

*Asynchronous motors*

**Gear  
traction  
machine**

YJ



FYJ



**YJ / FYJ**

**series**





## Recommendation Form

Traction ratio	Speed (m/s)							
	0,5	0,63	0,75	1,0	1,5	1,6	1,75	
Load (kg)								
100	YJ110							
200								
320								
400	YJ140							
500								
630				YJ140				
			FYJ180					
800						YJ240B		
1000	YJ200			YJ240B				
1150	FYJ245							
1250	YJ245D							
1350								
1600								
2500	YJ320							



# YJ110

## Elevator Traction Machine

Suspension: 1:1

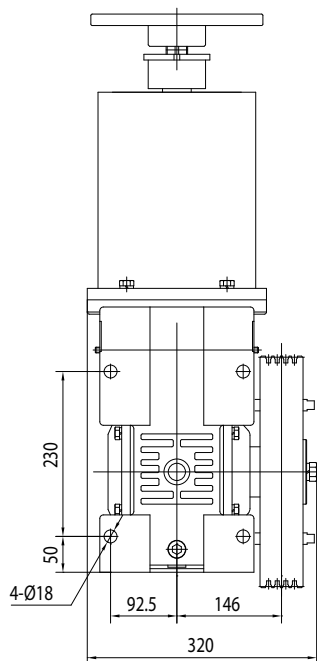
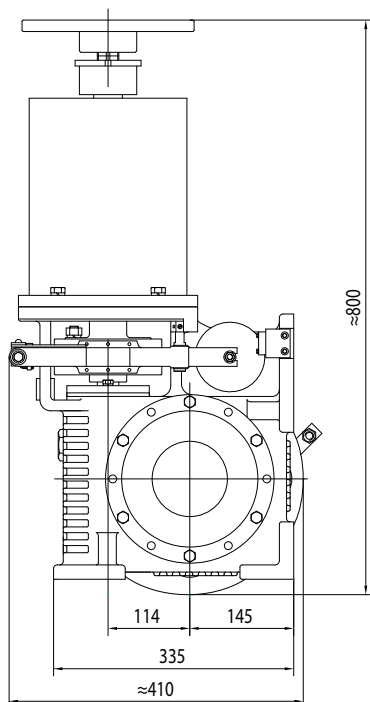
Control: VVVF

Brake: DC110V 1,4A

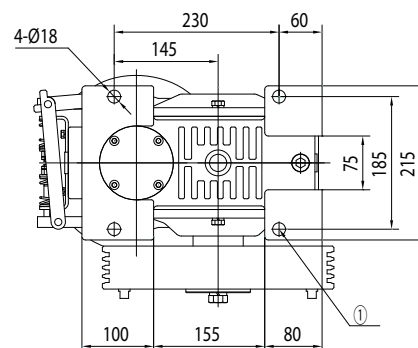
Weight: 155kg

Max. Static Load: 1800kg

*Horizontal type is optional*



The footing hole dimensions of box



Load (kg)	Speed (m/s)	Ratio	Sheave $\varnothing$ (mm)	Rope sheave (mm)	Motor Power (kW)	Pole
100	0,5	45:1	$\varnothing$ 320	3X $\varnothing$ 8X12	1,5	4
100	1,0	45:2	$\varnothing$ 320	3X $\varnothing$ 8X12	1,5	4
200	0,5	45:1	$\varnothing$ 320	3X $\varnothing$ 8X12	1,5	4
200	1,0	45:2	$\varnothing$ 320	3X $\varnothing$ 8X12	2,2	4
320	0,5	45:1	$\varnothing$ 320	4X $\varnothing$ 8X12	2,2	4
320	1,0	45:2	$\varnothing$ 320	4X $\varnothing$ 8X12	3,5	4

**Remark:**

Left sheave type is optional.

Please reverse to fix the bolt at mark 1.



# YJ140

## Elevator Traction Machine

Suspension: 1:1

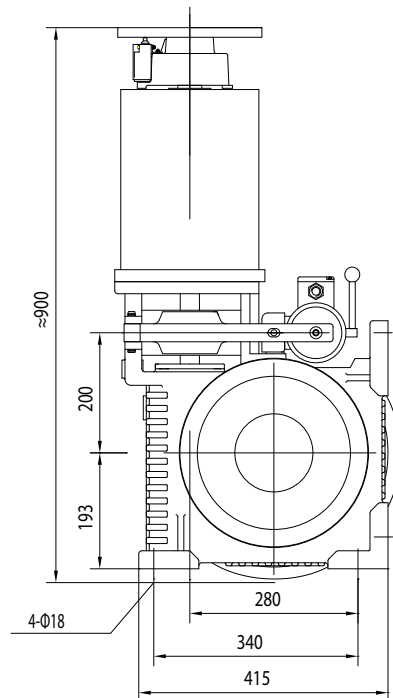
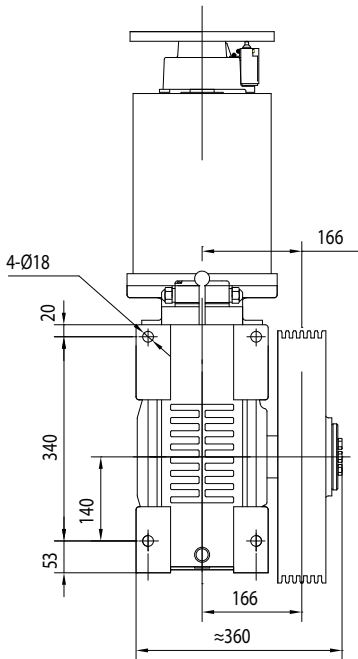
Control: VVVF

