

TORINDRIVE

GEARED

TRACTION MACHINE
ESCALATOR DRIVE



CATALOG 2025

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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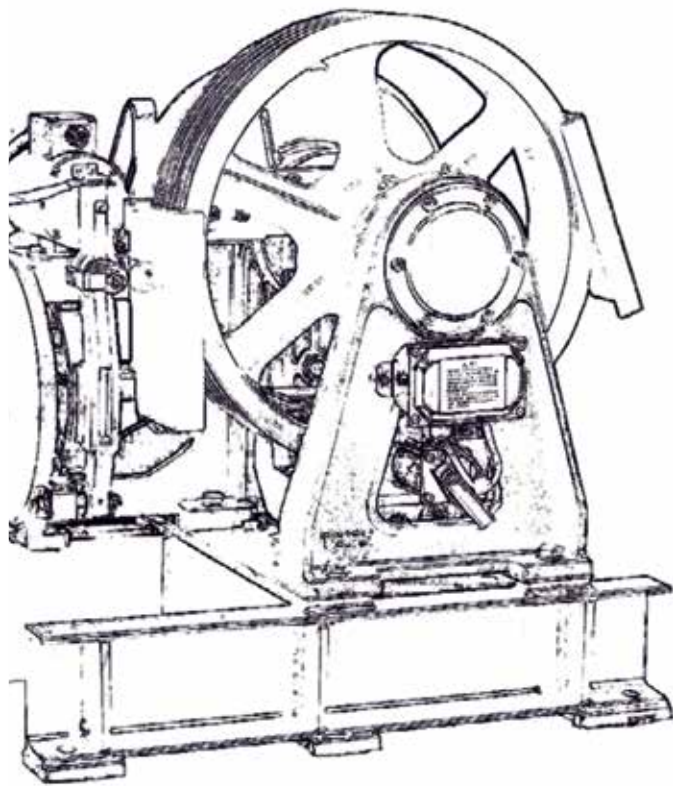
OUR STANDARD COLOURS



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)								
Load(kg)	0.5	0.63	0.75	1.0	1.5	1.6	1.75	2.0	
320				TDA-IGD00					
408				TDA-IGD05					
544				TDA-IGD10	TDA-IGD10				
680				TDA-IGD15					
	TDA-IGD21								
884	TDA-IGD21	TDA-IGD21							
1020									
1156	TDA-IGD39	TDA-IGD39					TDA-IGD39		
1224									
1360									
1600									
2500	TDA-IGD50				TDA-IGD50			TDA-IGD50	
5500				TDA-IGD60					

Data are subject to change without prior notice.

TORIN DRIVE GEARED MACHINE STANDARD

1. Torin Drive geared machine Part Number illustration
Example:

TDA-IGD10

-

5

1P0

-

13mm

Type#

Capacity
(544kg)

Speed
(1M/S)

Rope Dia
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.TDA-IGD21 toTDA-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.
6. Standard machines are all **VVVF control machines**. AC2 machines with 50HZ power 04 TORINDRIVE 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.



► TDA-IGD00

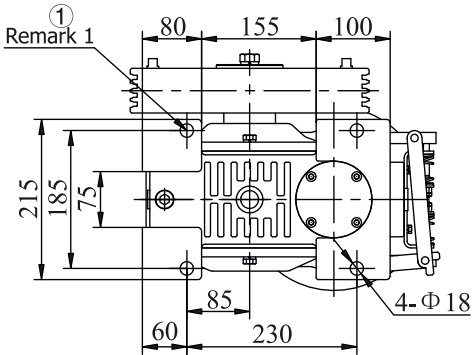
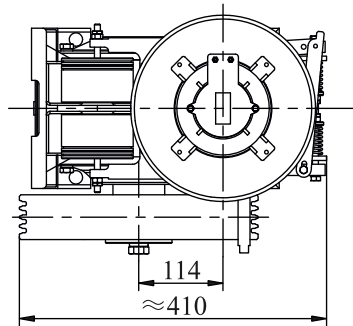
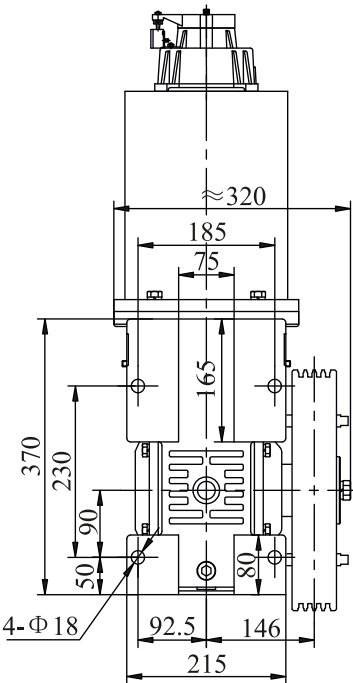
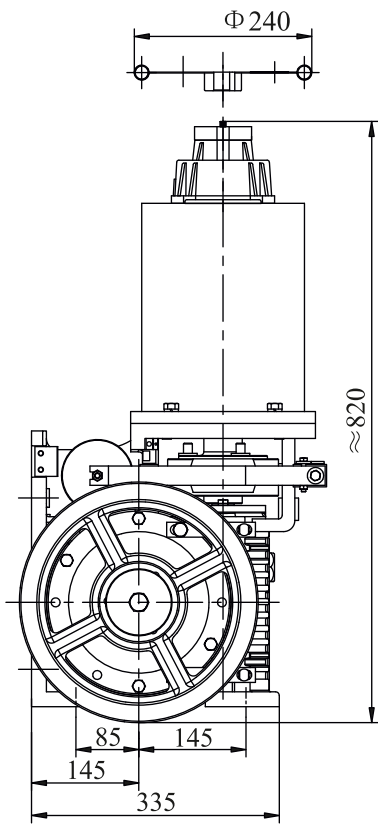
ELEVATOR TRACTION MACHINE

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
TDA-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 ⊖ .

