



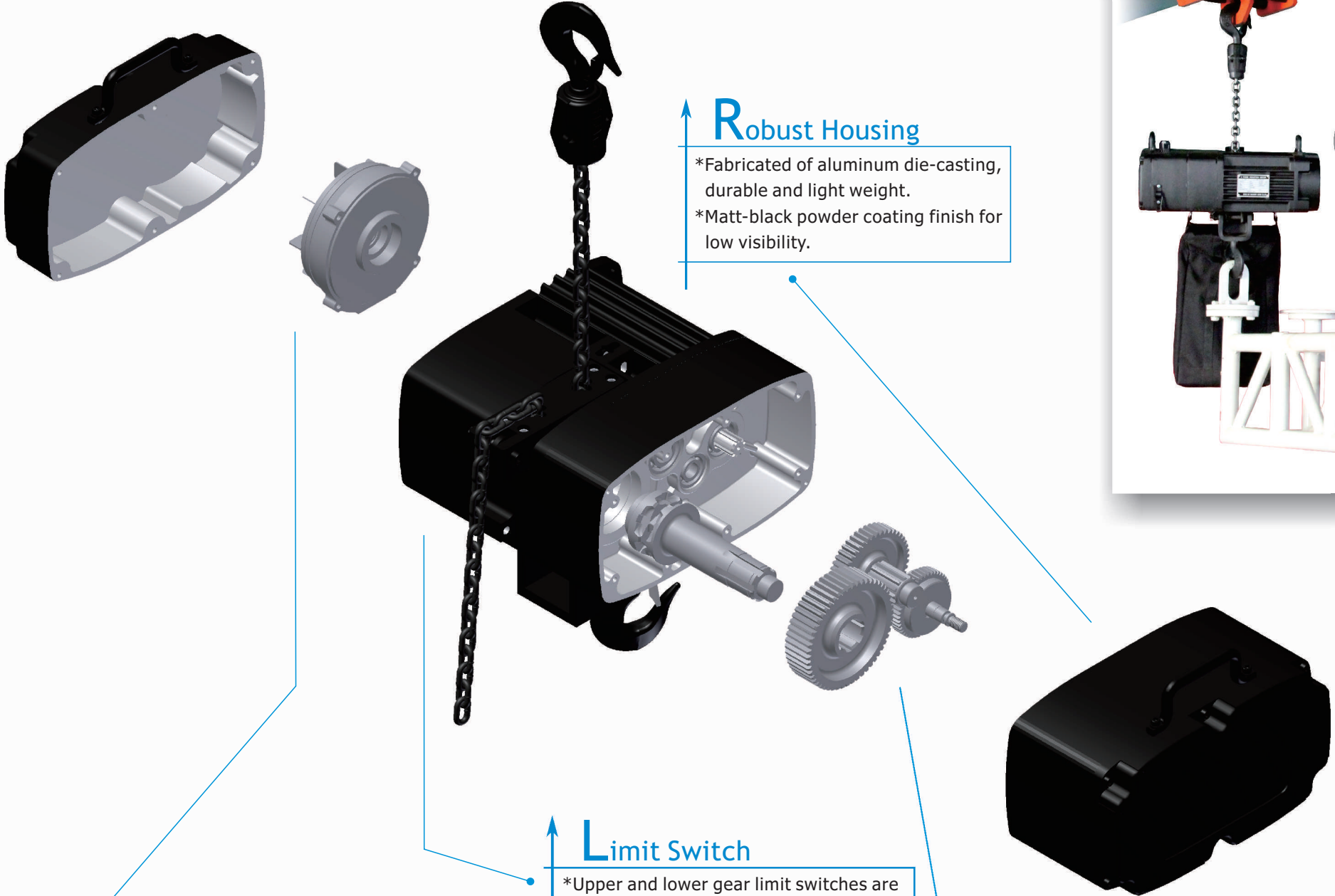
Concert Hoist



CHENG DAY MACHINERY WORKS CO., LTD.



Concert Hoist



Robust Housing

- *Fabricated of aluminum die-casting, durable and light weight.
- *Matt-black powder coating finish for low visibility.