Brake: DC110V 1A

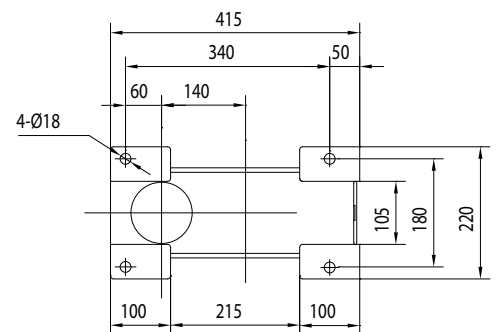
Weight: 285kg

Max. Static Load: 2800kg

*Horizontal type is optional*



The footing hole dimensions of box

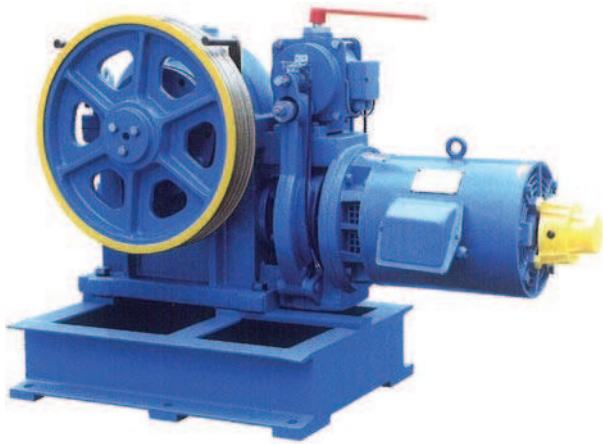


Load (kg)	Speed (m/s)	Ratio	Sheave ø (mm)	Rope sheave (mm)	Motor Power (kW)	Pole
320	1	41:1	Ø 520	4XØ10X16	4,5	4
400	0,5	51:1	Ø 340	5XØ8X12	3,5	4
400	0,63	51:1	Ø 425	4XØ10X16	3,5	4
400	1,0	51:2	Ø 340	5XØ8X12	4,5	4
500	0,5	51:1	Ø 340	6XØ8X12	3,5	4
500	0,63	51:1	Ø 425	4XØ10X16	4,5	4
500	1,0	51:2	Ø 340	6XØ8X12	5,5	4
630	1,0	41:2	Ø 425	5XØ10X16	7,5	6

**Remark:**

*Left sheave type is optional.*

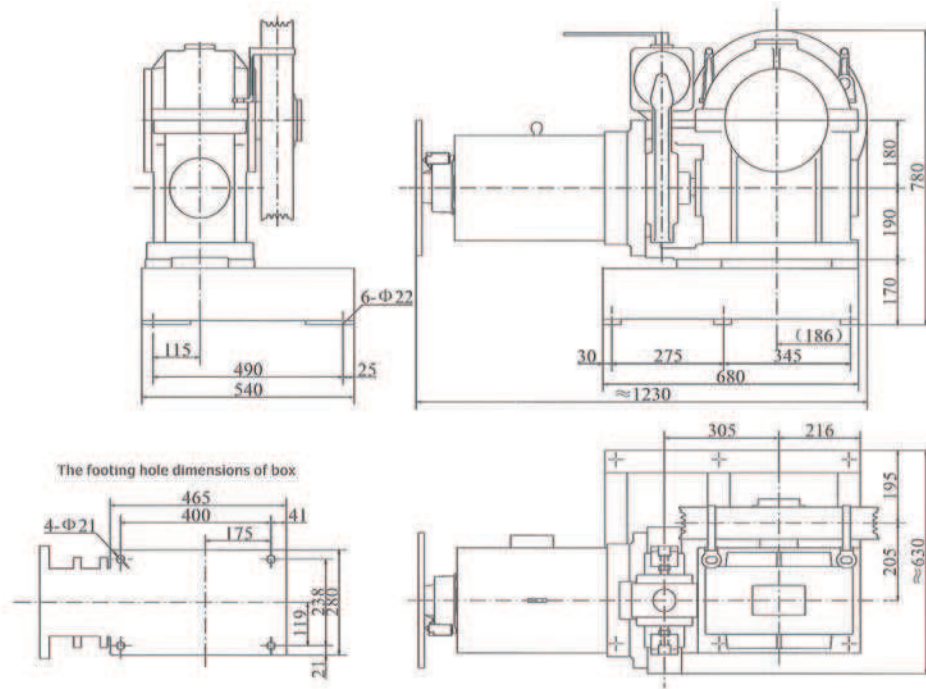
*If the machine matches with motor ≥ 7,5Kw, the brake with the excitation device and the brake voltage is AC220V, the user should use a single support voltage to control the brake.*