► TDA-IGD05



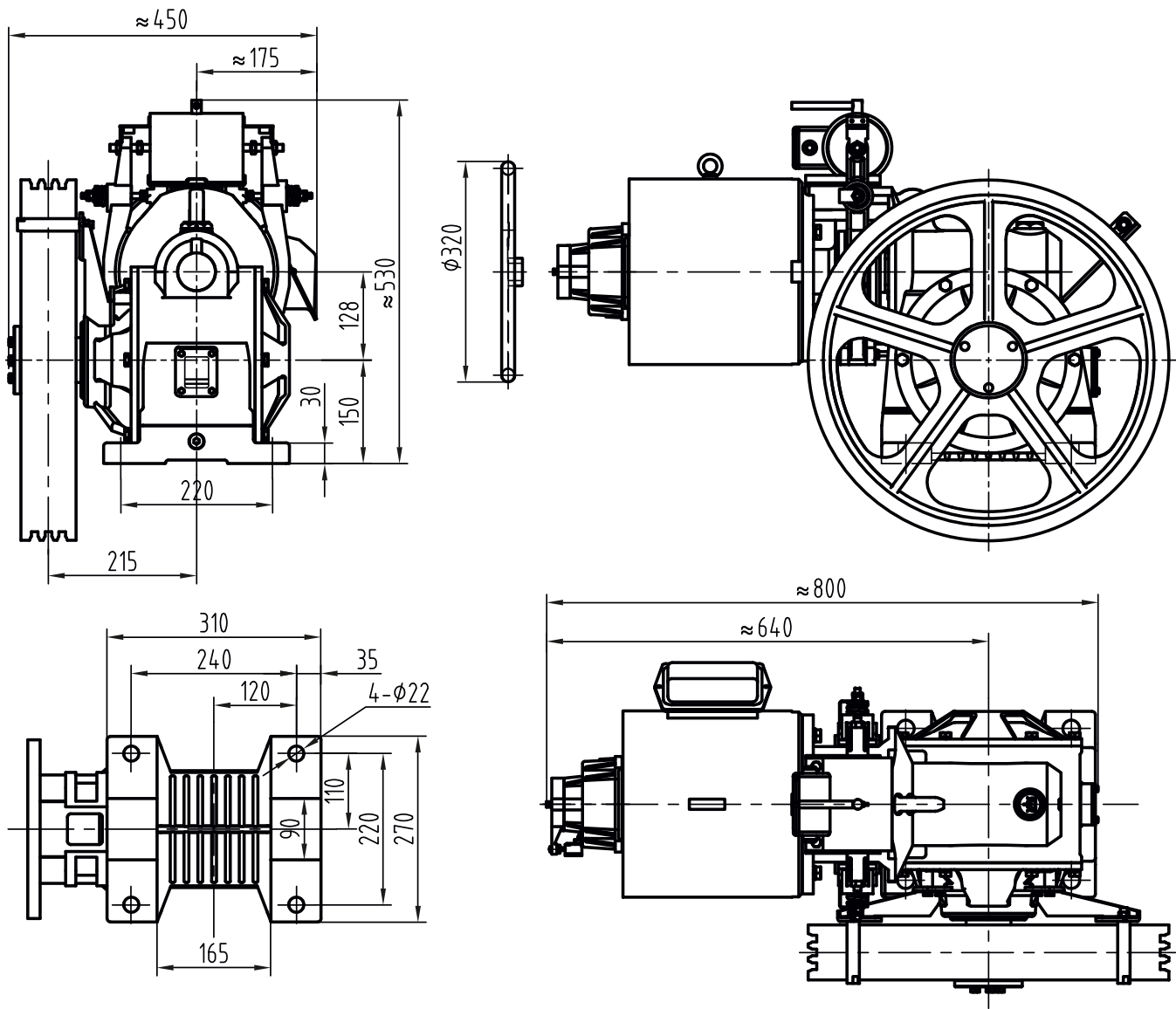
ELEVATOR TRACTION MACHINE

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
TDA-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.

► TDA-IGD10



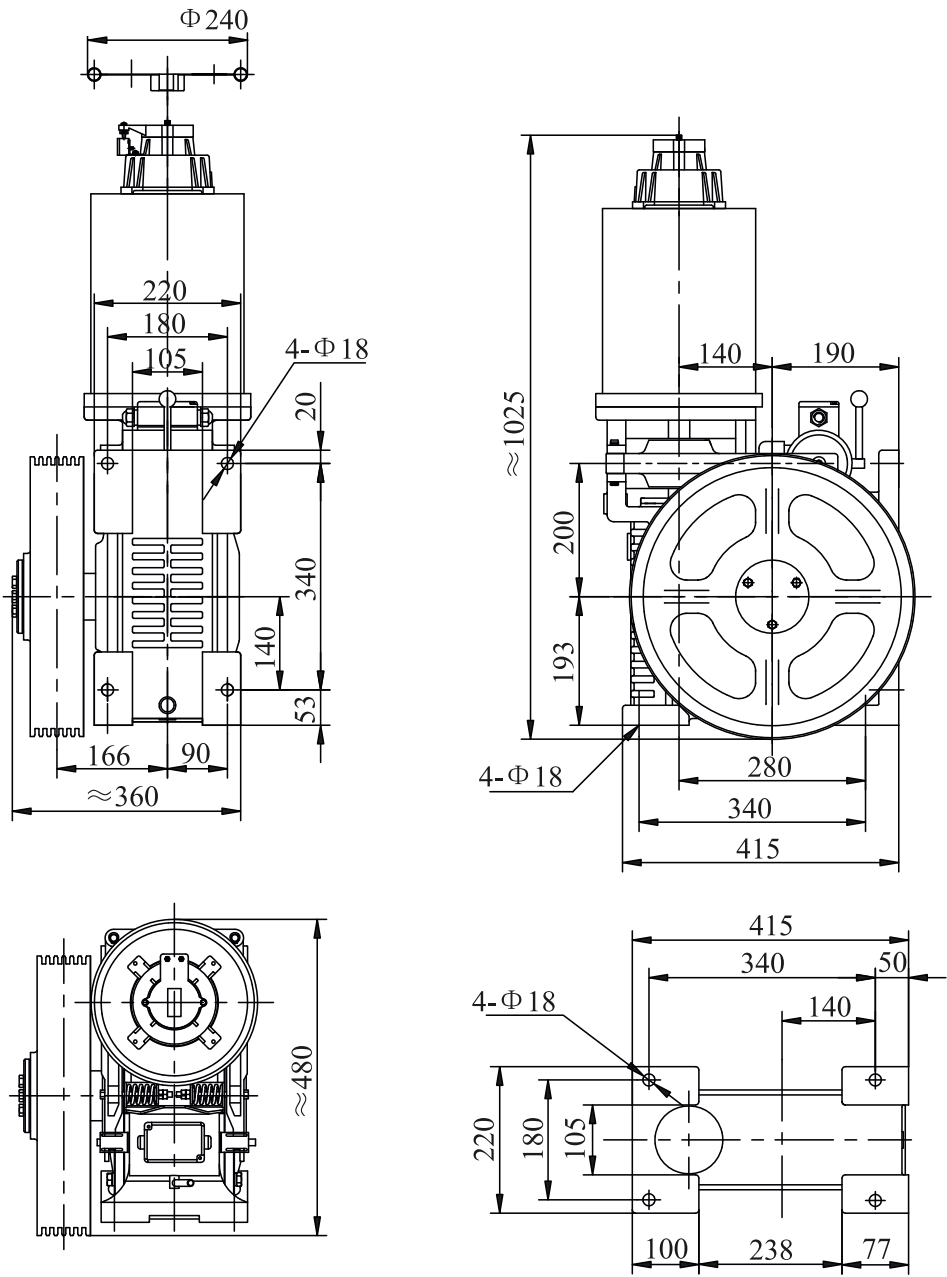
ELEVATOR TRACTION MACHINE

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
TDA-IGD10-51P0-10MM	544	1.0	5.5	4	32:1	380	11.2	1440	425	10	5	15
TDA-IGD10-51P0-10MM	544	1.0	5.5	4	41:1	380	11.2	1440	520	13	3	20
TDA-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.

