


By the utilization of state-of-the-art technology, we realize highly developed safety and improved operation of our loading system.

## Introduction of Products

### Hoists

**UM Type New**  
(5t-10t)

For medium frequency use  
UM Type series has been developed based on the next generation concept.  
UM Type series has Mitsubishi original inverter specially developed for hoist.  
Overload prevention function Electronic limit switches Light load high speed operation function Operation history function are standard.  
It has been designed for optimizing price and performance.



**S Type**  
(1/2-60t)

For high frequency use  
S Type series is heavy-duty type hoists for applications involving high frequency operations. Its hoisting speed and the duty class is the highest available. For more safety, a microprocessor control circuit which auto-matically prevents overloading is installed.



**M Type**  
(5t-10t)

For medium frequency use  
M Type series has been developed based on the next generation concept. It is has been designed for optimizing price and performance.



**R Type**  
(1-2.8(3)t)

For medium frequency use  
R Type series is structurally simple and economical with real capability. It is provided with one class higher capability and both power and worthy of its real capability and economical efficiency.




**Gear Motor for Crane Saddle(SGM)**  
(0.4kw-3.7kw)

<SGM-A> is easy handling gear motor for crane saddle.  
There are two speed types of output axis rotation. (Low speed and High speed)  
It allows customers to choose the most suitable type of gear motor.



**U2, HU2 Type**  
(1/2-60t)

For high frequency use  
Mitsubishi original inverter specially developed for hoist has realized the miniaturization and versatility. Functions, which detect the hook position and change to higher hoisting speed when zero load is detected, offer high level of operation efficiency.



**UR Type**  
(1-2.8(3)t)

For medium frequency use  
UR Type series has been developed produced by utilizing the power electronics technology accumulated by MITSUBISHI ELECTRIC and has new variable speed type.  
IT is popular for excellent operation.



**U-X · S-X Type**  
(1/2-60t)

Inverter Explosion-Proof Type (U-X Type) ※ Only 200V class is available  
U-X Type series is the first Inverter Explosion-Proof Type in the industry.  
Hoists used in places where explosive gas or steam exist must pass the Explosion-Protection Examination.  
Explosive grade d2 and Ignition degree 4 grade are available.



### Crane Related Equipment

**Saddle for Crane (~20t×27m)**

<ST-D · MT> Top-Running Crane Saddle and <SP-D · MP> Suspension Crane Saddle are available. A traveling device that adopts Channel frame makes the installation to the main beam easy. (ST-D, SP-D)

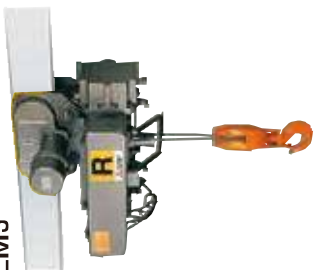
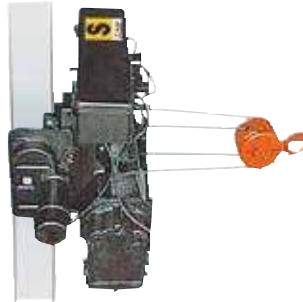
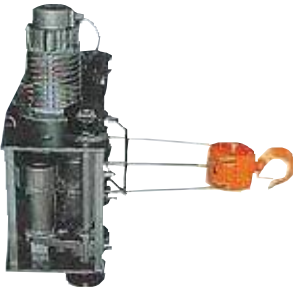
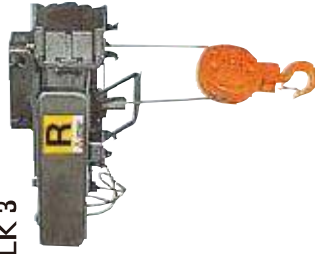
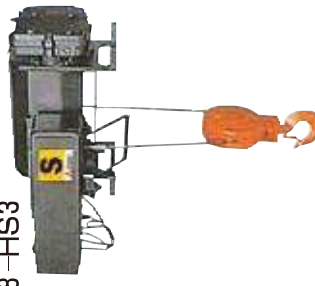


**Other Crane Related Equipments**

<TIB> Inverter control box for saddle motor  
<LCV-B> Over load detection device (Electric)  
<ICM> Over load detection device (Mechanical)  
※ A ICM is sold with a hoist. A ICM is not sold as single item.



