

SINCE 1982

# SAN YUAN

MATERIAL HANDLING

Professional Design & Manufacturer

## ELECTRIC CHAIN HOIST

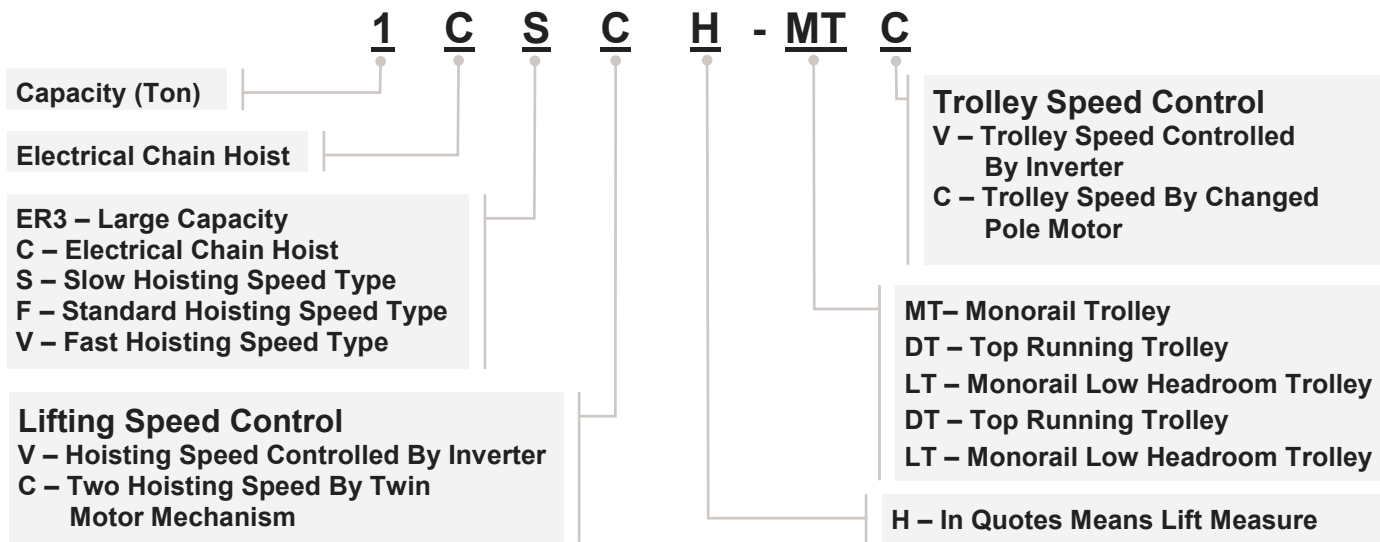


Patent No : TW D187828



[www.TaiwanHoist.com](http://www.TaiwanHoist.com)

## Product Code



Power Supply - 3Φ220V/380V/415V/440V 50/60HZ

Lift - Standard Lift

(For Special Lengths Can Be Customized)

Standard Accessories -

Chain Bag×1

Push Button Switch (Cable 3M) ×1

## Option

- ♦ Digital overload protection device
- ♦ Upper and lower limit switch < Type CS 、 CSC 、 CSV 、 CS-LT>
- ♦ Stainless steel chains
- ♦ Radio remote controller

Index		1
ER3	Large capacity electric chain crane (Single speed)	2 ~ 4
CF&CFC	Type Electric Chain Hoist (Standard)	5 ~ 6
CS	Type Electric Chain Hoist (Short)	7 ~ 8
CSC	(Two Speed) Type Electric Chain Hoist (Short)	9 ~ 10
CS-LT	Type Low-Headroom Electric Chain Hoist	11 ~ 12
CSV	Type Stepless Speed Control Electric Chain Hoist	13 ~ 14
CV	Type Electric Chain Hoist (Fast)	15 ~ 16
CA500	Type Electric Chain Hoist (Single phase voltage)	17
PT	Push Beam Trolley	18

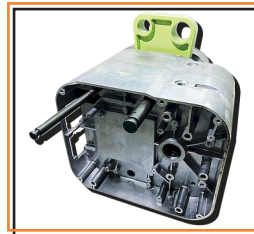
# ER3

## SIMPLY THE BEST HOISTS ON THE MARKET !!

*A secondary mechanical load brake is an additional features on ER3 models only.*

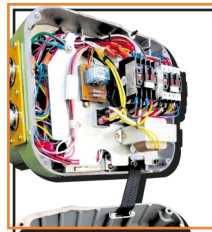
**Aluminum Alloy Body** - used in die casting process, light weight, strong structure and fast heat dissipation.

**IP55 Rating** - for dust and water spray resistant bodies.



### Hook

Designed with double boom design, the card can slow down the swing caused by the single lifting point and increase the safety.



### Electrical Control Settings -

The electrical box cover is equipped with a suspension strap for inspection and maintenance.

Overhanging buckle switch with emergency stop function.

High-strength forged hook - safety factor >5

With a secure snap - on card slot design for extended life.

### Digital Overload Protection Device (optional)

The crane can be safely monitored and the crane can be weighed online.

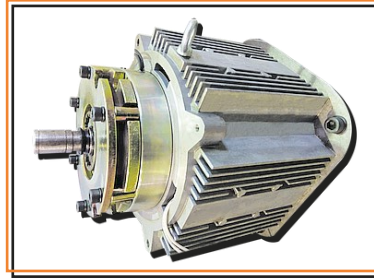




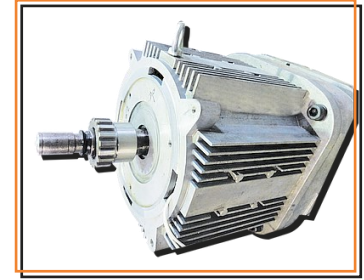
Patent/Publication Number (TW) D187828

Connected in series to a motor circuit, a **Current Driven Electromagnetic Brake** does not release unless the motor is energized.