► TDA-IGD15

ELEVATOR TRACTION MACHINE

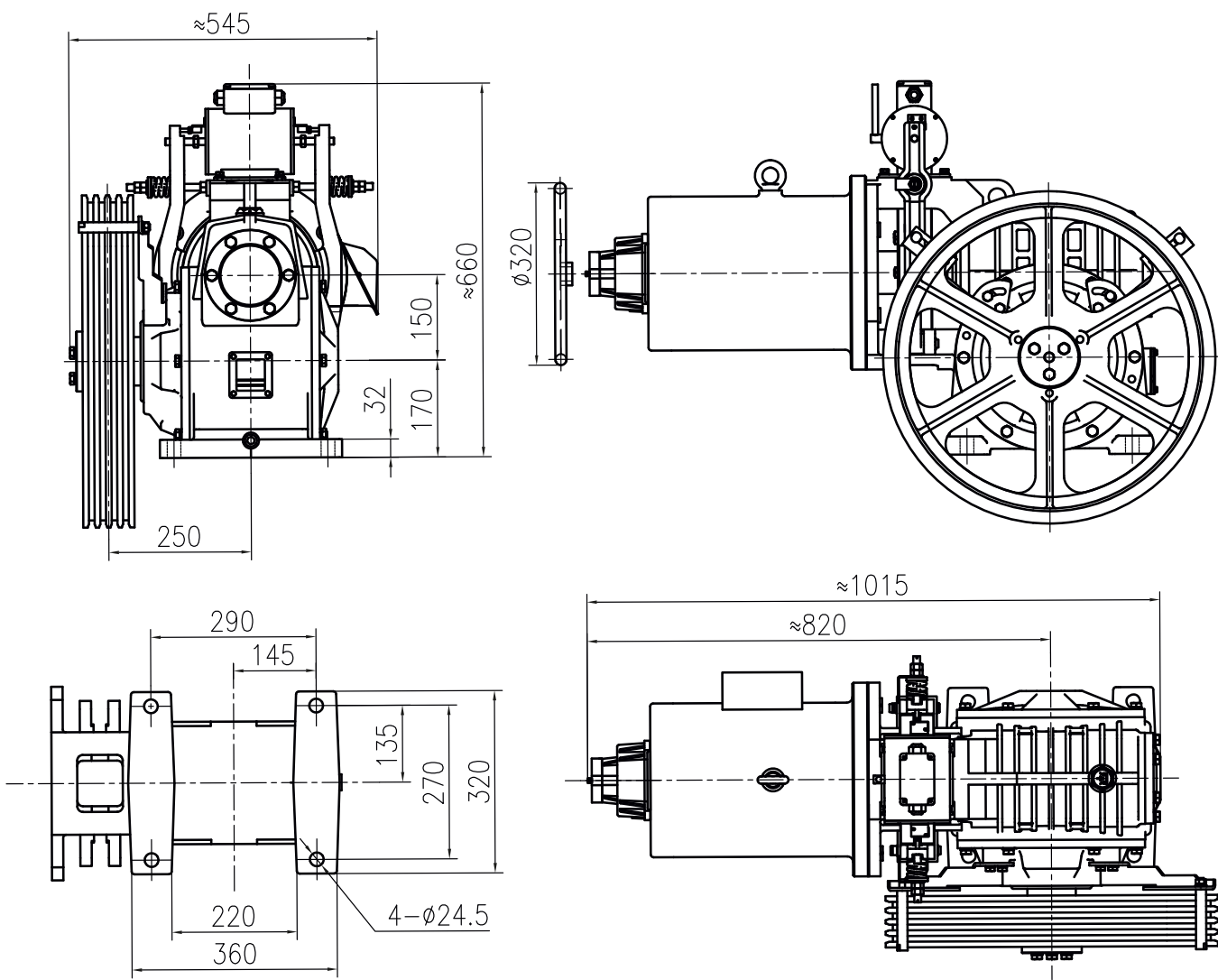
Suspension	1 : 1
Max.Static Load	3500kg
Control	VVVF
DZE-9EA Brake	DC110V 1.5A
Weight	310kg



► 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
TDA-IGD15-61P0-10MM	680	1.0	8.5	4	37:1	380	17	1465	480	10	5	15
TDA-IGD15-61P0-13MM	680	1.0	7.5	4	37:1	380	15	1360	520	13	4	20
TDA-IGD15-61P5-10MM	680	1.5	10	4	45:2	380	19	1360	480	10	5	16
TDA-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.



► TDA-IGD21

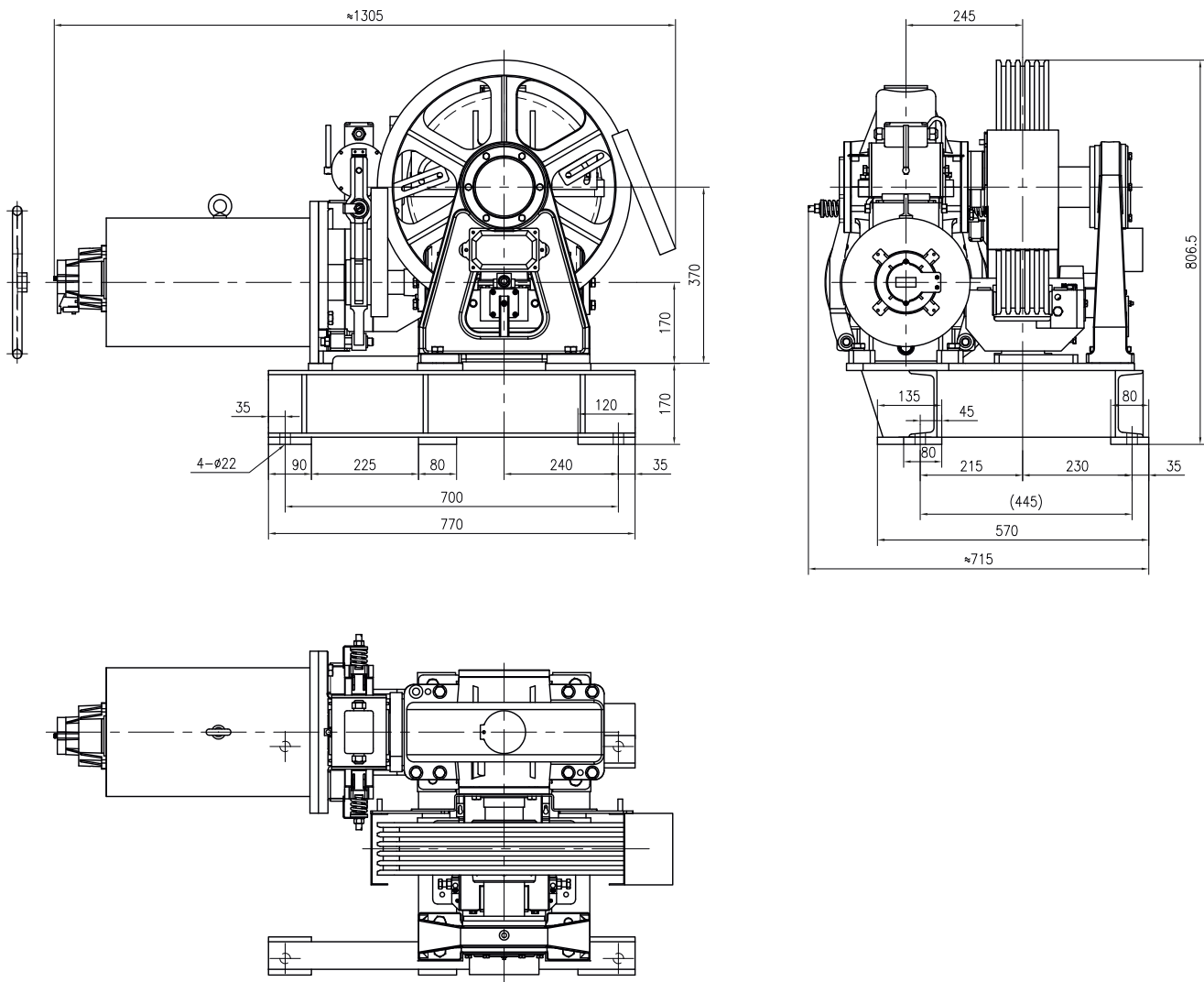
ELEVATOR TRACTION MACHINE

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
TDA-IGD21-61P0-13MM	680	1.0	5.5	4	75:2	380	11.5	1360	530	13	4	20
TDA-IGD21-61P7-13MM	680	1.7	8.5	4	47:2	380	17	1465	530	13	4	20
TDA-IGD21-62P0-13MM	680	2.0	11	4	61:3	380	21.0	1465	530	13	4	20
TDA-IGD21-80P5-13MM	884	0.5	5.5	6	53:1	380	12	960	530	13	5	20
TDA-IGD21-81P0-13MM	884	1.0	8.5	4	75:2	380	17	1360	530	13	5	20
TDA-IGD21-81P7-13MM	884	1.7	11	4	47:2	380	21.5	1465	530	13	5	20
TDA-IGD21-80P5-13MM	884	0.5	15	4	61:3	380	29	1465	530	13	6	20
TDA-IGD21-100P5-13MM	1020	0.5	5.5	6	53:1	380	12	960	530	13	5	20
TDA-IGD21-101P0-13MM	1020	1.0	8.5	4	75:2	380	17	1360	530	13	5	20
TDA-IGD21-101P7-13MM	1020	1.7	15	4	47:2	380	29	1465	530	13	5	20
TDA-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 Φ500 for motor≥15KW, others are Φ320.
- 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.