Limit Switch

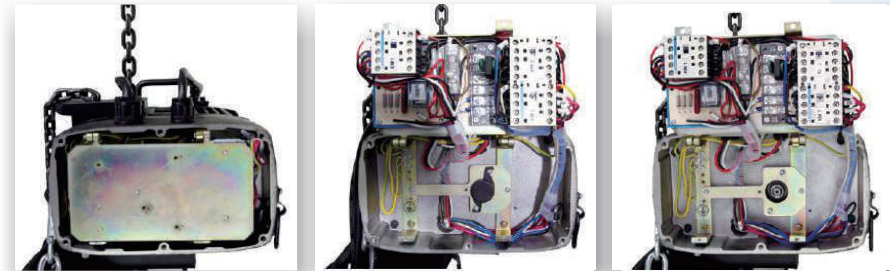
- *Upper and lower gear limit switches are fitted to switch off the power simultaneously in the case of over lifting or lowering position.

Motor and Brake

- *Cooling fins around motor have good thermal performance.
- *DC motor brake : with two-side single disk brake, electro-magnetic brake actuates synchronously in the event of power failure to ensure the operation safety while loading.
- *Standard IP54 enclosure, motor winding with class F insulation and thermal protection.
- *Asbestos-free brake to meet international request.

Overload Protection

- *A slipping clutch prevents damage from overloading, and ensures the life-span of hoist.



Magnetic Contactor & Clutch Adjustment

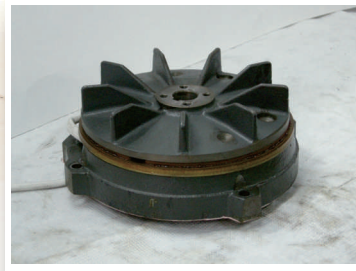
- *High performance fuse circuit breakers is fastened in a rotatable bracket for easy maintenance & inspection.
- *The clutch torsion can be adjusted through a torque tool by a qualified technician. Easy to access & calibrate.

Over-Heat Protection

- *With built-in heat detector, when motor's inside working temperature reaches 140(±5) Celsius degree, the protection mechanism will trigger, and not allow lifting the load. Instead, it permits coming down to release the load.

Phase error relay

- *Phase protection, in case of any phase missing or incorrect, the hoist will not be in active, ensuring the safety and durability to all components.



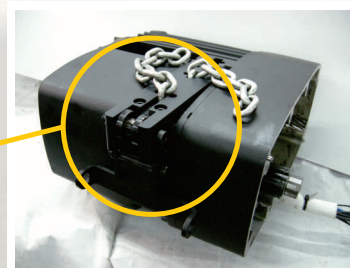
◀ Electromagnetic Disk Brake

Electromagnetic disk brake will brake synchronously while the power is off, ensuring the operation safety when loading.



▲▶ Mechanical Overload Device

- Gear is made of alloy steel with heat treatment for steady operation and less wearing and tearing. Fine-ground gear makes engagement precisely with less operation noisy.
- While generated torque is over the friction torque, the overload mechanism will trigger, in which motor keeps running but slipping clutch hold back the hoist from further lifting for the sake of safety.



▲ Chain Guide

- Made of robust material, MC Nylon, and comply with housing design to make sure the load chain operating smoothly.
- The forward-curve shape of MC Nylon keeps operating chain in the central position, away from getting stuck in the farther sides.

Flight-Case



Adopts 4 casters drive design for travel easily. With aluminum frame all around, anti-collision rugged. The internal layout can hold the hoist and set chain bag in the compartment.

Chain Bag



Special design of chain bag which apply high tension canvas with advantage of high strength and wear proof.

Chain Stopper



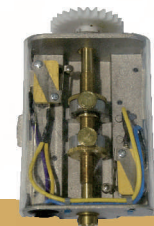
Prevent load chain from falling out upon reaching maximum lift and increase the application safety.

Load Chain



Premium quality and high strength alloy chain, heat treated, used in a variety of sling and tie down applications. For overhead lifting applications, only Grade 80 alloy chain should be used.

Gear Limit Switch



It can be handy adjusted to the required position, setting the chain travelling limits and offering the preventable method for hoist from over winding and damage.

Top Hook



Top hooks apply material SF45C to cast which allow swiveled 360 and are equipped with safety latch to enhance the loading safety.

Under Hook



Under hooks apply material SF45C to cast which allow swiveled 360 and are equipped with safety latch to enhance the loading safety. Connection plate is banded and formed by high strength steel for excellent safety.