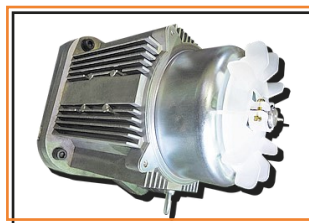
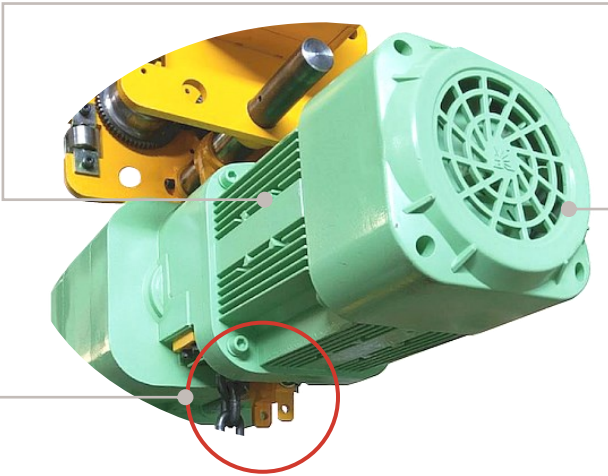
This concurrent drive increases safety of the circuit compared to separate circuits for the motor and the brake.



The brake surface is separated from the motor.



The brake connection tooth pressure angle is designed to be 30 degrees and can be repaired and replaced.

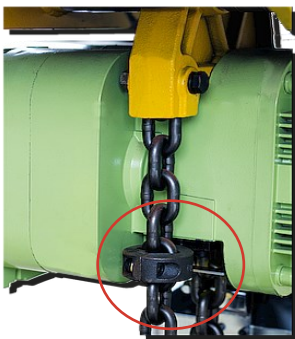


### Motor External Fan

The brakes are waterproof and equipped with a fan to reduce heat build-up, improve motor running performance, and extend coil and bearing life.

### Friction Clutch

Emergency overload protection to slip the force from the motor when subjected to an excessive load over the rated capacity. It is not easily compromised with changes in the surrounding temperature. In the case of irregular loading, this operates in advance to prevent the hoist body or load chain from being damaged.

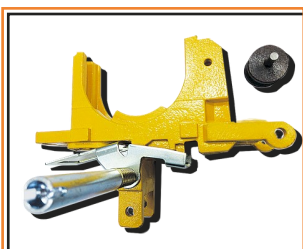


### Limit Switch

If the load is raised or lowered excessively, the limit switch is automatically stopped to prevent damage to the crane or chain.

### Hook Buffer Device

Make sure that the hook is not damaged by a collision when it is in the extreme position.

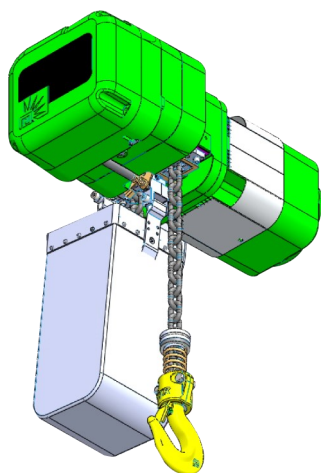


Uniquely-structured **Chain Guide** for smooth chain-feeding.

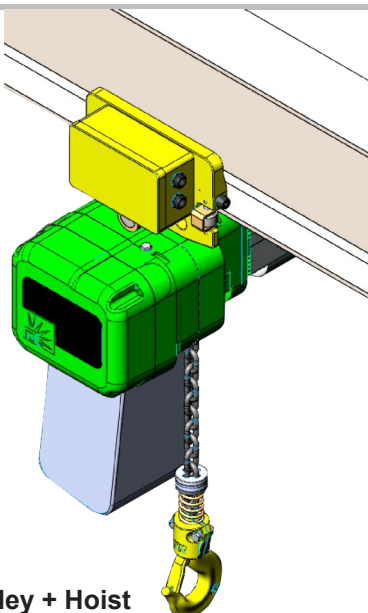


The guide chain, the guide chain roller and the limit device can be directly removed from the lower part of the main unit for convenient maintenance.

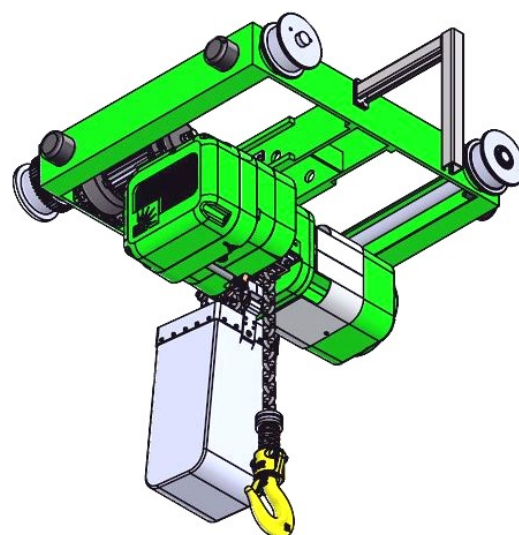
# ER3 Single Speed Type



Fixed Hoist



Motorized Trolley + Hoist



Dual Rail + Hoist

## 2.5 ~ 5 Ton

Type	Hoist Only	ER3-025S	ER3-030S	ER3-050S
	Hoist + Trolley	ER3-025S-MT	ER3-030S-MT	ER3-050S-MT
Rated Capacity (Ton)		2.5	3	5
Lifting Motor Rating %ED		60 %		
Hoist Speed (M/min)	50Hz	5.7	5	2.5
	60Hz	6.8	6	3
Hoist Motor (Kw)	60Hz	3.75	3.75	3.75
Trolley Speed (M/min)	50Hz	15	15	15
	60Hz	18	18	18
Chain Dia X No. Of Falls		Φ11.2 X 1	Φ11.2 X 1	Φ11.2 X 2

