

**TORINDRIVE**

# GEARED

TRACTION MACHINE  
ESCALATOR DRIVE



CATALOGUE 2024

## COMPANY INTRODUCTION

Torin Drive is a professional manufacturer of traction machines, efficient PM motors and other elevator components. It started to serve the elevator industry from 1985, and devoted to push the innovation of traction machine technology. It has become the pioneer and global leader in the field. It is responsible for drafting National Standard of Elevator Traction Machine.

As a Key High-tech Enterprise of China Torch Program, Torin Drive owns the core technologies such as PM motor and high-efficient transmission. It has a full range of products with more than 80 specifications and 800 types, including PM synchronous gearless traction machine, worm gear traction machine, escalator traction machine and other elevator components, which meet the standards of Asia, Europe, North America and the customer specific requirements.

Each day, more than 1.5 million traction machines produced by Torin Drive are running simultaneously in the buildings throughout the globe. We strive for a more outstanding high-end equipment group with the intention of providing the customers with high-quality products, customized solutions, all-round services, comfortable experience and value enhancement that



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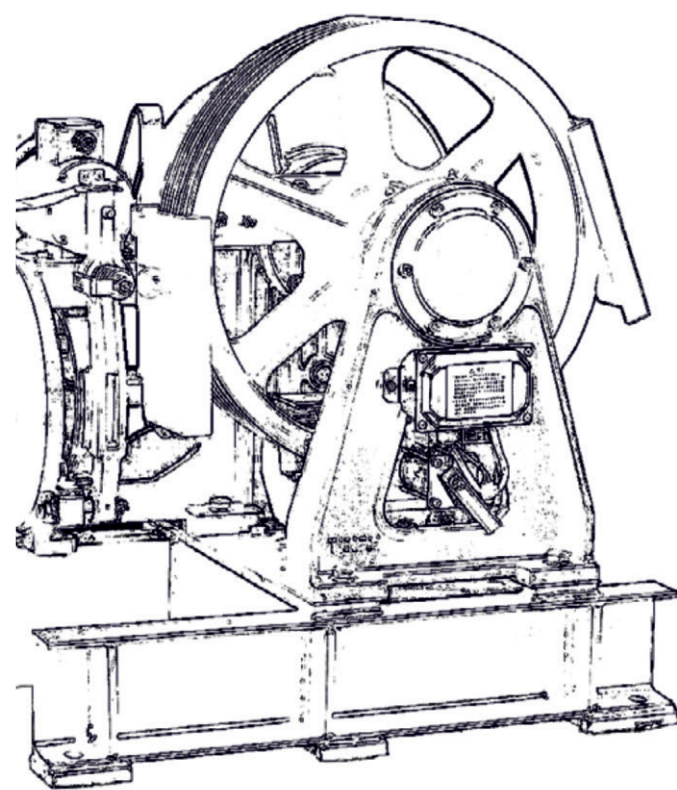
## OUR STANDARD COLOURS



**SELECTION TABLE**

CATALOUGE

**GEARED**  
SERIES  
GEARED TRACTION MACHINE



**TORINDRIVE**

TORINDRIVE strives for the most excellent elevator components production group with the intention of providing the personalized supporting and all-round service for the clients

Suspension : 1:1	Lift Speed(m/s)							
	0.5	0.63	0.75	1.0	1.5	1.6	1.75	2.0
320				TDS-IGD00				
408				TDS-IGD05				
544				TDS-IGD10	TDS-IGD10			
680				TDS-IGD15				
884				TDS-IGD21				
1020	TDS-IGD21			TDS-IGD21				
1156	TDS-IGD39			TDS-IGD39				TDS-IGD39
1224								
1360								
1600								
2500	TDS-IGD50			TDS-IGD50				TDS-IGD50
5500				TDS-IGD60				

Data are subject to change without prior notice.

**TORIN DRIVE GEARED MACHINE STANDARD**

1. Torin Drive geared machine Part Number illustration

Example:

IGD10 - 5 1P0 - 13mm  
Type# Capacity Speed Rope Dia  
(544kg) (1M/S)

2. All geared machines are designed for 180 starts per hour at **40% duty cycle and 1:1 roping**

3. All motors are designed with **Insulation class F** and with Ingress Protection Rating of **IP21**. **IGD21 to IGD50** machines can also be ordered with **IP55** motor by contacting Torin Drive sales representative.

4. All machines are designed with **counter weight ratio of between 45% to 50%**.

5. Standard geared machines are all **Right Hand** machines. Left hand arrangement is available as an option at extra cost except for **IGD50 & IGD60** machines.

6. Standard machines are all **VVVF control machines**. AC2 machines with 50HZ power source need to be special ordered by contacting Torin Drive sales representative.

