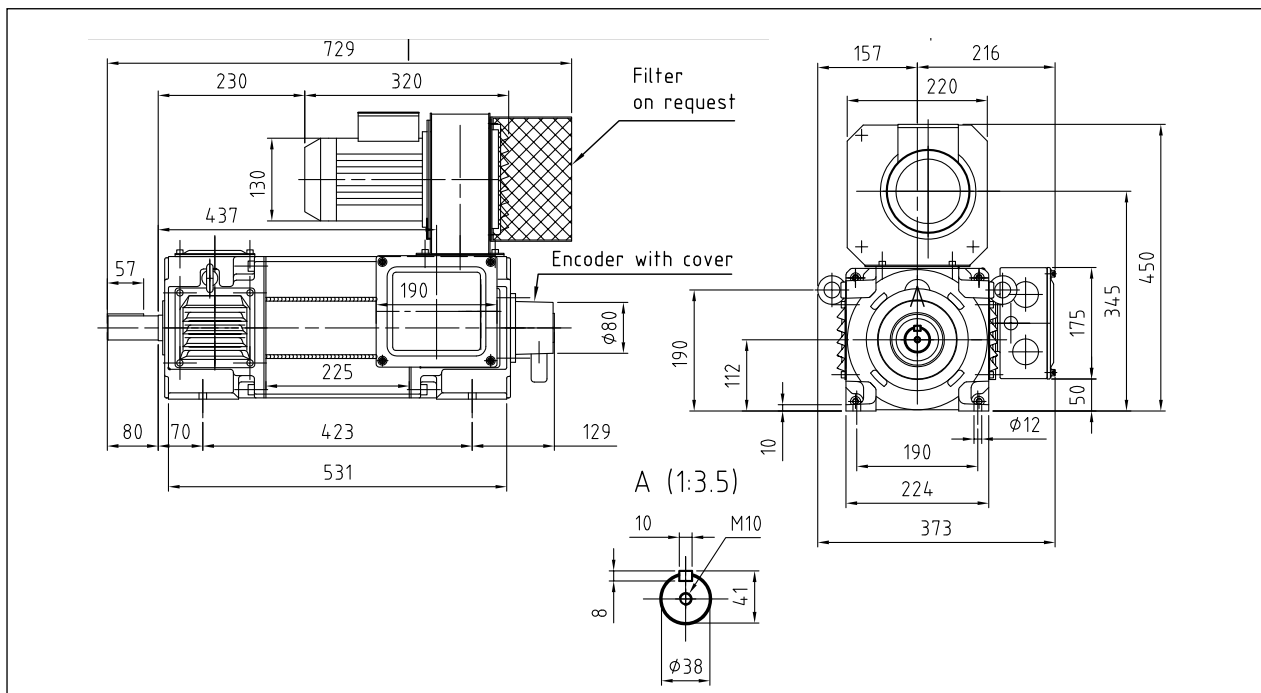
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Blower characteristics (Voltage/frequency supply to precise in order)

Frequency (Hz)	50/60	Number of phases	3
Voltage (V)	400/460	Mounting	Radial
Speed (rpm)	2810/3411	Type of cooling fan	Force draught
Power (kW)	0.25/0.25	Internal Static Air Pressure Drop (Pa)	500
Current (A)	0.66/0.58	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	20,7
1000	13	124	28	1600	0,8	0,84	37,5
1200	15,5	123	33	1920	0,8	0,86	43,3
1500	19	121	39	2400	0,8	0,88	54,2
1800	22	117	44	2880	0,81	0,89	65
2000	23	110	46	3200	0,81	0,9	70,8
2400	25	99	49	3840	0,81	0,91	85
3000	26	83	50	4800	0,81	0,92	104



Motor Characteristics

Degree of Protection	IP23 S	Cooling	IC06
Rotor Inertia J (kgm ²)	0.052	Motor weight (kg)	120
Maximum mechanical speed n _{max} (rpm)	5000 (7500)*	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

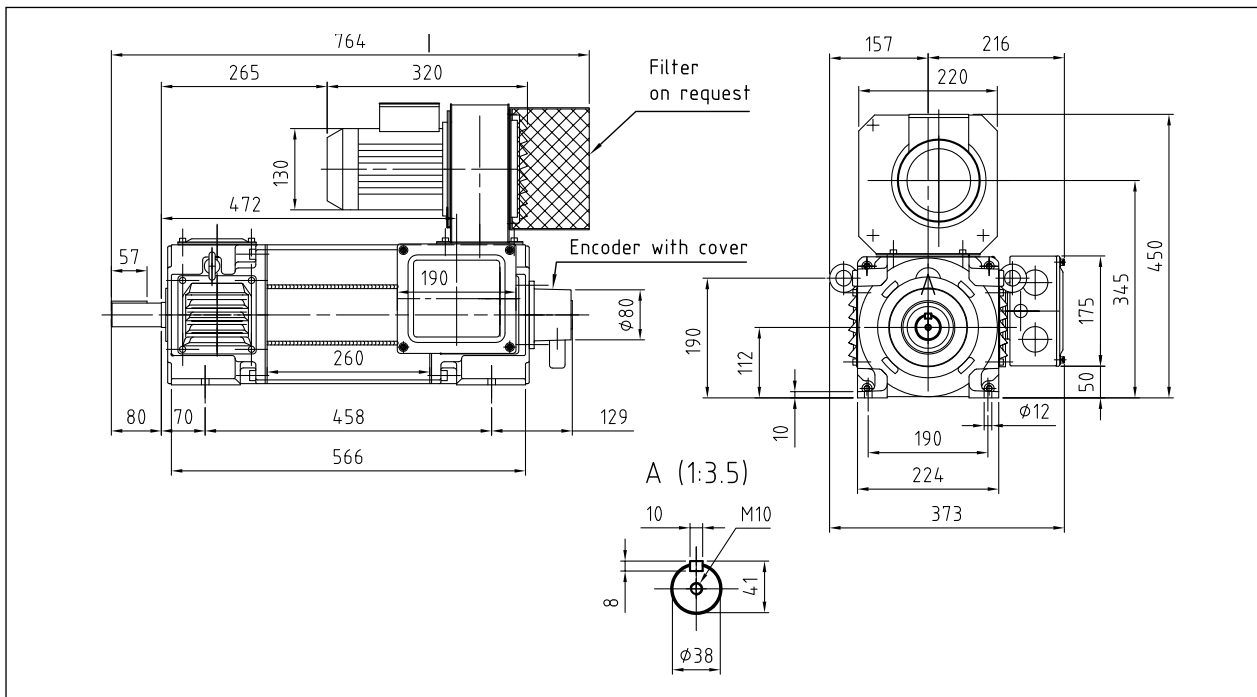
* On request (high speed option)

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)	2810/3411	Type of cooling fan	Force draught
Power (kW)	0.25/0.25	Internal Static Air Pressure Drop (Pa)	500
Current (A)	0.66/0.58	Required cooling Air flow (m ³ /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	20,8
1000	15	143	32	1600	0,8	0,85	37,6
1200	17	135	35	1920	0,8	0,87	43,4
1500	21	134	43	2400	0,8	0,89	54,3
1800	24,5	130	49	2880	0,8	0,9	65
2000	25	119	49	3200	0,81	0,91	70,9
2400	28	111	54	3840	0,81	0,92	86
3000	30	96	57	4800	0,81	0,93	104,2



Motor Characteristics

Degree of Protection	IP23 S	Cooling	IC06
Rotor Inertia J (kgm ²)	0.092	Motor weight (kg)	166
Maximum mechanical speed n _{max} (rpm)	4300 (10500)*	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

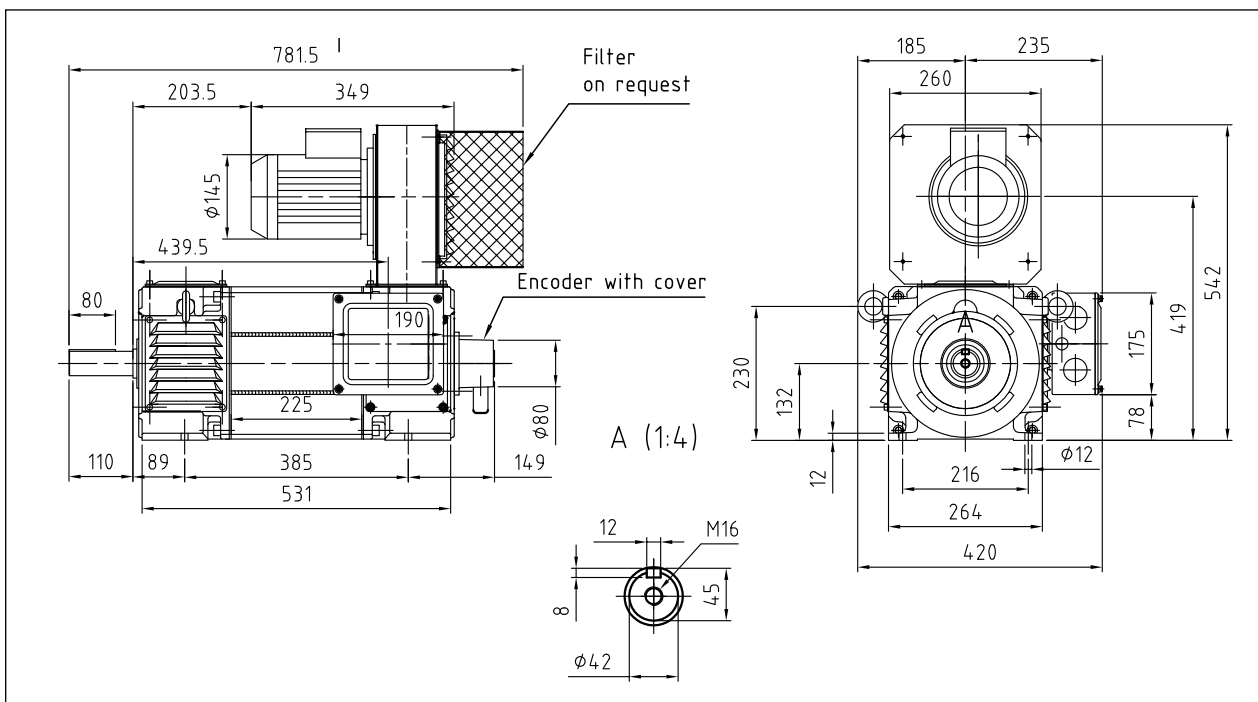
* On request (high speed option)

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)	2790/3420	Type of cooling fan	Force draught
Power (kW)	0.55/0.55	Internal Static Air Pressure Drop (Pa)	500
Current (A)	1.29/1.12	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	11	216	25	800	0,8	0,8	18,6
1000	22	212	47	1600	0,8	0,85	35
1200	26	207	54	1920	0,8	0,87	41,8
1500	32	204	65	2400	0,8	0,89	52,3
1800	37,5	199	75	2880	0,8	0,9	62,8
2000	39	186	76	3200	0,81	0,91	68,2
2400	42	167	81	3840	0,81	0,92	83,2
3000	45	143	86	4800*	0,81	0,93	101,8



Motor Characteristics

Degree of Protection	IP23 S	Cooling	IC06
Rotor Inertia J (kgm ²)	0.108	Motor weight (kg)	175
Maximum mechanical speed n _{max} (rpm)	4300 (8700)*	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

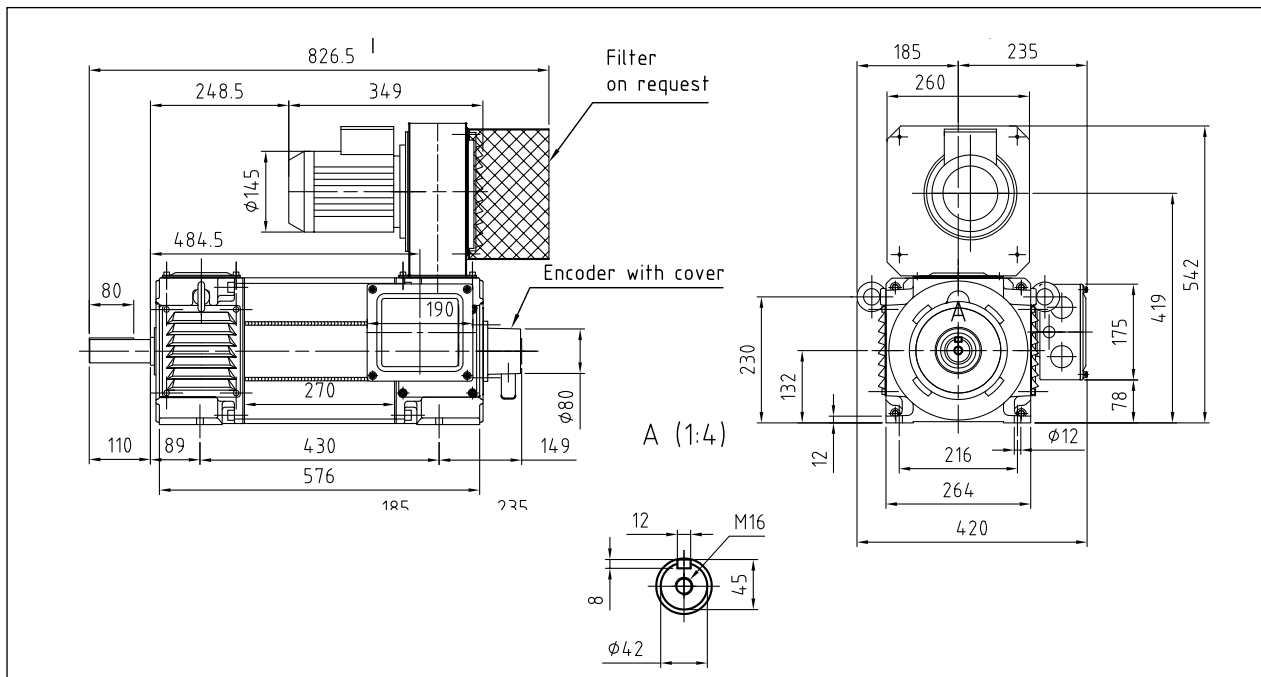
* On request (high speed option)

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)	2790/3420	Type of cooling fan	Force draught
Power (kW)	0.55/0.55	Internal Static Air Pressure Drop (Pa)	500
Current (A)	1.29/1.12	Required cooling Air flow (m ³ /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	0,79	0,81	18,5
1000	26	248	55	1600	0,8	0,86	35,1
1200	30	239	61	1920	0,81	0,88	41,7
1500	37	236	72	2400	0,82	0,9	52,1
1800	43	228	83	2880	0,82	0,91	62,5
2000	45	215	86	3200	0,82	0,92	68,5
2400	49	195	93	3840	0,82	0,93	83,4
3000	52	166	97	4800*	0,82	0,94	101,9



Motor Characteristics

Degree of Protection	IP23 S	Cooling	IC06
Rotor Inertia J (kgm ²)	0.125	Motor weight (kg)	205
Maximum mechanical speed n _{max} (rpm)	4300 (7400)*	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

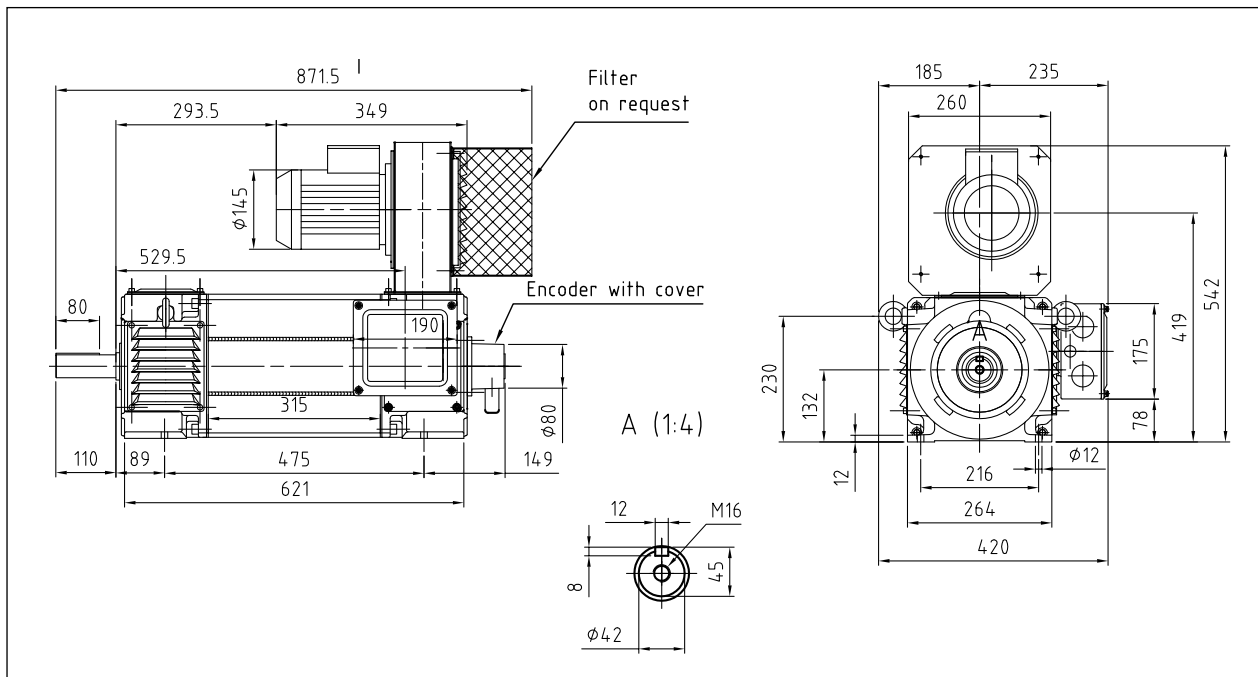
* On request (high speed option)

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)	2790/3420	Type of cooling fan	Force draught
Power (kW)	0.55/0.55	Internal Static Air Pressure Drop (Pa)	500
Current (A)	1.29/1.12	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	298	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 (kgm ²)	0.256	Motor weight (kg)	290
Maximum mechanical speed n _{max} (rpm)	3400 (9500)*	Sound Pressure level (db(A)) at 50 Hz	76
D-End Bearing	6214 2RSC3	N-End bearing	6214 2RSC3
Vibration Class	A	Mounting	IM1001
Insulation class	H	Temperature rise Class	F
Motor Nominal voltage (V)	400	Thermal Protection	PTC 150°C

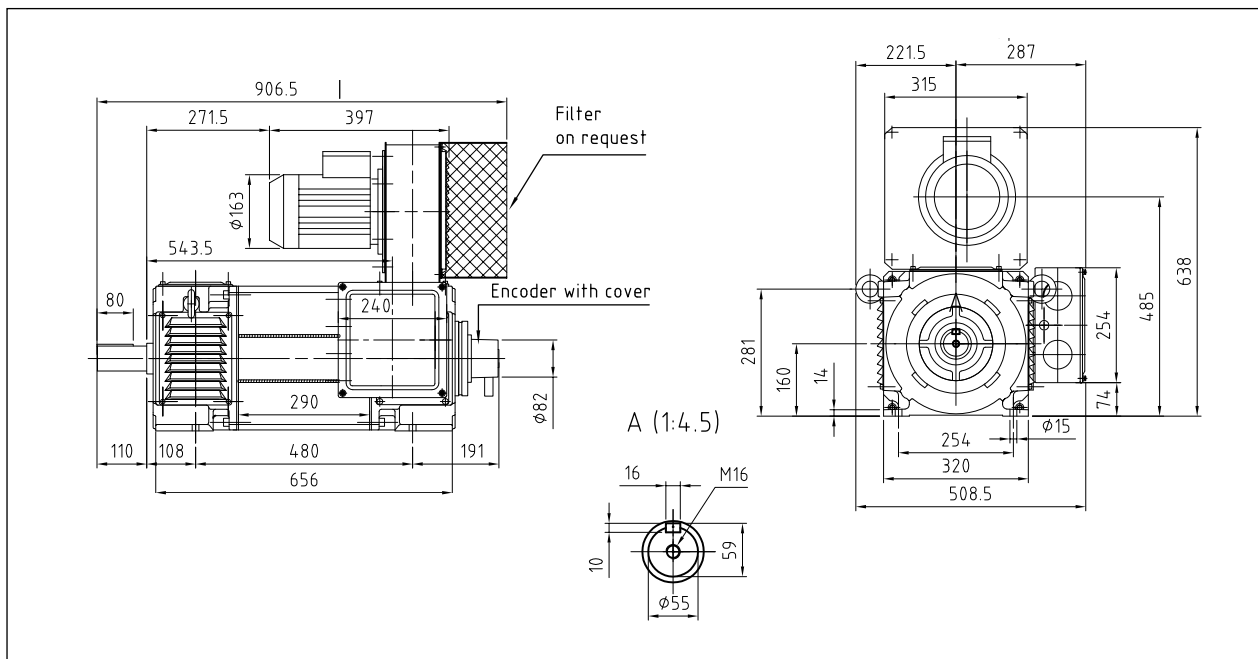
* On request (high speed option)

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)	2875/3490	Type of cooling fan	Force draught
Power (kW)	1.1/1.1	Internal Static Air Pressure Drop (Pa)	850
Current (A)	2.4/2.1	Required cooling Air flow (m ³ /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	23	439	49	800	0,8	0,84	18
1000	45	430	91	1600	0,8	0,89	34,6
1200	53	422	105	1920	0,8	0,91	41
1500	65	414	126	2400	0,8	0,93	51,3
1800	76	403	147	2880	0,8	0,93	61,5
2000	80	381	153	3200	0,8	0,94	68
2400	86	342	163	3840*	0,8	0,95	82
3000	91	290	171	4800*	0,8	0,96	101,5



Motor Characteristics

Degree of Protection	IP23 S	Cooling	IC06
Rotor Inertia J (kgm ²)	0.311	Motor weight (kg)	335
Maximum mechanical speed n _{max} (rpm)	3400 (7500)*	Sound Pressure level (db(A)) at 50 Hz	76
D-End Bearing**	6214 2RSC3	N-End bearing	6214 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)

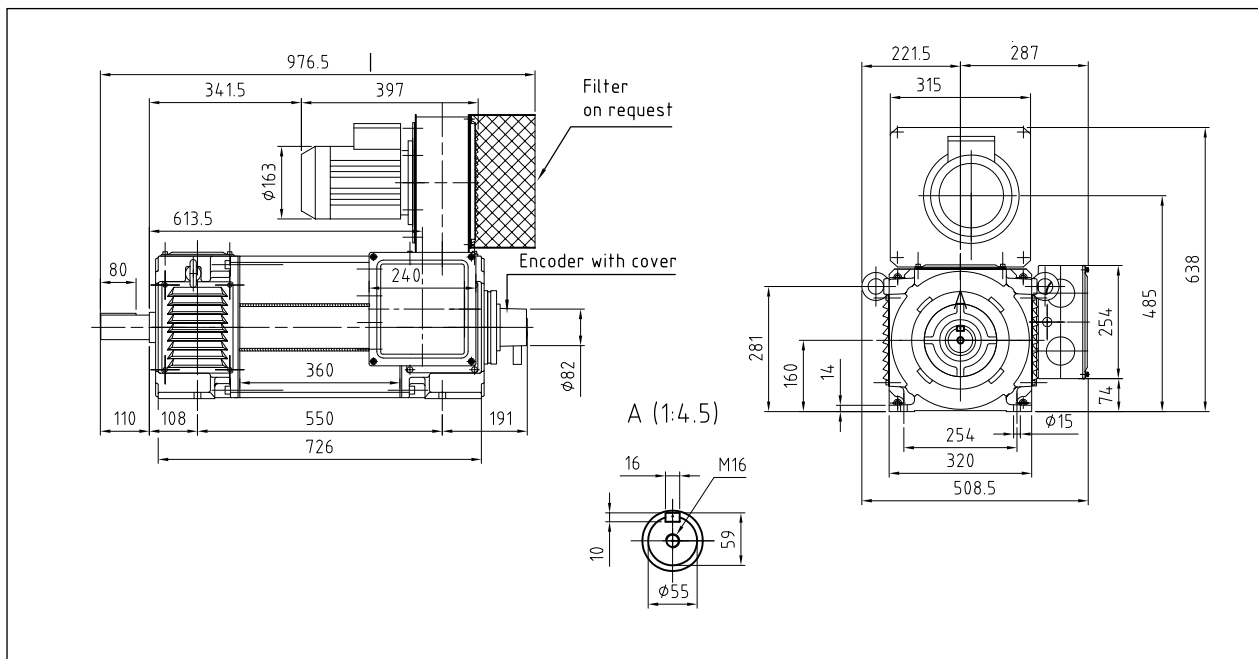
**Bearing protection ring recommended > 100kW

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)	2875/3490	Type of cooling fan	Force draught
Power (kW)	1.1/1.1	Internal Static Air Pressure Drop (Pa)	850
Current (A)	2.4/2.1	Required cooling Air flow (m ³ /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	27	506	56	800	0,82	0,84	18
1000	52	497	104	1600	0,81	0,89	34,7
1200	61	485	118	1920	0,82	0,91	41
1500	75	478	142	2400	0,82	0,93	51,4
1800	90	478	169	2880	0,82	0,94	61,5
2000	92	439	170	3200	0,82	0,95	68,3
2400	100	398	183	3840*	0,83	0,95	82,2
3000	105	334	190	4800*	0,83	0,96	101,5



Motor Characteristics

Degree of Protection	IP23 S	Cooling	IC06
Rotor Inertia J (kgm ²)	0.357	Motor weight (kg)	370
Maximum mechanical speed n _{max} (rpm)	3400 (6300)*	Sound Pressure level (db(A)) at 50 Hz	76
D-End Bearing**	6214 2RSC3	N-End bearing	6214 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)