## 7.5 ~ 20Ton

Type	Hoist Only	ER3-075S	ER3-100S	ER3-100G	ER3-150G	ER3-200G
	Hoist + Trolley	ER3-075S-MT	ER3-100S-MT	ER3-100G-MT	ER3-150G-MT	ER3-200G-MT
Rated Capacity (Ton)		7.5	10	10	15	20
Lifting Motor Rating %ED		60 %				
Hoist Speed (M/min)	50Hz	1.7	1.4	2.5	1.7	1.4
	60Hz	2	1.7	3	2	1.7
Hoist Motor (Kw)	60Hz	3.75	3.75	3.75 X 2	3.75 X 2	3.75 X 2
Trolley Speed (M/min)	50Hz	10	10	10	10	10
	60Hz	12	12	12	12	12
Chain Dia X No. Of Falls		Φ11.2 X 3	Φ11.2 X 4	Φ11.2 X 4	Φ11.2 X 6	Φ11.2 X 8

# CF · CFC SERIES

## Standard Type Single Speed / Two Speed



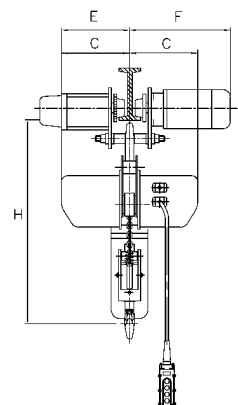
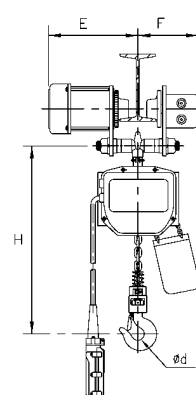
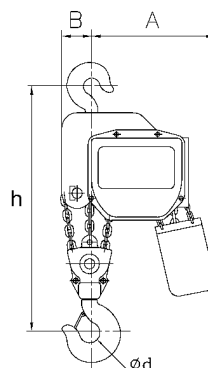
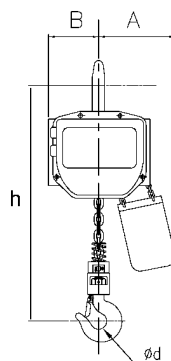
### AC Electromagnetic Brake System

The AC-type power-off safety brake has a manual release function, which requires only one bolt to adjust maintenance, and an automatic brake clearance adjustment function.



### Push-in Control Line Design

- ◆ 1~5 Ton (Single speed) Rated capacity
- ◆ 1~5 Ton (Two speed) Rated capacity
- ◆ Test load >125% Capacity
- ◆ Motors are available with various voltages.
- ◆ Helical Gearing used where practical to provide quiet operation.
- ◆ Plug-In Cables reduce maintenance time and installation.
- ◆ Chain sprocket is heat-treated and ground to a high tolerance ensures smooth lifting.
- ◆ Lower Hook is heat-treated and equipped with safety latch and 360 degree swiveling.
- ◆ Push button is rain-proof plastic for severe impact and corrosive atmosphere resistance and mechanically interlocked.
- ◆ Torque of brake > 125% Rated torque of motor.
- ◆ Lifting hook is made of high grade steel and is equipped with a safety latch.
- ◆ Safety factor of hook and chain sprocket and



## CF Standard (Single Speed)

Type	Hoist Only	1CF	2CF	3CF	5CF
	Hoist + Trolley	1CF-MT	2CF-MT	3CF-MT	5CF-MT
Rated Capacity (Ton)		1	2	3	5
Hoist Speed (M/min)	50Hz	7	3.5	2.3	1.4
	60Hz	8.4	4.2	2.8	1.7
Hoist Motor (Kw)	50Hz	1.3			
	60Hz	1.6			
Trolley Speed (M/min)	50Hz	15	15	15	15
	60Hz	18	18	18	18
Chain Dia X No. Of Falls		Φ7.1 X 1	Φ7.1 X 2	Φ7.1 X 3	Φ7.1 X 5
Min. Rad. Curvature (m)		1.3	1.5	1.8	1.8
I Beam (mm)		75 ~ 125	100~150		125~175
Approx. Dimensions (mm)	A/B	200/170	200/170	250/300	300/360
	Ød	40	45	55	65
	C	263	263	263	263
	H/h	613/560	720/665	880/820	986/925
	E/F	277/180	335/225	335/227	375/238
N.W. (Kg)	Hoist Only	53 (58)	60 (70)	71 (85)	95 (120)
	Hoist + Trolley	78 (83)	90 (100)	125 (140)	165 (190)

## CFC Standard (Two Speed)

Type	Hoist Only	1CFC	2CFC	3CFC	5CFC
	Hoist + Trolley	1CFC-MTC	2CFC-MTC	3CFC-MTC	5CFC-MTC
Rated Capacity (Ton)		1	2	3	5
Hoist Speed (M/min)	50Hz	5.5/1.8	2.7/0.9	1.8/0.6	1.1/0.36
	60Hz	6.6/2.2	3.3/1.1	2.2/0.7	1.3/0.4
Hoist Motor (Kw)	50Hz	1.3/0.45			
	60Hz	1.6/0.55			
Trolley Speed (M/min)	50Hz	20/6.6	18/6		17/5.6
	60Hz	24/8	22/7.3		20/6.6
Chain Dia X No. Of Falls		Φ7.1 X 1	Φ7.1 X 2	Φ7.1 X 3	Φ7.1 X 5
Min. Rad. Curvature (m)		1.3	1.5	1.8	1.8
I Beam (mm)		75 ~ 125	100~150		125~175
Approx. Dimensions (mm)	A/B	200/170	200/170	250/300	300/360
	Ød	40	45	55	65
	C	263	263	263	263
	H/h	613/560	720/665	880/820	986/925
	E/F	277/180	335/225	335/227	375/238
N.W. (Kg)	Hoist Only	55(60)	62(72)	73(87)	97(122)
	Hoist + Trolley	83(88)	95(105)	130(145)	170(195)

★ NOTE: (H) IN QUOTES MEANS LIFT MEASURE.