7. All machine grooves are U shape groove. Only use **metric rope size** grooves.

8. Standard machines come with both **380V and 220V**

9. All machines come with a copy of **operation manual** attached to the machine.



# ▶ TDS-IGD00

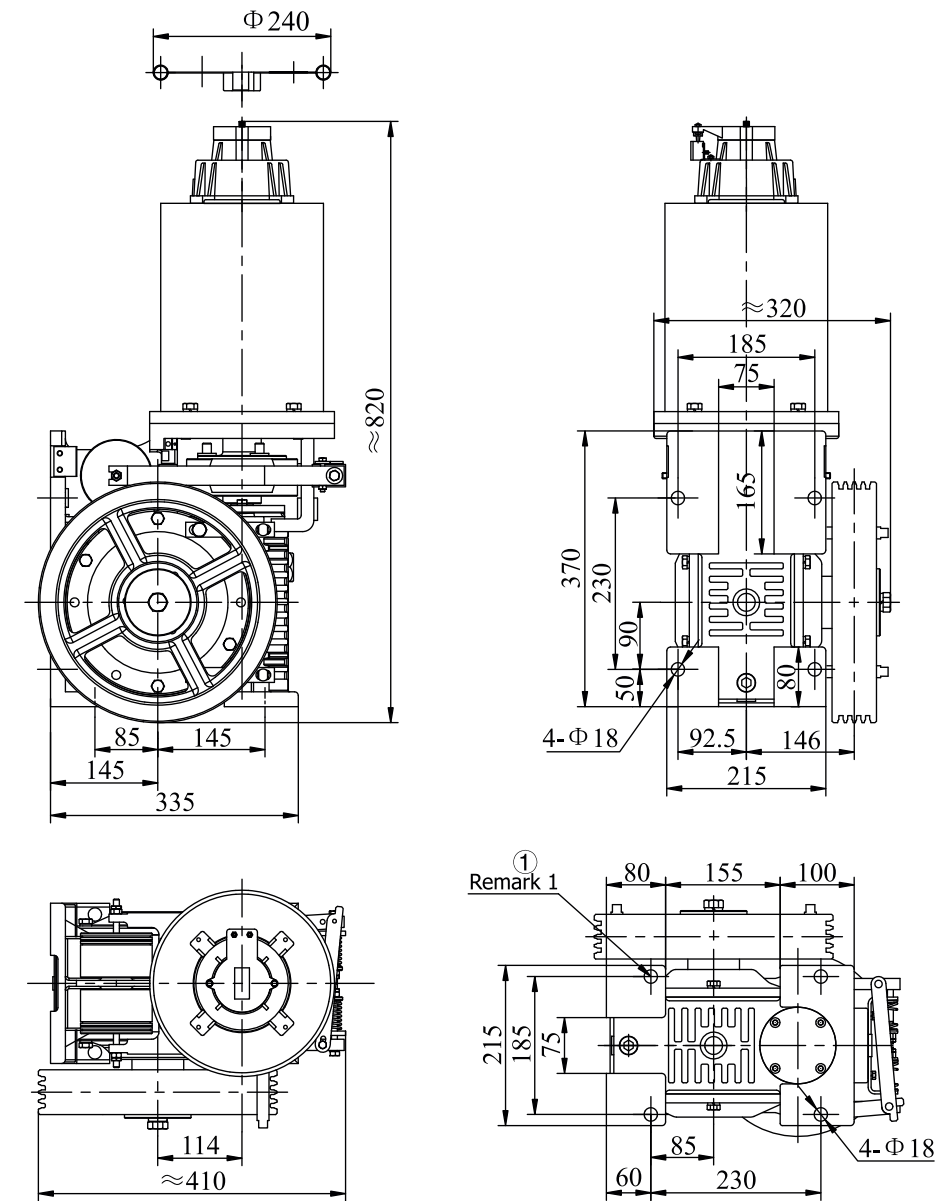
## ELEVATOR TRACTION MACHINE

Suspension	1 : 1
Max.Static Load	1800kg
Control	VVVF
DZE-8E Brake	DC110V 1.4A
Weight	155kg

### ▶ TECHNICAL DATA

Spec	Capacity (Kg)	Speed	Power (Kw)	Pole	Gear Ratio	Power Source (Vac)	Current (A)	Motor Speed	Sheave Dia (mm)	Rope Dia	No of Ropes	Pitch
TDS-IGD00-31P0-8MM	320	1.0	3.5	4	45:2	380	7.5	1440	320	8	4	12

### ▶ MACHINE'S DIMENSION

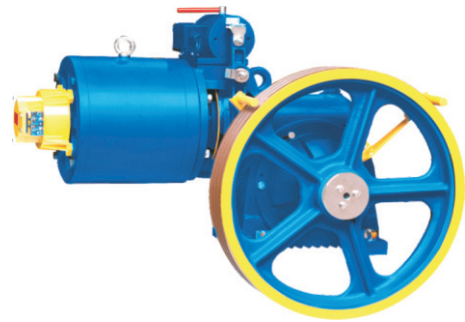


The dimension of mounting hole

#### REMARK

- 1.As shown is right sheave type, left sheave type is optional.
- 2.Please reverse to fix the bolt at mark ⊖ .