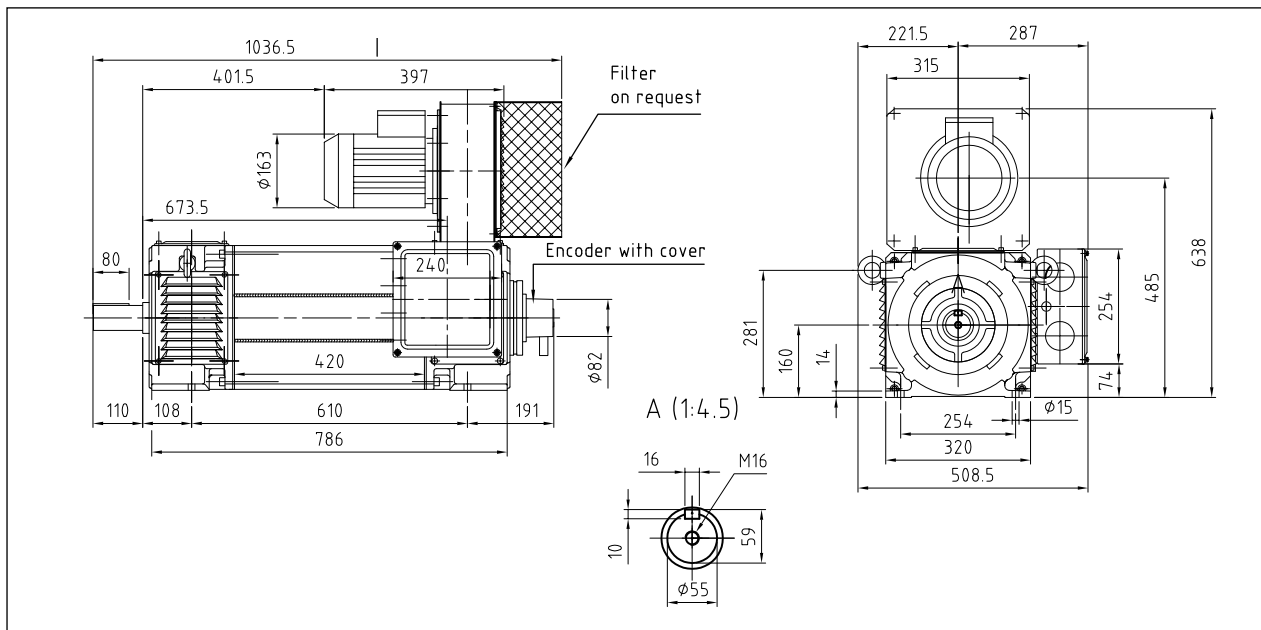
**Bearing protection ring recommended > 100kW

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)	2875/3490	Type of cooling fan	Force draught
Power (kW)	1.1/1.1	Internal Static Air Pressure Drop (Pa)	850
Current (A)	2.4/2.1	Required cooling Air flow (m ³ /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	594	68	800	0,78	0,84	18,9
1000	61	583	125	1600	0,79	0,89	35,8
1200	72	573	145	1920	0,79	0,91	41,6
1500	88	560	173	2400	0,79	0,93	52,1
1800	103	546	200	2880	0,79	0,94	62,5
2000	108	515	205	3200	0,8	0,95	68,9
2400	117	466	222	3840*	0,8	0,95	83
3000	123	392	232	4800*	0,8	0,96	101,9



Motor Characteristics

Degree of Protection	IP23 S	Cooling	IC06
Rotor Inertia J (kgm ²)	0.611	Motor weight (kg)	365
Maximum mechanical speed n _{max} (rpm)	3000 (7800)*	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

* On request (high speed option)

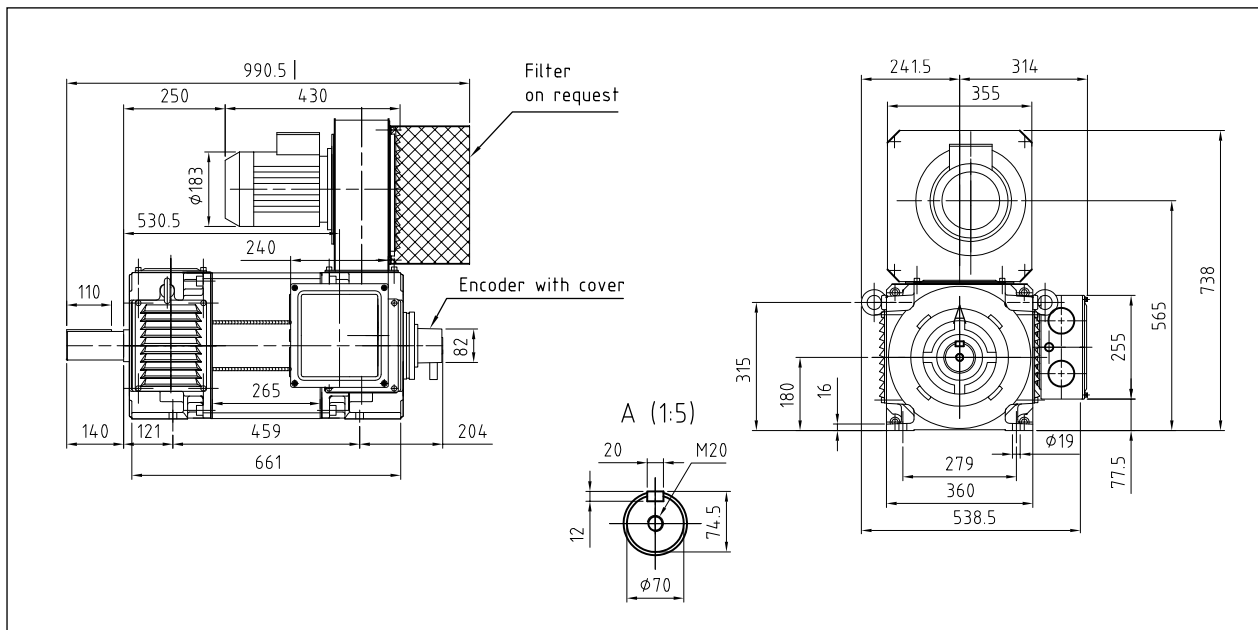
**Bearing protection ring recommended > 100kW

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)	2900/3510	Type of cooling fan	Force draught
Power (kW)	1.5/1.5	Internal Static Air Pressure Drop (Pa)	900
Current (A)	2.9/2.6	Required cooling Air flow (m ³ /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	36	688	74	800	0,84	0,84	17,5
1000	71	678	139	1600	0,83	0,89	34,3
1200	84	669	161	1920	0,83	0,91	40,6
1500	103	656	190	2400	0,84	0,93	50,8
1800	121	642	221	2880	0,84	0,94	60,8
2000	126	603	229	3200*	0,84	0,95	67,7
2400	137	545	248	3840*	0,84	0,95	81,2
3000	144	459	258	4800*	0,85	0,95	101



Motor Characteristics

Degree of Protection	IP23 S	Cooling	IC06
Rotor Inertia J (kgm ²)	0.842	Motor weight (kg)	450
Maximum mechanical speed n _{max} (rpm)	3000 (6700)*	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

* On request (high speed option)

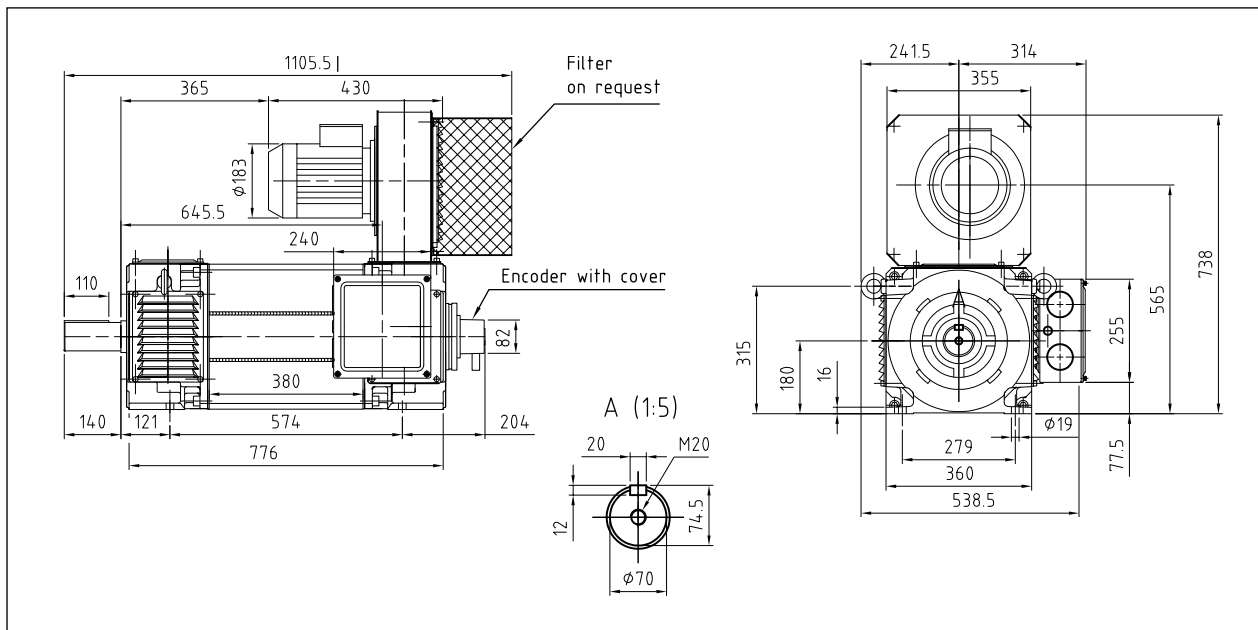
**Bearing protection ring recommended > 100kW

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)	2900/3510	Type of cooling fan	Force draught
Power (kW)	1.5/1.5	Internal Static Air Pressure Drop (Pa)	900
Current (A)	2.9/2.6	Required cooling Air flow (m ³ /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	44	840	89	800	0,84	0,85	17,3
1000	87	831	166	1600	0,84	0,9	34
1200	102	812	191	1920	0,84	0,92	40,6
1500	125	796	226	2400	0,85	0,94	50,7
1800	147	780	266	2880	0,85	0,94	60,8
2000	153	732	274	3200*	0,85	0,95	67,4
2400	166	661	297	3840*	0,85	0,95	81,1
3000	175	557	310	4800*	0,85	0,96	101



Motor Characteristics

Degree of Protection	IP23 S	Cooling	IC06
Rotor Inertia J (kgm ²)	1.101	Motor weight (kg)	545
Maximum mechanical speed n _{max} (rpm)	3000 (4900)*	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

* On request (high speed option)

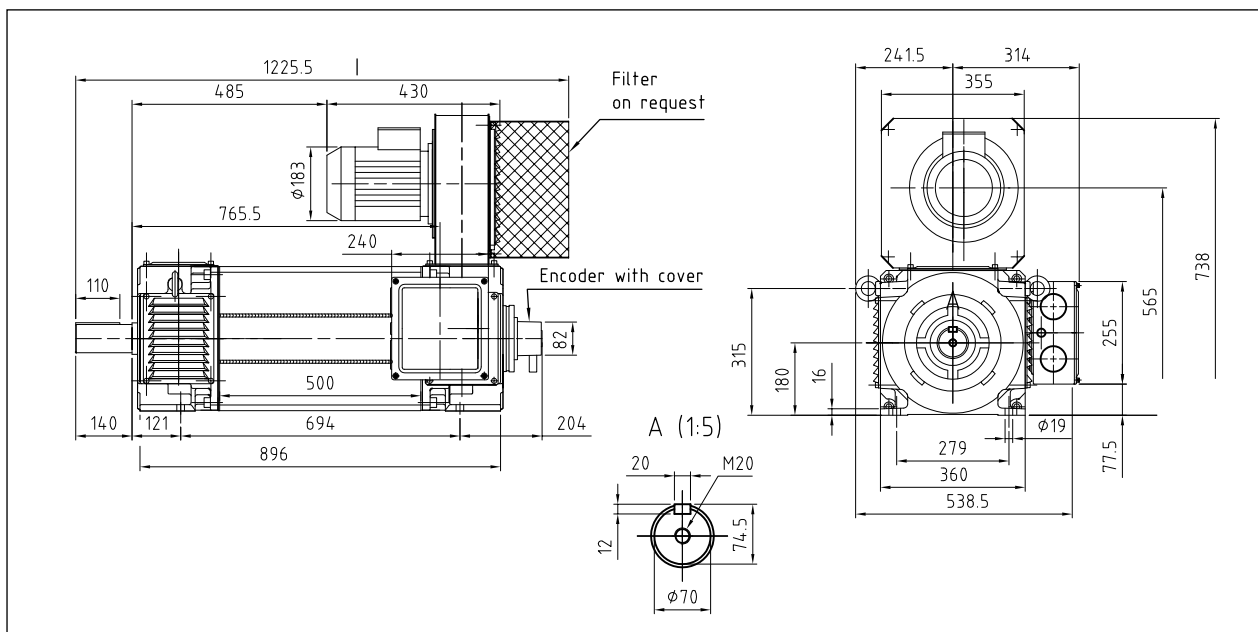
**Bearing protection ring recommended > 100kW

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)	2900/3510	Type of cooling fan	Force draught
Power (kW)	1.5/1.5	Internal Static Air Pressure Drop (Pa)	900
Current (A)	2.9/2.6	Required cooling Air flow (m ³ /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	53	1012	108	800	0,83	0,85	17,5
1000	104	993	199	1600	0,84	0,9	34,2
1200	122	971	228	1920	0,84	0,92	40,7
1500	150	955	271	2400	0,85	0,94	50,9
1800	176	934	318	2880	0,85	0,94	61,1
2000	184	879	329	3200*	0,85	0,95	67,6
2400	199	792	356	3840*	0,85	0,95	81,3
3000	210	669	367	4800*	0,86	0,96	100,9



Motor Characteristics

Degree of Protection	IP23 S	Cooling	IC06
Rotor Inertia J (kgm ²)	2.617	Motor weight (kg)	860
Maximum mechanical speed n _{max} (rpm)	3800 (5000)*	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)

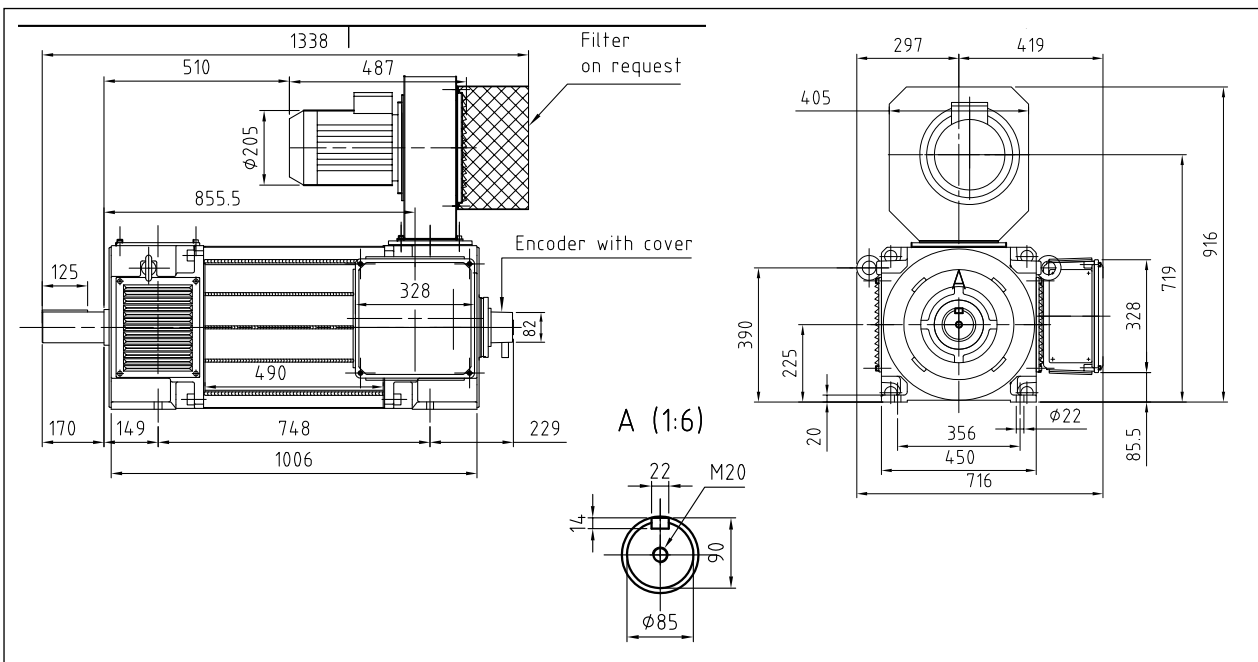
**Bearing protection ring recommended > 100kW

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)	2920/3530	Type of cooling fan	Force draught
Power (kW)	3/3	Internal Static Air Pressure Drop (Pa)	1200
Current (A)	5.8/5.1	Required cooling Air flow (m ³ /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	88	1687	176	800	0,84	0,86	17,1
1000	173	1655	323	1600	0,85	0,91	33,9
1200	204	1624	372	1920	0,85	0,93	40,4
1500	250	1592	447	2400	0,85	0,95	50,5
1800	294	1560	526	2880	0,85	0,95	60,6
2000	307	1464	542	3200	0,85	0,96	67,2
2400	332	1321	587	3840*	0,85	0,96	80,8
3000	350	1114	612	4800*	0,86	0,96	100,8



Motor Characteristics

Degree of Protection	IP23 S	Cooling	IC06
Rotor Inertia J (kgm ²)	2.915	Motor weight (kg)	920
Maximum mechanical speed n _{max} (rpm)	3800 (4400)*	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)

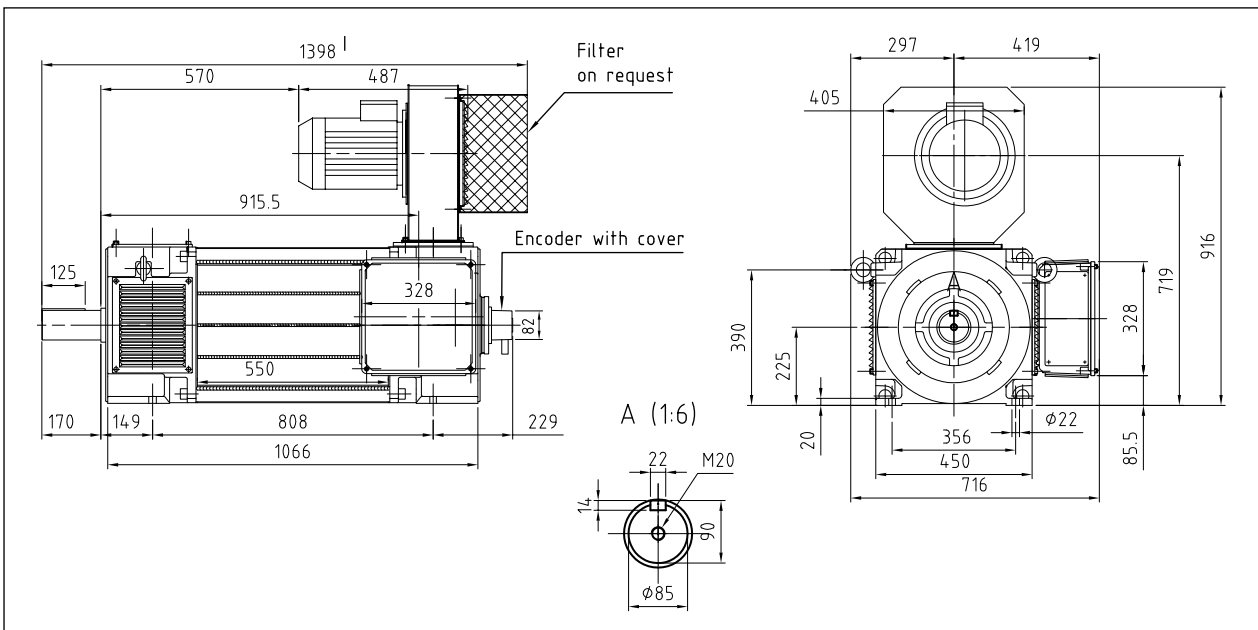
**Bearing protection ring recommended > 100kW

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)	2920/3530	Type of cooling fan	Force draught
Power (kW)	3/3	Internal Static Air Pressure Drop (Pa)	1200
Current (A)	5.8/5.1	Required cooling Air flow (m ³ /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	102	1957	205	800	0,84	0,86	17,3
1000	201	1920	384	1600	0,83	0,91	34
1200	236	1878	441	1920	0,83	0,93	40,6
1500	290	1846	525	2400	0,84	0,95	50,7
1800	341	1809	617	2880	0,84	0,95	60,7
2000	356	1699	643	3200	0,84	0,95	67,3
2400	385	1532	696	3840*	0,84	0,95	81
3000	406	1292	718	4400*	0,85	0,96	101



Motor Characteristics

Degree of Protection	IP23	Cooling	IC06
Rotor Inertia J (kgm ²)	2.677	Motor weight (kg)	1090
Maximum mechanical speed n _{max} (rpm)	3400 (5900)*	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)

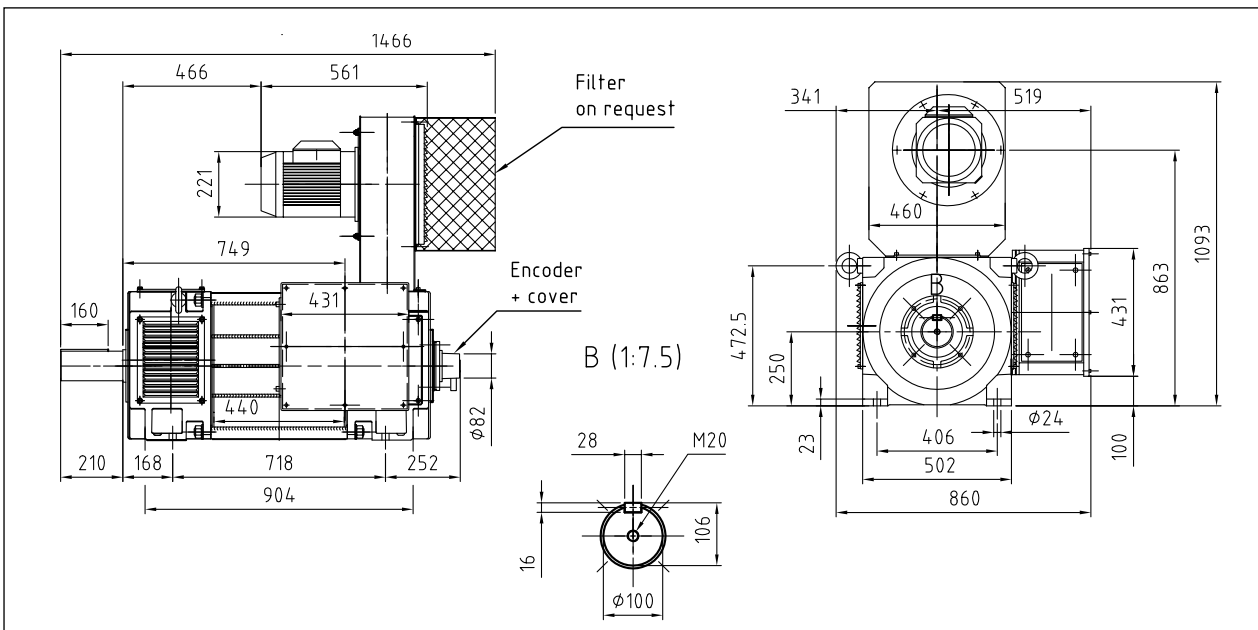
**Bearing protection ring recommended > 100kW

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)	2890/3510	Type of cooling fan	Force draught
Power (kW)	4/4.6	Internal Static Air Pressure Drop (Pa)	2100
Current (A)	7.7/7.9	Required cooling Air flow (m ³ /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	106	2025	212	800	0,84	0,86	16,8
1000	208	1986	393	1600	0,84	0,91	33,6
1200	245	1948	452	1920	0,84	0,93	40,4
1500	300	1910	536	2400	0,85	0,95	50,5
1800	353	1872	631	2880	0,85	0,95	60,6
2000	368	1757	651	3200	0,85	0,96	67,3
2400	398	1585	705	3840*	0,85	0,96	80,8
2600	400	1471	700	4160*	0,86	0,96	87,5



Motor Characteristics

Degree of Protection	IP23	Cooling	IC06
Rotor Inertia J (kgm ²)	3.29	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)

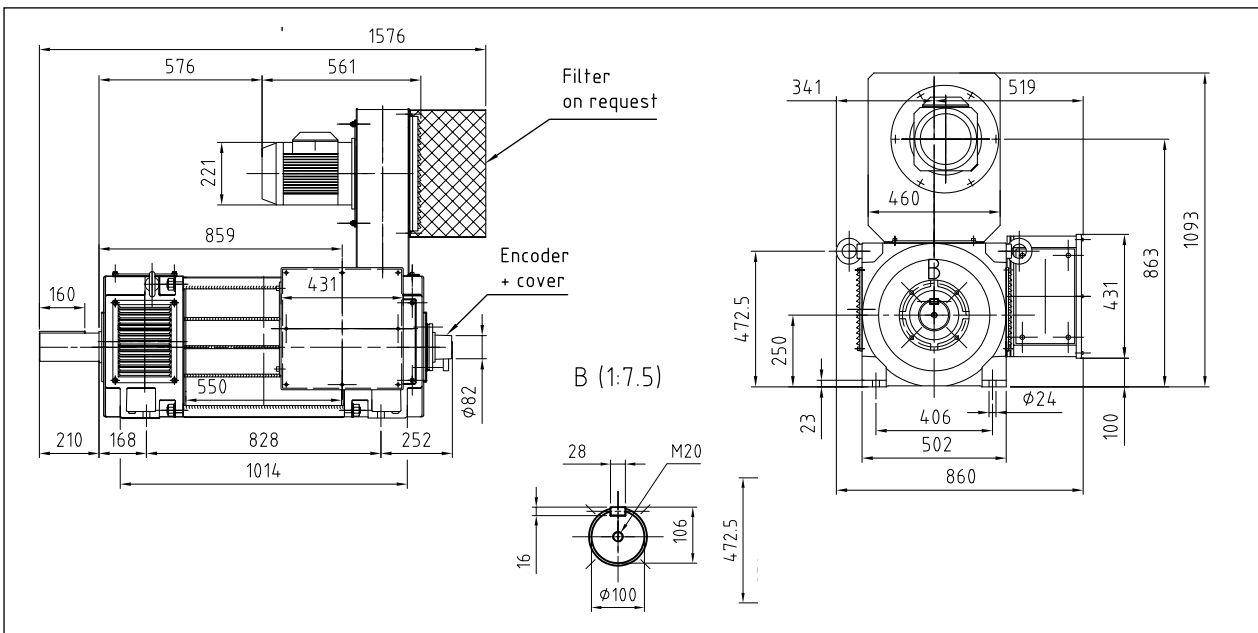
**Bearing protection ring recommended > 100kW

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)	2890/3510	Type of cooling fan	Force draught
Power (kW)	4/4.6	Internal Static Air Pressure Drop (Pa)	2100
Current (A)	7.7/7.9	Required cooling Air flow (m ³ /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	124	2362	247	800	0,84	0,86	16,8
1000	243	2317	458	1600	0,84	0,91	33,6
1200	286	2273	528	1920	0,84	0,93	40,4
1500	350	2228	626	2400	0,85	0,95	50,5
1800	412	2184	736	2880	0,85	0,95	60,6
2000	429	2050	759	3200	0,85	0,96	67,3
2400	465	1850	822	3840*	0,85	0,96	80,8
2600	467	1716	817	4160*	0,86	0,96	87.5



Motor Characteristics

Degree of Protection	IP23	Cooling	IC06
Rotor Inertia J (kgm ²)	3.73	Motor weight (kg)	1390
Maximum mechanical speed n _{max} (rpm)	3400 (3900)*	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)