# FYJ180

## Elevator Traction Machine

Suspension: 1:1  
Control: VVVF  
Brake: DC110V 1A  
Weight: 430kg  
Max. Static Load: 3500kg



Load (kg)	Speed (m/s)	Ratio	Sheave $\varnothing$ (mm)	Rope sheave (mm)	Motor Power (kW)	Pole
630	0,75	47:1	$\varnothing$ 480	4X12(Pitch 18)	5,5	4
630	1,0	36:1	$\varnothing$ 480	4X12(Pitch 18)	6,4	4
630	1,5	47:2	$\varnothing$ 480	4X12(Pitch 18)	9	4

Remark:  
Right sheave type is optional.



# YJ200

## Elevator Traction Machine

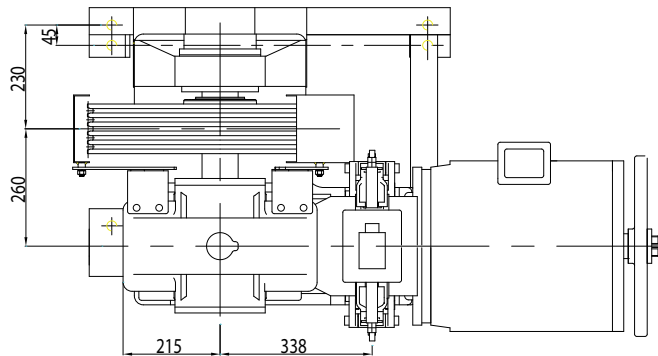
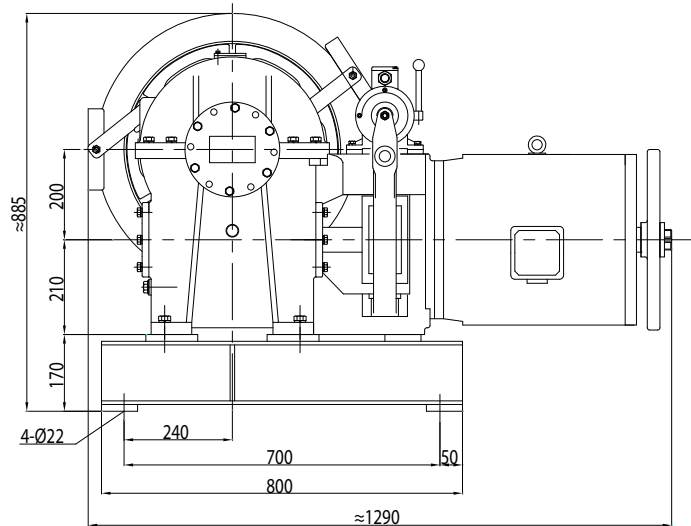
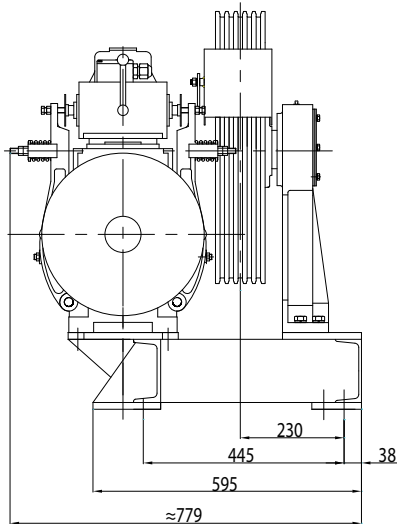
Suspension: 1:1