## Hoist Type (Shapes)

Monorail Type	Low-head Type	Double rail Type
<p><b>R-2-LM3</b></p> <p>Motor Operated Traversing Hoist This hoist travels in parallel to the traverse rail by motor driven trolley. (This type of hoist is the most widely used)</p> 	<p><b>S-2-LD2</b></p> <p>Motor Operated Traversing Hoist When this type of hoist performs hoisting to the upper limit, the distance between the bottom surface of the rail and the center of the hook becomes very short. This type is very useful for use in a place with a small height of ceiling.</p> 	<p><b>S-2.8-LR3A</b></p> <p>Motor Operated Traversing Hoist This hoist travels on the 2 rails of the hoist type overhead crane in the traverse direction. (Since its stability is extremely high, in particular, this type is often used for a large capacity.)</p> 
Suspended Type	Frame mounted Type	
<p><b>R-2-LK3</b></p> <p>This hoist is fixed at the ceiling and used only for lifting and lowering cargo.</p> 	<p><b>S-2.8-HS3</b></p> <p>This hoist is fixed on the pedestal and used only for lifting and lowering cargo. (This hoist is usually used for the same application as suspended type as well as the substitution for a winch.)</p> 	



### Traverse brake

Disc type DC brake  
The brake torque can be adjusted.

### Tie Bolts

Secured by a grooved nut and split pin.

### Electromagnetic brake

Not exceeding 5t: Disc braked with auto-adjustment device. More than 7.5t: Disc brake that allows to adjust a gap easily.

### Control box

The cover can be opened and closed by one-touch operation.

### ● Safety monitor(OLM PCB)

•OLM PCB has safety functions which are overload alarm function etc.  
•7-segment LED indicator ease various settings and history check.  
(Please refer [safety function] section about other functions.)



### Cable for push button switch

Vibration-proof cable  
(With a built-in protective wire)

### Push button switch

Plastic case

### Traverse deceleration section

Grease lubrication, simple 2-step deceleration, and totally enclosed structure.

### Traverse Motor

Squirrel-cage type with Class B insulation.

### Hoisting deceleration section

Oil lubrication  
1/2t~3t: simple 2-step deceleration.  
5t: Simple 3-step deceleration.  
7.5t or more: Planet 2-step deceleration.

### Drum-Casing

Built of rugged steel plate.

### Hoisting limit switch

2-step hoisting limit switch  
(Avoid using this switch for regular use.)

### Wire rope

Parallel stranded rope is used. The rope end is clamped by pressure welding. (Not exceeding φ 14)

### Hook block

Hook with an all-surface cover and a hook latch

### Safety devices

※Optional equipment:  
Over loading monitor (O.L.M) device,  
Emergency brake  
1t~60t optional equipment

### Safety Function

#### ●Over loading monitor

•Overload is electrically detected.(at only hoisting operation)  
•The buzzer is factory-set to activate at a 125% load.  
※:However,the buzzer activate at 100% or lower loads in certain environments, based on the power voltage etc.It is not trouble, please make the adjustment to turn the volume.

#### ●Number of starts ·Operating hours display

•Checking the suage conditions which are from the point of purchase. Having erasable operating hours and number of starts counter. The time to change the consumptive parts is visible, and contribute to preventive maintenance.

#### ● Failure history display

•Checking a monitor if a hoist stops operation, it contributes to identify the reason for the failure.

S type offers the best lifting speed, power and durability in this class.

Specifications		Hoisting				Traversing										
		Wire rope		Motor		Mono-rail · Low-head		Double-rail								
		Capacity(t)	Lift(m)	Speed m/s (m/min)	Output (kW)	Rated Current (A)	Poles	Speed m/s (m/min)	Output (kW)	Rated Current (A)	Poles					
Type	1/2	High	6	50 Hz	1.0	6.9	6.5	50 Hz	60	50	60	50 Hz	60	50 Hz	60	
		Low		φ 6.3	φ 4	0.183 (11)	2.0	12.6	12.4	50 Hz	50	50	50 Hz	50	50 Hz	50
1	2	High	6	50 Hz	2.9	3.5	17.5	18.5	50 Hz	0.22	0.26	1.6	1.5	50 Hz	60	60
		Low		φ 8	φ 6.3	0.14 (8.4)	4.1	4.9	25.5	27.5	0.35 (21)	0.417 (25)	4	0.35 (21)	0.417 (25)	4
2.8	3	High	12	50 Hz	4.4	5.3	27	28.5	50 Hz	0.85	1.0	4.8	4.7	50 Hz	60	60
		Low		φ 10	φ 9	0.112 (6.7)	6.2	7.5	31	35.5	0.85	1.0	4.8	4.7	50 Hz	60
5	7.5	High	8	50 Hz	10	12	51	55	50 Hz	1.5	1.8	8.5	8.1	50 Hz	60	60
		Low		φ 12.5	φ 11	0.0867 (5.8)	8.3	10	37	44	0.25 (12)	0.25 (15)	4	0.25 (12)	0.25 (15)	4
10	15	High	8	50 Hz	17	20	77	84	50 Hz	1.5	1.8	8.5	8.1	50 Hz	60	60
		Low		φ 16	φ 14	0.07 (4.2)	17	20	77	84	1.5	1.8	8.5	8.1	50 Hz	60
20	30	High	6	50 Hz	0.07 (4.2)	0.0833 (5)	75	83	50 Hz	1.5	1.8	8.5	8.1	50 Hz	60	60
		Low		φ 22.4	φ 20	0.0467 (2.8)	17	20	77	84	1.5	1.8	8.5	8.1	50 Hz	60
40	45	High	6	50 Hz	0.035 (2.1)	0.0417 (2.5)	75	83	50 Hz	1.5	1.8	8.5	8.1	50 Hz	60	60
		Low		φ 25	φ 22.4	0.03 (1.8)	17	20	77	84	1.5	1.8	8.5	8.1	50 Hz	60
60	※2	High	6	50 Hz	0.03 (1.8)	0.03 (1.8)	77	84	50 Hz	1.5	1.8	8.5	8.1	50 Hz	60	60
		Low		φ 19	φ 16	0.005 (0.3)	17	20	77	84	1.5	1.8	8.5	8.1	50 Hz	60