## Suitable For All Kinds of Spaces



- ◆ 1/6~2 Ton Rated Capacity Test load >125% Capacity Limit switch is easy to remove and install.
- ◆ Motors are available with various voltages & frequency.
- ◆ Friction torque limiter prevents the misuse of the hoist.
- ◆ It gives protection from overload, accidental over-hoisting, and over-lowering.
- ◆ Fail safety brake - ensuring the load is always stopped when the control button is released.
- ◆ Torque of brake > 125% Rated torque of motor.
- ◆ Chain sprocket is heat-treated and ground to a high tolerance ensures smooth lifting.
- ◆ Lifting hook is made of high grade steel and is equipped with a safety latch.
- ◆ Safety factor of hook and chain sprocket and chains > 5.

### Also known as a safety clutch installed in the power transmission.

A gear clipped in the spring composite friction surface, and nut can be adjust the spring force to limit the size of its drive torque, when the overload torque exceeds the set value, the torque limiter will have a separation, in order to effectively protect the driven machinery and prevent **over-load** or **over-winding**.

### Waterproof Electrical Box Structure

Patent/Publication Number (TW) M545390 U

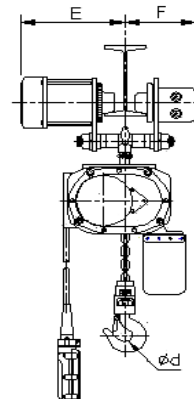
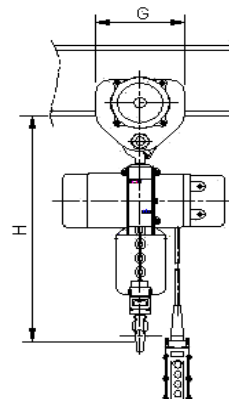
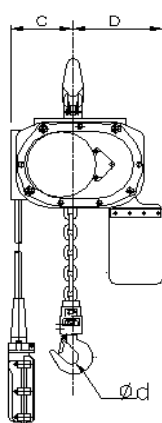
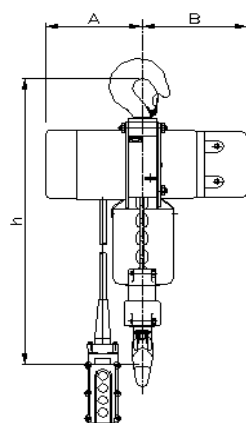
The upper and lower cover sets are designed to be waterproof and drained. The side walls are provided with windows on both sides for quick and easy inspection of wiring and maintenance work.



Patent/Publication Number (TW) M545390U



# CS Ultra Short Single Speed Type

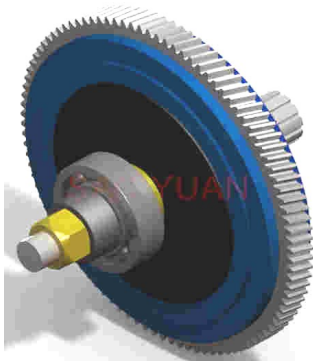
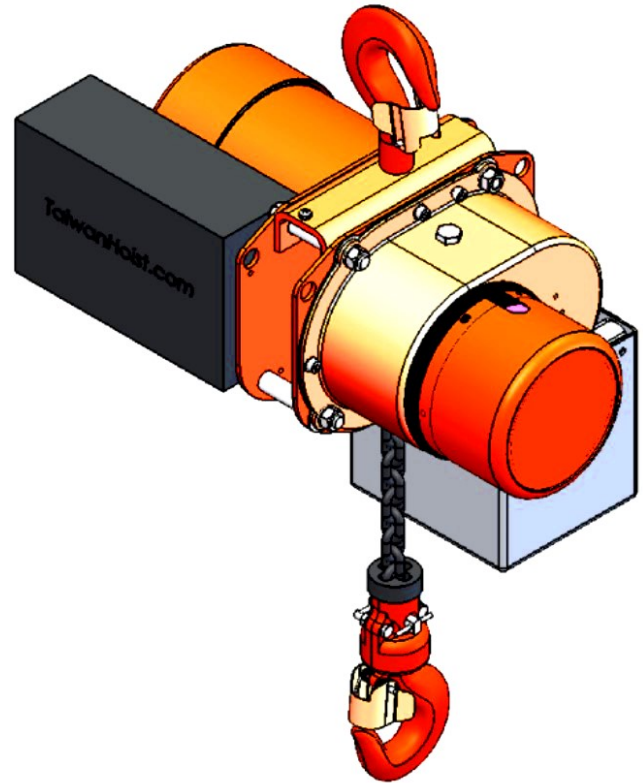