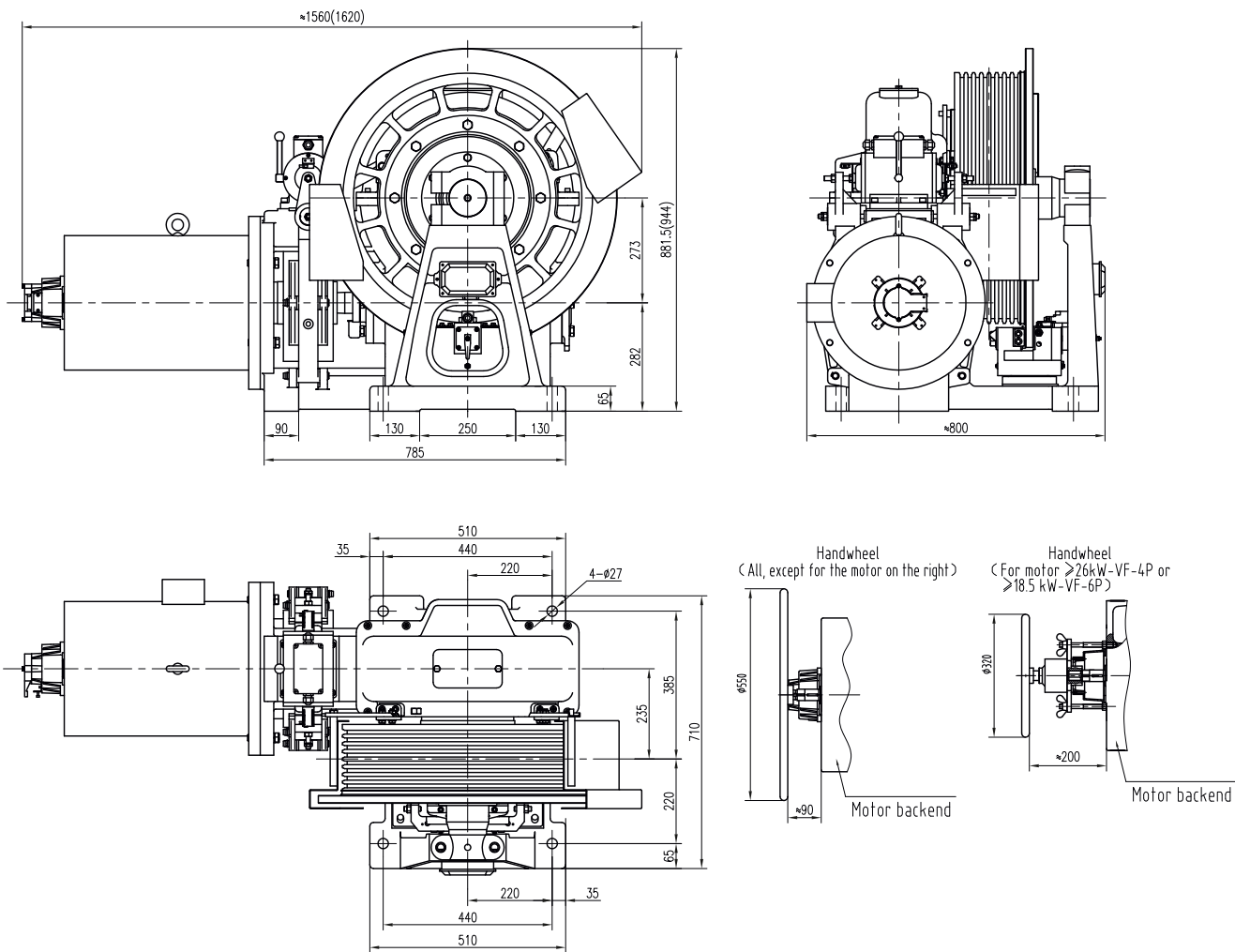
► TDA-IGD39

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
TDA-IGD39-110P5-13MM	1156	0.5	7.5	6	59:1	380	17	900	650	13	6	20
TDA-IGD39-111P0-13MM	1156	1.0	11	6	59:2	380	25	900	650	13	6	20
TDA-IGD39-111P7-13MM	1156	1.7	18.5	4	57:2	380	35	1440	650	13	8	20
TDA-IGD39-112P0-13MM	1156	2.0	22	4	49:2	380	41	1440	650	13	8	20
TDA-IGD39-120P5-13MM	1224	0.5	7.5	6	59:1	380	17	900	650	13	6	20
TDA-IGD39-121P0-13MM	1224	1.0	15	6	59:2	380	32	900	650	13	6	20
TDA-IGD39-121P7-13MM	1224	1.7	22	4	57:2	380	41	1440	650	13	8	20
TDA-IGD39-122P0-13MM	1224	0.5	26	4	49:2	380	48.5	1440	650	13	8	20
TDA-IGD39-110P5-13MM	1360	0.5	7.5	6	59:1	380	17	900	650	13	6	20
TDA-IGD39-111P0-13MM	1360	1.0	15	6	59:2	380	32	900	650	13	6	20
TDA-IGD39-111P7-13MM	1360	1.7	22	4	57:2	380	41	1440	650	13	8	20
TDA-IGD39-112P0-13MM	1360	2.0	26	4	49:2	380	48.5	1440	650	13	8	20
TDA-IGD39-120P5-13MM	1600	0.5	11	6	59:1	380	25	900	650	13	8	20
TDA-IGD39-121P0-13MM	1600	1.0	18.5	6	59:2	380	39	900	650	13	8	20
TDA-IGD39-121P7-13MM	1600	1.7	26	4	57:2	380	48.5	1440	650	13	8	20
TDA-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.