# ▶ TDS-IGD05



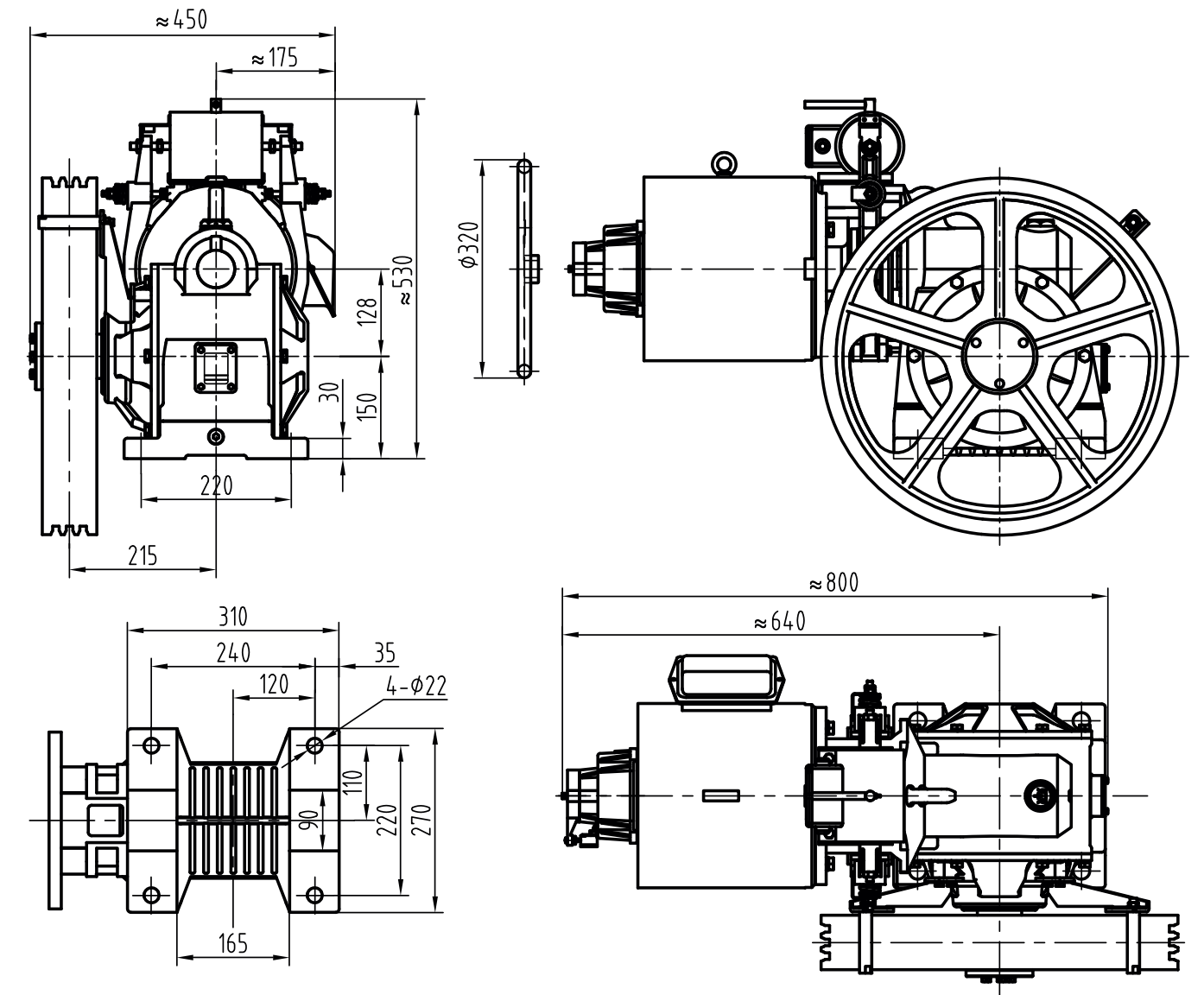
## ELEVATOR TRACTION MACHINE

Suspension	1 : 1
Max.Static Load	2000kg
Control	VVVF
DZE-8E Brake	DC110V 1A
Weight	195kg

### ▶ TECHNICAL DATA

Spec	Capacity (Kg)	Speed	Power (Kw)	Pole	Gear Ratio	Power Source (Vac)	Current (A)	Motor Speed	Sheave Dia (mm)	Rope Dia (mm)	No Of Ropes (#)	Pitch
TDS-IGD05-41P0-13MM	408	1.0	4.0	4	37:1	380	8.5	1360	520	13	3	20

### ▶ MACHINE'S DIMENSION



The dimension of mounting hole

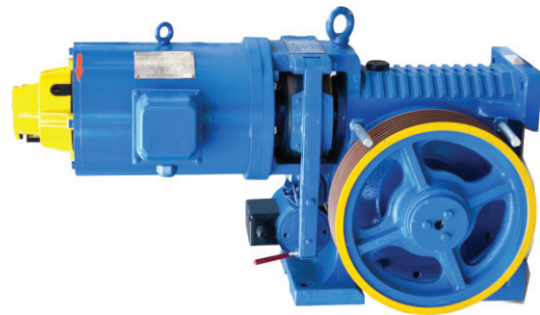
#### REMARK

As shown is right sheave type, left sheave type is optional.

# ▶ TDS-IGD10

## ELEVATOR TRACTION MACHINE

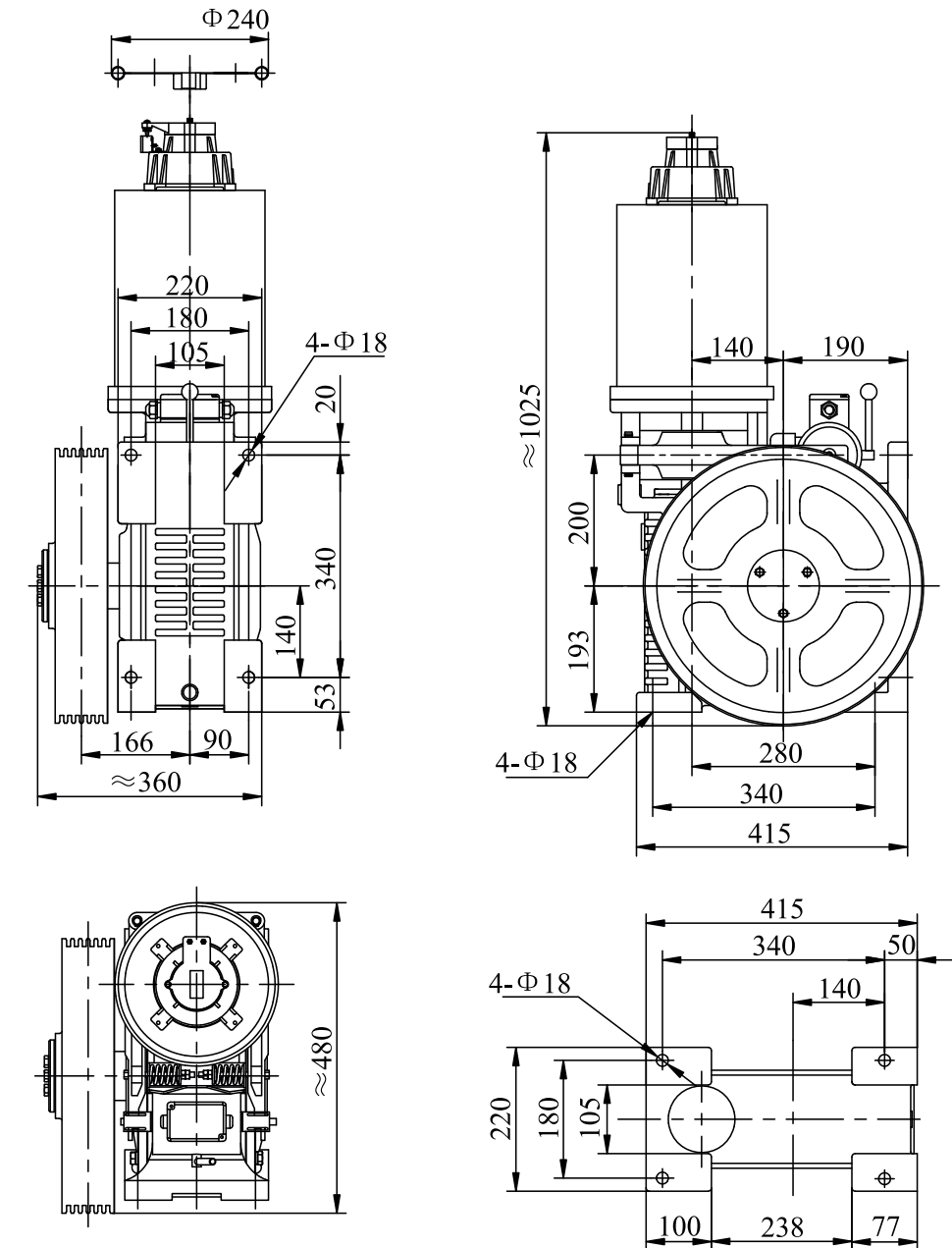
Suspension 1 : 1  
 Max.Static Load 2800kg  
 Control VVVF  
 DZE-8E Brake DC110V 1A  
 AC220V 1.2A/0.6A  
 Weight 285kg  
 Horizontal type is optional