Control: AC2, VVVF

Brake: DC110V 2A

Weight(with support): 650kg

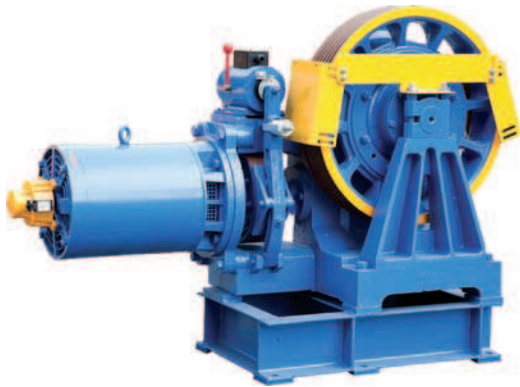
Max. Static Load: 6000k



Load (kg)	Speed (m/s)	Ratio	Sheave $\phi$ (mm)	Rope sheave (mm)	Motor Power (kW)	Pole
1000	0,5	53:1	$\phi$ 530	5X $\phi$ 13X20	7,5	6
1000	1,0	41:1	$\phi$ 530	5X $\phi$ 13X20	11	4
1000	0,5	53:1	$\phi$ 530	5X $\phi$ 13X20	7,5/1,5	6/24
1000	1,0	41:1	$\phi$ 530	5X $\phi$ 13X20	11/2,5	4/16

Remark:

Left sheave type is optional.



# YJ240B

## Elevator Traction Machine

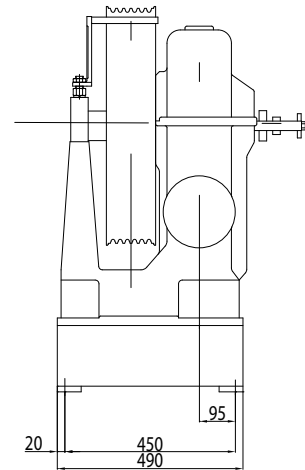
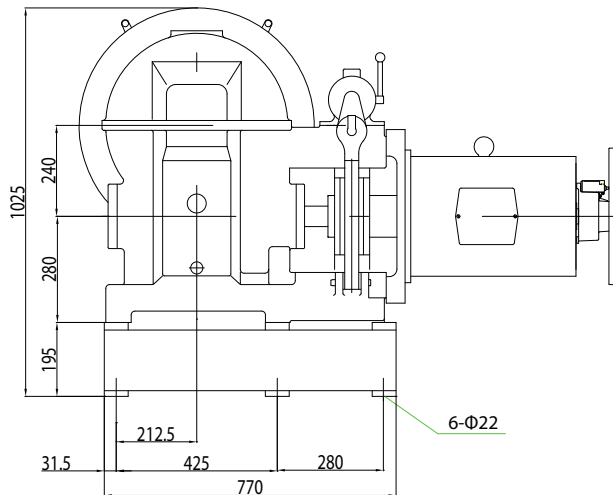
Suspension: 1:1

Control: VVVF

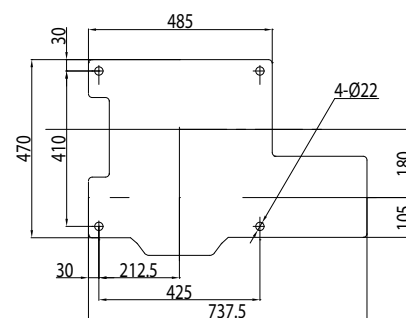
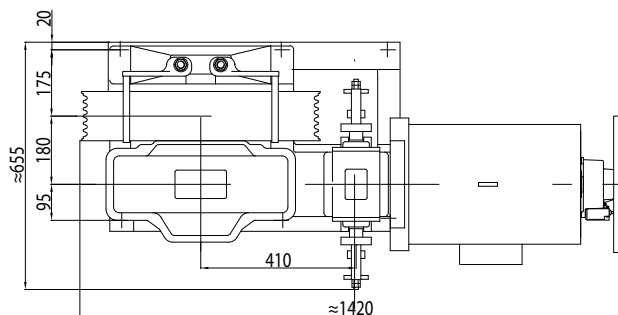
Brake: DC110V 2A

Weight(with support): 730kg

Max. Static Load: 7500kg



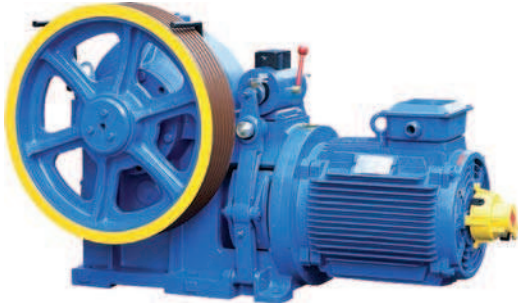
The footing hole dimensions of box



Load (kg)	Speed (m/s)	Ratio	Sheave $\phi$ (mm)	Rope sheave (mm)	Motor Power (kW)	Pole
800	1,6	59:2	$\phi$ 620	5X $\phi$ 13X20	11	4
800	1,75	55:2	$\phi$ 620	5X $\phi$ 13X20	15	4
1000	1,0	49:1	$\phi$ 620	5X $\phi$ 13X20	11	4
1000	1,6	59:2	$\phi$ 620	6X $\phi$ 13X20	15	4
1000	1,75	55:2	$\phi$ 620	6X $\phi$ 13X20	18,5	4
1000	2,0	49:2	$\phi$ 620	6X $\phi$ 13X20	18,5	4

Remark:  
Left sheave type is optional.