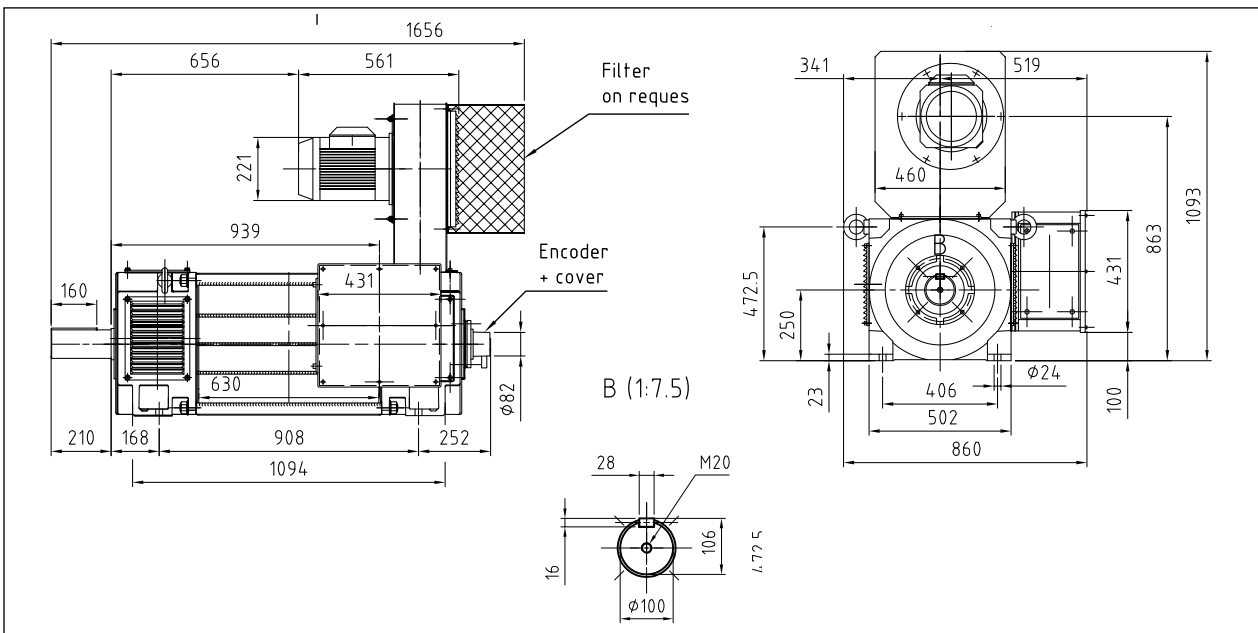
**Bearing protection ring recommended > 100kW

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)	2890/3510	Type of cooling fan	Force draught
Power (kW)	4/4.6	Internal Static Air Pressure Drop (Pa)	2100
Current (A)	7.7/7.9	Required cooling Air flow (m ³ /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	145	2767	289	800	0,84	0,86	16,8
1000	284	2715	537	1600	0,84	0,91	33,6
1200	335	2663	618	1920	0,84	0,93	40,4
1500	410	2610	733	2400	0,85	0,95	50,5
1800	482	2558	862	2880	0,85	0,95	60,6
2000	503	2402	890	3200	0,85	0,96	67,3
2400	544	2167	963	3840*	0,85	0,96	80,8
2600	547	2010	957	3900*	0,86	0,96	87.5



Motor Characteristics

Degree of Protection	IP23 S	Cooling	IC06
Rotor Inertia J (kgm ²)	4.705	Motor weight (kg)	1160
Maximum mechanical speed n _{max} (rpm)	3200 (5000)*	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

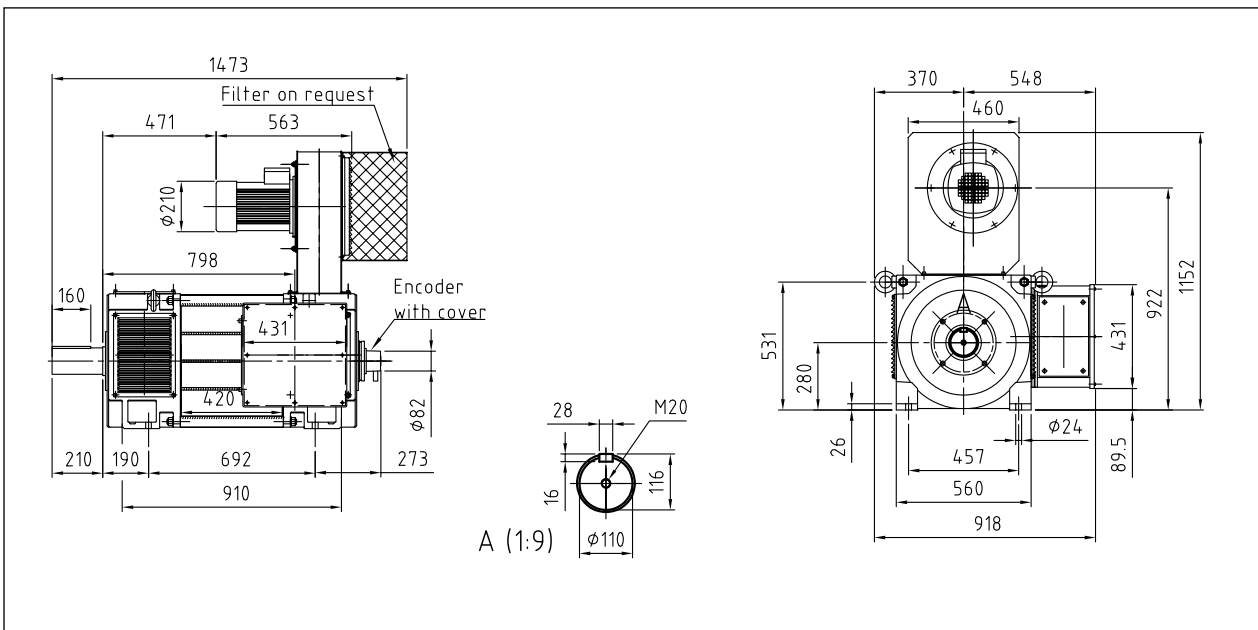
*** 690V possible on request

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)	2915/3520	Type of cooling fan	Force draught
Power (kW)	5.5/7.5	Internal Static Air Pressure Drop (Pa)	2600
Current (A)	11/11.8	Required cooling Air flow (m ³ /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	120	2295	237	800	0,85	0,86	17,1
1000	236	2251	435	1600	0,86	0,91	33,7
1200	277	2204	500	1920	0,86	0,93	40,3
1500	340	2165	594	2400	0,87	0,95	50,4
1800	400	2122	699	2880	0,87	0,95	60,5
2000	417	1991	728	3200	0,87	0,95	67,1



Motor Characteristics

Degree of Protection	IP23 S	Cooling	IC06
Rotor Inertia J (kgm ²)	6.309	Motor weight (kg)	1510
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

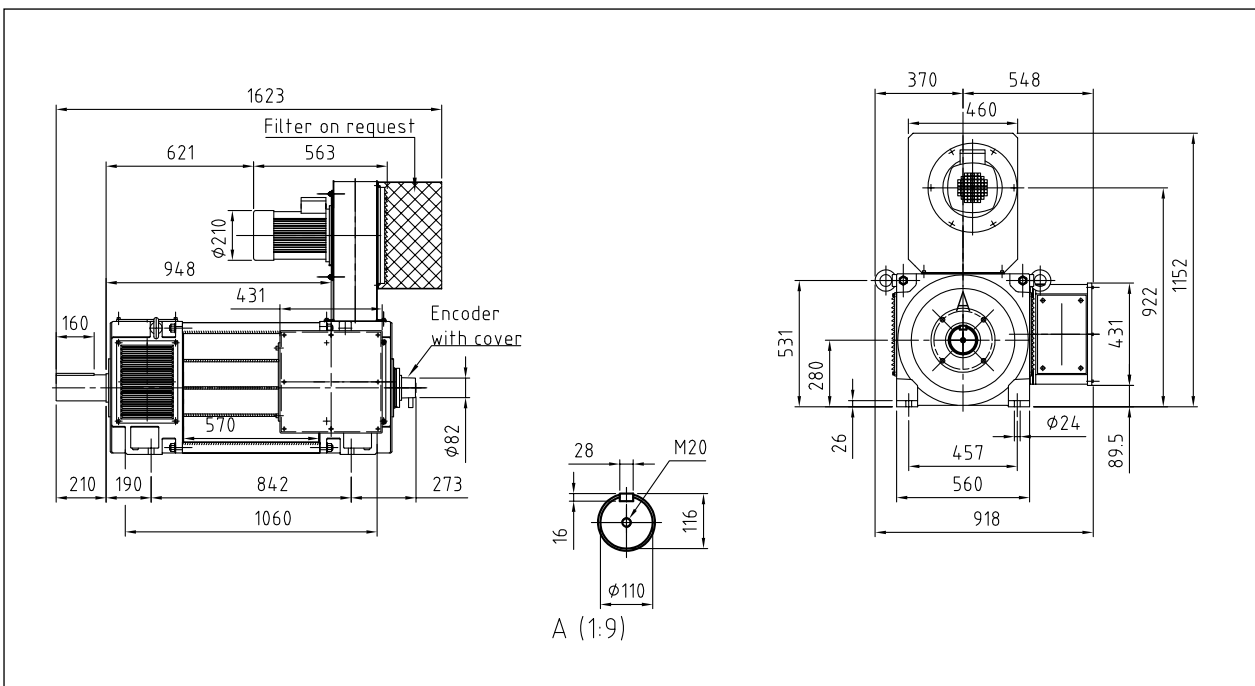
*** 690V possible on request

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)	2915/3520	Type of cooling fan	Force draught
Power (kW)	5.5/7.5	Internal Static Air Pressure Drop (Pa)	2600
Current (A)	11/11.8	Required cooling Air flow (m ³ /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	3104	310	800	0,87	0,87	17,1
1000	319	3046	569	1600	0,88	0,92	33,7
1200	375	2984	654	1920	0,88	0,94	40,3
1500	460	2929	786	2400	0,88	0,96	50,4
1800	540	2865	923	2880	0,88	0,96	60,5
2000	564	2694	964	3200	0,88	0,96	67,1



Motor Characteristics

Degree of Protection	IP23 S	Cooling	IC06
Rotor Inertia J (kgm ²)	7.094	Motor weight (kg)	1800
Maximum mechanical speed n _{max} (rpm)	3200 (3500)*	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

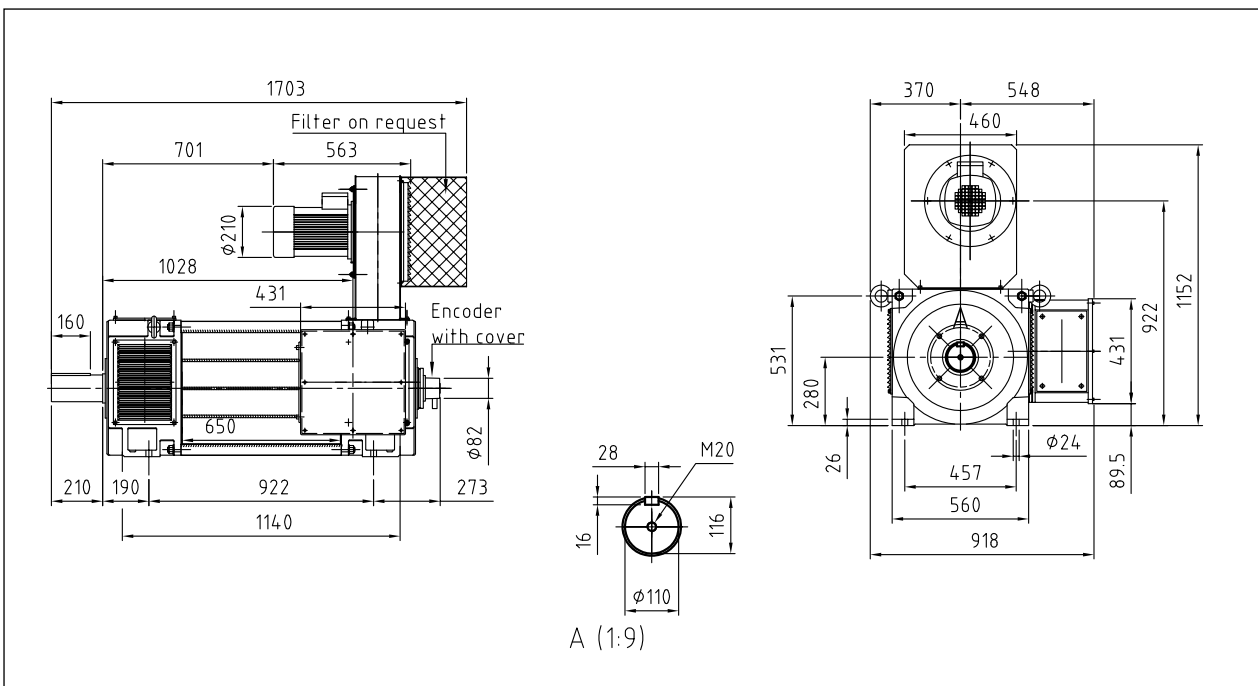
*** 690V possible on request

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)	2915/3520	Type of cooling fan	Force draught
Power (kW)	5.5/7.5	Internal Static Air Pressure Drop (Pa)	2600
Current (A)	11/11.8	Required cooling Air flow (m ³ /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	187	3577	370	800	0,84	0,87	17
1000	367	3509	678	1600	0,85	0,92	33,7
1200	432	3438	780	1920	0,85	0,94	40,3
1500	530	3374	937	2400	0,85	0,96	50,4
1800	623	3305	1102	2880	0,85	0,96	60,5
2000	650	3104	1150	3200	0,85	0,96	67,1



Motor Characteristics

Degree of Protection	IP23 S	Cooling	IC06
Rotor Inertia J (kgm ²)	13.3	Motor weight (kg)	2120
Maximum mechanical speed n _{max} (rpm)	3000 (4300)*	Sound Pressure level (db(A)) at 50Hz	85
D-End Bearing**	6226C3	N-End bearing	6226C3
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

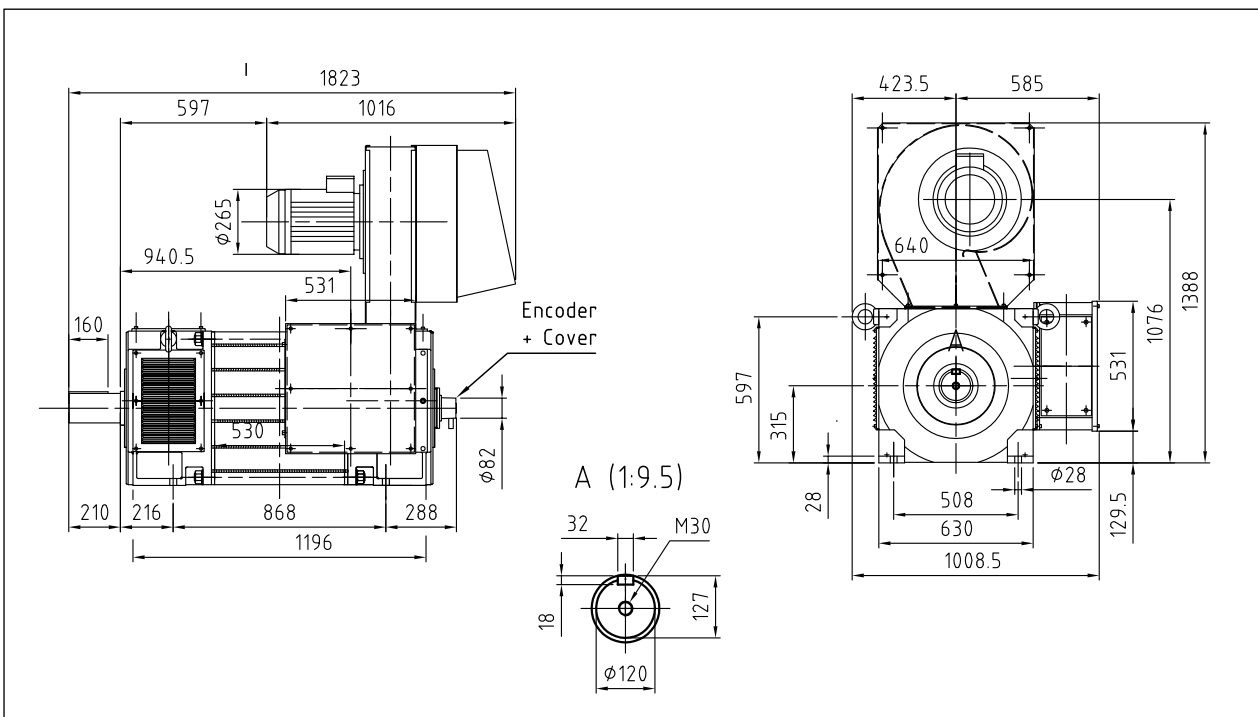
*** 690V possible on request

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)	2915/3520	Type of cooling fan	Force draught
Power (kW)	5.5/7.5	Internal Static Air Pressure Drop (Pa)	3500
Current (A)	11/11.8	Required cooling Air flow (m ³ /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 (kgm ²)	16	Motor weight (kg)	2540
Maximum mechanical speed n _{max} (rpm)	3000 (3200)*	Sound Pressure level (db(A)) at 50Hz	85
D-End Bearing**	6226C3	N-End bearing	6226C3
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

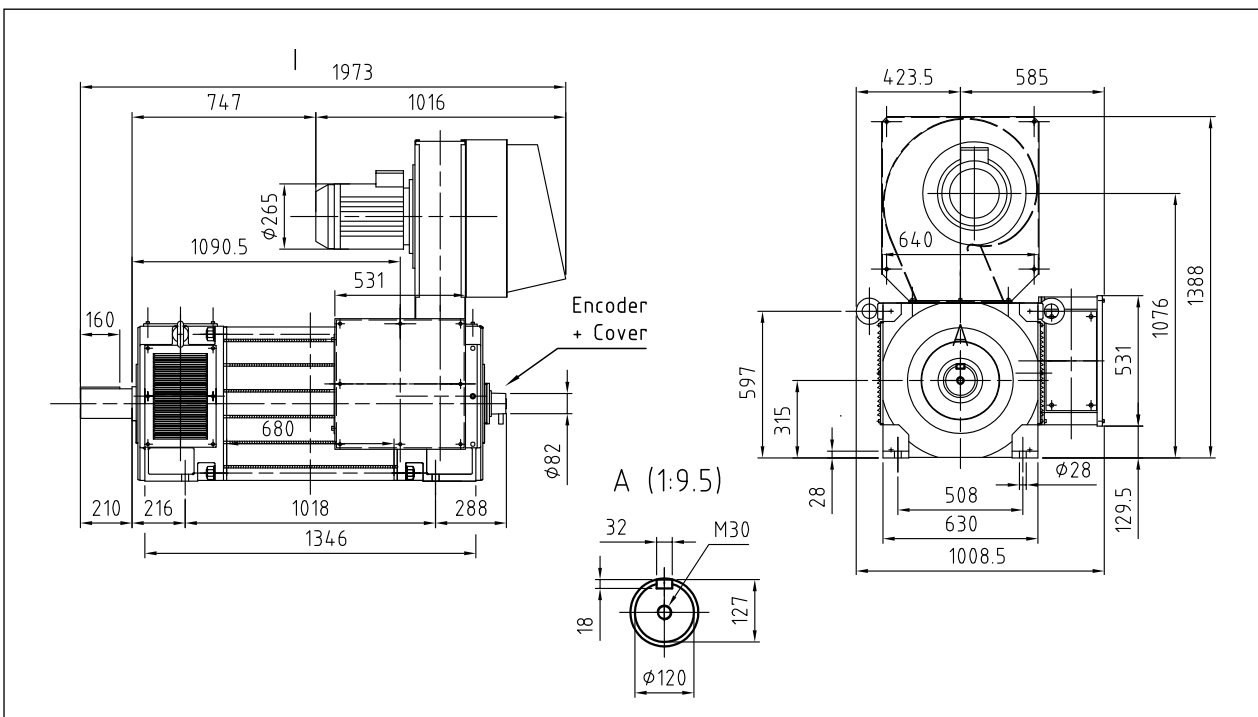
*** 690V possible on request

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)	2915/3520	Type of cooling fan	Force draught
Power (kW)	5.5/7.5	Internal Static Air Pressure Drop (Pa)	3500
Current (A)	11/11.8	Required cooling Air flow (m ³ /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 (kgm ²)	18.5	Motor weight (kg)	2930
Maximum mechanical speed n _{max} (rpm)	2600	Sound Pressure level (db(A)) at 50Hz	85
D-End Bearing**	6226C3	N-End bearing	6226C3
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

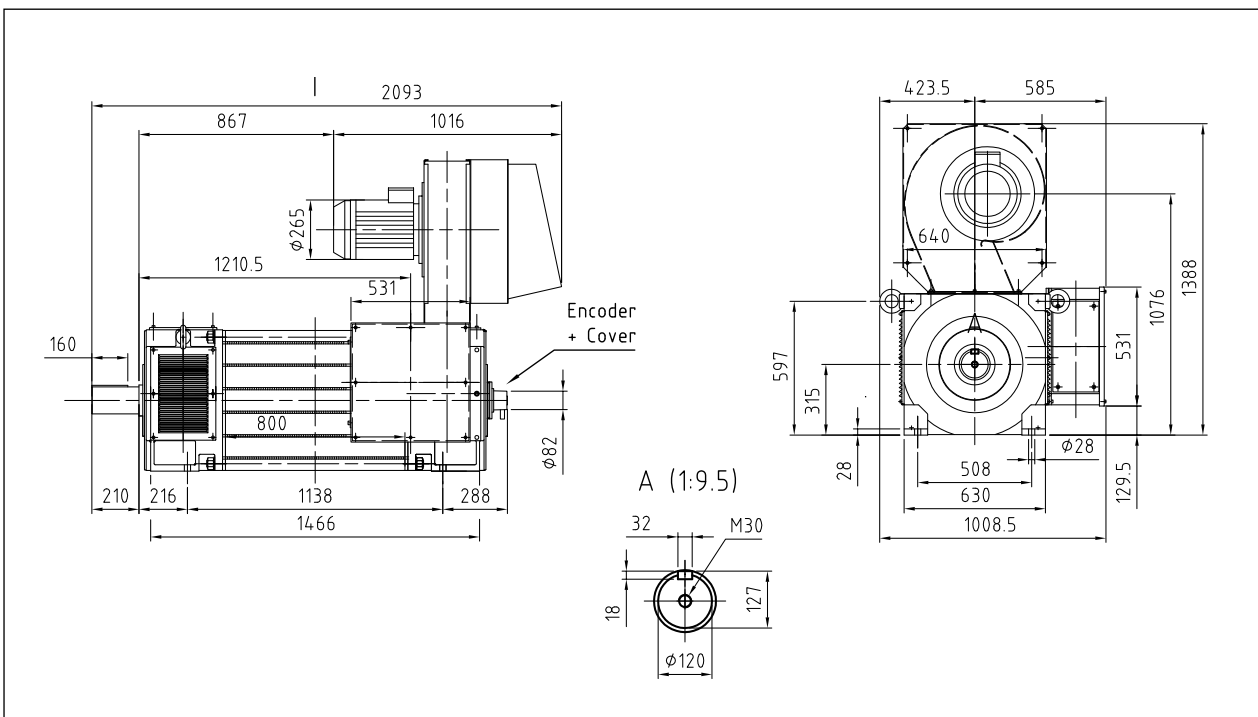
*** 690V possible on request

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)	2915/3520	Type of cooling fan	Force draught
Power (kW)	5.5/7.5	Internal Static Air Pressure Drop (Pa)	3500
Current (A)	11/11.8	Required cooling Air flow (m ³ /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	IP23 S	Cooling	IC06
Rotor Inertia J (kgm ²)	19.288	Motor weight (kg)	2100
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

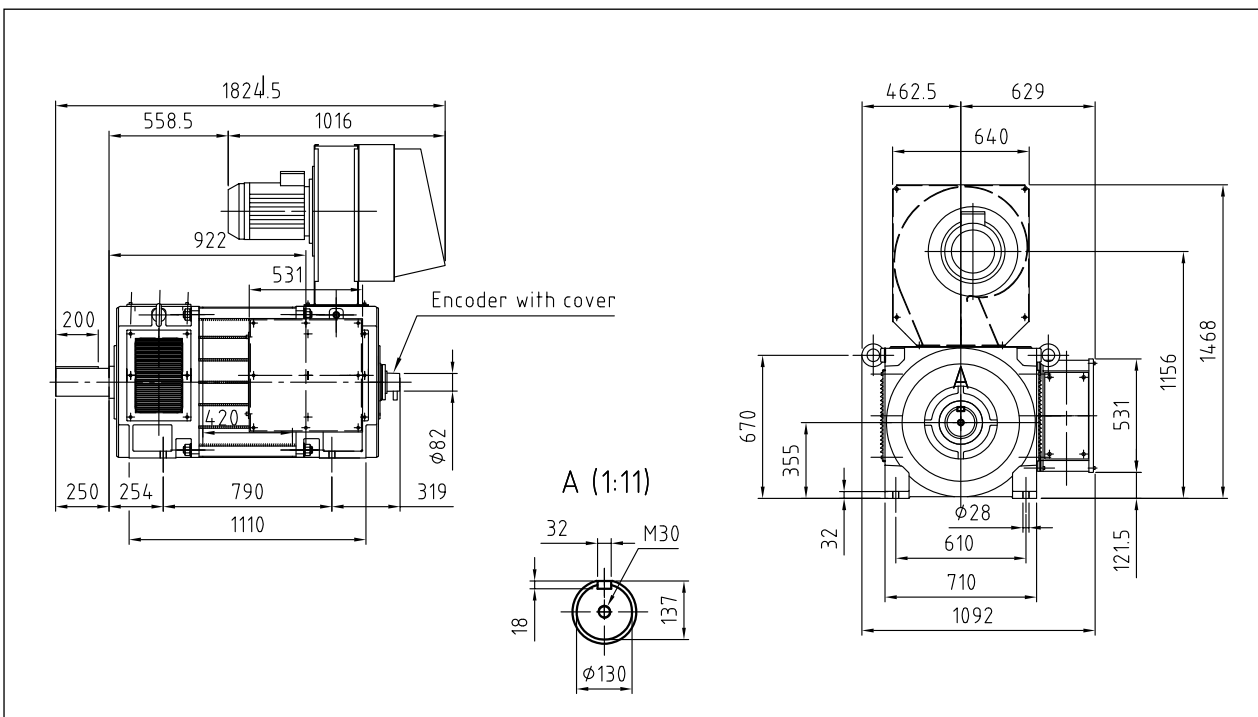
*** 690V possible on request

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)	2915/3520	Type of cooling fan	Force draught
Power (kW)	5.5/7.5	Internal Static Air Pressure Drop (Pa)	3300
Current (A)	11/11.8	Required cooling Air flow (m ³ /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	216	4117	436	800	0,86	0,83	17
1000	423	4039	763	1600	0,87	0,92	33,6
1200	498	3963	879	1920	0,87	0,94	40,2
1500	610	3884	1042	2400	0,88	0,96	50,3
1800	717	3804	1225	2880*	0,88	0,96	60,4
2000	748	3573	1278	3200*	0,88	0,96	66,9