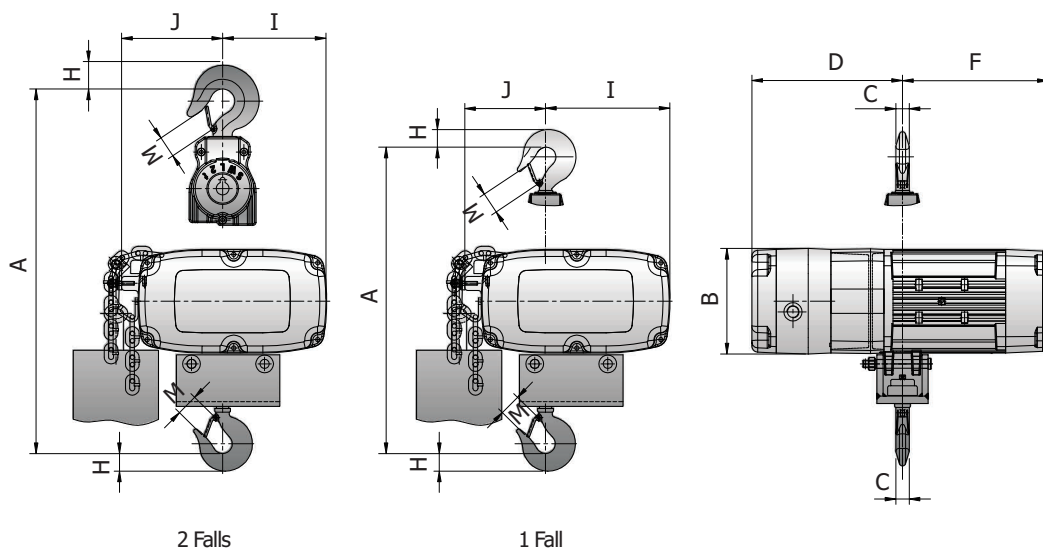
Pendant



Apply high strength integrated plastic formation for push bottom with aesthetic look resists strike. Bottoms are designed as waterproof with IP-65 protection.

Outstanding Features

- Particularly design and operates in both upright and inverted position.
- Gravity die-casted aluminum, matt-black non reflective finish chassis for rigid, light-weight, durable and low visibility.
- Epoxy black powder coated chassis is featuring corrosion-resistance, and with fine gasket and mechanical design, the complete unit turns to be IP54 rated.
- MC Nylon chain leading plate ensures the chain links properly fit into the lift wheel, and eliminates the possibility of jamming, as well as protect the lift wheel from wet and dirt.
- Heavy-duty DC brake automatically gets engaged in the event of power failure, requiring very little maintenance and only minor periodic adjustments.
- Hook is made of drop-forged high tensile steel with heat treatment, allowing 360 degree swiveling, and equipped with safety latch to ensure proper rigging the load.
- Equipped with duty cycle ED 40% high efficiency, light weight and robust motor, running the chain hoist quietly and steady.
- Operates on single voltage between 220V~550V, 3 phase, 50 or 60 Hz.
- Conforms to FEM 2m / ISO M5 classification, covering a wide range of applications.
- Average operational noise is within 75dB, quietly working and less noisy



Specification/Dimensions

Capacity (kg)	Model	Speed (m/min)		Fall No.	Load Chain (Dia x Pitch) (mm)	Motor (kw x pole)	Weight of hoist (kg)	Dimension (mm)								
		50Hz	60Hz					A	B	C	D	F	H	I	J	M
250	SH-025-1	4.0	4.8	1	ϕ 4X12	0.25X4	30	410	135	18	205	175	28	165	85	25
500	SH-050-1	4.0	4.8	1	ϕ 6.3X19.1	0.4X4	42	600	156	23	247	221	33	185	105	30
1000	SH-100-1	3.3	4.0	1	ϕ 7.1X20.2	0.75X4	47	650	156	23	247	221	33	185	105	30
2000	SH-200-2	3.3	4.0	2	ϕ 7.1X20.2	1.5X2	62	860	170	27	275	240	39	170	170	30