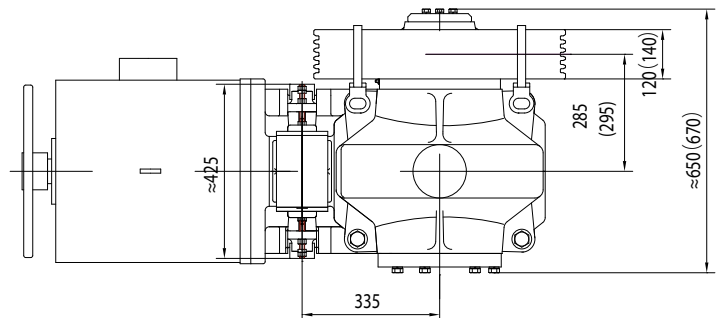
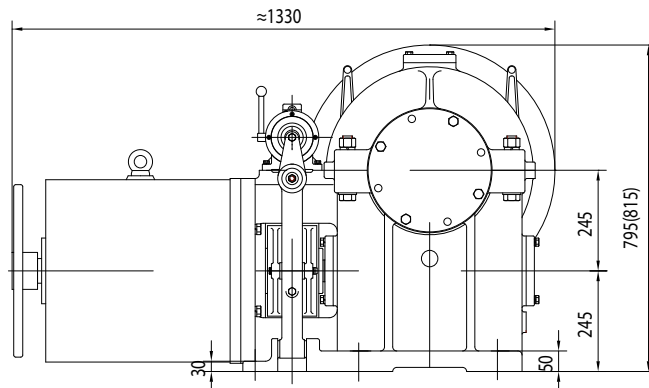
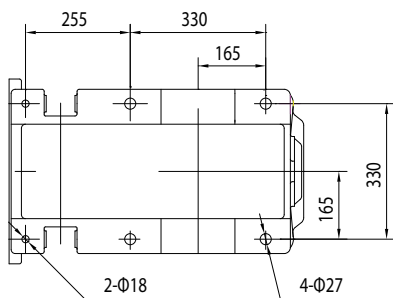


# FYJ245

## Elevator Traction Machine

Suspension: 1:1  
Control: AC2, VVVF  
Brake: DC110V 2A  
Weight: 860kg  
Max. Static Load: 7500kg

The footing hole dimensions of box



Load (kg)	Speed (m/s)	Ratio	Sheave ø (mm)	Rope sheave (mm)	Motor Power (kW)	Pole
1150	0,5	61:1	Ø 610	5XØ13X20	7,5	6
1150	0,63	50:1	Ø 610	5XØ13X20	7,5	6
1150	1,0	61:2	Ø 610	5XØ13X20	11	6
1150	1,25	49:2	Ø 610	5XØ13X20	15	6
1150	1,6	61:2	Ø 650	6XØ13X20	18,5	4
1150	1,75	55:2	Ø 650	6XØ13X20	18,5	4
1150	2,0	49:2	Ø 650	6XØ13X20	22	4
1150	0,5	61:1	Ø 610	5XØ13X20	7,5/1,5	6/24
1150	0,63	50:1	Ø 610	5XØ13X20	7,5/1,5	6/24
1150	1,0	61:2	Ø 610	5XØ13X20	11/2,3	6/24
1150	1,25	49:2	Ø 610	5XØ13X20	15/3,5	6/24

**Remark:**  
Right sheave type is optional.  
The rated load is 2000kg when the suspension is 2:1.  
The dimension in bracket is also applied to 650 sheave.