Motor Characteristics

Degree of Protection	IP23 S	Cooling	IC06
Rotor Inertia J (kgm ²)	25.309	Motor weight (kg)	2800
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

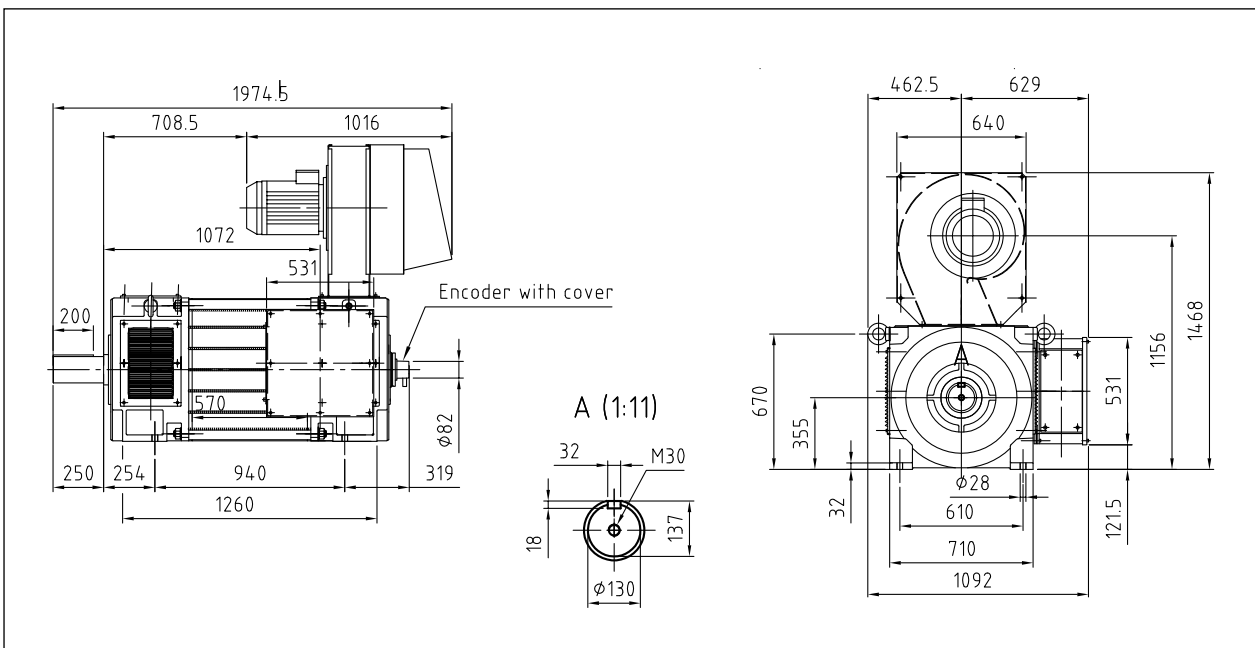
*** 690V possible on request

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)	2915/3520	Type of cooling fan	Force draught
Power (kW)	5.5/7.5	Internal Static Air Pressure Drop (Pa)	3300
Current (A)	11/11.8	Required cooling Air flow (m ³ /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	1008	5348	1742	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 (kgm ²)	29.313	Motor weight (kg)	3400
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	IM2001
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

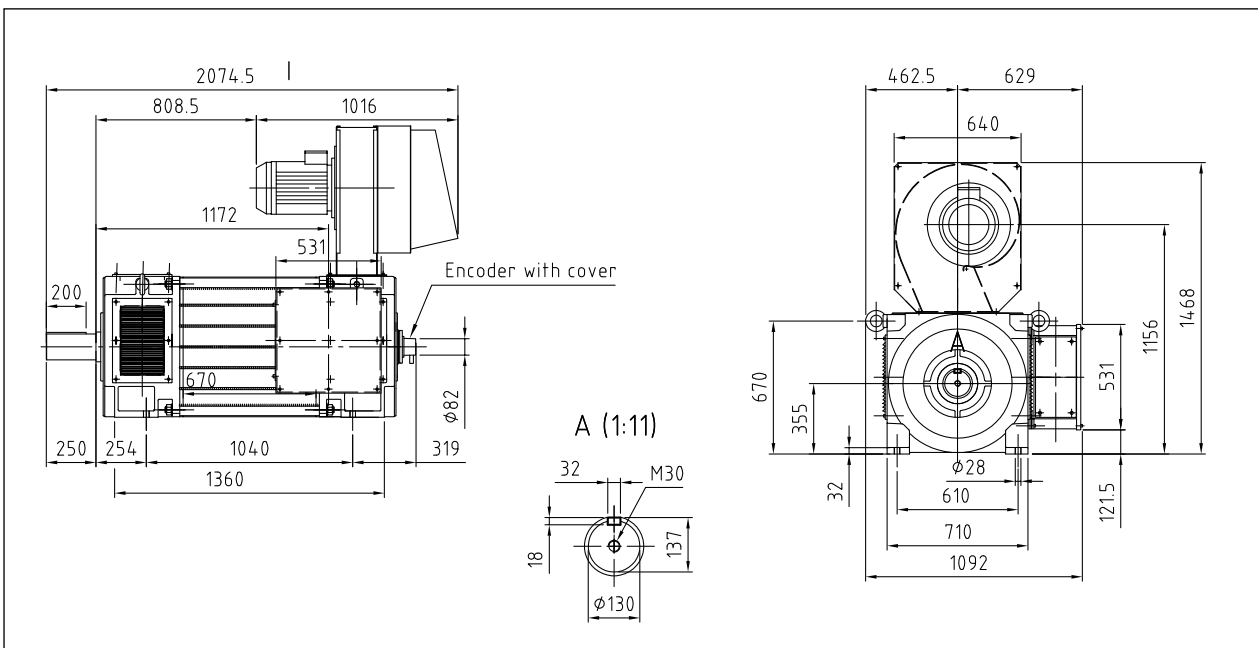
*** 690V possible on request

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)	2915/3520	Type of cooling fan	Force draught
Power (kW)	5.5/7.5	Internal Static Air Pressure Drop (Pa)	3300
Current (A)	11/11.8	Required cooling Air flow (m ³ /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	6621	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 (kgm ²)	37.12	Motor weight (kg)	3900
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

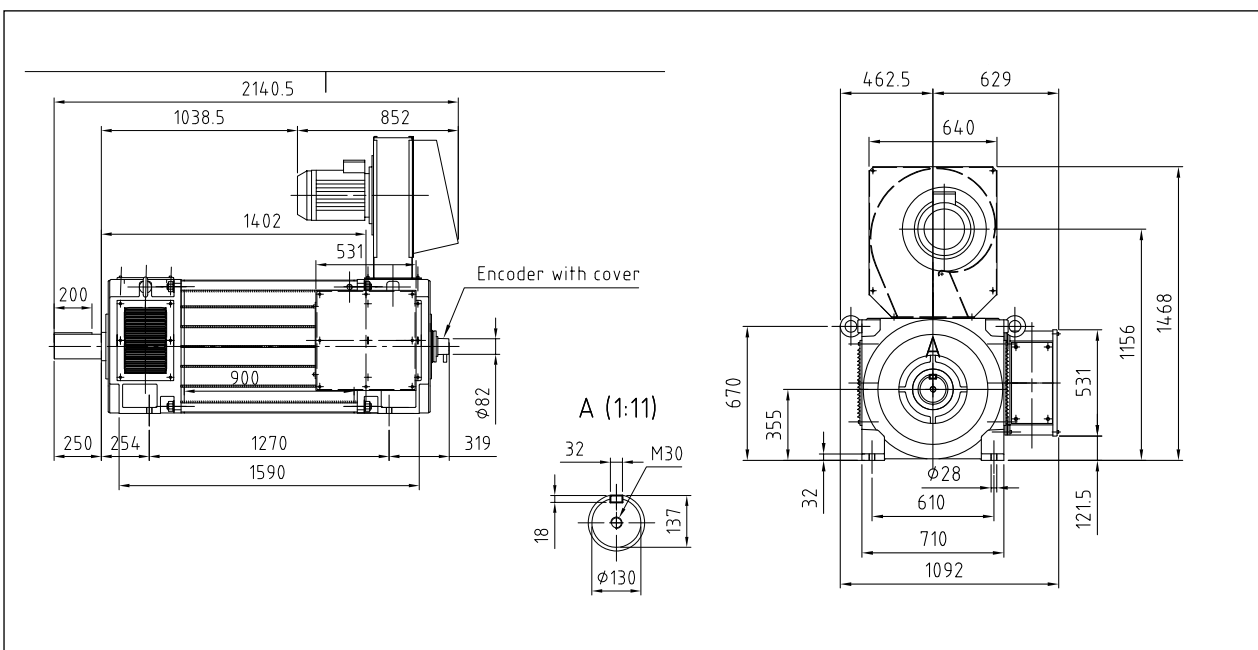
- On request (high speed option)
- Insulated bearing or similar solution recommended above 100 kW
- 690V possible on request

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)	2915/3520	Type of cooling fan	Force draught
Power (kW)	5.5/7.5	Internal Static Air Pressure Drop (Pa)	3300
Current (A)	11/11.8	Required cooling Air flow (m ³ /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	IP55	Cooling	IC416
Rotor Inertia J (kgm ²)	0.037	Motor weight (kg)	85
Maximum mechanical speed n _{max} (rpm)	5000 (10600)*	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)

** 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

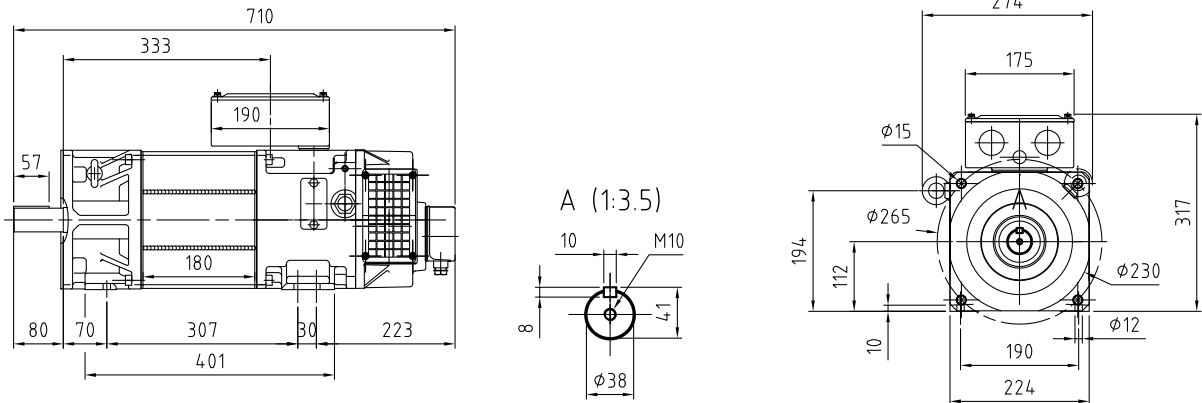
(Voltage/frequency supply to precise in order)

Frequency (Hz)	50/60	Number of phases	3
Voltage (V)	400/460	Mounting	Radial or axial
Speed (rpm)	2810/3411	Type of cooling fan	Force draught
Power (kW)	0.25/0.25	Internal Static Air Pressure Drop (Pa)	500
Current (A)	0.66/0.58	Required cooling Air flow (m ³ /h)	300

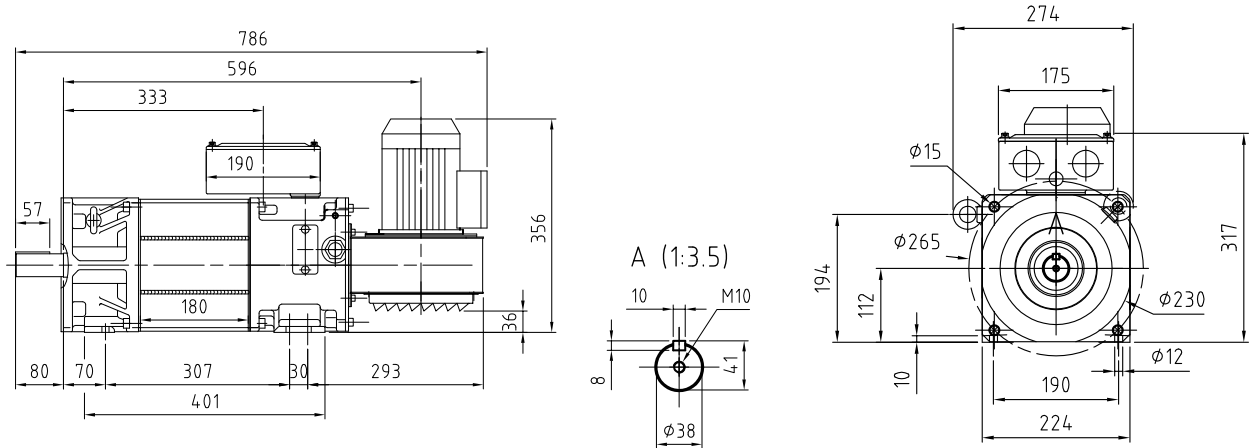
Electrical Data (at 400V)

n _N rpm	P _N kW	T _N Nm	I _N A	n ₁ rpm	cos φ	η	f _N Hz
500	4	76	9	1000	0,8	0,83	20,8
1000	7	66	14	2000	0,81	0,86	37,5
1200	8	64	16	2400	0,81	0,87	43,3
1500	10	64	20	3000	0,82	0,88	54,3
1800	12,0	64	24	3600	0,82	0,88	65
2000	12	59	24	4000	0,82	0,89	70,9
2400	13	52	26	4800	0,82	0,89	86,3
3000	14	45	27	6000*	0,82	0,9	104,3

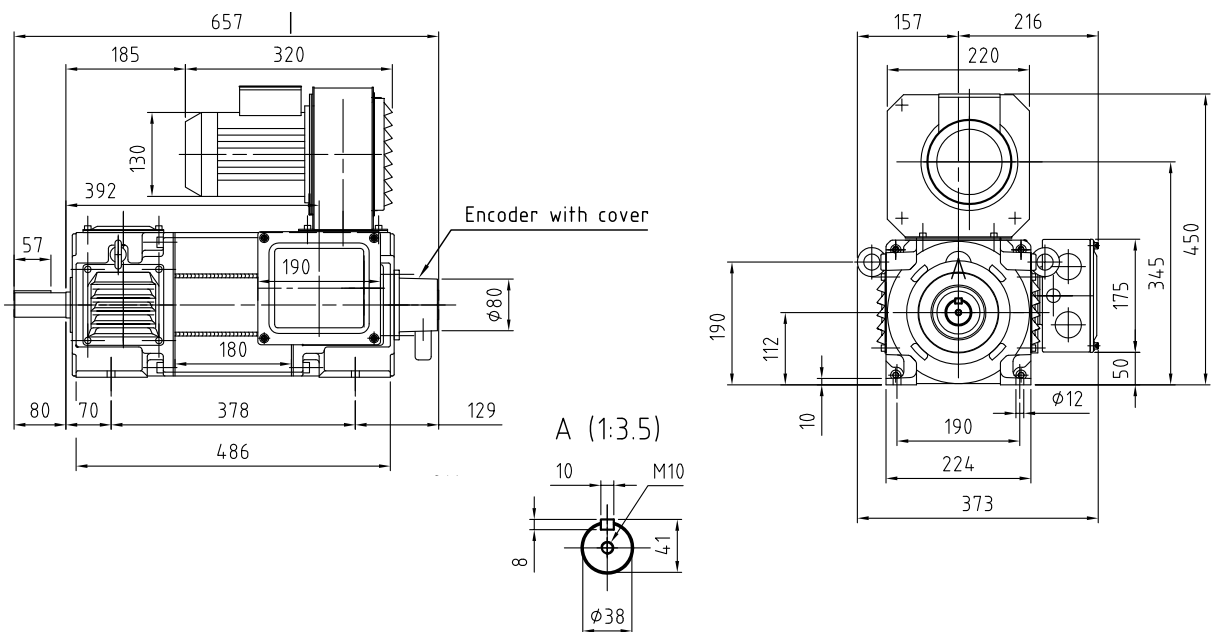
IP54 version, axial ventilation



IP55 version, axial ventilation



IP55 version, radial ventilation



Motor Characteristics

Degree of Protection	IP55	Cooling	IC416
Rotor Inertia J (kgm ²)	0.045	Motor weight (kg)	95
Maximum mechanical speed n _{max} (rpm)	5000 (8700)*	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)

** 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

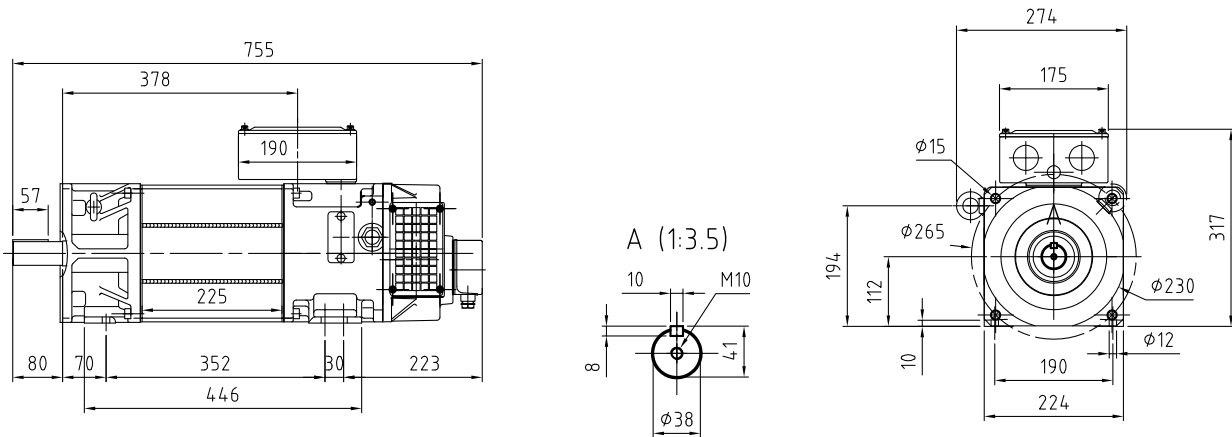
(Voltage/frequency supply to precise in order)

Frequency (Hz)	50/60	Number of phases	3
Voltage (V)	400/460	Mounting	Radial
Speed (rpm)	2810/3411	Type of cooling fan	Force draught
Power (kW)	0.25/0.25	Internal Static Air Pressure Drop (Pa)	500
Current (A)	0.66/0.58	Required cooling Air flow (m ³ /h)	300

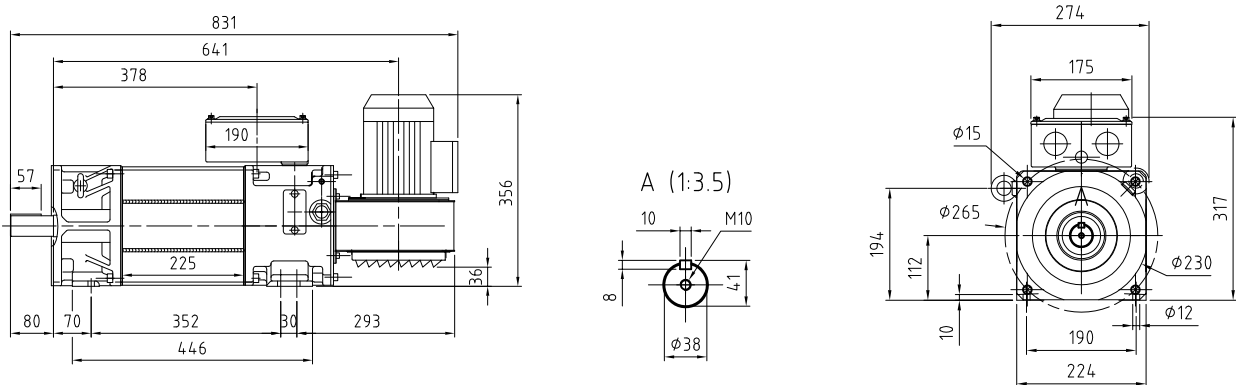
Electrical Data (at 400V)

n _N rpm	P _N kW	T _N Nm	I _N A	n ₁ rpm	cos φ	η	f _N Hz
500	4	76	8	1000	0,81	0,84	20,7
1000	8	76	16	2000	0,82	0,87	37,4
1200	10	80	20	2400	0,82	0,88	43,3
1500	12	76	23	3000	0,83	0,89	54,2
1800	14	74	27	3600	0,83	0,9	64
2000	15	72	29	4000	0,83	0,9	70,8
2400	16	64	31	4800	0,83	0,91	86
3000	17	54	32	6000*	0,83	0,91	104,2

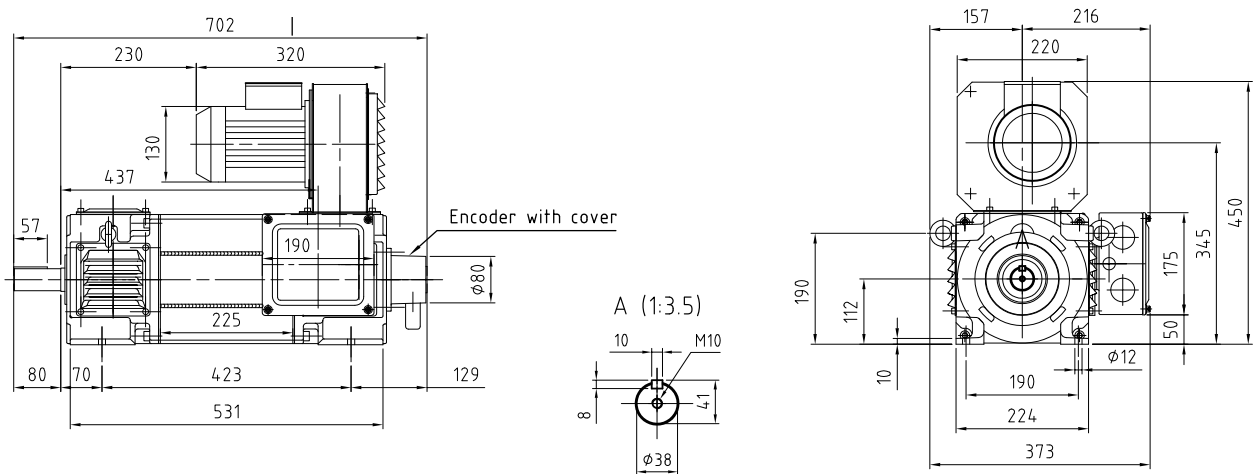
IP54 version, axial ventilation



IP55 version, axial ventilation



IP55 version, radial ventilation



Motor Characteristics

Degree of Protection	IP55	Cooling	IC416
Rotor Inertia J (kgm ²)	0.052	Motor weight (kg)	125
Maximum mechanical speed n _{max} (rpm)	5000 (7500)*	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)

** 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)	2810/3411	Type of cooling fan	Force draught
Power (kW)	0.25/0.25	Internal Static Air Pressure Drop (Pa)	500
Current (A)	0.66/0.58	Required cooling Air flow (m ³ /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	11	1000	0,79	0,85	20,5
1000	10	96	21	2000	0,8	0,88	37,2
1200	12	96	24	2400	0,8	0,89	43
1500	14	89	28	3000	0,81	0,9	54
1800	16	85	32	3600	0,81	0,9	64
2000	17	81	33	4000	0,82	0,91	70,6
2400	18,5	74	36	4800	0,82	0,91	86
3000	20	64	38	6000*	0,82	0,92	104

Motor Characteristics

Degree of Protection	IP55	Cooling	IC416
Rotor Inertia J (kgm ²)	0.092	Motor weight (kg)	170
Maximum mechanical speed n _{max} (rpm)	4300 (10500)*	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

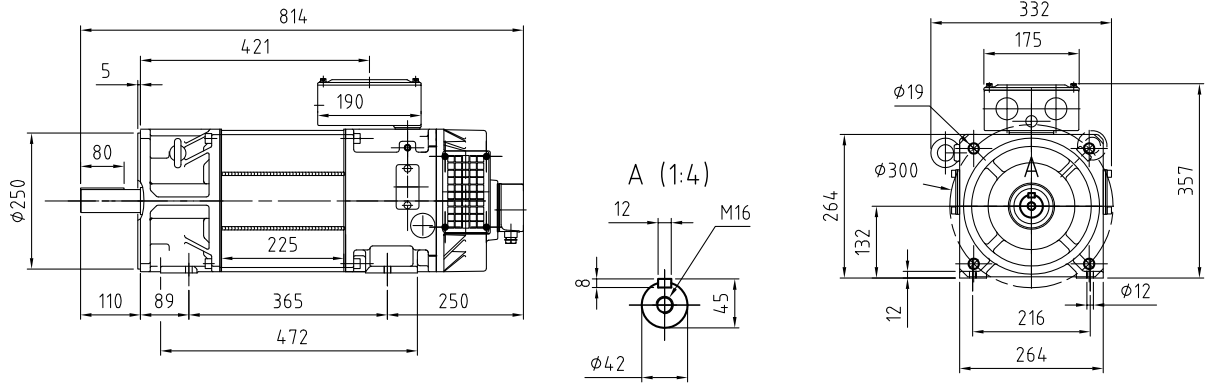
(Voltage/frequency supply to precise in order)

Frequency (Hz)	50/60	Number of phases	3
Voltage (V)	400/460	Mounting	Radial
Speed (rpm)	2790/3420	Type of cooling fan	Force draught
Power (kW)	0.55/0.55	Internal Static Air Pressure Drop (Pa)	500
Current (A)	1.29/1.12	Required cooling Air flow (m ³ /h)	400