### ▶ TECHNICAL DATA

Spec	Capacity (Kg)	Speed	Power (Kw)	Pole	Gear Ratio	Power Source (Vac)	Current (A)	Motor Speed	Sheave Dia (mm)	Rope Dia (mm)	No Of Ropes (#)	Pitch
TDS-IGD10-51P0-10MM	544	1.0	5.5	4	32:1	380	11.2	1440	425	10	5	15
TDS-IGD10-51P0-10MM	544	1.0	5.5	4	41:1	380	11.2	1440	520	13	3	20
TDS-IGD10-51P0-10MM	544	1.5	7.5	4	41:2	380	15.2	1440	425	10	4	16

### ▶ MACHINE'S DIMENSION



The dimension of mounting hole

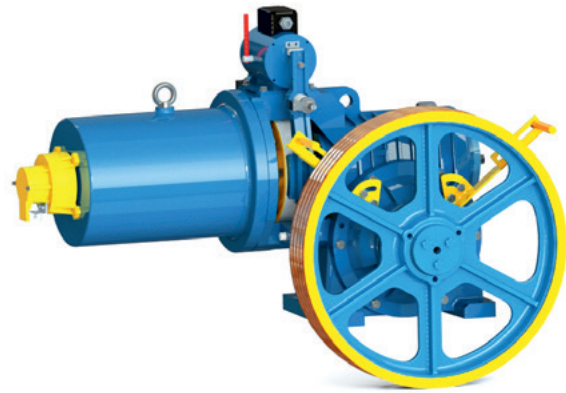
### REMARK

- 1.As shown is left sheave type, right sheave type is optional.
- 2.If the machine matches with motor  $\geq 7.5Kw$ , the brake with the excitation device and the brake voltage is AC220V, the user should use a single support voltage to control the brake.

# ▶ TDS-IGD15

## ELEVATOR TRACTION MACHINE

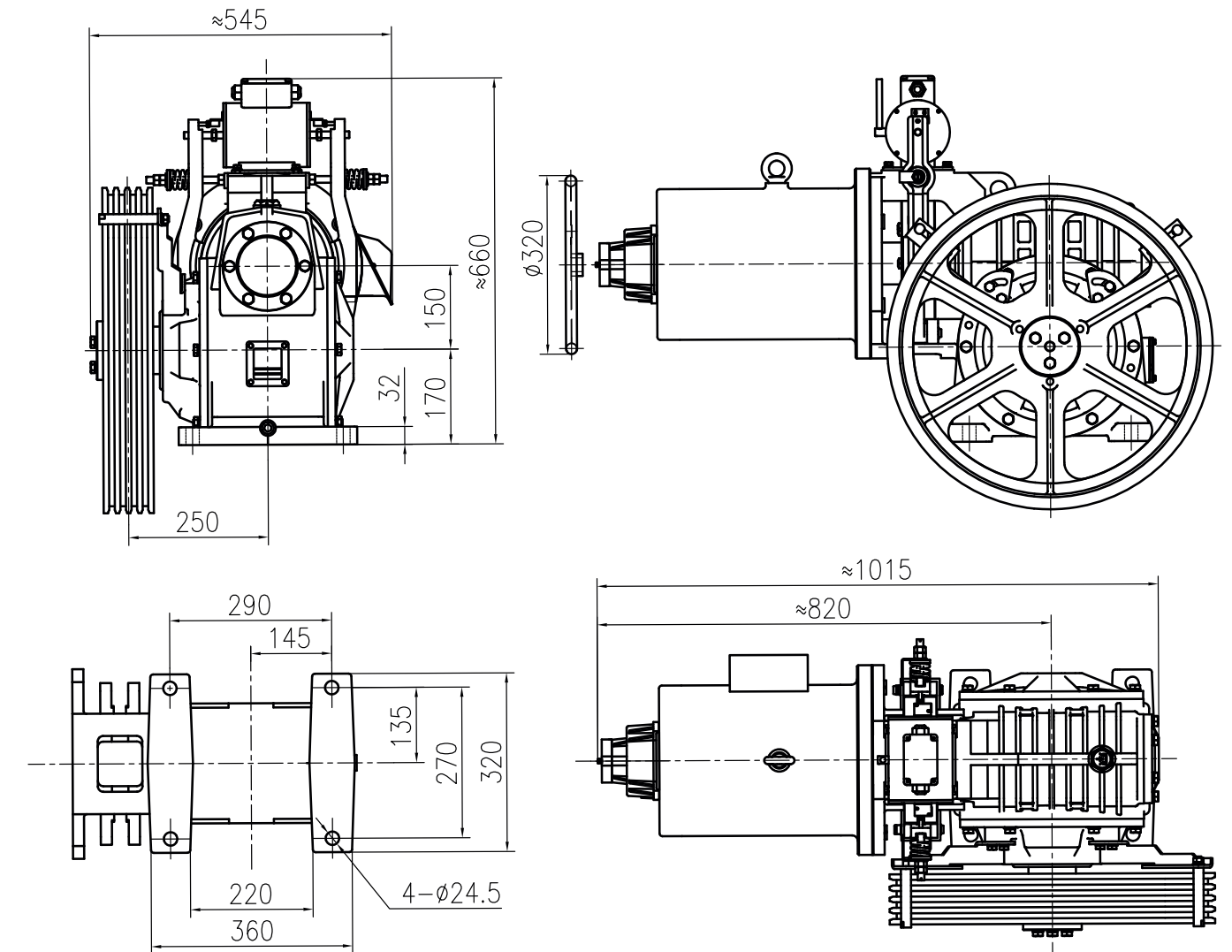
Suspension	1 : 1
Max.Static Load	3500kg
Control	VVVF
DZE-9EA Brake	DC110V 1.5A
Weight	310kg