# YJ245D

## Elevator Traction Machine

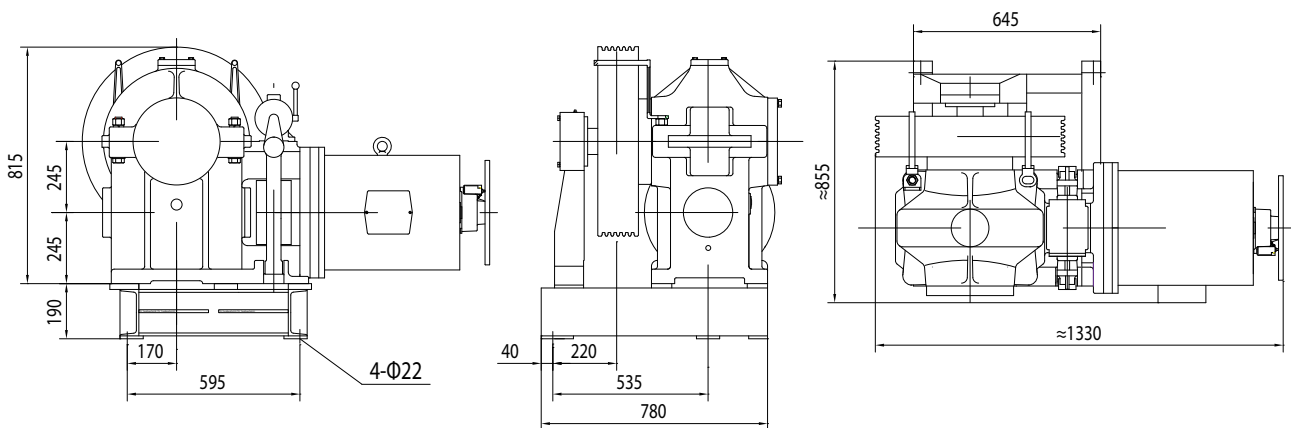
Suspension: 1:1

Control: AC2, VVVF

Brake: DC110V 2A

Weight(with support): 900kg

Max. Static Load: 11000kg



Load (kg)	Speed (m/s)	Ratio	Sheave ø (mm)	Rope sheave (mm)	Motor Power (kW)	Pole
1250	0,5	61:1	Ø 650	6XØ13X20	7,5	6
1250	1,0	61:2	Ø 650	6XØ13X20	15	6
1250	1,6	61:2	Ø 650	8XØ13X20	22	4
1250	1,75	55:2	Ø 650	8XØ13X20	22	4
1250	2,0	49:2	Ø 650	8XØ13X20	26	4
1350	0,5	61:1	Ø 650	6XØ13X20	11	6
1350	1,0	61:2	Ø 650	6XØ13X20	15	6
1350	1,6	61:2	Ø 650	8XØ13X20	22	4
1350	1,75	55:2	Ø 650	8XØ13X20	22	4
1350	2,0	49:2	Ø 650	8XØ13X20	26	4
1600	0,5	61:1	Ø 650	8XØ13X20	11	6
1600	1,0	61:2	Ø 650	8XØ13X20	18,5	6
1600	1,6	61:2	Ø 650	8XØ13X20	26	4
1600	1,75	55:2	Ø 650	8XØ13X20	26	4
1600	2,0	49:2	Ø 650	8XØ13X20	30	4
1250	0,5	61:1	Ø 610	6XØ13X20	7,5/1,5	6/24
1250	1,0	61:2	Ø 610	6XØ13X20	15/3,5	6/24
1350	0,5	61:1	Ø 610	6XØ13X20	11/2,3	6/24
1350	1,0	61:2	Ø 610	6XØ13X20	15/3,5	6/24
1500	0,5	61:1	Ø 610	8XØ13X20	11/2,3	6/24
1500	1,00	61:2	Ø 610	8XØ13X20	18,5/4,3	6/24

Remark:  
Left sheave type is optional.