► TDA-IGD50



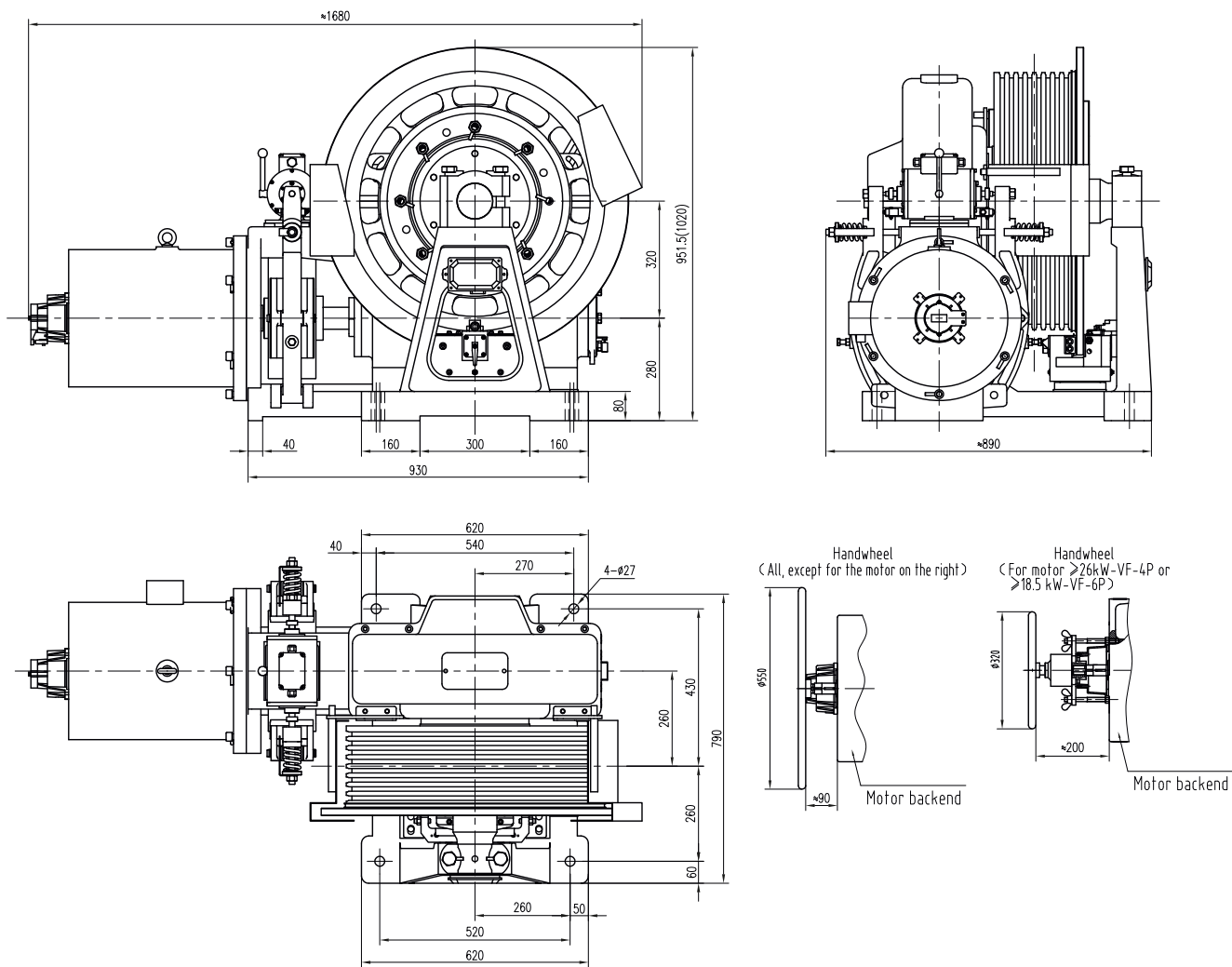
ELEVATOR TRACTION MACHINE

Suspension	1 : 1
Max.Static Load	12500kg
Control	VVVF
DZE-13EBrake	DC110V 2.2A
Weight	AC220V 4.4A/2.2A
	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
TDA-IGD50-250P5-16MM	2500	0.5	15	6	69:1	380	32.0	970	700	16	8	25
TDA-IGD50-251P0-16MM	2500	1.0	26	6	69:2	380	48.5	970	700	16	8	25
TDA-IGD50-251P5-16MM	2500	1.5	30	4	69:2	380	56.0	1465	700	16	8	25
TDA-IGD50-251P7-16MM	2500	1.7	37	4	61:2	380	69.0	1465	700	16	8	25
TDA-IGD50-252P0-16MM	2500	2.0	45	4	82:3	380	84.0	1465	700	16	8	25

► MACHINE'S DIMENSION



REMARK

- 1.As shown is right sheave type, left sheave type is optional.
- 2.Excitation voltage: DC200V , Sustaining voltage: DC100V.
- 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.
- 4.The dimension in bracket is applied to the machine with emergency brake .



► TDA-IGD60

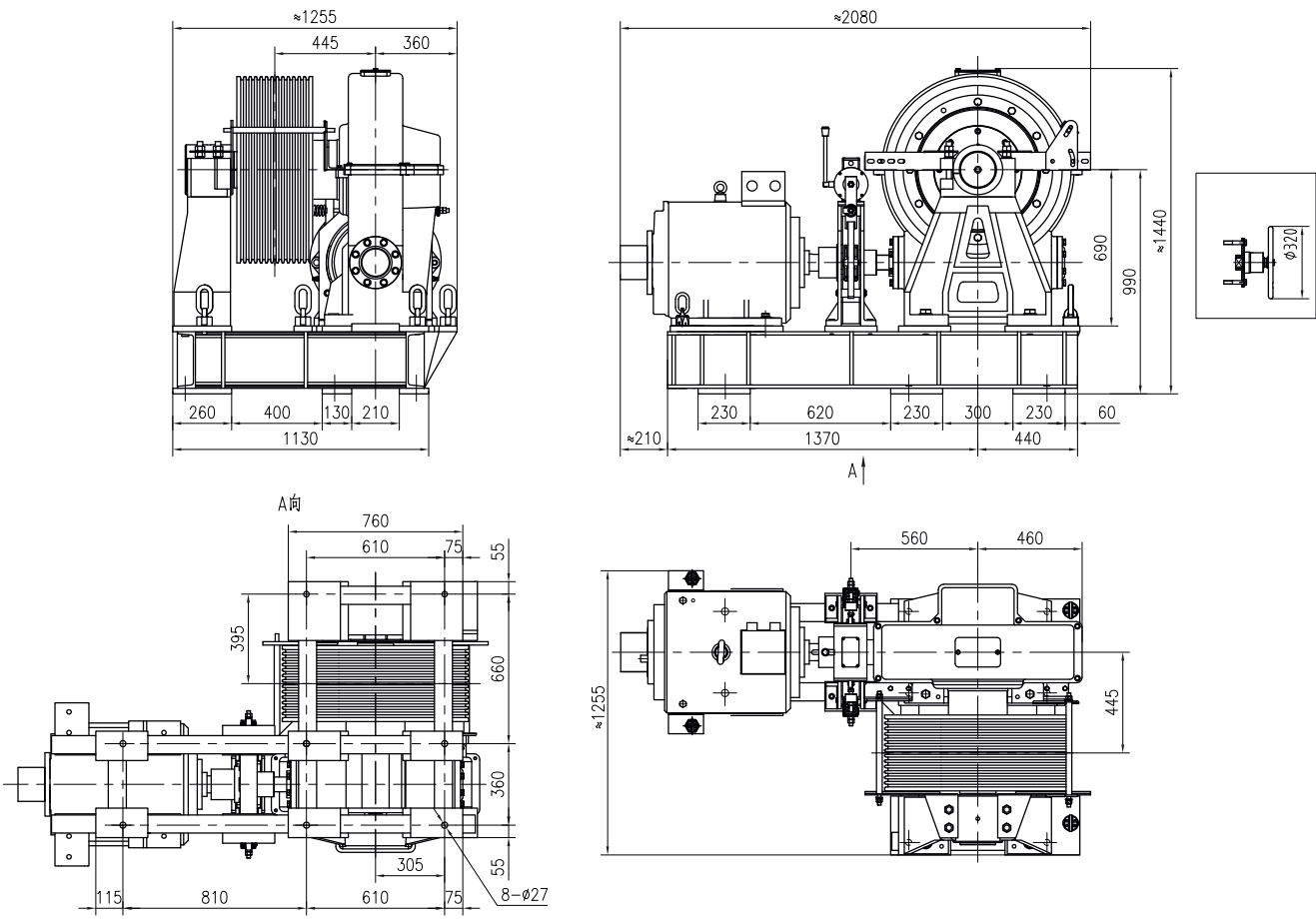
ELEVATOR TRACTION MACHINE

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
TDA-IGD60-551P0-20MM	5500	1.0	55	8	75:2	380	105	886	820	19	10	29