※1: 40t has 8falls and 45t has 6falls.(Regarding 60t, please inquire separately)

※2: Please contact us for 60t separately

※3: Rope specification of 11falls is 6×FI(29)

●Power supply.....3-phase 200V 50/60Hz control 200V, 220V 60Hz control 220V (400V class is also available).....3-phase 400V 50/60Hz control 200V, 440V 60Hz control 220V 3-phase 380V 50Hz control 48V (100V and 24V are also available)

●Operating method..... Push button switch operations

Speed m/s (m/min)	Output (kW)	Rated Current (A)	Poles
1/2~3t	2 Points	UD	5~45t
Suspended type	UD	ON OFF U D	4 Points
Frame mounted type	UD	ON OFF U D	8 Points
Motor operated traversing hoist	U D E W S N	ON OFF U D E W S N	ON OFF U D E W S N

### Standard specifications

●Rating...30 min.(JIS C 9620)

●Power supply system...Both trolley feeding and cable feeding are available. However, neither trolley nor cable is attached.

●Enclosure...Simplified out door type (JIS C0920, equivalent to IP44)

●Applicable standard...JIS C 9620 electric hoist/crane structure standard

●Color coating... Main body: Metallic gray(Equivalent to Munsell N4.0)  
Hook block: Munsell 7.5YR7/14

Pushbutton: Equivalent to Munsell 7.5YR7/13

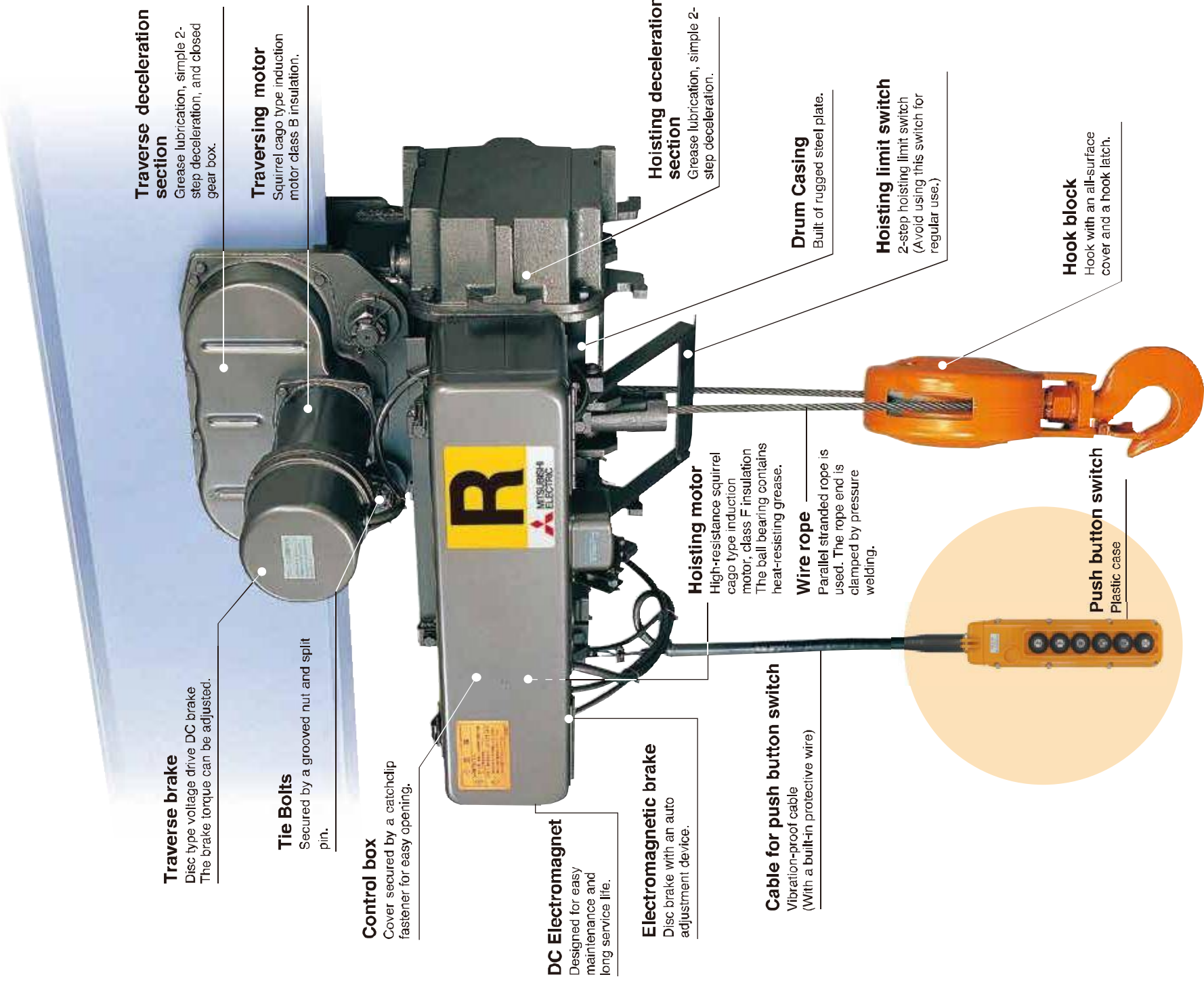
●Ambient air temperature...-10°C to 40°C (Non condensation)