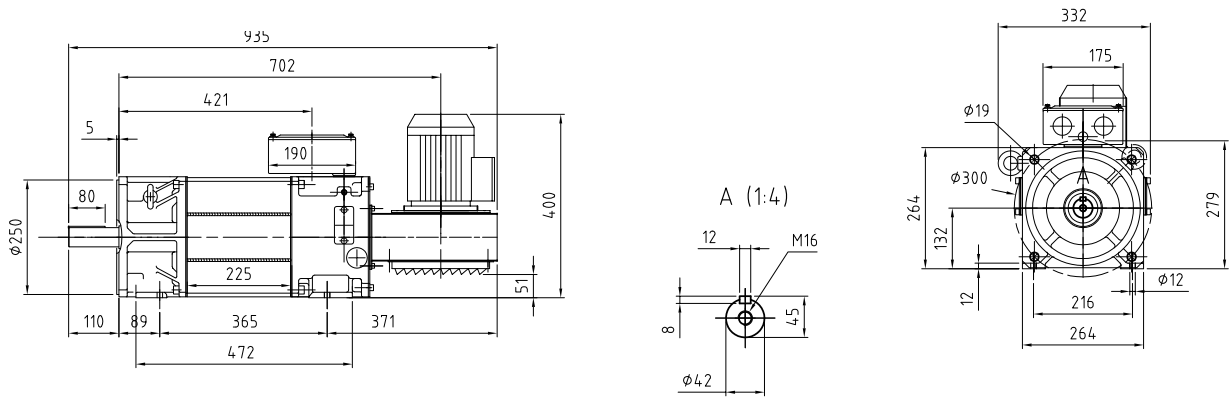
Electrical Data (at 400V)

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

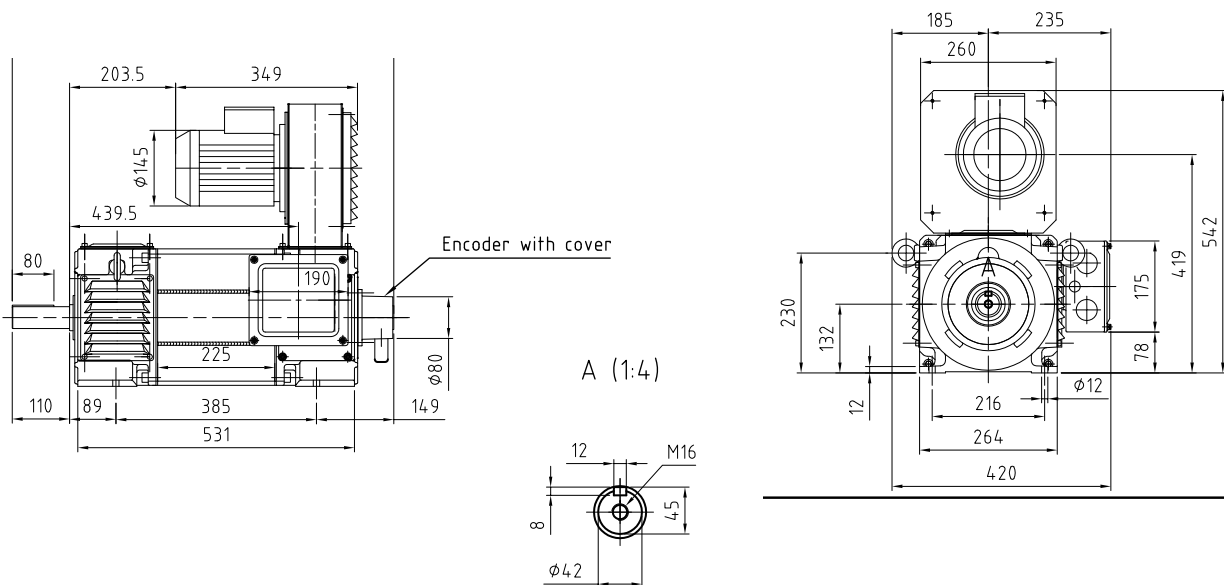
IP54 version, axial ventilation



IP55 version, axial ventilation



IP55 version, radial ventilation



Motor Characteristics

Degree of Protection	IP55	Cooling	IC416
Rotor Inertia J (kgm ²)	0.108	Motor weight (kg)	180
Maximum mechanical speed n _{max} (rpm)	4300 (8700)*	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

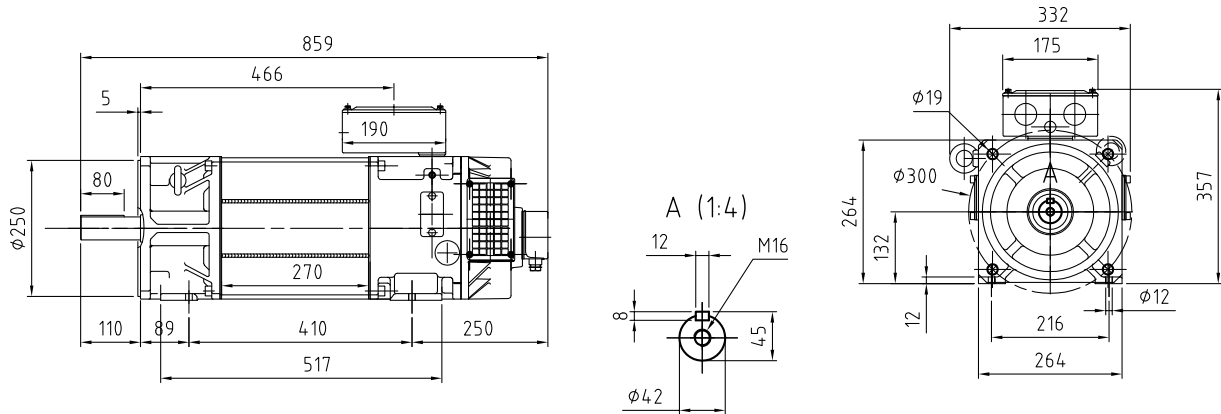
(Voltage/frequency supply to precise in order)

Frequency (Hz)	50/60	Number of phases	3
Voltage (V)	400/460	Mounting	Radial
Speed (rpm)	2790/3420	Type of cooling fan	Force draught
Power (kW)	0.55/0.55	Internal Static Air Pressure Drop (Pa)	500
Current (A)	1.29/1.12	Required cooling Air flow (m ³ /h)	400

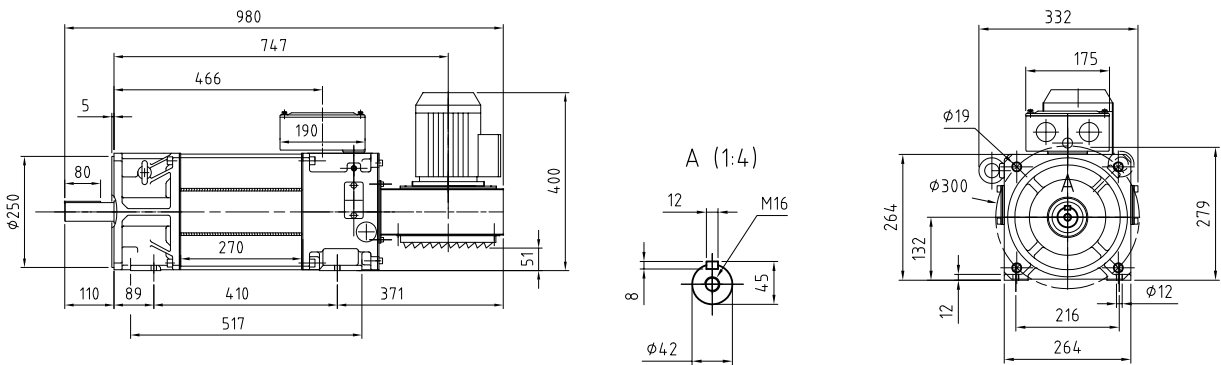
Electrical Data (at 400V)

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

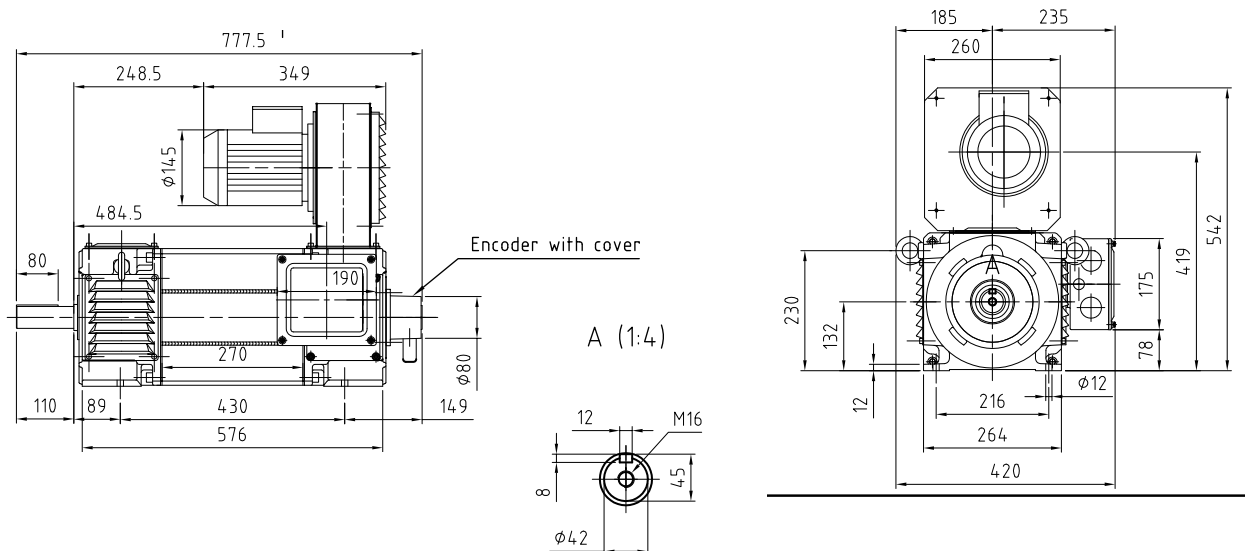
IP54 version, axial ventilation



IP55 version, axial ventilation



IP55 version, radial ventilation



Motor Characteristics

Degree of Protection	IP55	Cooling	IC416
Rotor Inertia J (kgm ²)	0.125	Motor weight (kg)	205
Maximum mechanical speed n _{max} (rpm)	4300 (7400)*	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

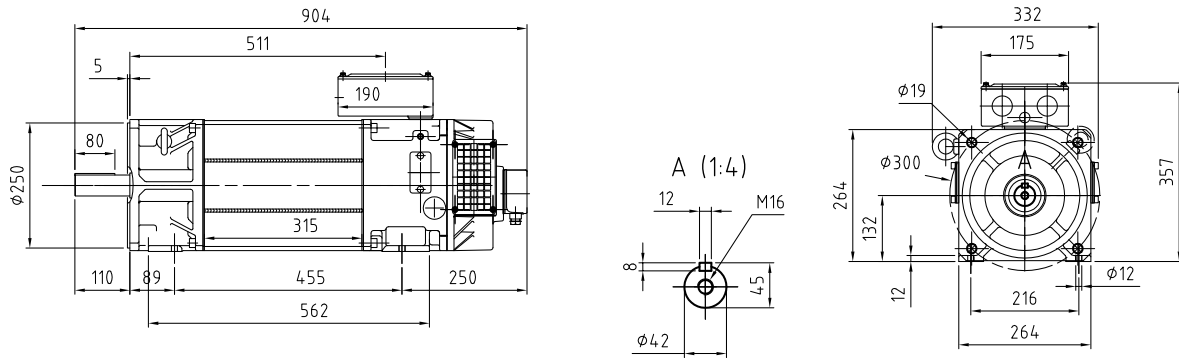
(Voltage/frequency supply to precise in order)

Frequency (Hz)	50/60	Number of phases	3
Voltage (V)	400/460	Mounting	Radial
Speed (rpm)	2790/3420	Type of cooling fan	Force draught
Power (kW)	0.55/0.55	Internal Static Air Pressure Drop (Pa)	500
Current (A)	1.29/1.12	Required cooling Air flow (m ³ /h)	400

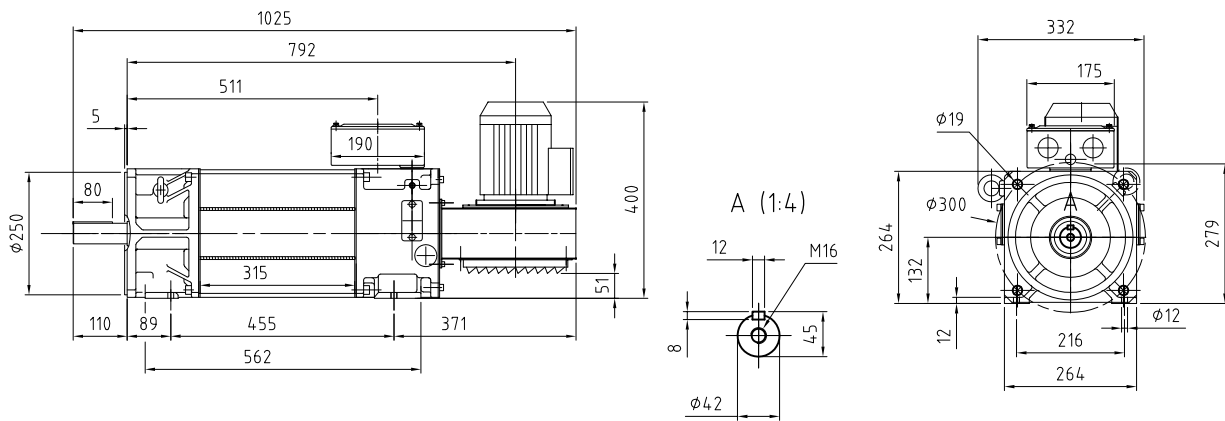
Electrical Data (at 400V)

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	36	115	64	5000*	0,87	0,93	101,7

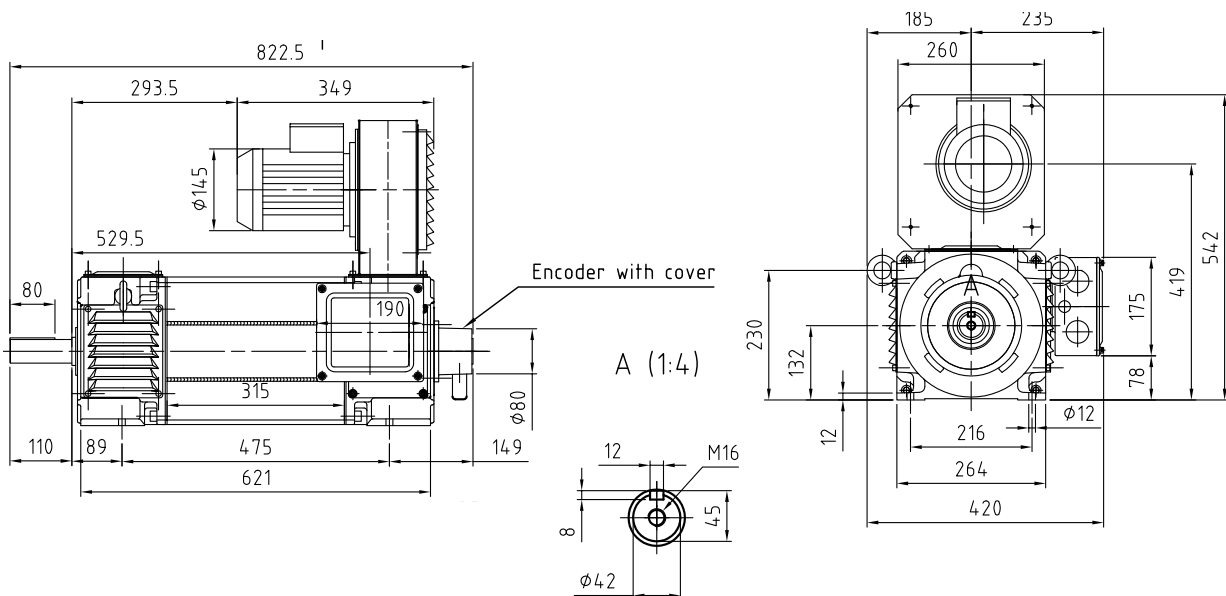
IP54 version, axial ventilation



IP55 version, axial ventilation



IP55 version, radial ventilation



Motor Characteristics

Degree of Protection	IP55	Cooling	IC416
Rotor Inertia J (kgm ²)	0.256	Motor weight (kg)	295
Maximum mechanical speed n _{max} (rpm)	3400 (9500)*	Sound Pressure level (db(A)) at 50 Hz	76
D-End Bearing	6214 2RSC3	N-End bearing	6214 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

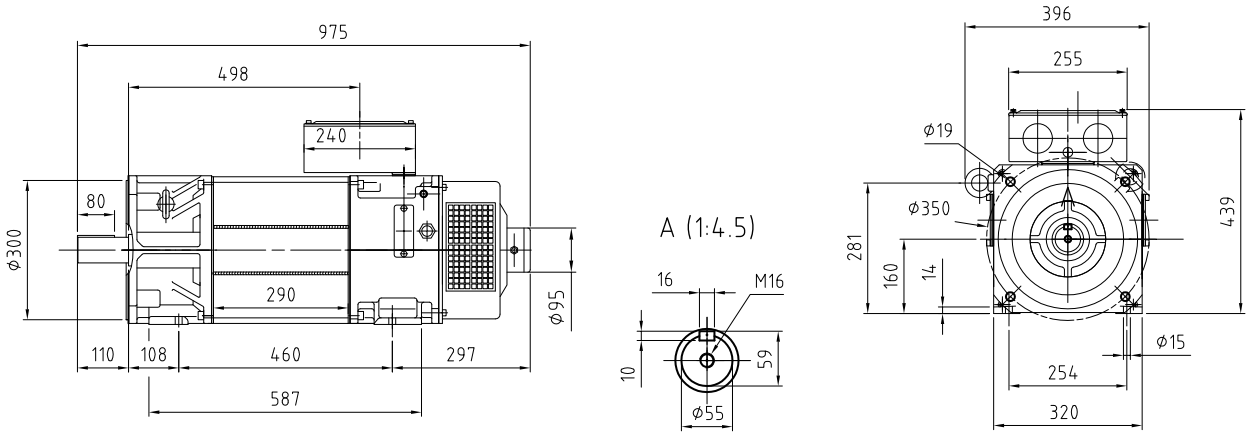
(Voltage/frequency supply to precise in order)

Frequency (Hz)	50/60	Number of phases	3
Voltage (V)	400/460	Mounting	Radial
Speed (rpm)	2875/3490	Type of cooling fan	Force draught
Power (kW)	1.1/1.1	Internal Static Air Pressure Drop (Pa)	850
Current (A)	2.4/2.1	Required cooling Air flow (m ³ /h)	900

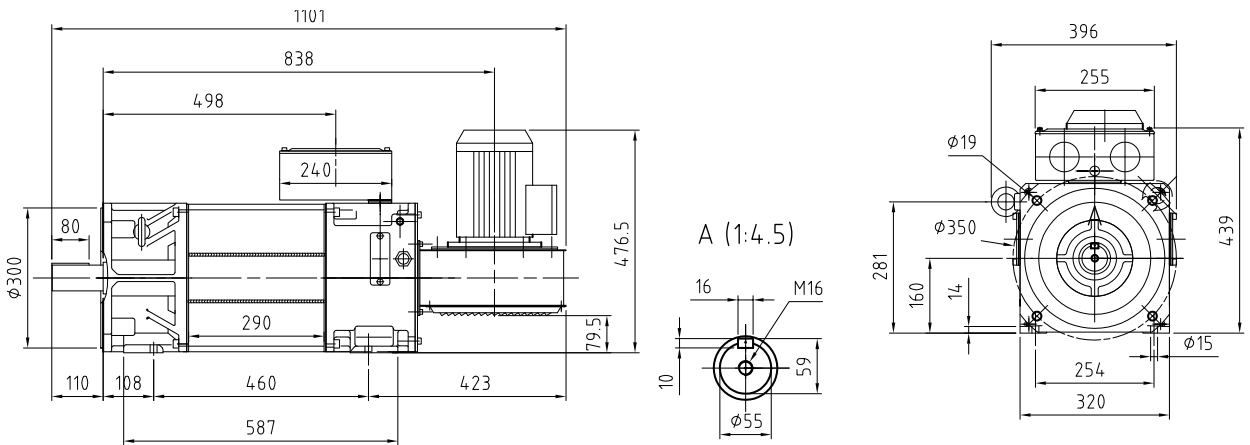
Electrical Data (at 400V)

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

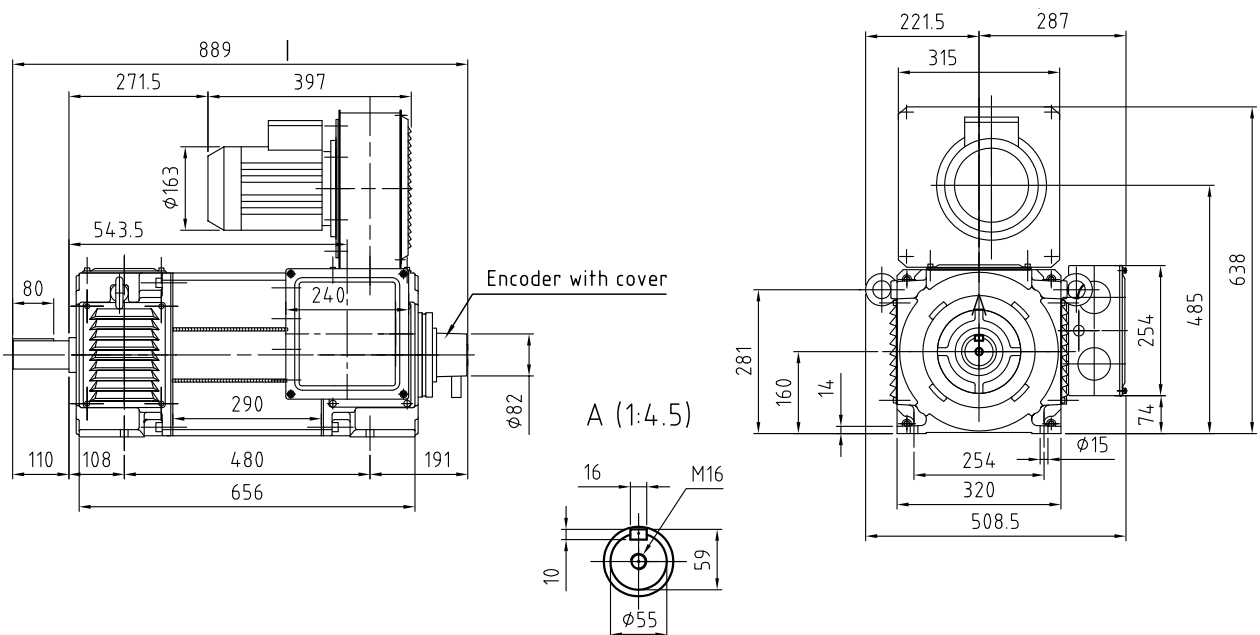
IP54 version, axial ventilation



IP55 version, axial ventilation



IP55 version, radial ventilation



Motor Characteristics

Degree of Protection	IP55	Cooling	IC416
Rotor Inertia J (kgm ²)	0.311	Motor weight (kg)	340
Maximum mechanical speed n _{max} (rpm)	3400 (7500)*	Sound Pressure level (db(A)) at 50 Hz	76
D-End Bearing	6214 2RSC3	N-End bearing	6214 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

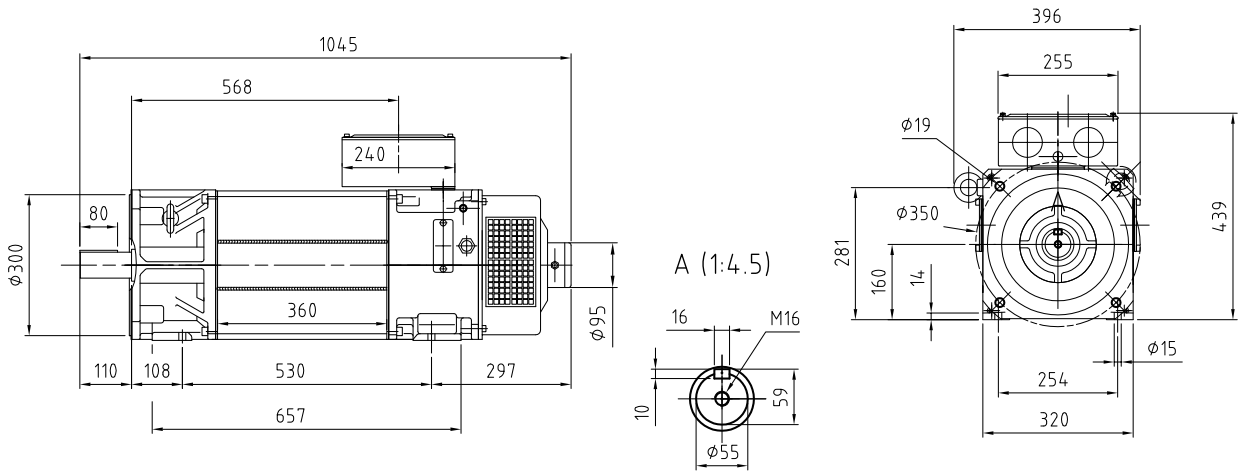
(Voltage/frequency supply to precise in order)

Frequency (Hz)	50/60	Number of phases	3
Voltage (V)	400/460	Mounting	Radial
Speed (rpm)	2875/3490	Type of cooling fan	Force draught
Power (kW)	1.1/1.1	Internal Static Air Pressure Drop (Pa)	850
Current (A)	2.4/2.1	Required cooling Air flow (m ³ /h)	900

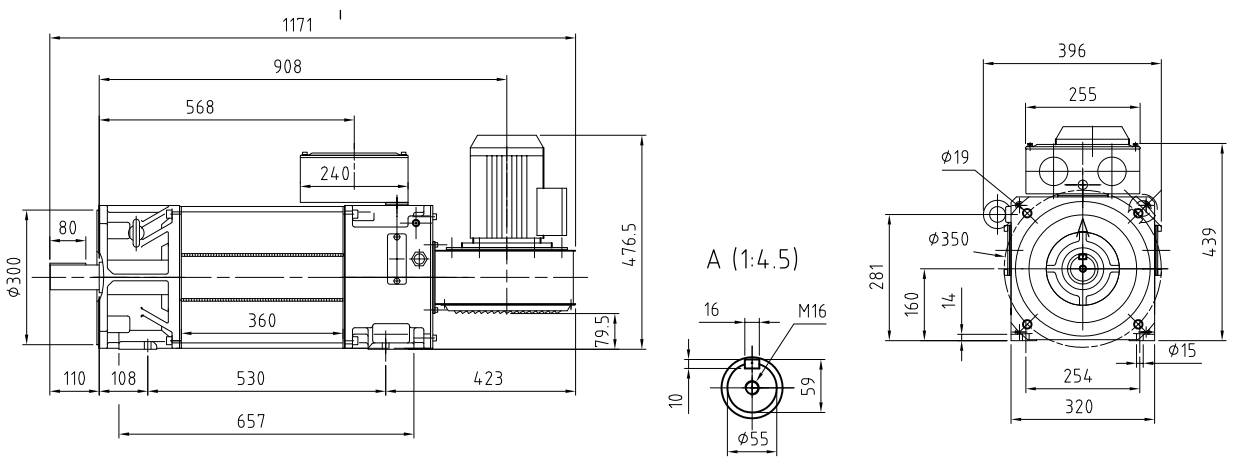
Electrical Data (at 400V)