Type	Hoist Only	1/6CS	1/4CS	1/2CS	1/2CSX	1CS	2CS
	Hoist + Trolley	1/6CS-MT	1/4CS-MT	1/2CS-MT	1/2CSX-MT	1CS-MT	2CS-MT
Rated Capacity (Ton)		0.16	0.25	0.5	0.5	1	2
Hoist Speed (M/min)	50Hz	12	7.6	3.8	7.6	3.8	1.9
	60Hz	14	9.2	4.6	9.2	4.6	2.3
Hoist Motor (Kw)	50Hz	0.34			0.7		
	60Hz	0.4			0.8		
Trolley Speed (M/min)	50Hz	17	17	17	17	15	15
	60Hz	20	20	20	20	18	18
Chain Dia X No. Of Falls		Φ6.3 X 1				Φ7.1 X 1	Φ7.1 X 2
Min. Rad. Curvature (m)		1.2	1.2	1.2	1.3	1.3	1.5
I Beam (mm)		75 ~ 125					100 ~150
Approx. Dimensions (mm)	A	200	200	200	235	235	235
	B	210	210	210	230	230	230
	C	168					
	D	180					
	G	216	216	216	216	240	240
	h	380	380	380	395	395	460
	Ød	35	35	35	37	37	40
	H	435	435	435	435	445	530
	E	245	245	245	245	277	332
	F	150	150	150	150	180	225
N.W. (Kg)	Hoist	35 (37)			38 (42)		49 (56)
	Hoist + Trolley	52 (55)			63 (67)		80 (87)

★ NOTE: (H) IN QUOTES MEANS LIFT MEASURE.

## Suitable For All Kinds of Spaces

- ◆ Test load >125% Capacity Limit switch is easy to remove and install.
- ◆ Motors are available with various voltages & frequency.
- ◆ Friction torque limiter prevents the misuse of the hoist.
- ◆ It gives protection from overload, accidental over-hoisting, and over-lowering.
- ◆ Fail safety brake - ensuring the load is always stopped when the control button is released.
- ◆ Torque of brake > 125% Rated torque of motor.
- ◆ Chain sprocket is heat-treated and ground to a high tolerance ensures smooth lifting.
- ◆ Lifting hook is made of high grade steel and is equipped with a safety latch.
- ◆ Safety factor of hook and chain sprocket and chains > 5.



### Also known as a safety clutch installed in the power transmission.

A gear clipped in the spring composite friction surface, and nut can be adjust the spring force to limit the size of its drive torque, when the overload torque exceeds the set value, the torque limiter will have a separation, in order to effectively protect the driven machinery and prevent **over-load or over-winding**.

### Waterproof Electrical Box Structure

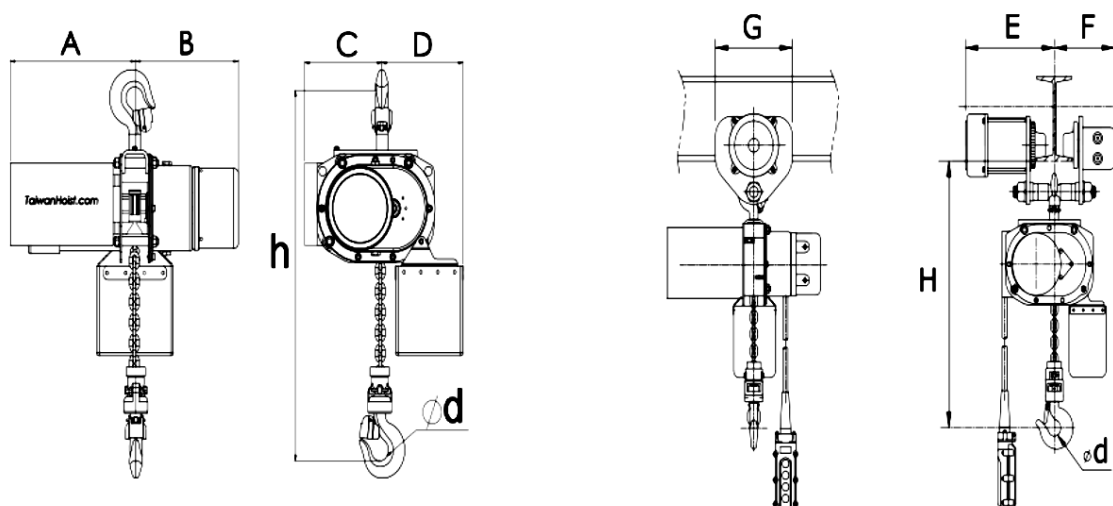
Patent/Publication Number (TW) M545390 U

The upper and lower cover sets are designed to be waterproof and drained. The side walls are provided with windows on both sides for quick and easy inspection of wiring and maintenance work.