► MACHINE’S DIMENSION

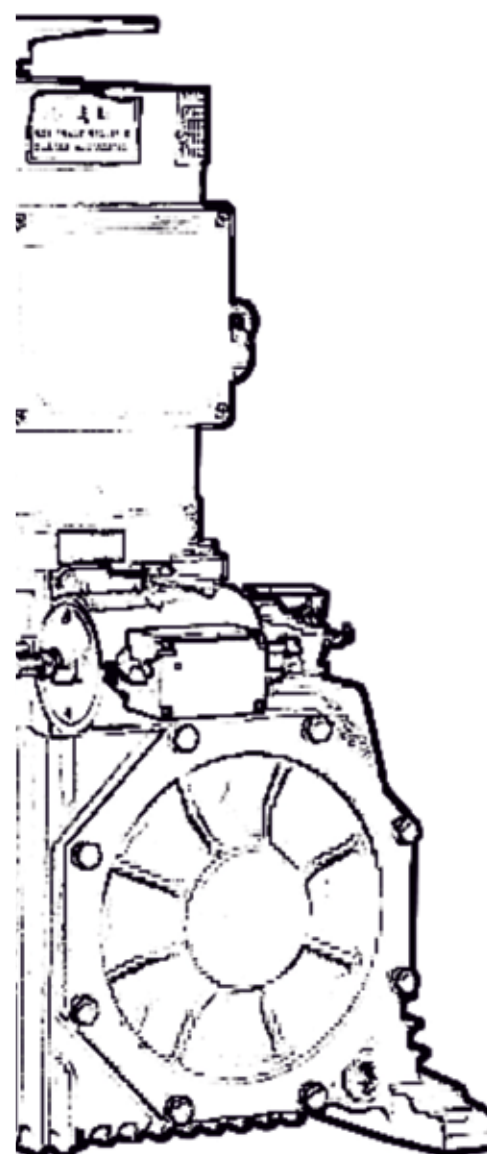


REMARK

- 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.

CATALOGUE

ESCALATOR SERIES

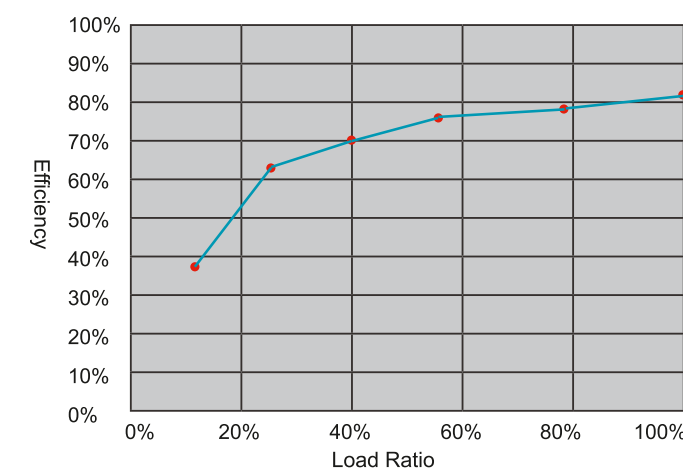


TORINDRIVE

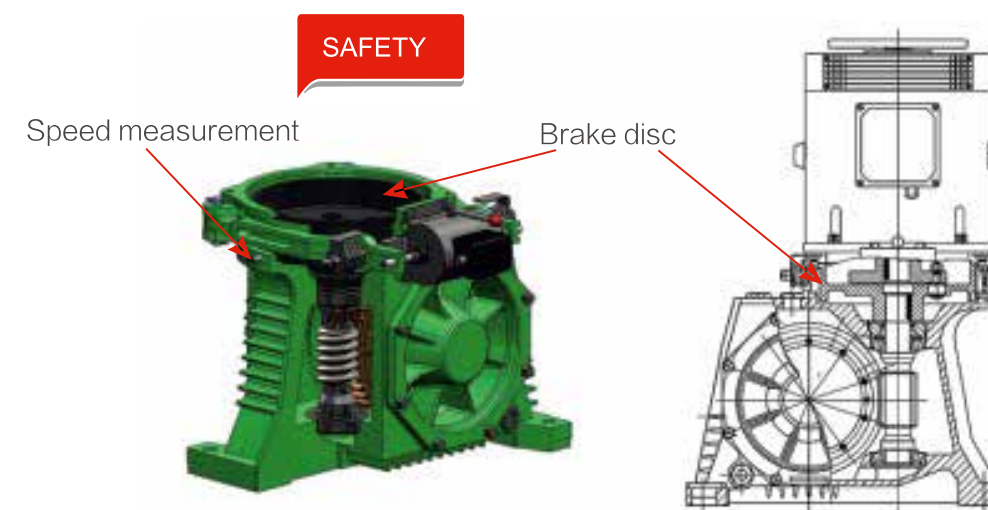
TORINDRIVE strives for the most excellent elevator components production group with the intention of providing the personalized supporting and all-round service for the clients

PRODUCT FEATURES

- Advanced traditional manufacturing technology makes the overall efficiency reach more than 80%.
- Underlying brake system eradicates retrograde accidents of ineffective coupling.
- Arc worm gear pair transmission greatly improves carrying capacity.
- Excellent manufacturing engineering reliably guarantees the performance of products.



UNDERLYING BRAKE SYSTEM



Brake through the tradition; brake directly works on worm shaft; when coupling and motor shaft fail to work, the brake can still work effectively.