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

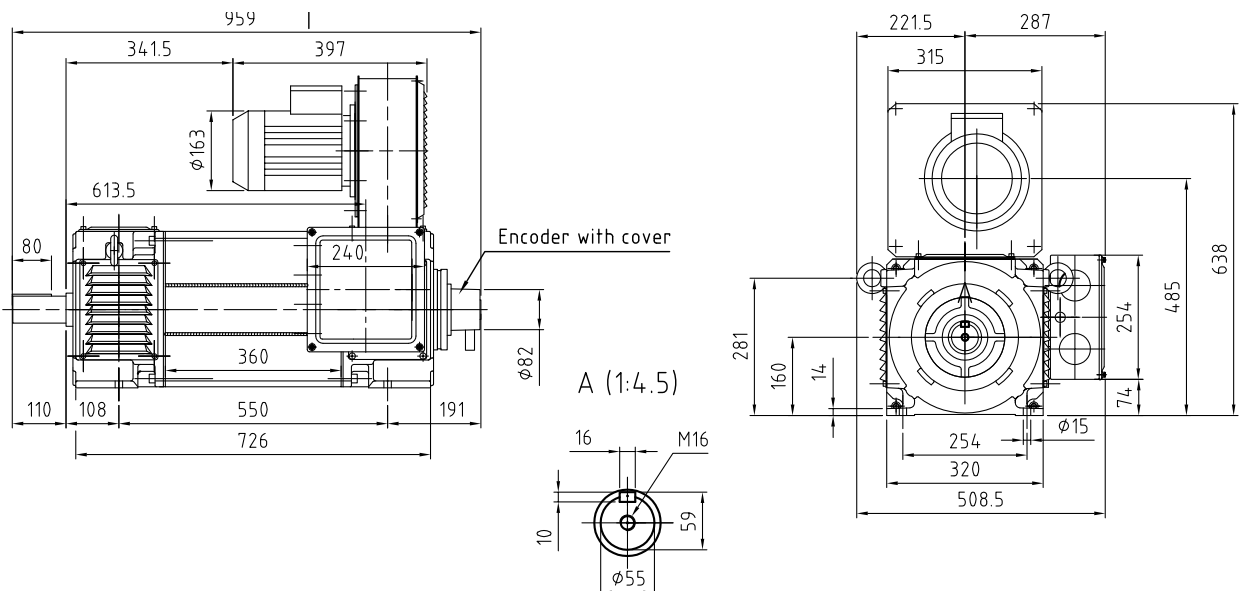
IP54 version, axial ventilation



IP55 version, axial ventilation



IP55 version, radial ventilation



Motor Characteristics

Degree of Protection	IP55	Cooling	IC416
Rotor Inertia J (kgm ²)	0.357	Motor weight (kg)	375
Maximum mechanical speed n _{max} (rpm)	3400 (6300)*	Sound Pressure level (db(A)) at 50 Hz	76
D-End Bearing	6214 2RSC3	N-End bearing	6214 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

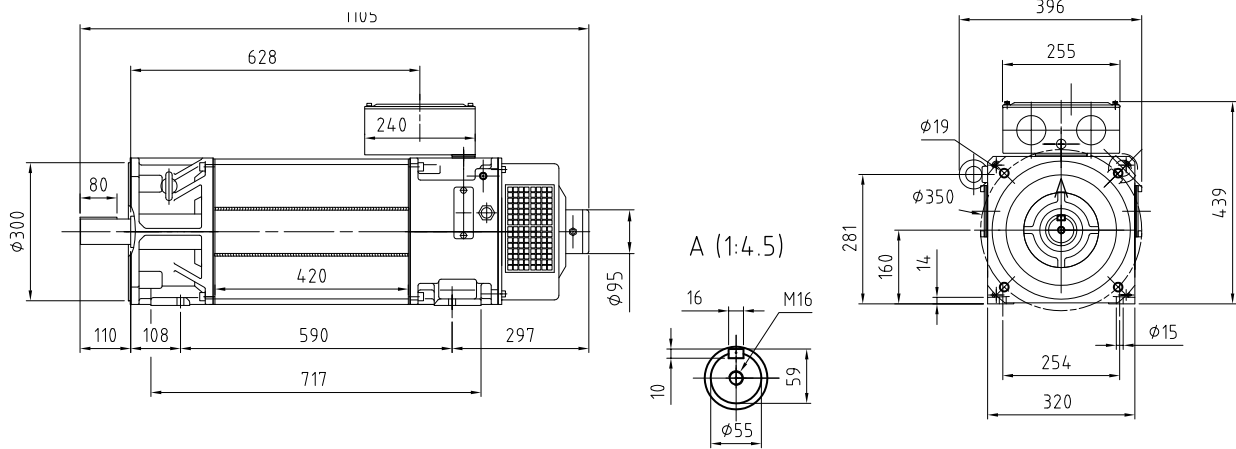
(Voltage/frequency supply to precise in order)

Frequency (Hz)	50/60	Number of phases	3
Voltage (V)	400/460	Mounting	Radial
Speed (rpm)	2875/3490	Type of cooling fan	Force draught
Power (kW)	1.1/1.1	Internal Static Air Pressure Drop (Pa)	850
Current (A)	2.4/2.1	Required cooling Air flow (m ³ /h)	900

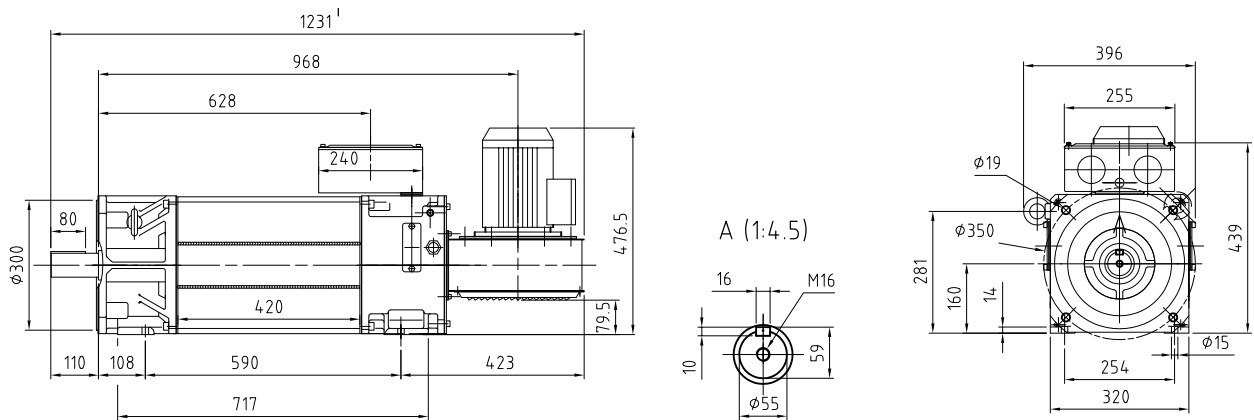
Electrical Data (at 400V)

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

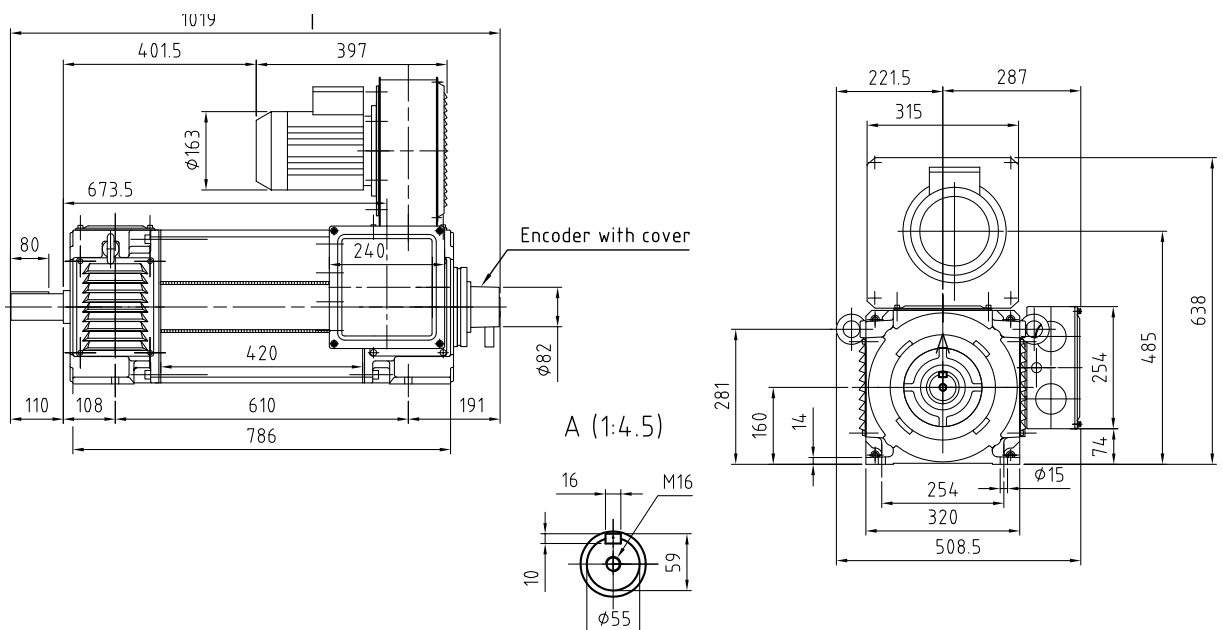
IP54 version, axial ventilation



IP55 version, axial ventilation



IP55 version, radial ventilation



Motor Characteristics

Degree of Protection	IP55	Cooling	IC416
Rotor Inertia J (kgm ²)	0.611	Motor weight (kg)	370
Maximum mechanical speed n _{max} (rpm)	3000 (7800)*	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

* Can be increased on request

** 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

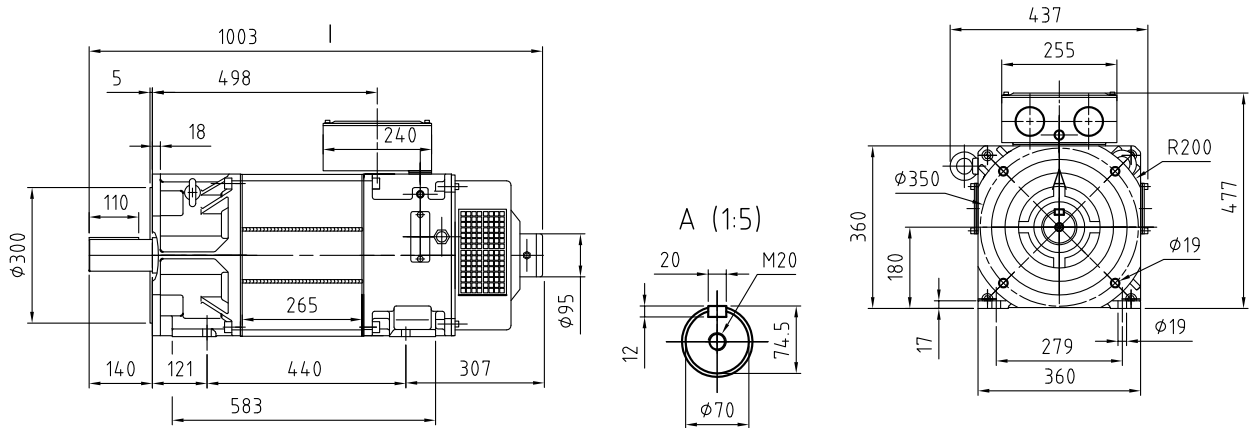
(Voltage/frequency supply to precise in order)

Frequency (Hz)	50/60	Number of phases	3
Voltage (V)	400/460	Mounting	Radial
Speed (rpm)	2900/3510	Type of cooling fan	Force draught
Power (kW)	1.5/1.5	Internal Static Air Pressure Drop (Pa)	900
Current (A)	2.9/2.6	Required cooling Air flow (m ³ /h)	1300

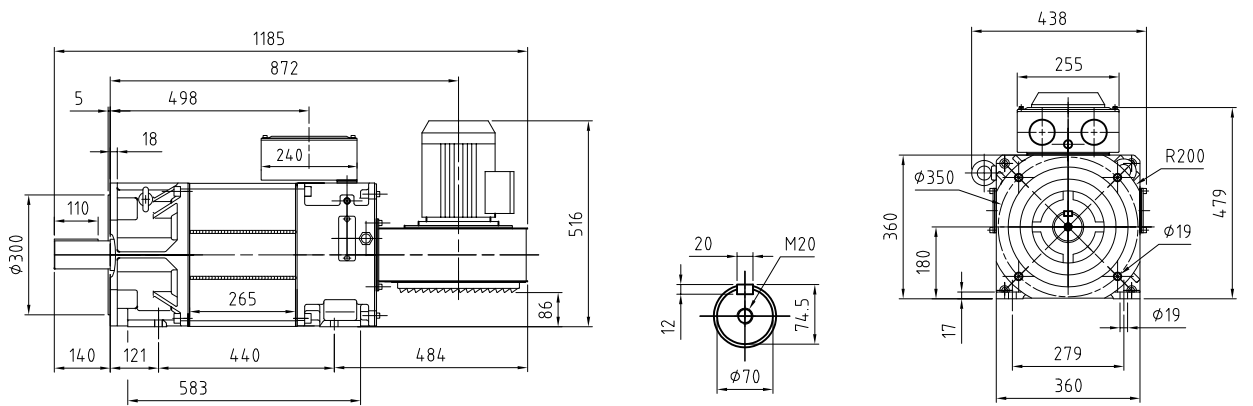
Electrical Data (at 400V)

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

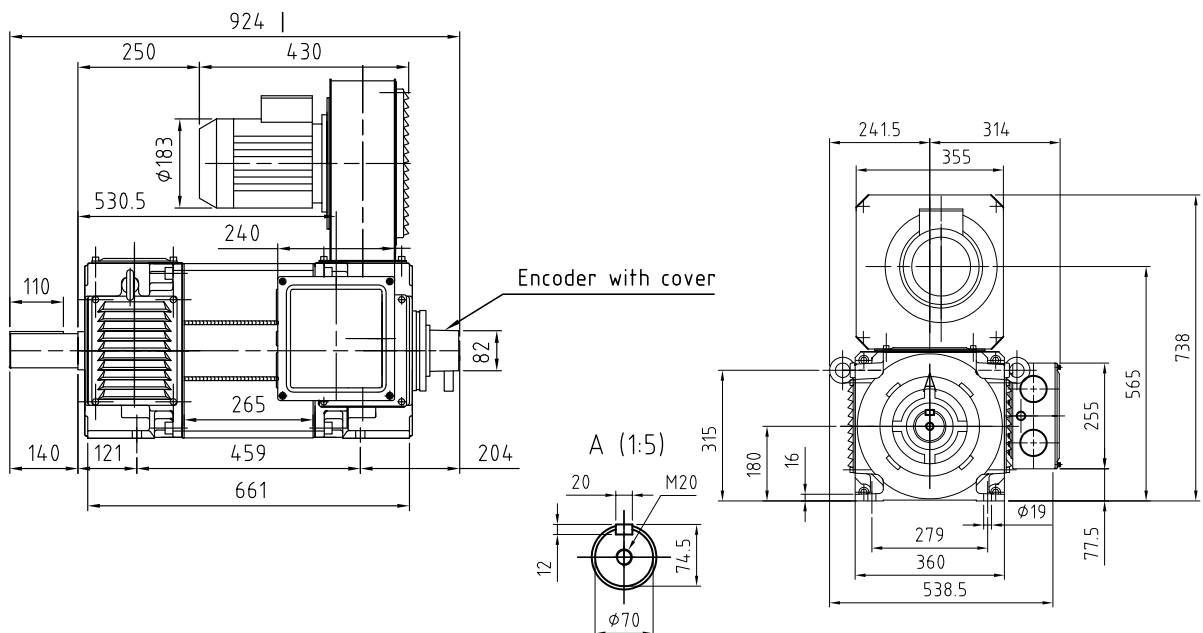
IP54 version, axial ventilation



IP55 version, axial ventilation



IP55 version, radial ventilation



Motor Characteristics

Degree of Protection	IP55	Cooling	IC416
Rotor Inertia J (kgm ²)	0.842	Motor weight (kg)	460
Maximum mechanical speed n _{max} (rpm)	3000 (6700)*	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

* Can be increased on request

** bearing protection ring recommended above 100 kW

*** 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

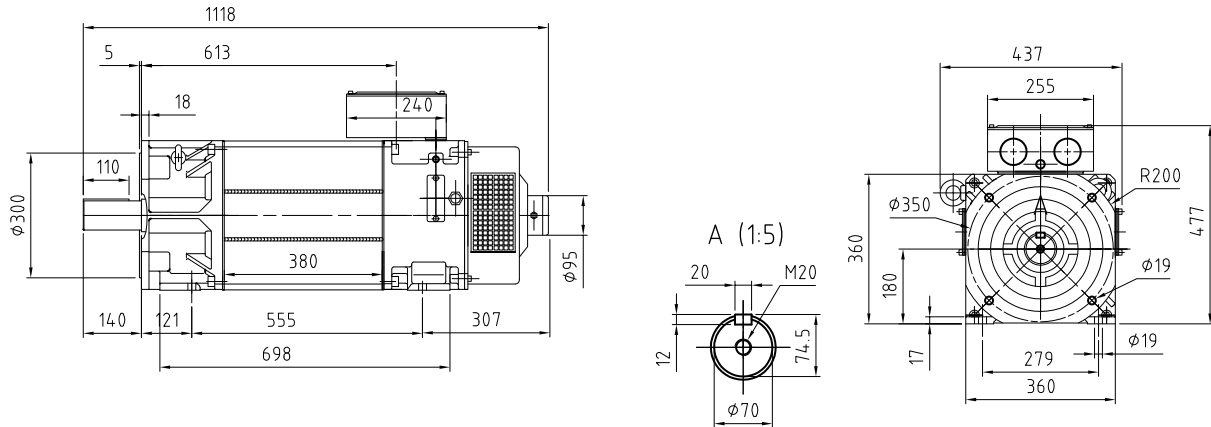
(Voltage/frequency supply to precise in order)

Frequency (Hz)	50/60	Number of phases	3
Voltage (V)	400/460	Mounting	Radial
Speed (rpm)	2900/3510	Type of cooling fan	Force draught
Power (kW)	1.5/1.5	Internal Static Air Pressure Drop (Pa)	900
Current (A)	2.9/2.6	Required cooling Air flow (m ³ /h)	1300

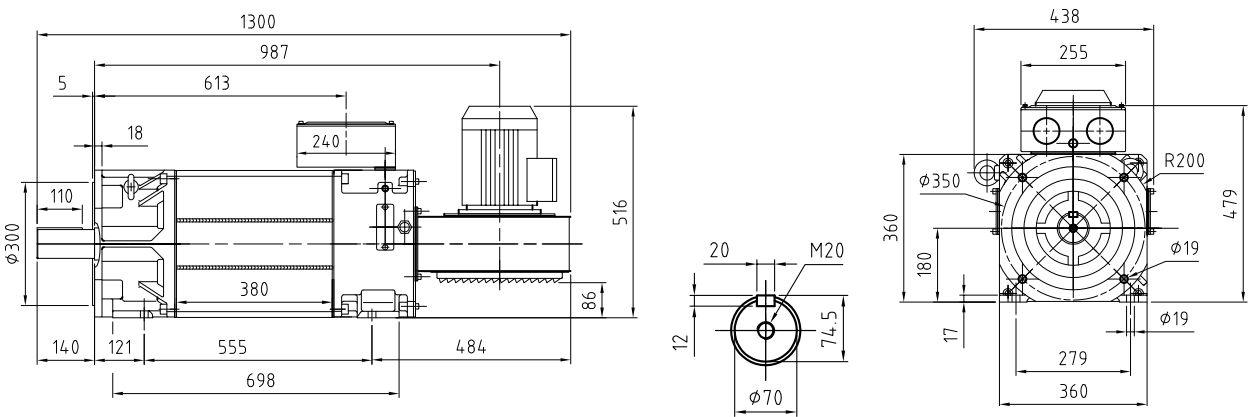
Electrical Data (at 400V)

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

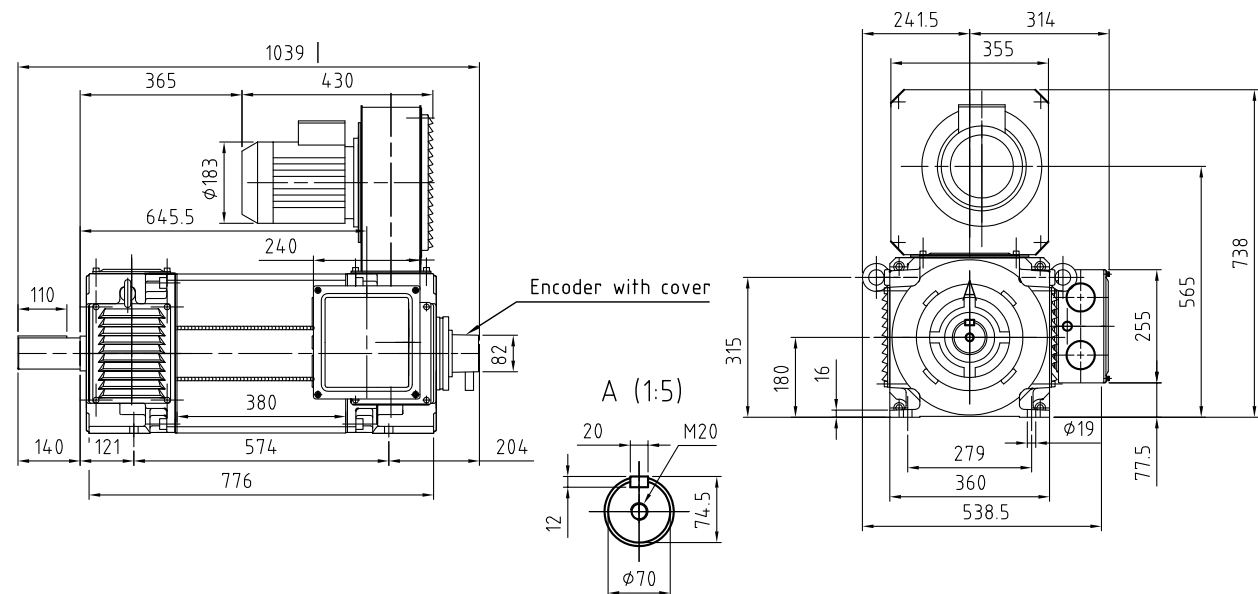
IP54 version, axial ventilation



IP55 version, axial ventilation



IP55 version, radial ventilation



Motor Characteristics

Degree of Protection	IP55	Cooling	IC416
Rotor Inertia J (kgm ²)	1.101	Motor weight (kg)	550
Maximum mechanical speed n _{max} (rpm)	3000 (4900)*	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

* Can be increased on request

** bearing protection ring recommended above 100 kW

*** 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

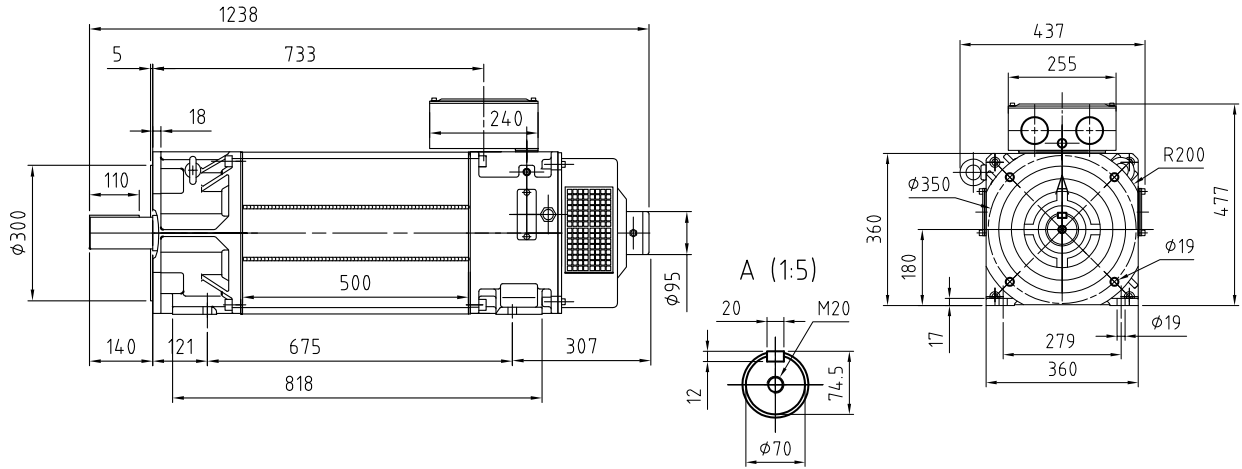
(Voltage/frequency supply to precise in order)

Frequency (Hz)	50/60	Number of phases	3
Voltage (V)	400/460	Mounting	Radial
Speed (rpm)	2900/3510	Type of cooling fan	Force draught
Power (kW)	1.5/1.5	Internal Static Air Pressure Drop (Pa)	900
Current (A)	2.9/2.6	Required cooling Air flow (m ³ /h)	1300

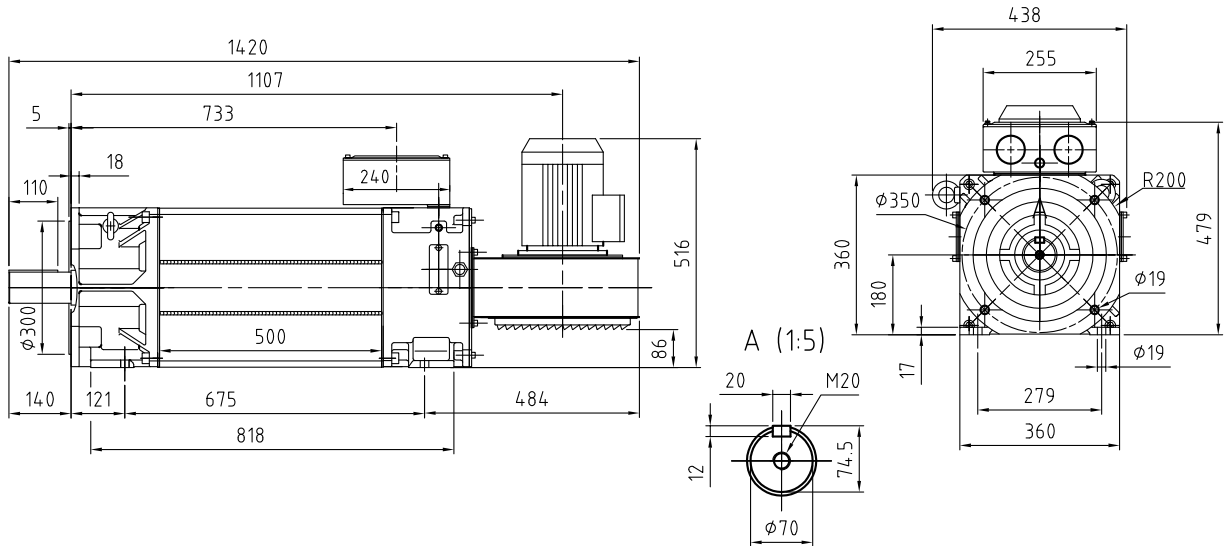
Electrical Data (at 400V)