# YJ320

## Elevator Traction Machine

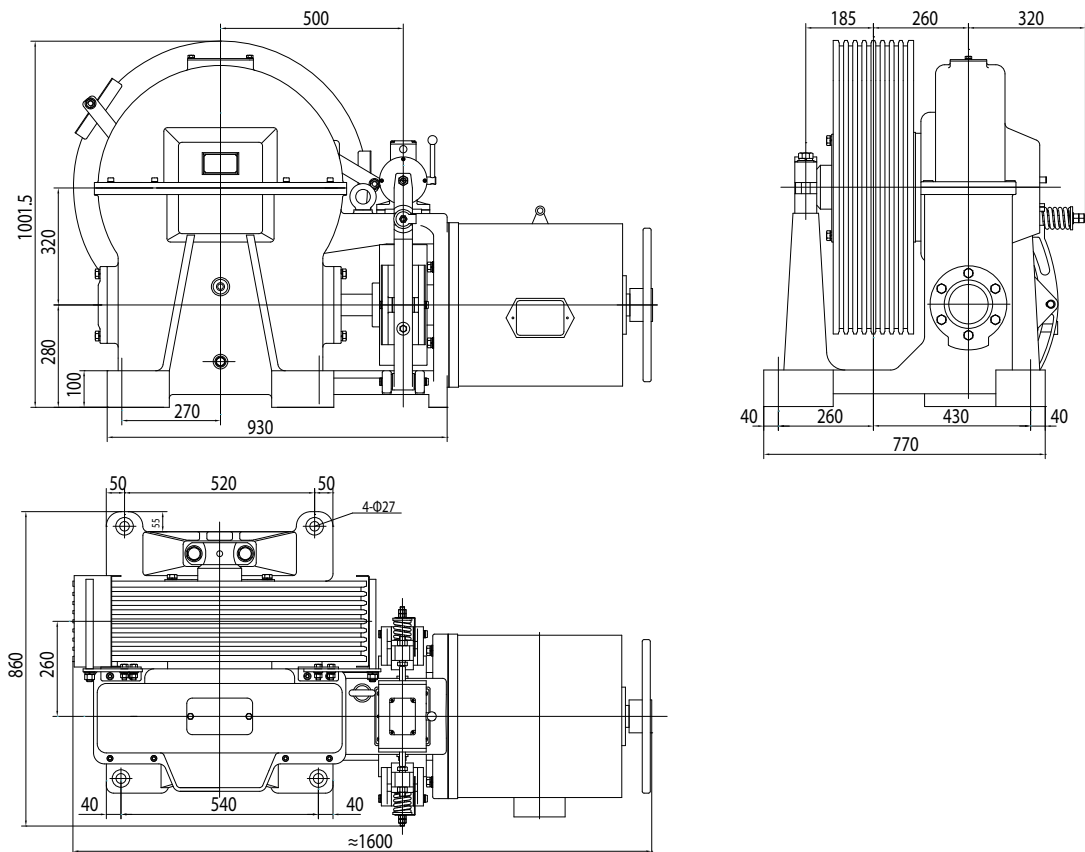
Suspension: 1:1

Control: AC2, VVVF

Brake: DC110V 2,2A

Weight: 1450kg

Max. Static Load: 12500kg



Load (kg)	Speed (m/s)	Ratio	Sheave $\phi$ (mm)	Rope sheave (mm)	Motor Power (kW)	Pole
2500	0,5	69:1	$\phi$ 700	8X $\phi$ 16X25	15	6
2500	1,0	61:1	$\phi$ 800	8X $\phi$ 16X25	26	4
2500	1,5	69:2	$\phi$ 700	8X $\phi$ 16X25	37	4
2500	1,75	69:2	$\phi$ 800	8X $\phi$ 16X25	45	4
2500	2,0	61:2	$\phi$ 800	8X $\phi$ 16X25	45	4
2500	0,5	69:1	$\phi$ 700	8X $\phi$ 16X25	15/3,5	6/24

**Remark:**

If the machine matches with AC2 motor  $\geq$  22kW or VVVF motor  $\geq$  37 kW, the brake with the excitation device and the brake voltage is AC220V, the user should use a single voltage to control the brake.

## VVVF Motor parameter table

Applied model	Model	Power (kW)	Pole	Synchronous speed (rpm)	Rated speed (rpm)	Voltage (V)	Frequency (Hz)	Current (A)	P.F. Cos $\phi$	E.F. (%)	INS. Class	IP Code	Weight (kg)	Shaft End (mm)
YJ110	YTTD100TVF1-4	1,5	4P	1500	1440	380	50	3,5	0,81	83	F	IP21	38	30
YJ110	YTTD100TVF1A-4	2,2	4P	1500	1440	380	50	5	0,82	84	F	IP21	43	30
YJ110	YTTD100TVF2-4	3,5	4P	1500	1440	380	50	7,5	0,84	84	F	IP21	48	30
YJ140	YTTD112TVF1-4	3,5	4P	1500	1440	380	50	7,3	0,84	86	F	IP21	60	30
YJ140	YTTD112TVF1A-4	4,5	4P	1500	1440	380	50	9,5	0,84	87	F	IP21	65	30
YJ140	YTTD112TVF2-4	5,5	4P	1500	1440	380	50	11,2	0,86	86	F	IP21	70	30
YJ140	YTTD132TVF2-6	7,5	6P	1000	950	380	50	16,5	0,8	87	F	IP21	95	30
YJ200	YTTD160TVF1-6	7,5	4P	1000	950	380	50	16,9	0,76	88	F	IP21	120	30
YJ200	YTTD160TVF2-4	11	4P	1500	1440	380	50	23	0,88	90	F	IP21	120	30
YJ240B	YTTD160TVF2-4	11	4P	1500	1440	380	50	23	0,88	90	F	IP21	120	30
YJ240B	YTTD160TVF3-4	15	4P	1500	1440	380	50	28,4	0,88	91	F	IP21	130	30
YJ240B	YTTD160TVF4-4	18,5	4P	1500	1440	380	50	34,5	0,89	91	F	IP21	135	30