### ▶ TECHNICAL DATA

Spec	Capacity (Kg)	Speed	Power (Kw)	Pole	Gear Ratio	Power Source (Vac)	Current (A)	Motor Speed	Sheave Dia (mm)	Rope Dia (mm)	No Of Ropes (#)	Pitch
TDS-IGD15-61P0-10MM	680	1.0	8.5	4	37:1	380	17	1465	480	10	5	15
TDS-IGD15-61P0-13MM	680	1.0	7.5	4	37:1	380	15	1360	520	13	4	20
TDS-IGD15-61P5-10MM	680	1.5	10	4	45:2	380	19	1360	480	10	5	16
TDS-IGD15-61P5-13MM	680	1.5	11	4	45:2	380	21.5	1320	520	13	4	20

### ▶ MACHINE'S DIMENSION



The dimension of mounting hole

### REMARK

As shown is right sheave type, left sheave type is optional.

# ▶ TDS-IGD21

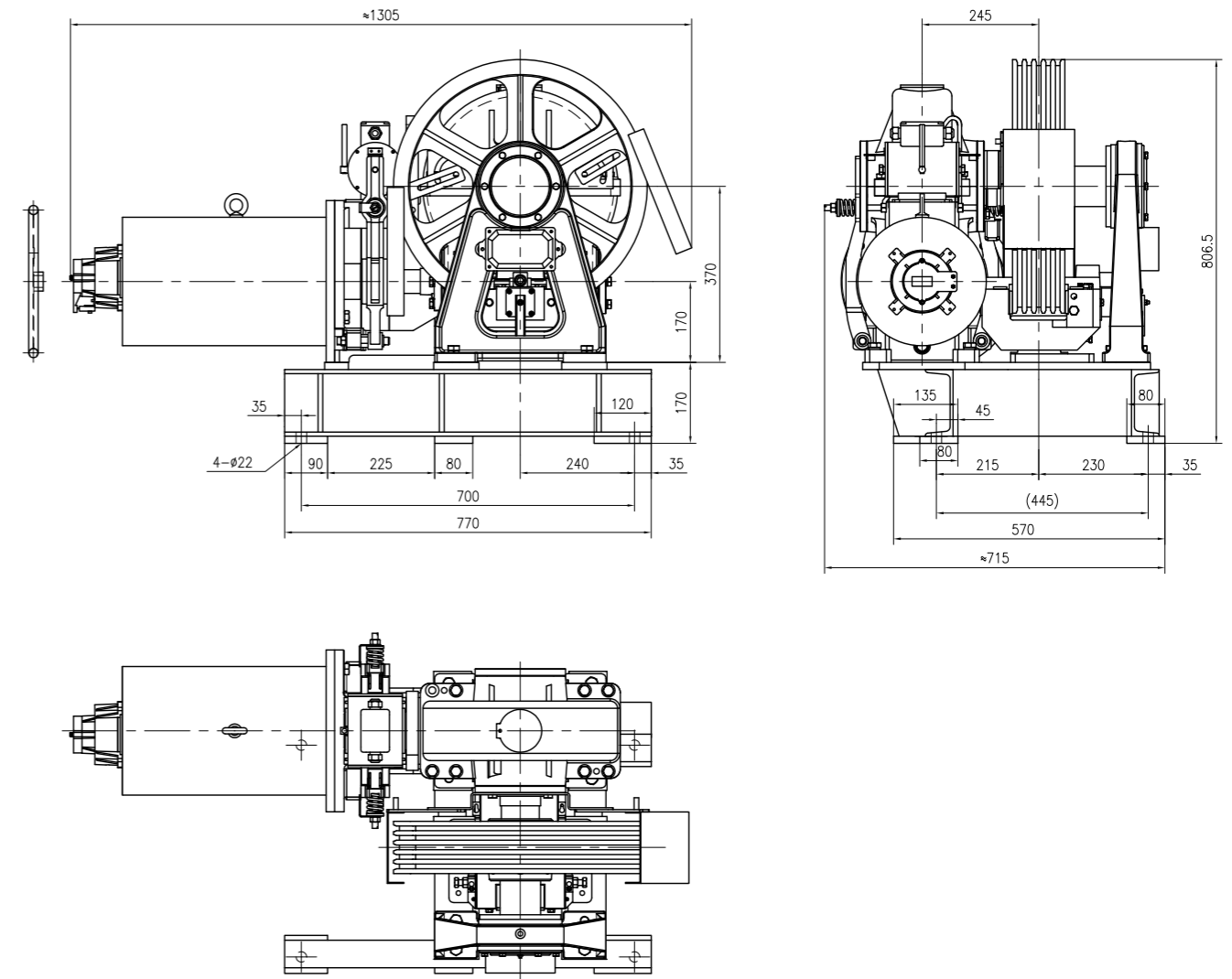
## ELEVATOR TRACTION MACHINE

Suspension 1 : 1  
 Max.Static Load 6000kg  
 Control VVVF  
 DZE-9EA Brake DC110V 1.5A  
 Weight 610kg

### ▶ TECHNICAL DATA

Spec	Capacity (Kg)	Speed	Power (Kw)	Pole	Gear Ratio	Power Source (Vac)	Current (A)	Motor Speed	Sheave Dia (mm)	Rope Dia (mm)	No Of Ropes (#)	Pitch
TDS-IGD21-61P0-13MM	680	1.0	5.5	4	75:2	380	11.5	1360	530	13	4	20
TDS-IGD21-61P7-13MM	680	1.7	8.5	4	47:2	380	17	1465	530	13	4	20
TDS-IGD21-62P0-13MM	680	2.0	11	4	61:3	380	21.0	1465	530	13	4	20
TDS-IGD21-80P5-13MM	884	0.5	5.5	6	53:1	380	12	960	530	13	5	20
TDS-IGD21-81P0-13MM	884	1.0	8.5	4	75:2	380	17	1360	530	13	5	20
TDS-IGD21-81P7-13MM	884	1.7	11	4	47:2	380	21.5	1465	530	13	5	20
TDS-IGD21-80P5-13MM	884	0.5	15	4	61:3	380	29	1465	530	13	6	20
TDS-IGD21-100P5-13MM	1020	0.5	5.5	6	53:1	380	12	960	530	13	5	20
TDS-IGD21-101P0-13MM	1020	1.0	8.5	4	75:2	380	17	1360	530	13	5	20
TDS-IGD21-101P7-13MM	1020	1.7	15	4	47:2	380	29	1465	530	13	5	20
TDS-IGD21-102P0-13MM	1020	2.0	15	4	61:3	380	29	1465	530	13	6	20

### ▶ MACHINE'S DIMENSION



### REMARK

- 1.As shown is right sheave type, left sheave type is optional.
- 2.Handwheel  $\Phi 500$  for motor  $\geq 15KW$ , others are  $\Phi 320$ .
- 3.The user only needs to adopt the single support voltage to control the emergency brake, in view of the emergency brake with the excitation device.