Patent/Publication Number (TW) M545390U

# CSC Ultra Short Two Speed Type

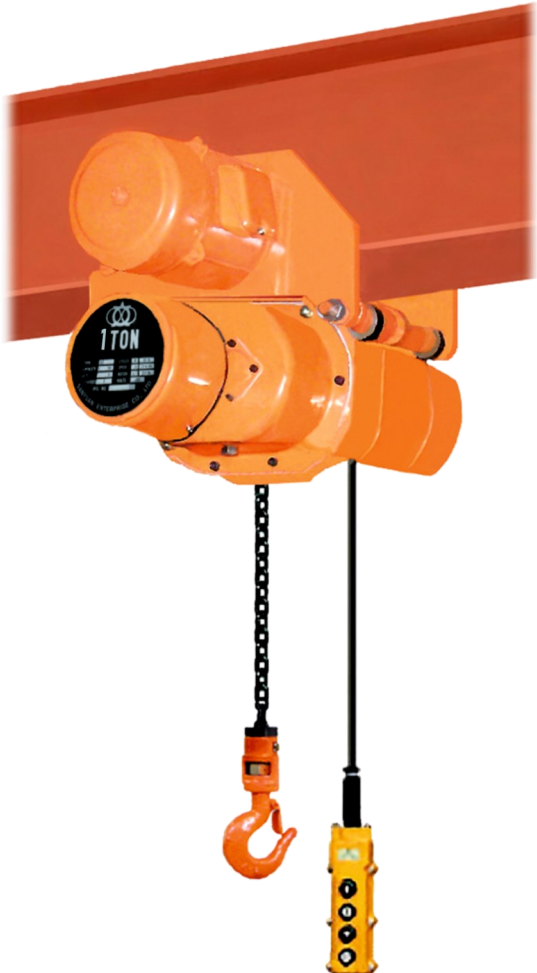


Type	Hoist Only	1/4CSC(H)	1/2CSC(H)
	Hoist + Trolley	1/4CSC(H)-MT	1/2CSC(H)-MT
Rated Capacity (Ton)		0.25	0.5
Hoist Speed (M/min)	50HZ	15.3 / 2.5	7.6 / 1.2
	60HZ	18.4 / 3	9.2 / 1.5
Hoist Motor (Kw)	50HZ	0.62 / 0.1	
	60HZ	0.75 / 0.12	
Trolley Speed (M/min)	50HZ	17	17
	60HZ	20	20
Chain Dia X No. Of Falls		Φ6.3 X 1	
Min. Rad. Curvature (m)		1.2	
I Beam (mm)		75~125	
Approx. Dimensions (mm)	A	235	235
	B	230	230
	C	168	168
	D	180	180
	G	240	240
	h	395	395
	Φd	37	37
	H	445	445
	E	277	277
	F	180	180
N.W. (Kg)	Hoist	39 (43)	
	Hoist + Trolley	63 (67)	

★ NOTE: (H) IN QUOTES MEANS LIFT MEASURE.

## CS- LT SERIES Low Lift Single Rail Single Speed Type

### Suitable For All Kinds of Spaces



The Low Headroom CS-LT series is the most economy solution to meet your toughest clearance requirements for special applications.

Allows for maximum hook height in tight clearance applications.

- ◆ 160Kg to 2 ton capacity.
- ◆ QUIET OPERATION:  
The sprocket chain wheels are heat-treated and ground to a high tolerance. This ensures especially smooth lifting.
- ◆ The lifting hook is made of high grade steel and is equipped with a safety latch.
- ◆ PREVENT OVERLOADS: The friction torque limiter prevents the misuse of the hoist. It gives protection from overload, accidental over-hoisting, and over-lowering.
- ◆ The motors are available with various voltages. For operator safety, low voltage control is standard.
- ◆ Fail-safe brake - torque of brake > 150% rated motor torque.
- ◆ Trolley wheel treads compatible with I or H beams.



Also known as a safety clutch installed in the power transmission.

A gear clipped in the spring composite friction surface, and nut can be adjust the spring force to limit the size of its drive torque, when the overload torque exceeds the set value, the torque limiter will have a separation, in order to effectively protect the driven machinery and prevent **over-load or over-winding**.

### Waterproof Electrical Box Structure

Patent/Publication Number (TW) M545390 U

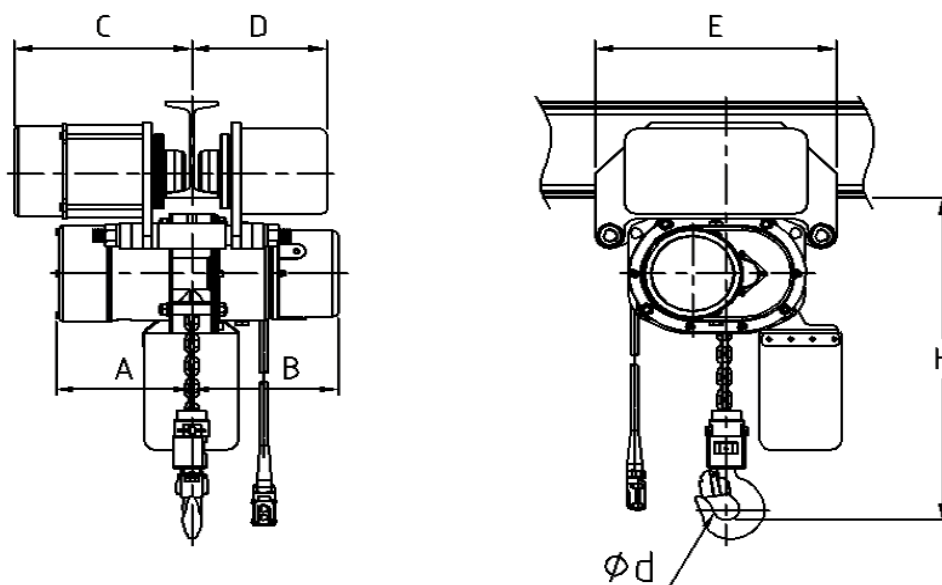
The upper and lower cover sets are designed to be waterproof and drained. The side walls are provided with windows on both sides for quick and easy inspection of wiring and maintenance work.



Patent/Publication Number (TW) M545390U



# CS - LT Low Lift Single Rail Single Speed Type



Type		1/6CS-LT			1/4CS-LT			1/2CS-LT			1CS-LT			2CS-LT		
Rated Capacity (Ton)		0.16			0.25			0.5			1			2		
Hoist Speed (M/min)	50Hz	12			7.6			3.8			3.8			1.9		
	60Hz	14			9.2			4.6			4.6			2.3		
Hoist Motor (Kw)		0.4			0.4			0.4			0.8			0.8		
Trolley Speed (M/min)	50Hz	17			17			17			15			15		
	60Hz	20			20			20			18			18		
Chain Dia X No. Of Falls		Φ6.3 X 1			Φ6.3 X 1			Φ6.3 X 1			Φ 7.1 X 1			Φ 7.1 X 2		
I Beam (mm)		75~125			75~125			75~125			75~125			100~150		
Approx. Dimensions (mm)	A	192			192			192			235			235		
	B	208			208			208			230			230		
	E	346			346			346			340			380		
	Ød	35			35			35			37			40		
	Steel Width	H	C	D	H	C	D	H	C	D	H	C	D	H	C	D
	75	314	245	190	314	245	190	314	245	190	340	250	190	*		
	100	314	258	202	314	258	202	314	258	202	340	263	202	400	310	202
	125	314	271	215	314	271	215	314	271	215	340	276	215	400	322	215
	150	*			*			*			*			400	335	225
	N.W. (Kg)		52			52			52			65			86	

## Suitable For All Kinds of Spaces

Traditional hoist & Crane using single-speed or dual speed motor design, so operator can feel intense vibration when motor start & stop. And it is hard to control the lowering speed when you want to position the load.