Load spectrum	Cubic mean value Definitions	Average operating time per day in hours							
1 (light)	$(k \leq 0.50)$ Mechanisms or parts thereof, usually subject to very small loads and in exceptional cases only to maximum loads.	0.25-0.5	0.5-1	1-2	2-4	4-8	8-16	> 16	
2 (medium)	$(0.50 < k \leq 0.63)$ Mechanisms or parts thereof, usually subject to small loads but rather often to maximum loads.	0.12-0.25	0.25-0.5	0.5-1	1-2	2-4	4-8	8-16	> 16
3 (heavy)	$(0.63 < k \leq 0.80)$ Mechanisms or parts thereof, usually subject to medium loads but frequently to maximum loads.	≤ 0.12	0.12-0.25	0.25-0.5	0.5-1	1-2	2-4	4-8	8-16
4 (very heavy)	$(0.80 < k \leq 1)$ Mechanisms or parts thereof, usually subject to maximum or almost to maximum loads.		≤ 0.12	0.12-0.25	0.25-0.5	0.5-1	1-2	2-4	4-8
Classification of Mechanisms FEM 9.511		1 Dm	1 Cm	1 Bm	1 Am	2 m	3 m	4 m	5 m

ISO/FEM (9.511)

Classification of mechanisms:

1 Dm	1 Cm	1 Bm	1 Am	2 m	3 m	4 m	5 m
M 1	M 2	M 3	M 4	M 5	M 6	M 7	M 8

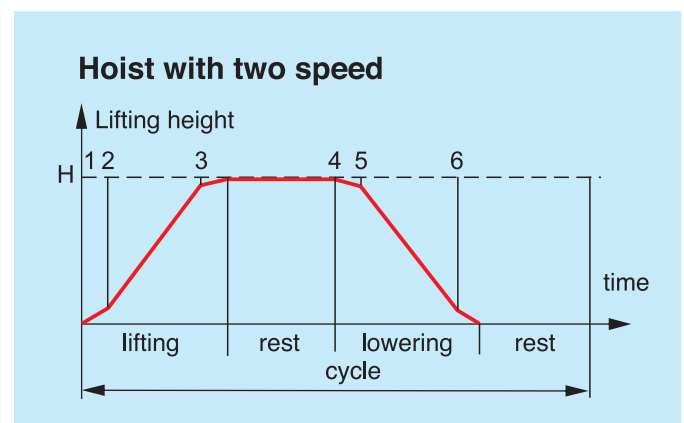
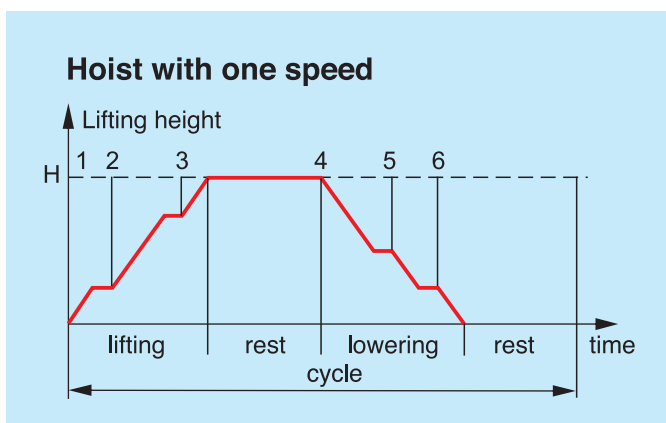
Classification of mechanisms into groups:

Load spectrum	Cubic mean value	Class of operation time									
		V0.06	V0.12	V0.25	V0.5	V1	V2	V3	V4	V5	
		TO	T1	T2	T3	T4	T5	T6	T7	T8	
		Average operating time per day in hours									
		≤ 0.12	≤ 0.25	≤ 0.5	≤ 1	≤ 2	≤ 4	≤ 8	≤ 16	> 16	
1 L1	$k \leq 0.50$			1 Dm	1 Cm	1 Bm	1 Am	2 m	3 m	4 m	
2 L2	$0.50 < k \leq 0.63$		1 Dm	1 Cm	1 Bm	1 Am	2 m	3 m	4 m	5 m	
3 L3	$0.63 < k \leq 0.80$	1 Dm	1 Cm	1 Bm	1 Am	2 m	3 m	4 m	5 m		
4 L4	$0.80 < k \leq 1.00$	1 Cm	1 Bm	1 Am	2 m	3 m	4 m	5 m			

Class of operating time:

Class of operation time	Average operating time per day (in hours)	Calculated total operating time in hours
V0.06 T0	≤ 0.12	200
V0.12 T1	≤ 0.25	400
V0.25 T2	≤ 0.5	800
V0.5 T3	≤ 1	1600
V1 T4	≤ 2	3200
V2 T5	≤ 4	6300
V3 T6	≤ 8	12500
V4 T7	≤ 16	25000
V5 T8	> 16	50000

OPERATION CYCLE





FAITH • PRACTICALITY • EFFICIENCY



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