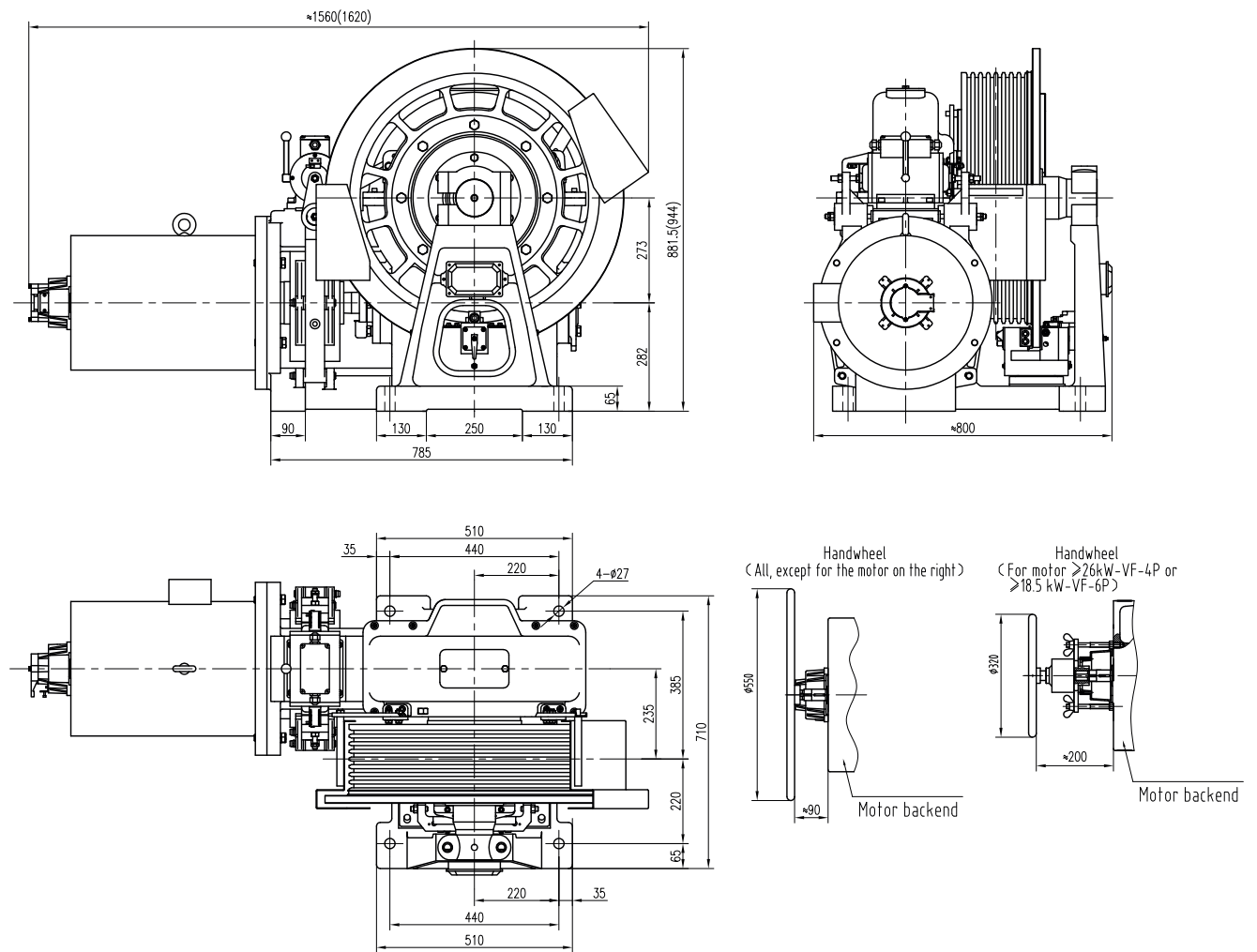
# ▶ TDS-IGD39

## ELEVATOR TRACTION MACHINE

Suspension	1 : 1
Max.Static Load	9000kg
Control	VVVF
DZE-12E Brake	DC110V 2A
Weight	1000kg