Through the use of our CSV type "Stepless Hoist Speed Control electric hoist", the load in the direction of Up. Down. East. West. South. North way handling, the user can control speed, with the following advantages in any time by finger -

- ◆ Positioning load up within a few mm.
- ◆ It can reduce rampant load shaking in handling and position process.
- ◆ It can reduce vibration of building caused by the crane, especially suitable for precision manufacturing.



### < Application >

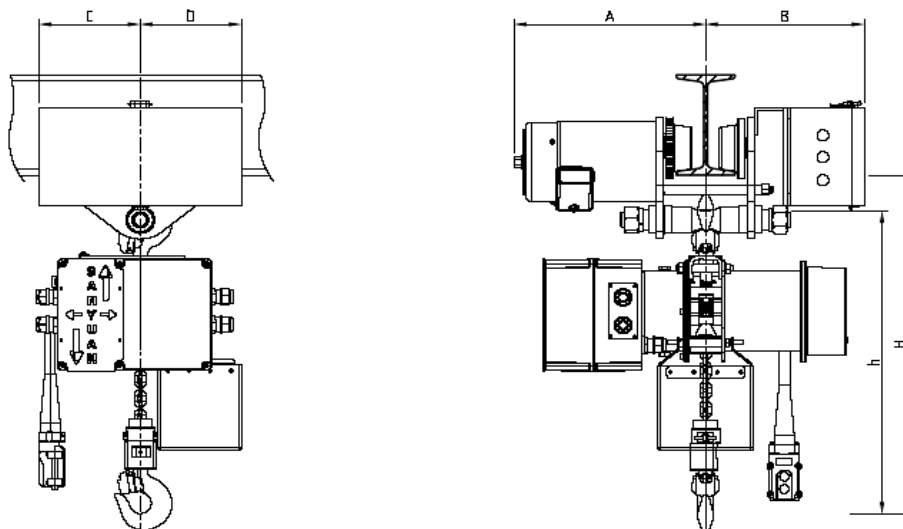
- ◆ The need to move quickly with the displacement and at the same time the need for sophisticated group with the Legislative Assembly, and so on.
- ◆ Mold removal and position
- ◆ Removal of the items are broken
- ◆ Precision instruments and transportation equipment



**Also known as a safety clutch installed in the power transmission.**

A gear clipped in the spring composite friction surface, and nut can be adjust the spring force to limit the size of its drive torque, when the overload torque exceeds the set value, the torque limiter will have a separation, in order to effectively protect the driven machinery and prevent **over-load or over-winding**.

# CSV Steeples Speed Control



Type	Hoist Only	1/2CSVL	1/2CSVH	1CSVL
	Hoist + Trolley	1/2CSVL-MTC	1/2CSVH-MTC	1CSVL-MTC
Rated Capacity (Ton)		0.5	0.5	1
Hoist Speed (M/min)	50HZ	12 ~ 0.8	5.9 ~ 0.38	3.8 ~ 0.38
	60HZ	14 ~ 0.9	7.1 ~ 0.46	4.6 ~ 0.46
Hoist Motor (Kw)	50HZ	0.4		
	60HZ	0.5		
Trolley Speed (M/min)	50HZ	12.2 / 10.2		
	60HZ	14.6 / 4.9		
Chain Dia X No. Of Falls		Φ6.3 X 1	Φ6.3 X 1	Φ7.1 X 1
Min. Rad. Curvature (m)		1.5		
I Beam (mm)		75~125		
Approx. Dimensions (mm)	A	360		
	B	275		
	C	200		
	D	200		
	h	390	390	405
	Standard H	445	445	445
	Low Lift H	400		
N.W. (Kg)	Hoist	46 (49)		
	Hoist + Trolley	88 (92)		

★ NOTE: (H) IN QUOTES MEANS LIFT MEASURE.