●Ambient air humidity...90% or less(Non condensing)

# R Type Series

Regular type Utilitarian type 1t~2.8(3)t

R type copes with both one-class higher capability and economical efficiency.



Specifications		Wire rope		Hoisting			Traversing																			
		Monorail type	Double rail type Low head type	Speed m/s (m/min)	Output (kW)	Rated Current (A)	Poles	Speed m/s (m/min)	Output (kW)	Rated Current (A)	Poles															
Capacity(t)	High	2 falls	4 falls	50 Hz	50 Hz	60 Hz	60 Hz	50 Hz	50 Hz	60 Hz	60 Hz	Motor	Output (kW)	Rated Current (A)	Poles											
	Low	2 falls	4 falls	50 Hz	50 Hz	60 Hz	60 Hz	50 Hz	50 Hz	60 Hz	60 Hz					Motor	Output (kW)	Rated Current (A)	Poles							
Type	Lift(m)	Rope specification	6×W(19) B class JIS-G3525	0.112 (6.7)	0.133 (8)	1.2	1.4	7.4	7.9	0.35 (21)	0.47 (25)	4	0.35 (21)	0.47 (25)	0.5					0.6	3.2	3.1	4	0.35 (21)	0.47 (25)	0.5
				1	2	6	12	2.8	3	2.2	2.6					13.1	13.2	3	3.6							

∴1 Rope specification of 1t 2falls is 6×F(29)  
Note 1: High lift models (Low-head type 1~2.8t, Double rail type 2.8t) are not available.

● **Power supply**...3-phase 200V 50/60Hz control 200V, 220V 60Hz control 220V (400V class is also available) ...3-Phase 400V 50/60Hz control 200V, 440V 60Hz control 220V  
3-Phase 380V 50Hz control 48V (100V and 24V are also available)

● **Operating method**...Push button switch operations.

Suspended type	1/2~3t
Frame mounted type	2 Points U D
Motor operated traversing hoist	6 Points U D E W S N

## Standard specifications

- **Rating**...30 min. (JIS C 9620)
- **Power supply system**...Both trolley feeding and cable feeding are available. However, neither trolley nor cable is attached.
- **Enclosure**...Simplified outdoor type (JISC 0920, Equivalent to IP44)  
(Rainproof cover is required, when it is used in the open air.)
- **Applicable standard**...JIS C 9620 electric hoist/crane structure standard
- **Color coating**...Main body: Metallic gray (Equivalent to MunsellIN4.0)  
Hook block: Munsell 7.5YR7/14  
Pushbutton: Equivalent to Munsell 7.5YR7/14
- **Ambient air temperature**...-10°C to 40°C (Non condensation)
- **Ambient relative humidity**...90% or less (Non condensing)  
Note: These hoists cannot be used for lift (elevator for passengers.)