## ▶ MACHINE'S DIMENSION



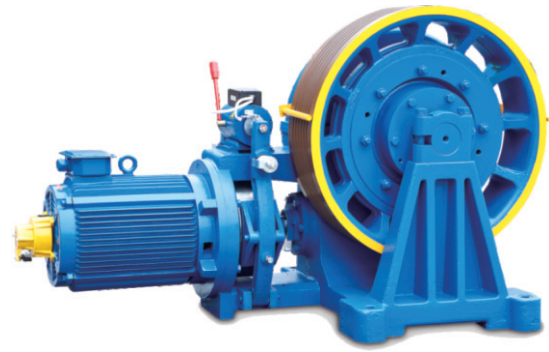
## ▶ TECHNICAL DATA

Spec	Capacity (Kg)	Speed	Power (Kw)	Pole	Gear Ratio	Power Source (Vac)	Current (A)	Motor Speed	Sheave Dia (mm)	Rope Dia (mm)	No Of Ropes (#)	Pitch
TDS-IGD39-110P5-13MM	1156	0.5	7.5	6	59:1	380	17	900	650	13	6	20
TDS-IGD39-111P0-13MM	1156	1.0	11	6	59:2	380	25	900	650	13	6	20
TDS-IGD39-111P7-13MM	1156	1.7	18.5	4	57:2	380	35	1440	650	13	8	20
TDS-IGD39-112P0-13MM	1156	2.0	22	4	49:2	380	41	1440	650	13	8	20
TDS-IGD39-120P5-13MM	1224	0.5	7.5	6	59:1	380	17	900	650	13	6	20
TDS-IGD39-121P0-13MM	1224	1.0	15	6	59:2	380	32	900	650	13	6	20
TDS-IGD39-121P7-13MM	1224	1.7	22	4	57:2	380	41	1440	650	13	8	20
TDS-IGD39-122P0-13MM	1224	0.5	26	4	49:2	380	48.5	1440	650	13	8	20
TDS-IGD39-110P5-13MM	1360	0.5	7.5	6	59:1	380	17	900	650	13	6	20
TDS-IGD39-111P0-13MM	1360	1.0	15	6	59:2	380	32	900	650	13	6	20
TDS-IGD39-111P7-13MM	1360	1.7	22	4	57:2	380	41	1440	650	13	8	20
TDS-IGD39-112P0-13MM	1360	2.0	26	4	49:2	380	48.5	1440	650	13	8	20
TDS-IGD39-120P5-13MM	1600	0.5	11	6	59:1	380	25	900	650	13	8	20
TDS-IGD39-121P0-13MM	1600	1.0	18.5	6	59:2	380	39	900	650	13	8	20
TDS-IGD39-121P7-13MM	1600	1.7	26	4	57:2	380	48.5	1440	650	13	8	20
TDS-IGD39-122P0-13MM	1600	0.5	30	4	49:2	380	55.5	1440	650	13	8	20

### REMARK

- 1.As shown is right sheave type, left sheave type is optional.
- 2.The user only needs to adopt the single support voltage to control the emergency brake, in view of the emergency brake with the excitation device.
- 3.The dimension in bracket is applied to the machine with emergency brake.

# ▶ TDS-IGD50



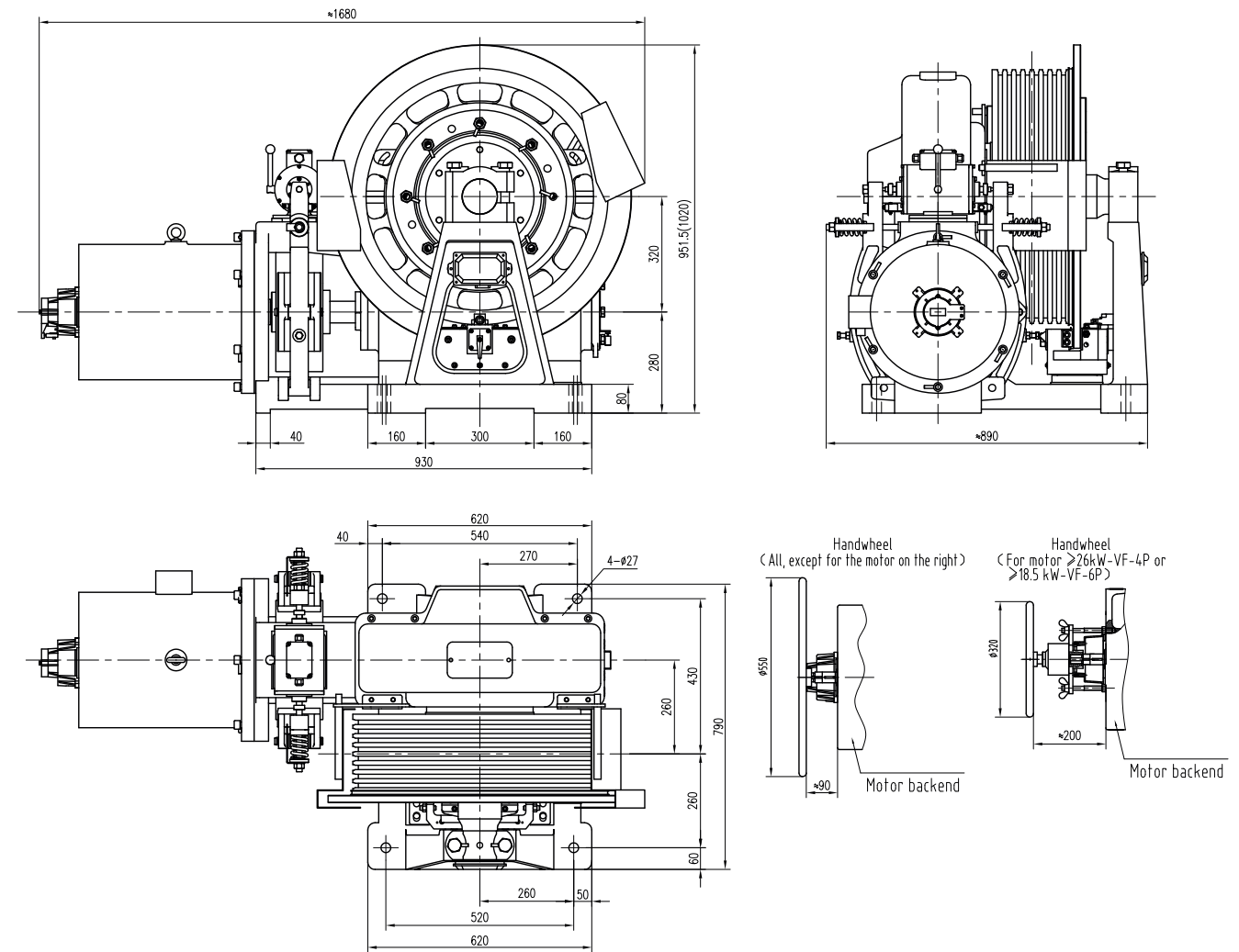
## ELEVATOR TRACTION MACHINE

Suspension	1 : 1
Max.Static Load	12500kg
Control	VVVF
DZE-13EBrake	DC110V 2.2A AC220V 4.4A/2.2A
Weight	1450kg