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

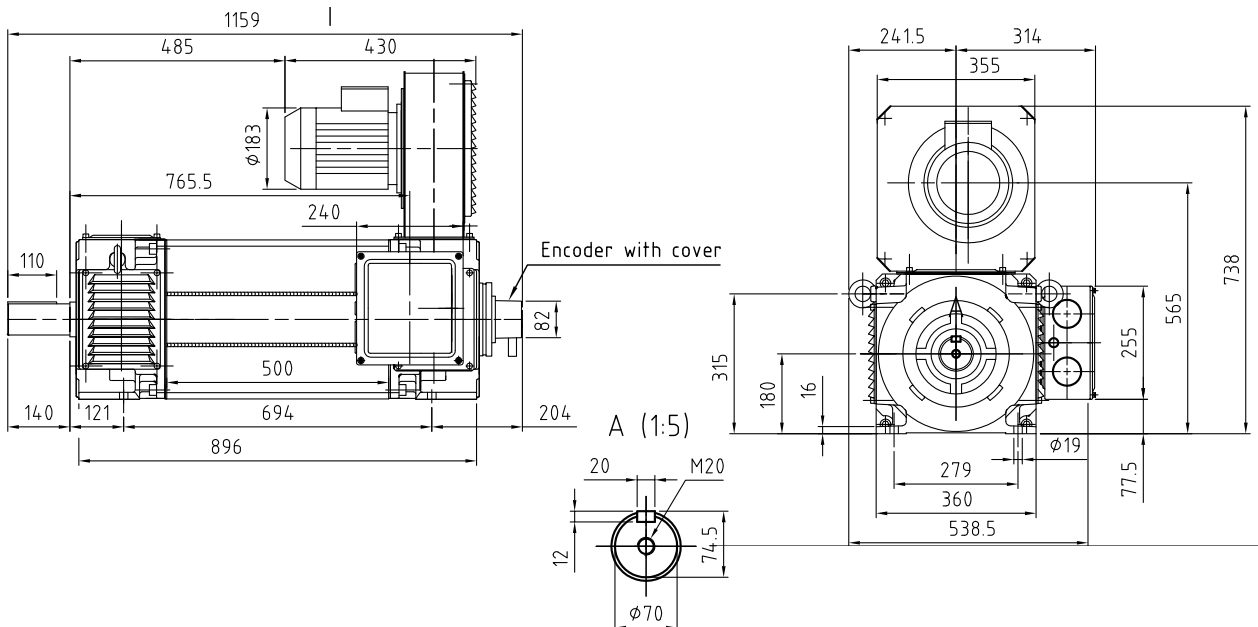
IP54 version, axial ventilation



IP55 version, axial ventilation



IP55 version, radial ventilation



Motor Characteristics

Degree of Protection	IP55	Cooling	IC416
Rotor Inertia J (kgm ²)	1.97	Motor weight (kg)	715
Maximum mechanical speed n _{max} (rpm)	3800 (6000)*	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

* On request (high speed option)

** 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)	2920/3530	Type of cooling fan	Force draught
Power (kW)	3/3	Internal Static Air Pressure Drop (Pa)	1200
Current (A)	5.8/5.1	Required cooling Air flow (m ³ /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	4200*	0,89	0,97	100,5

Motor Characteristics

Degree of Protection	IP55	Cooling	IC416
Rotor Inertia J (kgm ²)	2.617	Motor weight (kg)	870
Maximum mechanical speed n _{max} (rpm)	3800* (5000)	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

* On request (high speed option)

** Bearing protection ring recommended above 100 kW

IP55 version, Axial or radial ventilation, Fan characteristics

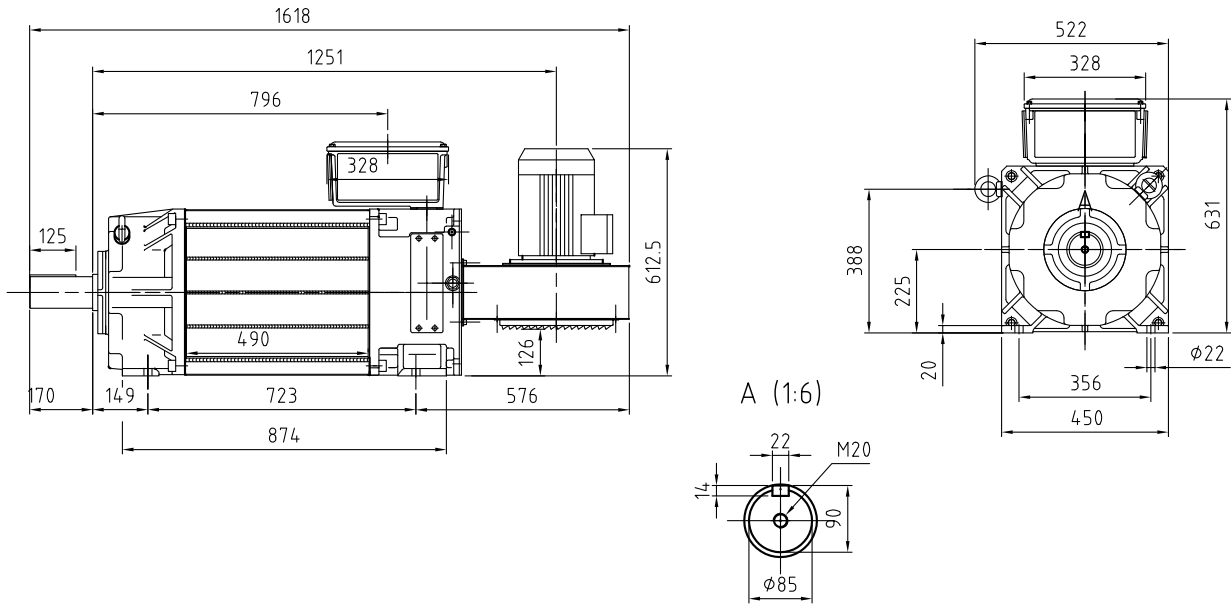
(Voltage/frequency supply to precise in order)

Frequency (Hz)	50/60	Number of phases	3
Voltage (V)	400/460	Mounting	Radial
Speed (rpm)	2920/3530	Type of cooling fan	Force draught
Power (kW)	3/3	Internal Static Air Pressure Drop (Pa)	1200
Current (A)	5.8/5.1	Required cooling Air flow (m ³ /h)	2200

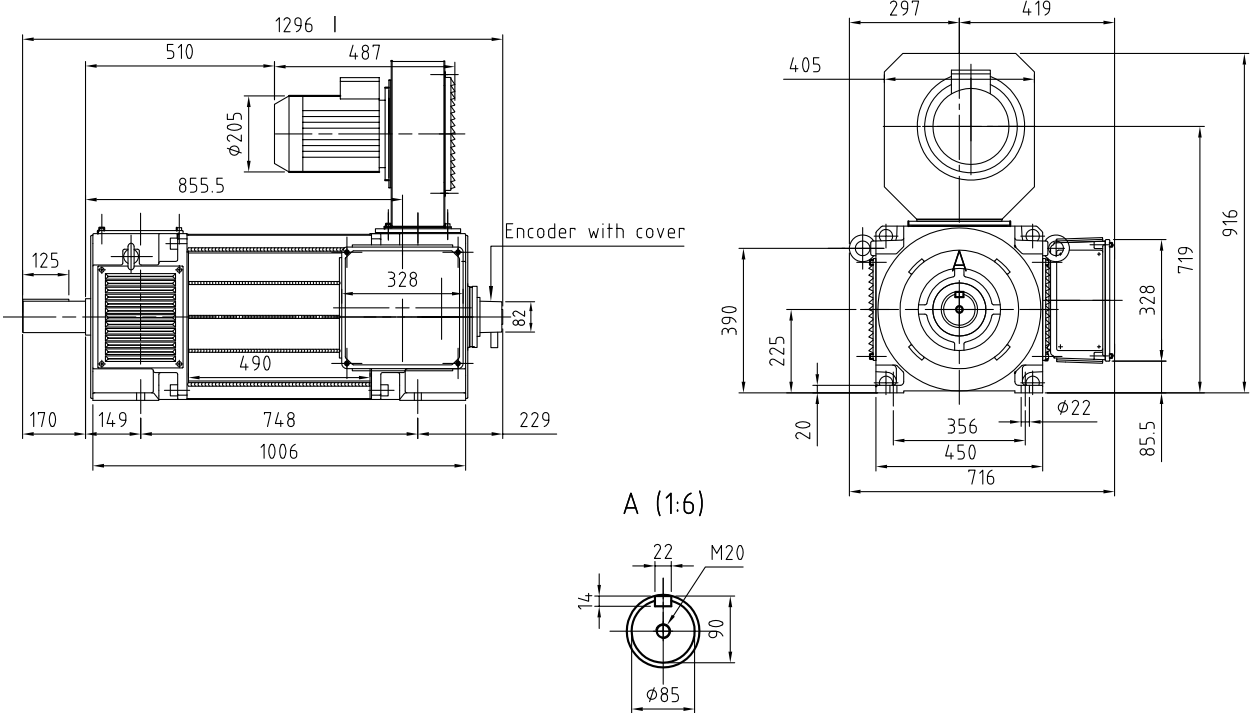
Electrical Data (at 400V)

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	4200*	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 (kgm ²)	2.915	Motor weight (kg)	930
Maximum mechanical speed n _{max} (rpm)	3800 (4400)*	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

* On request (high speed option)

** 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)	2920/3530	Type of cooling fan	Force draught
Power (kW)	3/3	Internal Static Air Pressure Drop (Pa)	1200
Current (A)	5.8/5.1	Required cooling Air flow (m ³ /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	4200*	0,9	0,97	100,5

Motor Characteristics

Degree of Protection	IP55	Cooling	IC416
Rotor Inertia J (kgm ²)	2.677	Motor weight (kg)	1110
Maximum mechanical speed n _{max} (rpm)	3400 (5900)*	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)

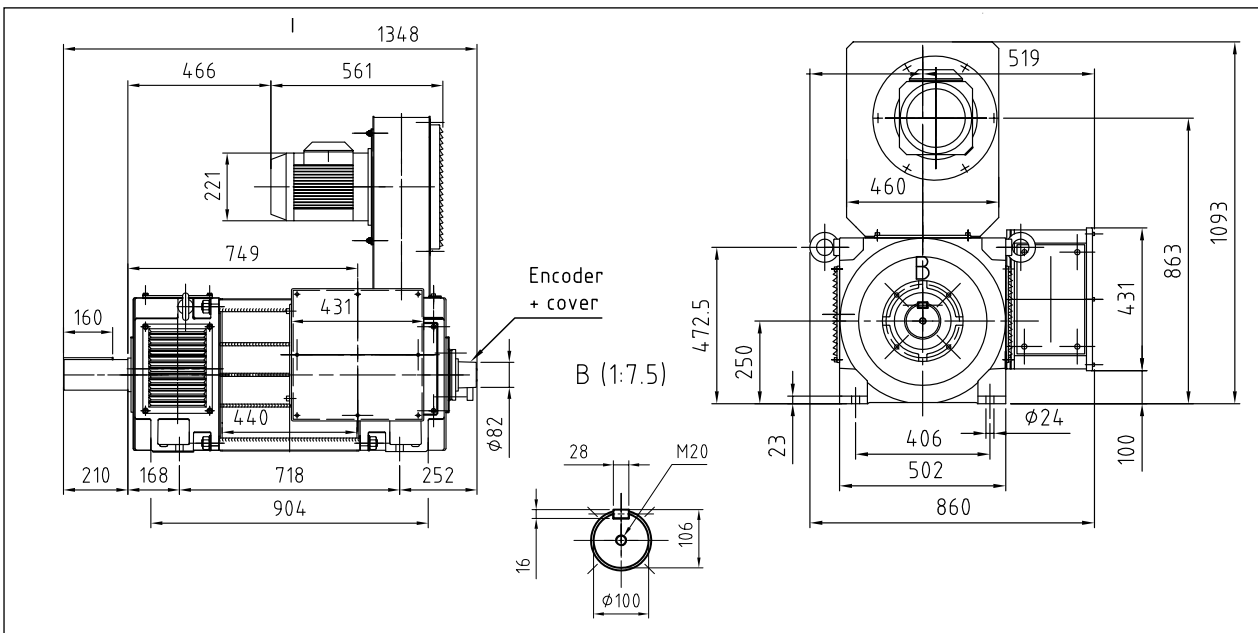
** Bearing protection ring recommended above 100 kW

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)	2890/3510	Type of cooling fan	Force draught
Power (kW)	4/4.6	Internal Static Air Pressure Drop (Pa)	2100
Current (A)	7.7/7.9	Required cooling Air flow (m ³ /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 (kgm ²)	3.29	Motor weight (kg)	1280
Maximum mechanical speed n _{max} (rpm)	3400 (4600)*	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)

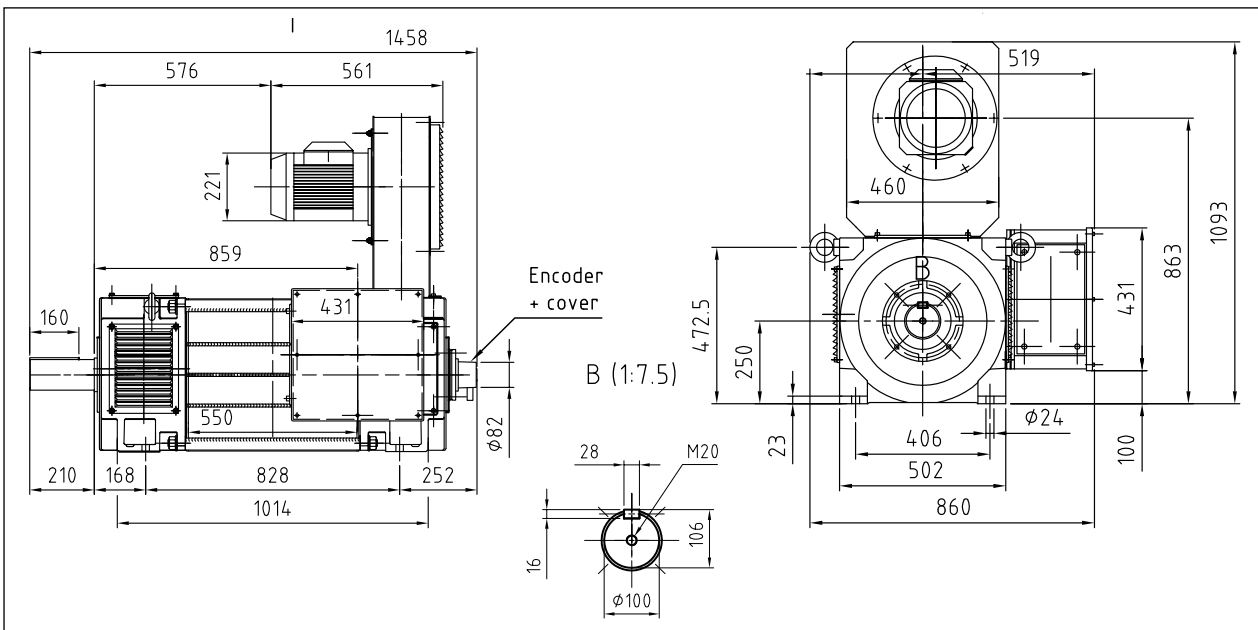
** Bearing protection ring recommended above 100 kW

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)	2890/3510	Type of cooling fan	Force draught
Power (kW)	4/4.6	Internal Static Air Pressure Drop (Pa)	2100
Current (A)	7.7/7.9	Required cooling Air flow (m ³ /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 (kgm ²)	3.73	Motor weight (kg)	1410
Maximum mechanical speed n _{max} (rpm)	3400 (3900)*	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)

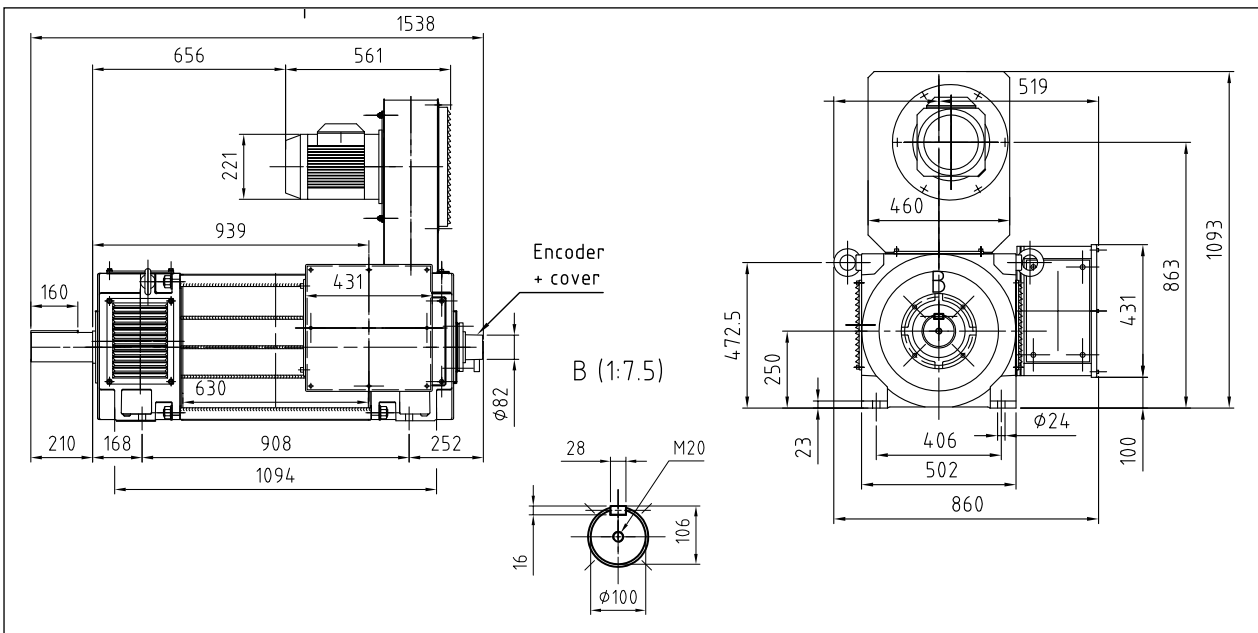
** Bearing protection ring recommended above 100 kW

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)	2890/3510	Type of cooling fan	Force draught
Power (kW)	4/4.6	Internal Static Air Pressure Drop (Pa)	2100
Current (A)	7.7/7.9	Required cooling Air flow (m ³ /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 (kgm ²)	4.705	Motor weight (kg)	1180
Maximum mechanical speed n _{max} (rpm)	3200 (5000)*	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

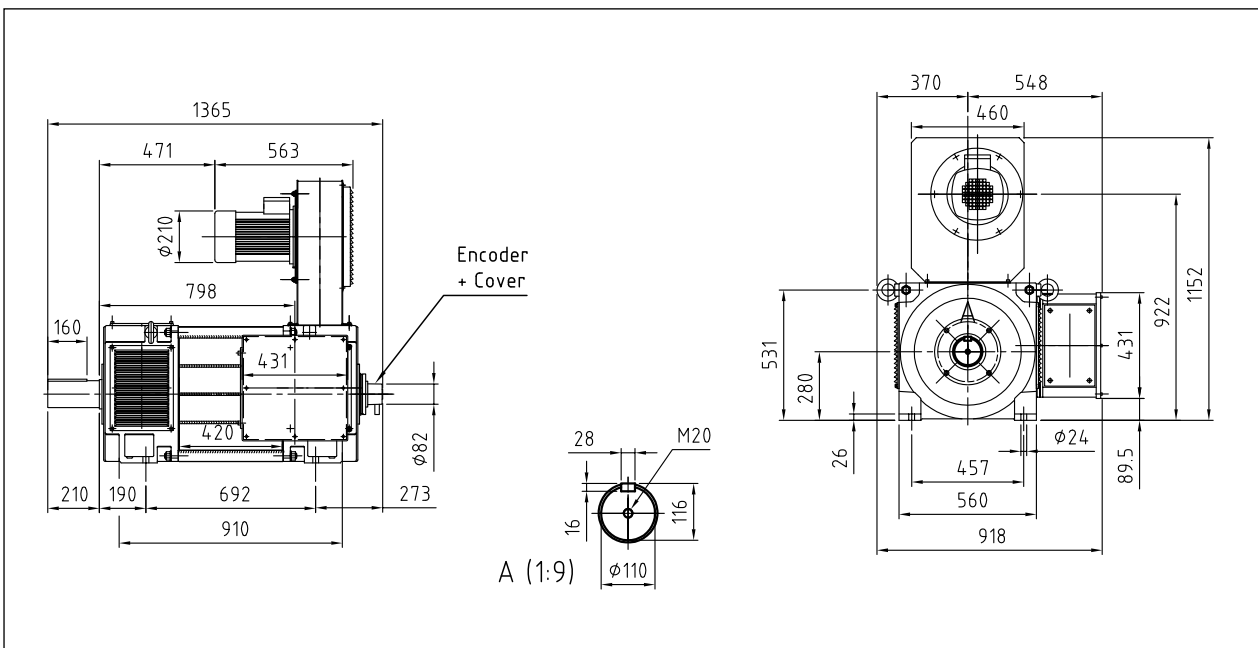
* On request (high speed option)
 ** bearing protection ring recommended
 *** 690V possible on request

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)	2915/3520	Type of cooling fan	Force draught
Power (kW)	5.5/7.5	Internal Static Air Pressure Drop (Pa)	2600
Current (A)	11/11.8	Required cooling Air flow (m ³ /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 (kgm ²)	6.309	Motor weight (kg)	1530
Maximum mechanical speed n _{max} (rpm)	3200 (4200)*	Sound Pressure level (db(A)) at 50 Hz	84
D-End Bearing**	6230 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

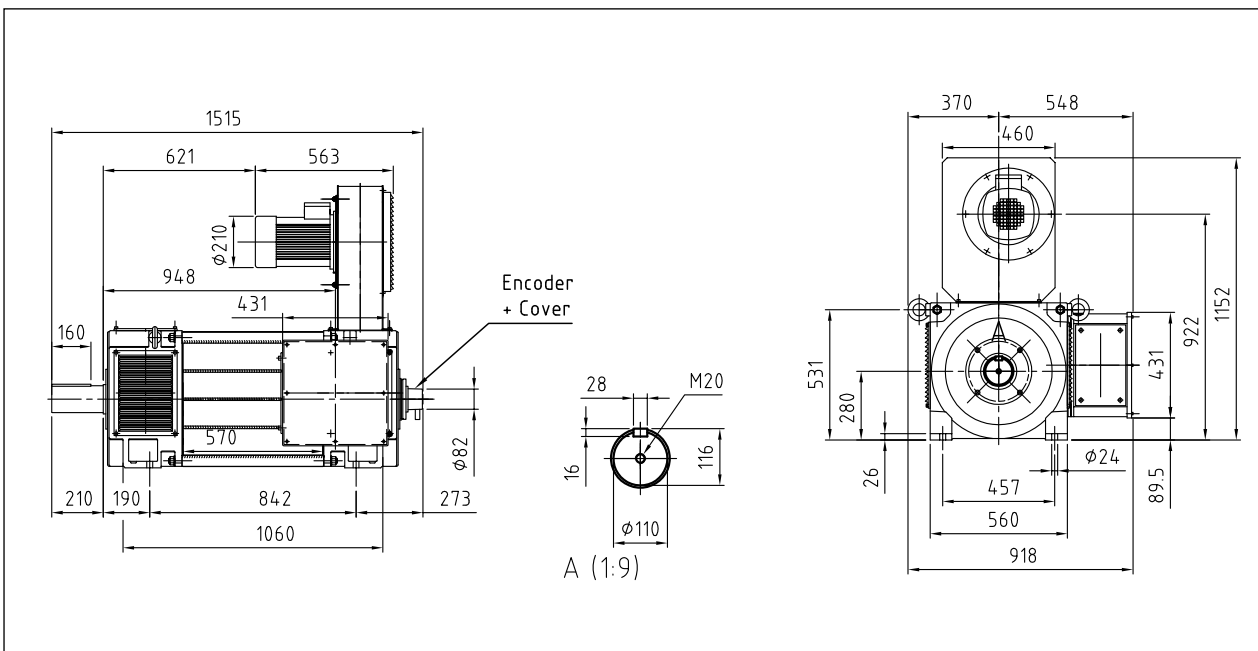
* On request (high speed option)
 ** bearing protection ring recommended
 *** 690V possible on request

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)	2915/3520	Type of cooling fan	Force draught
Power (kW)	5.5/7.5	Internal Static Air Pressure Drop (Pa)	2600
Current (A)	11/11.8	Required cooling Air flow (m ³ /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 (kgm ²)	7.094	Motor weight (kg)	1820
Maximum mechanical speed n _{max} (rpm)	3200 (3500)*	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