## VVVF Motor parameter table

Applied model	Model	Power (kW)	Pole	Synchronous speed (rpm)	Rated speed (rpm)	Voltage (V)	Frequency (Hz)	Current (A)	P.F. Cos $\phi$	E.F. (%)	INS. Class	IP Code	Weight (kg)	Shaft End (mm)
FYJ245	YTTD160TVF1-6	7,5	6P	1000	950	380	50	16,9	0,76	88	F	IP21	120	30
FYJ245	YTTD160TVF2-6	11	6P	1000	950	380	50	24	0,78	89	F	IP21	135	30
FYJ245	YTTD180TVF3-6	15	6P	1000	950	380	50	31,4	0,81	90	F	IP21	255	30
FYJ245	YTTD180TVF4-4	18,5	4P	1500	1440	380	50	34,2	0,89	92	F	IP21	255	30
FYJ245	YTTD180TVF5-4	22	4P	1500	1440	380	50	40,5	0,89	92	F	IP21	305	30
YJ245D	YTTD160TVF1-6	7,5	6P	1000	950	380	50	16,9	0,76	88	F	IP21	120	30
YJ245D	YTTD160TVF2-6	11	6P	1000	950	380	50	24	0,78	89	F	IP21	135	30
YJ245D	YTTD180TVF3-6	15	6P	1000	950	380	50	31,4	0,81	90	F	IP21	255	30
YJ245D	YTTD180TVF4-6	18,5	6P	1000	950	380	50	38	0,82	90	F	IP21	305	30
YJ245D	YTTD180TVF5-4	22	4P	1500	1440	380	50	40,5	0,89	92	F	IP21	305	30
YJ245D	YTTD180TVF6-4	26	4P	1500	1440	380	50	49	0,87	92	F	IP21	355	30
YJ245D	YTTD225TVF2-4	30	4P	1500	1440	380	50	57	0,87	92	F	IP21	350	30
YJ320	YTTD180TVF3-6	15	6P	1000	950	380	50	31,4	0,81	90	F	IP21	255	30
YJ320	YTTD180TVF6-4	26	4P	1500	1440	380	50	49	0,87	92	F	IP21	355	30
YJ320	YTTD225TVF3-4	37	4P	1500	1440	380	50	69	0,88	90	F	IP21	300	30
YJ320	YTTD225TVF4-4	45	4P	1500	1440	380	50	84	0,88	91	F	IP21	360	30

## AC2 Motor parameter table

Applied model	Model	Power (kW)	Pole	Synchronous speed (rpm)	Rated speed (rpm)	Voltage (V)	Frequency (Hz)	Current (A)	P.F. Cos $\phi$	E.F. (%)	INS. Class	IP Code	Weight (kg)	Shaft End (mm)	Stalling Torque (multiple)	Stalling Current (multiple)
YJ200	YTD <sub>2</sub> 200M1-6/24	7,5/1,5	6/24	1000/250	950/220	380	50	18/17	0,78/0,36	80/38	F	IP10	200	45	3,0/1,7	4,5
YJ200	YTD <sub>2</sub> 200M2-4/16	11/2,5	4/16	1500/375	1390/330	380	50	22/14	0,90/0,42	83/67	F	IP10	215	45	3,0/1,7	4,5
FYJ245	YTD <sub>2</sub> 200M1-6/24	7,5/1,5	6/24	1000/250	950/220	380	50	18/17	0,78/0,36	80/38	F	IP10	245	45	3,0/1,7	4,5
FYJ245	YTD <sub>2</sub> 200M2-6/24	11/2,3	6/24	1000/250	950/230	380	50	26/26	0,79/0,36	81/39	F	IP10	340	45	3,0/1,7	4,5
FYJ245	YTD <sub>2</sub> 250M1-6/24	15/3,5	6/24	1000/250	940/210	380	50	30/23	0,89/0,41	86/58	F	IP10	325	45	3,0/1,7	4,5
YJ245D	YTD <sub>2</sub> 200M1-6/24	7,5/1,5	6/24	1000/250	950/220	380	50	18/17	0,78/0,36	80/38	F	IP10	200	45	3,0/1,7	4,5
YJ245D	YTD <sub>2</sub> 200M2-6/24	11/2,3	6/24	1000/250	950/230	380	50	26/26	0,79/0,36	81/39	F	IP10	245	45	3,0/1,7	4,5
YJ245D	YTD <sub>2</sub> 250M1-6/24	15/3,5	6/24	1000/250	940/210	380	50	30/23	0,89/0,41	86/58	F	IP10	325	45	3,0/1,7	4,5
YJ245D	YTD <sub>2</sub> 250M2-6/24	18,5/4,3	6/24	1000/250	935/210	380	50	38/28	0,89/0,44	86/59	F	IP10	345	45	3,0/1,7	4,5
YJ320	YTD <sub>2</sub> 250M1-6/24	15/3,5	6/24	1000/250	940/210	380	50	30/23	0,89/0,41	86/58	F	IP10	325	45	3,0/1,7	4,5





**TORIN DRIVE EUROPE**

11 rue Ampère

26600 Pont de l'Isère - FRANCE

☎ + 33(0)4 75 84 86 00 📠 + 33(0)4 75 84 67 30

[www.torindrive-europe.fr](http://www.torindrive-europe.fr)

mail: [contact@torindrive-europe.fr](mailto:contact@torindrive-europe.fr)