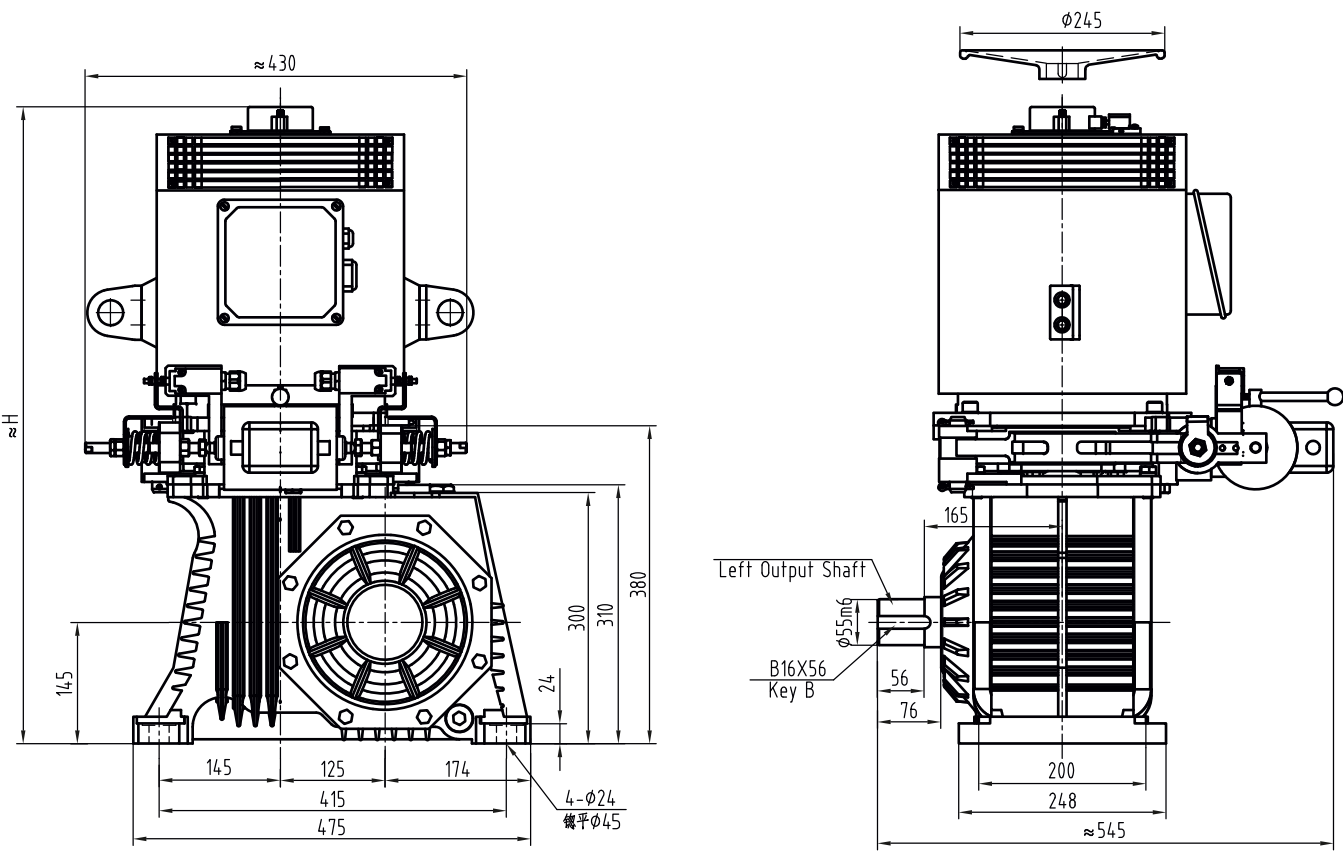
TDA-IED10

ESCALATOR DRIVE	
Voltage	380V
Wiring	Δ
Brake	AC220V
Weight	220kg

TECHNICAL DATA

Type	Gear Ratio	Output Speed (Rpm)	Torque (Nm)	Power (kW)	Current (A)	Oil(Synthrtic)	H(For IP21)	H(For IP55)
TDA-IED10-5-5	24.5	39.2	1099	5.5	13	460	761	793
TDA-IED10-7-5	24.5	39.2	1499	7.5	17	460	761	793

MACHINE’S DIMENSION



REMARK
As shown is left type, right type can be provided.



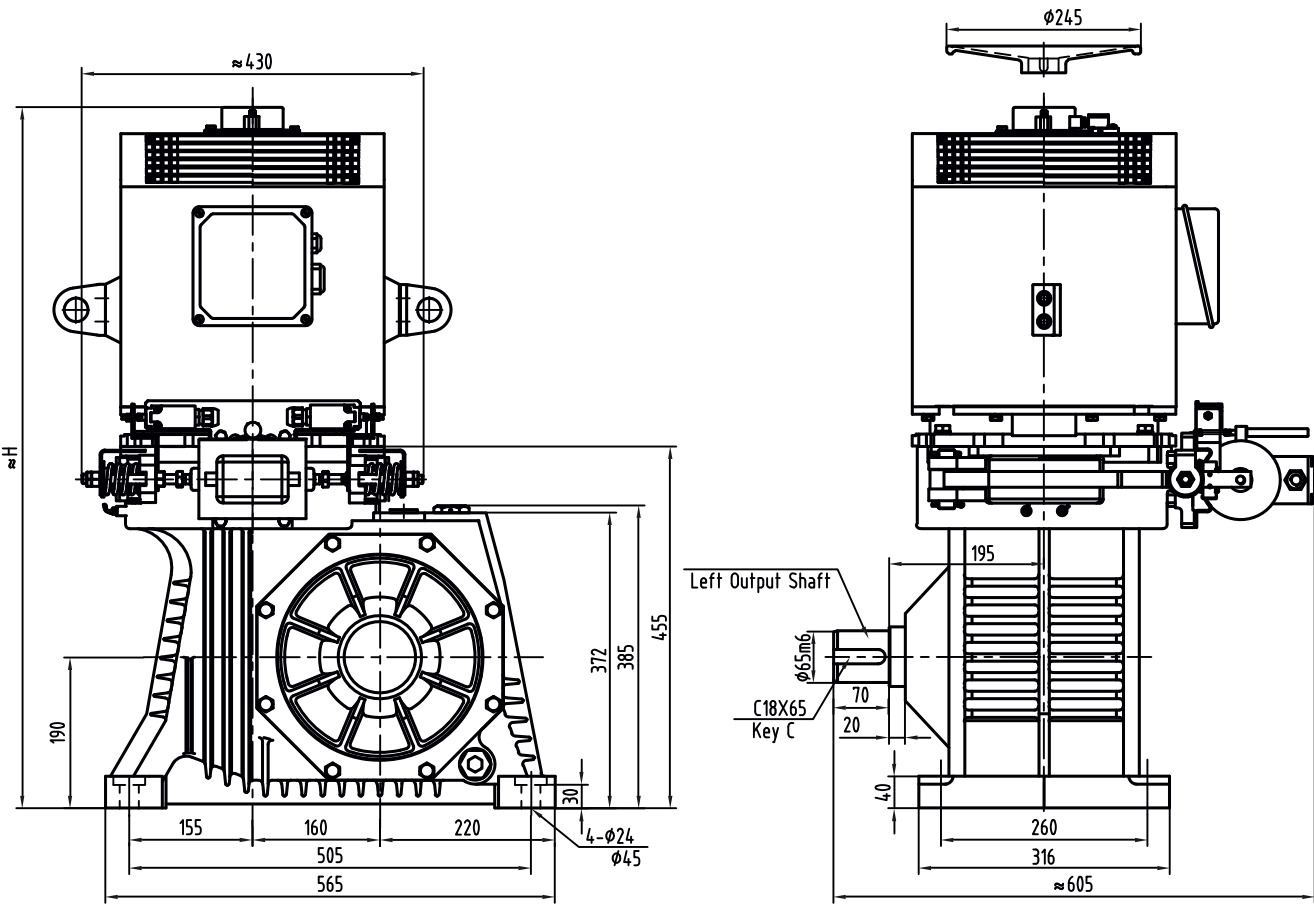
TDA-IED20

ESCALATOR DRIVE	
Voltage	380V
Wiring	Δ
Brake	AC220V
Weight	310kg

TECHNICAL DATA

Type	Gear Ratio	Output Speed (Rpm)	Torque (Nm)	Power (kW)	Current (A)	Oil	H(For IP21)	H(For IP55)
TDA-IED20-08	24.5	39.2	1599	8	17.5	460(mineral oil)	857	870
TDA-IED20-11	24.5	39.2	2198	11	23.5	460(mineral oil)	857	870
TDA-IED20-13	24.5	39.2	2598	13	27.5	460(Synthetic oil)	857	870
TDA-IED20-15	24.5	39.2	2998	15	31	460(Synthetic oil)	881	890