## ▶ TECHNICAL DATA

Spec	Capacity (Kg)	Speed	Power (Kw)	Pole	Gear Ratio	Power Source (Vac)	Current (A)	Motor Speed	Sheave Dia (mm)	Rope Dia (mm)	No Of Ropes (#)	Pitch
TDS-IGD50-250P5-16MM	2500	0.5	15	6	69:1	380	32.0	970	700	16	8	25
TDS-IGD50-251P0-16MM	2500	1.0	26	6	69:2	380	48.5	970	700	16	8	25
TDS-IGD50-251P5-16MM	2500	1.5	30	4	69:2	380	56.0	1465	700	16	8	25
TDS-IGD50-251P7-16MM	2500	1.7	37	4	61:2	380	69.0	1465	700	16	8	25
TDS-IGD50-252P0-16MM	2500	2.0	45	4	82:3	380	84.0	1465	700	16	8	25

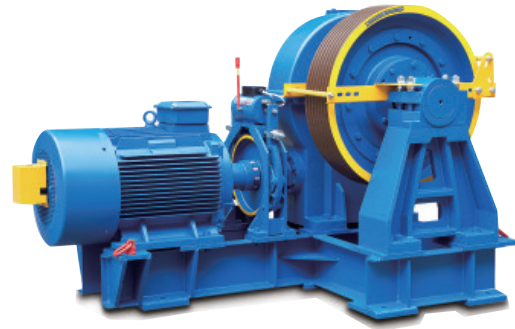
## ▶ MACHINE'S DIMENSION



## REMARK

- As shown is right sheave type, left sheave type is optional.
- Excitation voltage: DC200V , Sustaining voltage: DC100V.
- The user only needs to adopt the single support voltage to control the emergency brake, in view of the emergency brake with the excitation device.
- The dimension in bracket is applied to the machine with emergency brake .

# ▶ TDS-IGD60



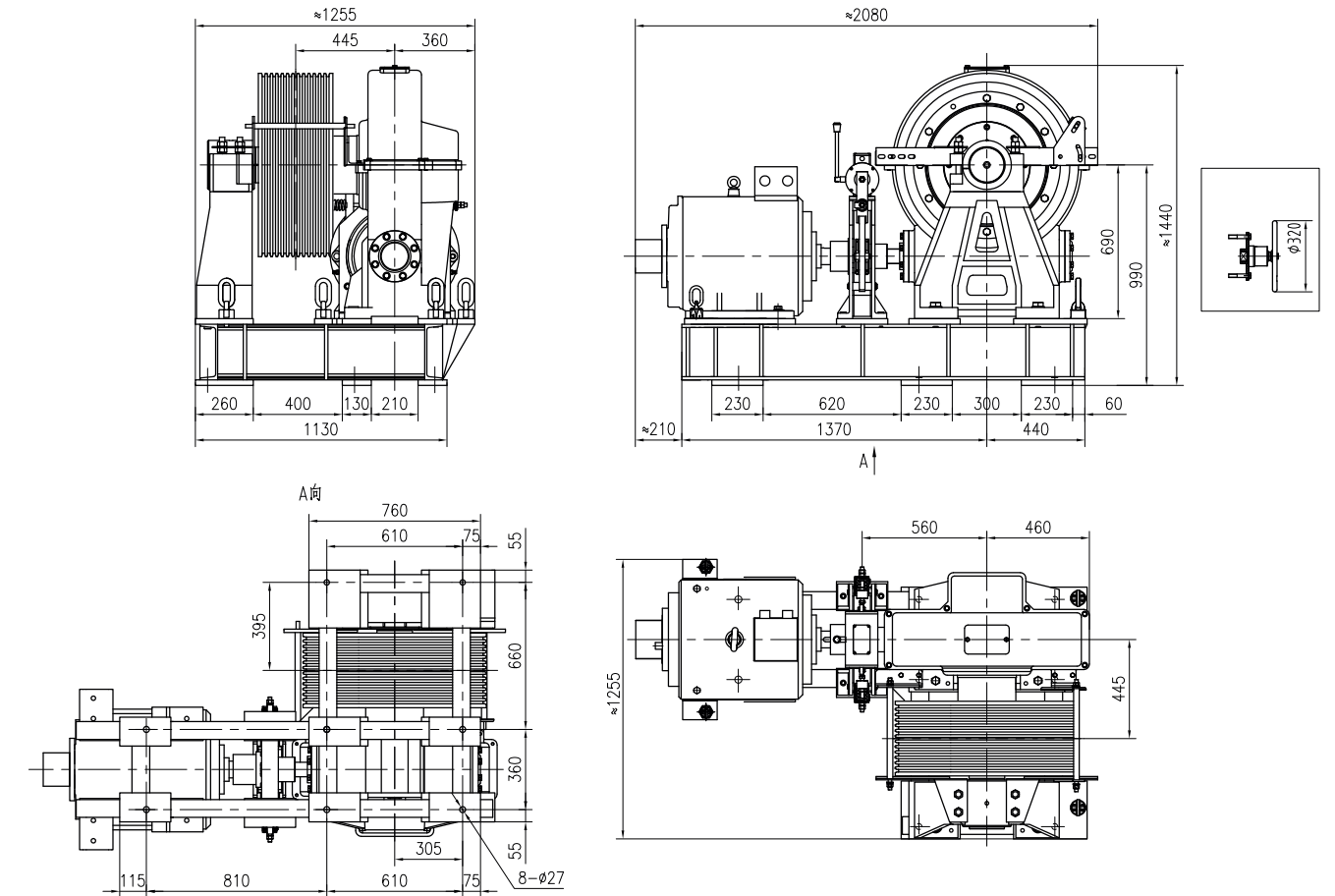
## ELEVATOR TRACTION MACHINE

Suspension	1 : 1
Max.Static Load	22000kg
Control	VVVF
DZE-14EBrake	DC110V 3.5A
Weight	3000kg

## ▶ TECHNICAL DATA

Spec	Capacity (Kg)	Speed	Power (Kw)	Pole	Gear Ratio	Power Source (Vac)	Current (A)	Motor Speed	Sheave Dia (mm)	Rope Dia (mm)	No Of Ropes (#)	Pitch
TDS-IGD60-551P0-20MM	5500	1.0	55	8	75:2	380	105	886	820	19	10	29

## ▶ MACHINE'S DIMENSION



## REMARK

- 1.As shown is right sheave type, left sheave type is optional.
- 2.The "Frequency" in the parameter table is the input frequency of the motor.
- 3.The configuration of 2m/s, load and power is based on the balance coefficient 0.45.

# TORINDRIVE