## Double Brake System

- ✓ **Mechanical safety brake**
- ✓ **Electromagnetic power off safe brake**

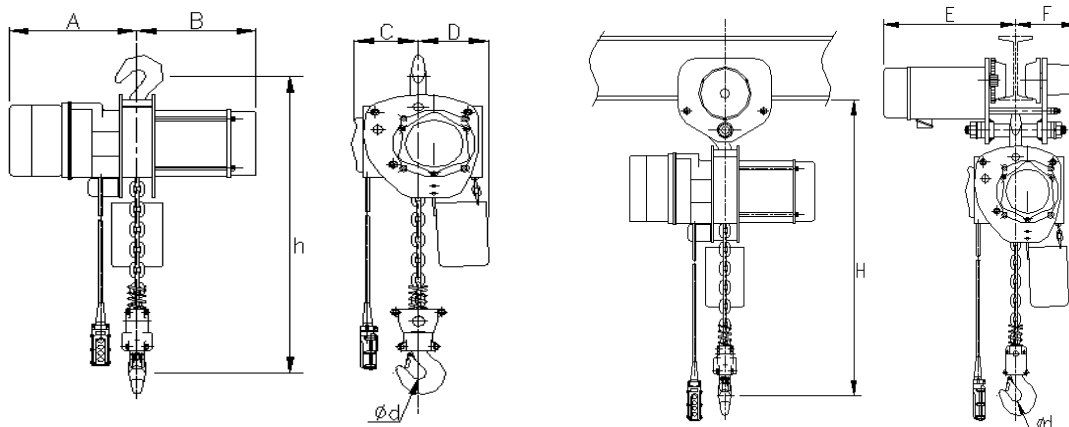
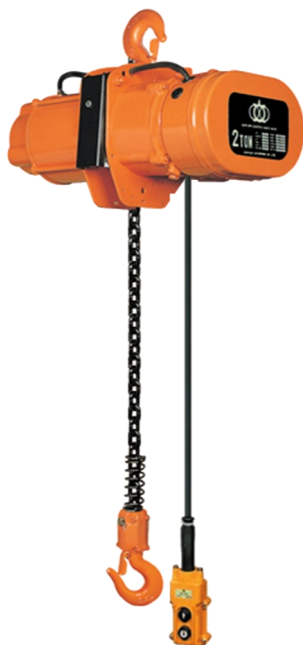
- ◆ 2~7.5 Ton Rated Capacity
- ◆ Test load > 125% Capacity
- ◆ Dual brake system = Mechanical load brake + Fail-safe DC brake.
- ◆ Torque of each brake > 125% rated torque of motor.
- ◆ Motors are available with various voltages.
- ◆ Helical Gearing used where practical to provide quiet operation.
- ◆ Chain sprocket is heat-treated and ground to a high tolerance ensures smooth lifting.
- ◆ Lower Hook is heat-treated and equipped with safety latch and 360 degree swiveling.
- ◆ Push button is rain-proof plastic for severe impact and corrosive atmosphere resistance and mechanically interlocked.



**Mechanical brake braking force > 150% rated transmission torque**



# CV Powerful Single Speed Type



Type	Hoist Only	2CV	3CV	5CV	7.5CV
	Hoist + Trolley	2CV-MT	3CV-MT	5CV-MT	7.5CV-MT
Rated Capacity (Ton)		2	3	5	7.5
Hoist Speed (M/min)	50Hz	6.7	5.6	2.8	1.8
	60Hz	8	6.7	3.3	2.2
Hoist Motor (Kw)	50Hz	2.5			
	60Hz	3.75			
Trolley Speed (M/min)	50Hz	15	15	15	10
	60Hz	18	18	18	12
Chain Dia X No. Of Falls		Φ10 X 1	Φ10 X 1	Φ10 X 2	Φ10 X 3
Min. Rad. Curvature (m)		1.5		1.8	2.5
I Beam (mm)		100~150		125~175	
Approx. Dimensions (mm)	A	320			
	B	350			
	C	180	180	180	320
	D	200	200	245	300
	h	620	700	820	1000
	Ød	45	58	60	100
	H	690	780	900	1070
	E	325	330	350	-
	F	225	227	238	-
N.W. (Kg)	Hoist	80 (87)	84 (91)	117 (130)	140 (160)
	Hoist + Trolley	112 (119)	124 (131)	180 (193)	210 (230)

★ NOTE: (H) IN QUOTES MEANS LIFT MEASURE.

# Single Phase Voltage

# 110 / 220V

## Electric Chain Hoist

### Alloy steel chain for electric cranes made in Japan

The fracture safety factor is more than 5 times.

Guaranteed surface hardness HV500, test load 130%

Hook with thrust bearing, 360 degree rotation under load

Chain end stopper material FCD70,

The fracture safety factor is more than 5 times.



Type : CA500

Rated Capacity : 500KG

Hoist Speed : 6 M / min

Chain Length : 3M

N.W. : 19KG

#### Standard Equipment

- ◆ Plug-in power cord
- ◆ Chain bag
- ◆ Quick release overhang button with emergency stop button

# Hand Trolley

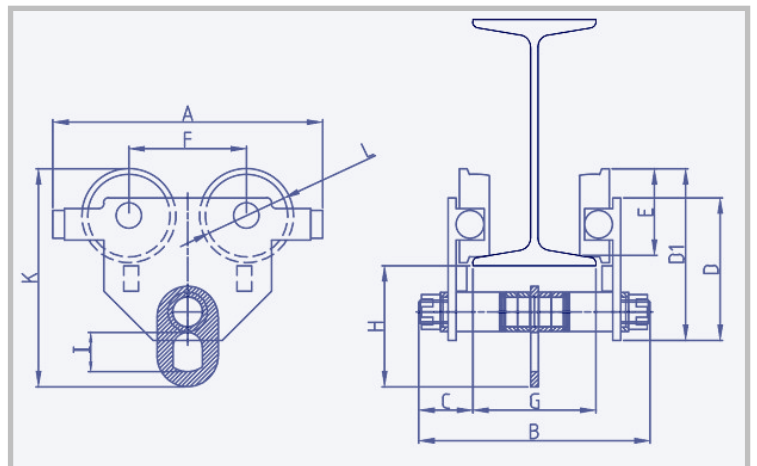
Rated Capacity

1000 Kg

500 Kg

I Beam

64-136mm



Type	Rated Capacity (Kg)	Approx. Dimensions (mm)													
		A	B	C	D	D1	E	F	G	H	I	J	K	L	N.W. (Kg)
PT-05	500Kg	226	245	48	125	148	65	99	64-136	112	32	25	187	56	6
PT-1	1000Kg	274	235	55	145	175	88	119	64-136	123	40	30	221	84	10





# SAN YUAN CHAIN HOIST CORP.

## Network

SAN YUAN meets customers' needs through the total network which can supply speedy design, production, sales, service and engineering for industrial equipment and systems. For further information, please contact your nearest sales representative.

Information in this brochure is subject to change without notice.

2020.01.18