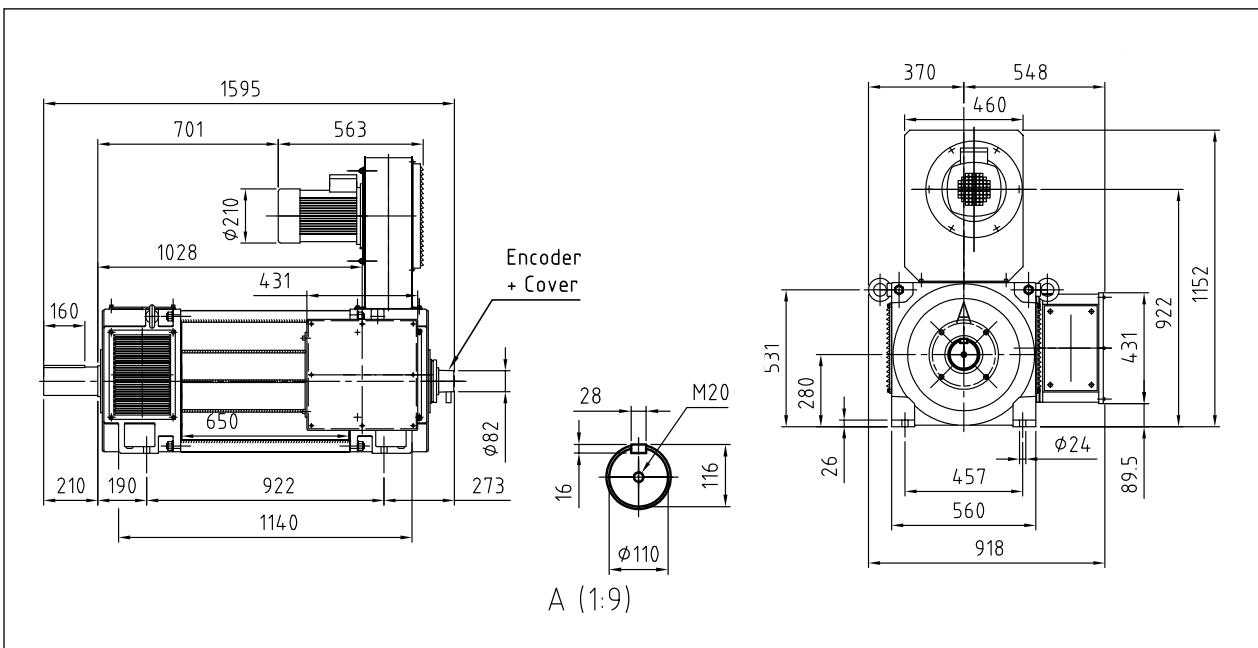
* On request (high speed option)
 ** bearing protection ring recommended
 *** 690V possible on request

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)	2915/3520	Type of cooling fan	Force draught
Power (kW)	5.5/7.5	Internal Static Air Pressure Drop (Pa)	2600
Current (A)	11/11.8	Required cooling Air flow (m ³ /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 (kgm ²)	13.3	Motor weight (kg)	2140
Maximum mechanical speed n _{max} (rpm)	3000 (4300)*	Sound Pressure level (db(A)) at 50 Hz	85
D-End Bearing**	6226 C3	N-End bearing	6226 C3
Vibration Class	A	Mounting	IM1001
Insulation class	H	Temperature rise Class	F
Motor Nominal voltage (V)	400***	Thermal Protection	PTC 150°C

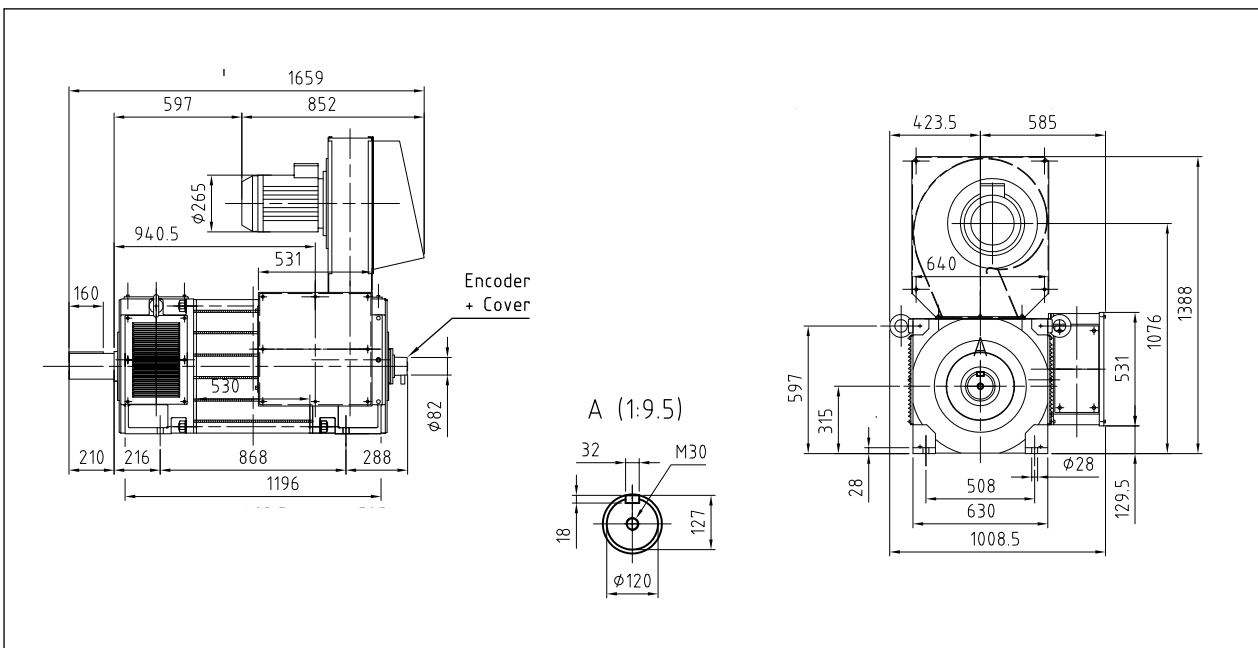
* On request (high speed option)
 ** bearing protection ring recommended
 *** 690V possible on request

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)	2915/3520	Type of cooling fan	Force draught
Power (kW)	5.5/7.5	Internal Static Air Pressure Drop (Pa)	2600
Current (A)	11/11.8	Required cooling Air flow (m ³ /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 (kgm ²)	16	Motor weight (kg)	2560
Maximum mechanical speed n _{max} (rpm)	3000 (3200)*	Sound Pressure level (db(A)) at 50 Hz	85
D-End Bearing**	6226 C3	N-End bearing	6226 C3
Vibration Class	A	Mounting	IM1001
Insulation class	H	Temperature rise Class	F
Motor Nominal voltage (V)	400***	Thermal Protection	PTC 150°C

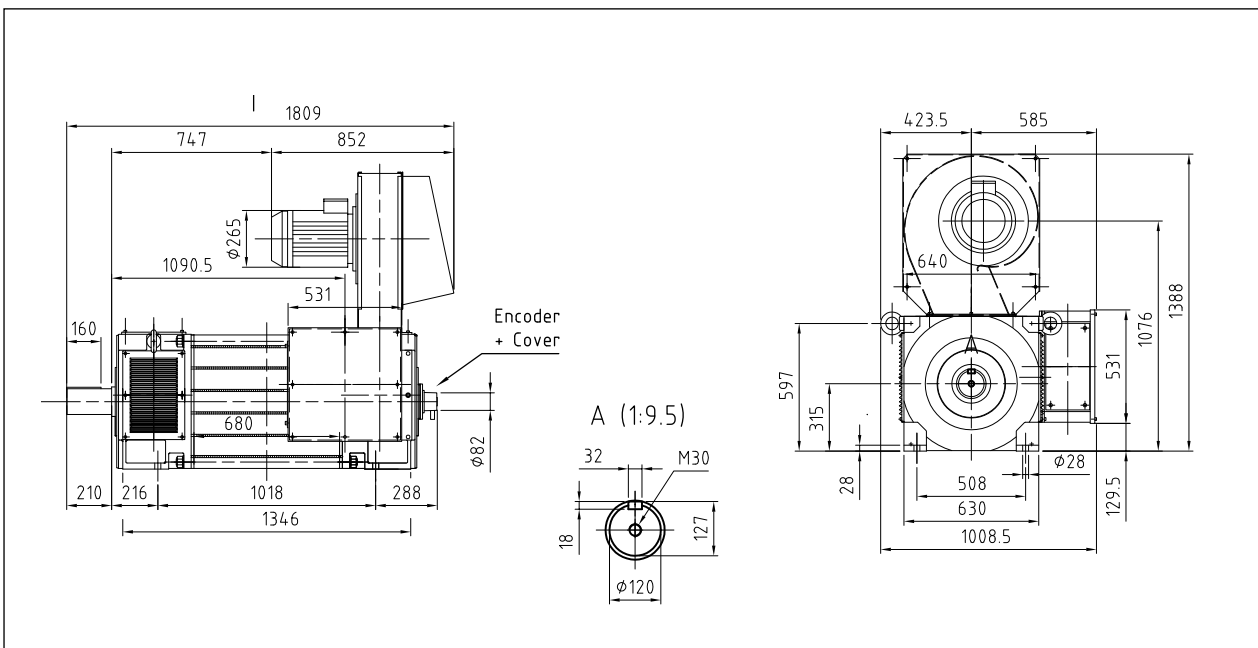
* On request (high speed option)
 ** bearing protection ring recommended
 *** 690V possible on request

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)	2915/3520	Type of cooling fan	Force draught
Power (kW)	5.5/7.5	Internal Static Air Pressure Drop (Pa)	2600
Current (A)	11/11.8	Required cooling Air flow (m ³ /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 (kgm ²)	18.5	Motor weight (kg)	2910
Maximum mechanical speed n _{max} (rpm)	2600	Sound Pressure level (db(A)) at 50 Hz	85
D-End Bearing*	6226 C3	N-End bearing	6226 C3
Vibration Class	A	Mounting	IM1001
Insulation class	H	Temperature rise Class	F
Motor Nominal voltage (V)	400**	Thermal Protection	PTC 150°C

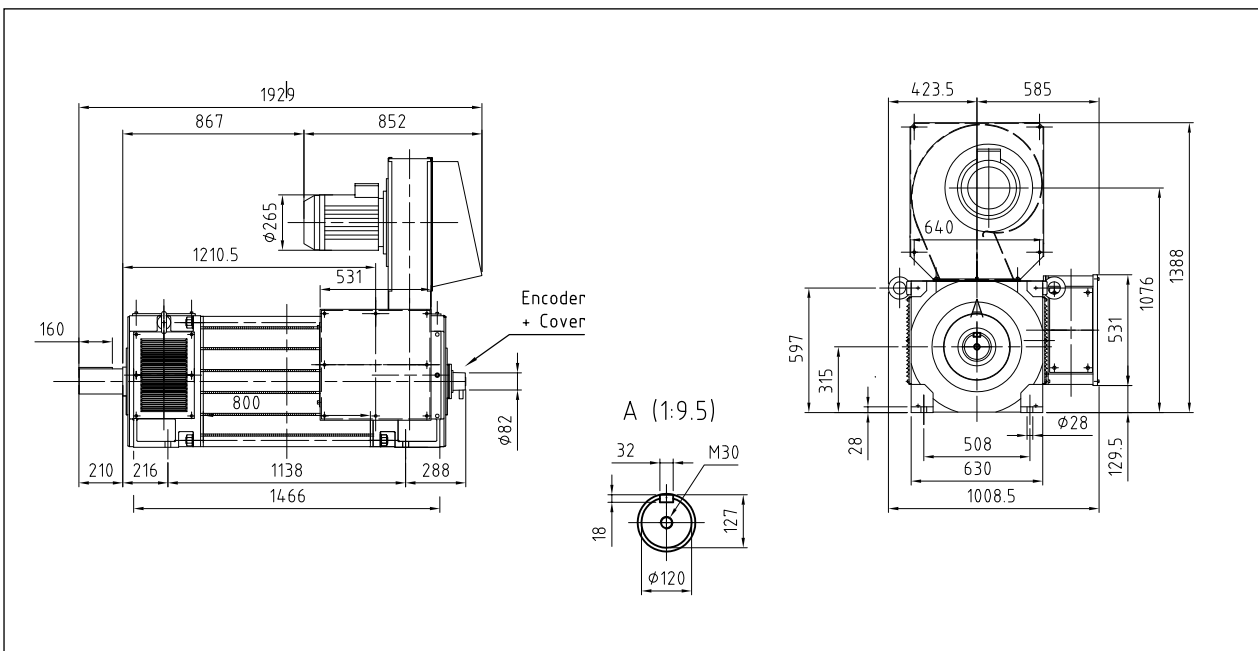
* bearing protection ring recommended
 ** 690V possible on request

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)	2915/3520	Type of cooling fan	Force draught
Power (kW)	5.5/7.5	Internal Static Air Pressure Drop (Pa)	2600
Current (A)	11/11.8	Required cooling Air flow (m ³ /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 (kgm ²)	19.288	Motor weight (kg)	2130
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

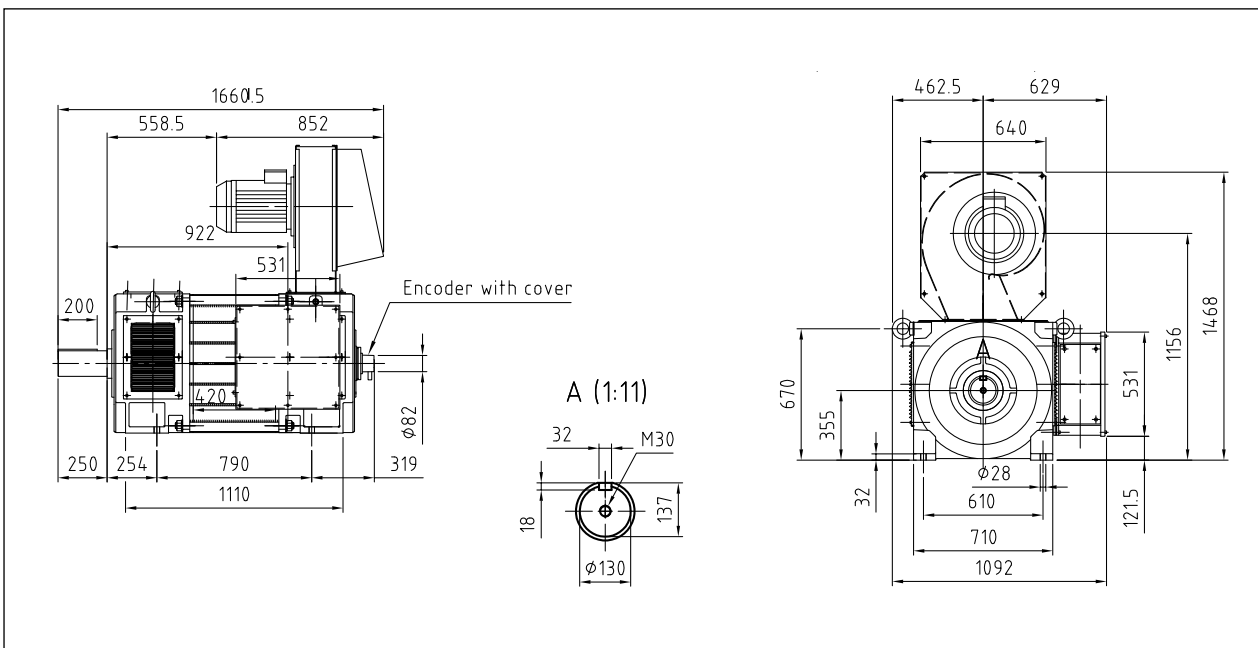
* On request (high speed option)
 ** bearing protection ring recommended
 *** 690V possible on request

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)	2915/3520	Type of cooling fan	Force draught
Power (kW)	5.5/7.5	Internal Static Air Pressure Drop (Pa)	2600
Current (A)	11/11.8	Required cooling Air flow (m ³ /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	3100*	0,88	0,96	60,3
2000	412	1967	704	3400*	0,88	0,96	66,9



Motor Characteristics

Degree of Protection	IP55	Cooling	IC416
Rotor Inertia J (kgm ²)	25.309	Motor weight (kg)	2830
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

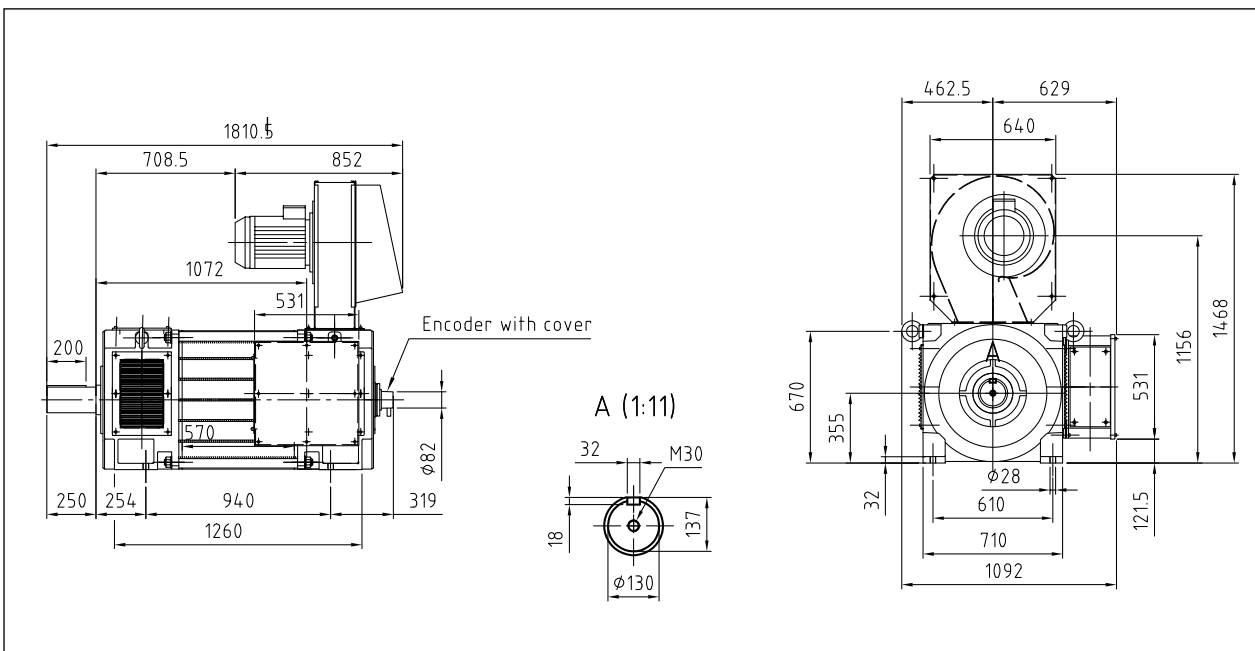
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Blower characteristics (Voltage/frequency supply to precise in order)

Frequency (Hz)	50/60	Number of phases	3
Voltage (V)	400/460	Mounting	Radial
Speed (rpm)	2915/3520	Type of cooling fan	Force draught
Power (kW)	5.5/7.5	Internal Static Air Pressure Drop (Pa)	2600
Current (A)	11/11.8	Required cooling Air flow (m ³ /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	3100*	0,87	0,96	60,3
2000	567	2707	980	3400*	0,87	0,96	66,9



Motor Characteristics

Degree of Protection	IP55	Cooling	IC416
Rotor Inertia J (kgm ²)	29.313	Motor weight (kg)	3430
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

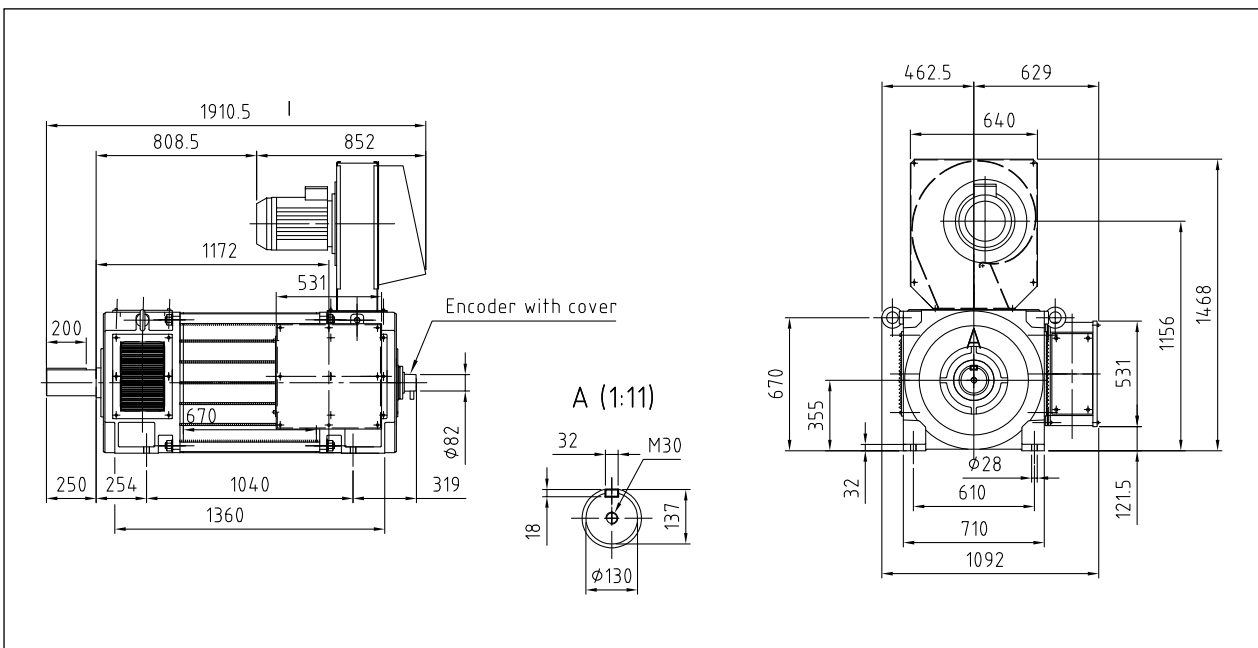
* On request (high speed option)
 ** bearing protection ring recommended
 *** 690V possible on request

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)	2915/3520	Type of cooling fan	Force draught
Power (kW)	5.5/7.5	Internal Static Air Pressure Drop (Pa)	2600
Current (A)	11/11.8	Required cooling Air flow (m ³ /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	3100*	0,87	0,96	60,3
2000	675	3223	1167	3400*	0,87	0,96	66,9



Motor Characteristics

Degree of Protection	IP55	Cooling	IC416
Rotor Inertia J (kgm ²)	37.12	Motor weight (kg)	3930
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

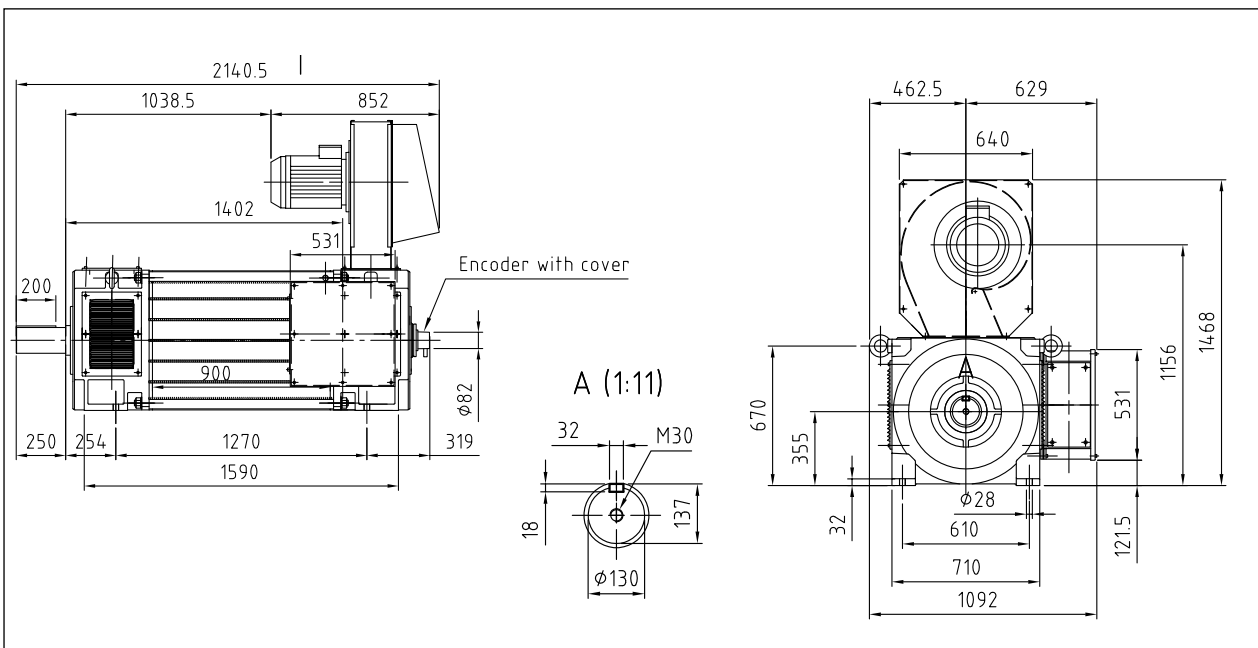
* bearing protection ring recommended
 ** 690V possible on request

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)	2915/3520	Type of cooling fan	Force draught
Power (kW)	5.5/7.5	Internal Static Air Pressure Drop (Pa)	2600
Current (A)	11/11.8	Required cooling Air flow (m ³ /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	3100	0,87	0,96	60,3
2000	877	4188	1516	3400	0,87	0,96	66,9



Founded over 100 years ago, T-T Electric is a world-class supplier of top-quality industrial electric motors and drives. Pioneers in the industry, we are an experienced and established manufacturer of a comprehensive and cost-effective range of highly reliable drive products. They are used around the world in the toughest of application environments and in all industrial segments.

Driven by customer demand, T-T Electric is continually researching product excellence and manufacturing

process perfection. The flexible product design ensures easy adaptations to customer requirements. This, combined with unequalled short delivery times, make T-T Electric a reference within industry. Our extensive support services include diagnostics and maintenance on site as well as full overhaul in our own repair facilities.

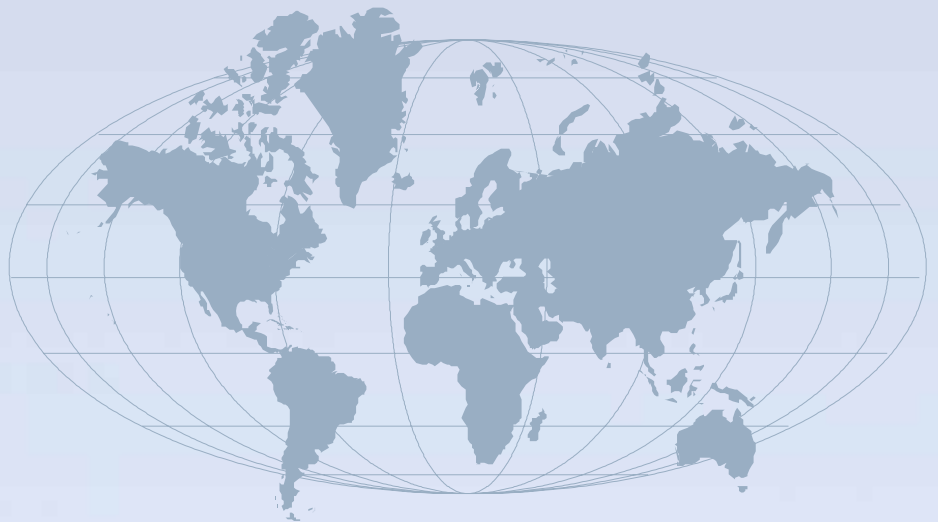
T-T Electric is committed to a working partnership with our customers. For mutual benefit, we focus on complete and innovative solutions together.

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