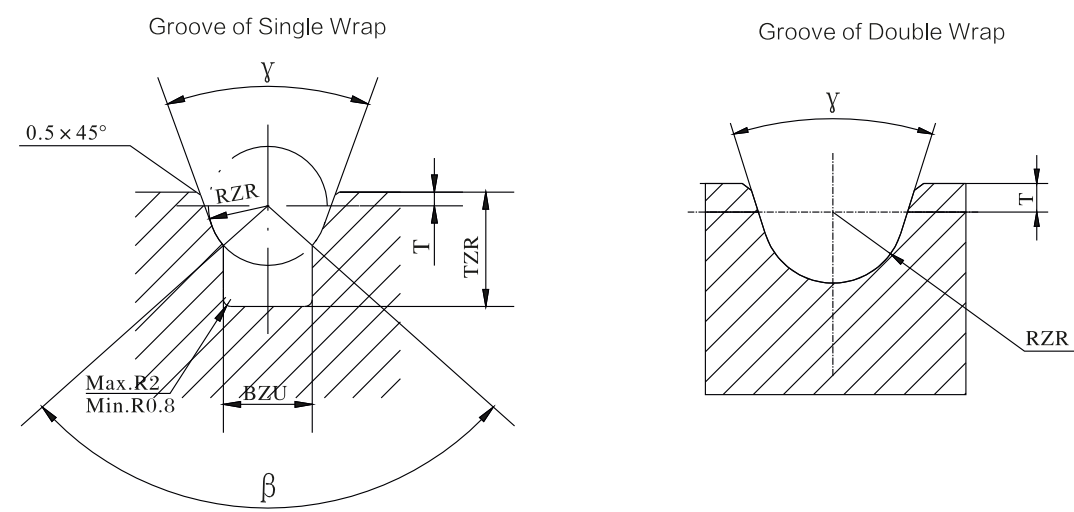
MACHINE'S DIMENSION



REMARK

As shown is left type, right type can be provided.

ROPE GROOVE

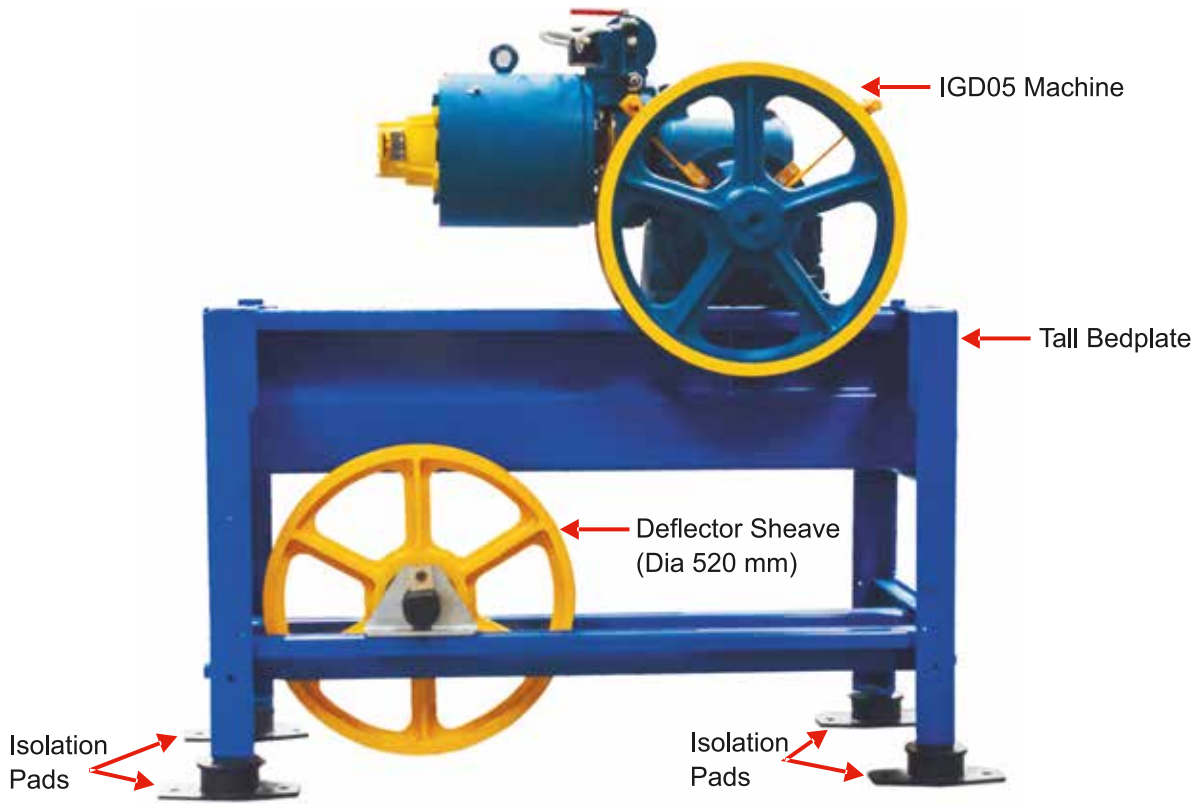


Groove	Rope	β	γ	BZU	RZR	TZR	T
Single Wrap	8	90	30	5.66	4	9.5	1.5
	10	95	30	7.37	5	12.5	1.5
	11	95	30	8.11	5.5	12.5	1.5
	12	95	30	8.85	6	12.5	1.5
	13	96.5	30	9.70	6.5	12.5	1.5
	14	95	30	10.32	7	15	1.5
	16	96.5	30	11.93	8	15	1.5
Double Wrap	19	96.5	30	14.2	9.525	18	1.5
	10	-	35	-	5.2	-	2
	12	-	35	-	6.2	-	2
	13	-	35	-	6.7	-	2
	16	-	35	-	8.2	-	2

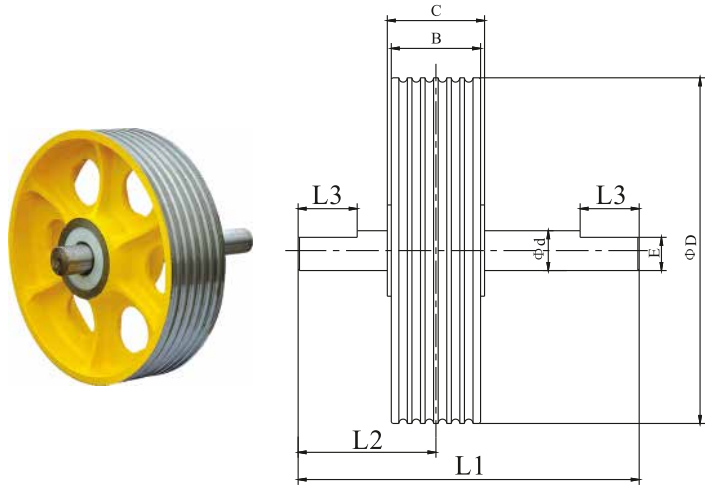
REMARK
This is our factory standard configuration groove.
The user should calculate according to the elevator traction condition and the safety factor of rope.

Complete Solution

Geared Machine



1 Need To Order **Deflector Sheave?**
Please Specify L1, L2 And L3 When Ordering.



Model	D (mm)	d (mm)	B (mm)	C (mm)	E (mm)
DSV4GD00	340	60	78	84	50
DSV4GD05	520	60	100	100	50
DSV4GD10	400	60	78	84	50
DSV4GD21	520	60	100	100	50
DSV4GD39	520	60	200	200	80
DSV4GD50	640	90	200	200	80
DSV4GD60	762	120	200	305	120

2 Need **Remote Manual Brake Release?**
(Only Available For IGD10)

TORINDRIVE

