71575-07
JUL.2017

ACCOLIFT®

ELECTRIC CHAIN HOIST

INSTRUCTION MANUAL

for

Installation / Operation / Maintenance / Parts

SERIAL NUMBER _____

⚠WARNING

This equipment should not be installed, operated or maintained by any person who has not read all the contents of these instructions. Failure to read and comply with these instructions or any one of the limitations noted herein can result in serious bodily injury or death, and/or property damage.

There are no other warranties which extend beyond the description on the Order Acknowledgement and as it may apply to the specifications provided in this publication. The IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE EXCLUDED. Acco shall in no event be liable for any special, direct, indirect, incidental or consequential damages to anyone beyond the cost of replacement of the goods sold hereby.

ACCOLIFT®

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NOTICE

TO ORDER PARTS: Provide part number, part description, quantity required, and Product Number or Serial Number of Hoist.

SAFETY ALERT SYMBOL 

The Safety Alert Symbol is used in this manual to indicate hazards and to alert the reader to information that should be known, understood, and followed in order to avoid DEATH or SERIOUS INJURY.

Read and understand this manual before using the hoist.

Important issues to remember during operation are provided at the hoist control stations, at various locations on the hoist and in this manual by DANGER, WARNING, or CAUTION instructions or placards, that alert personnel to potential hazards, proper operation, load limitations, and more.

⚠DANGER Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

⚠WARNING Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

⚠CAUTION Indicates a potentially hazardous situation which, if not avoided,may result in minor or moderate injury. It may also be used to alert against unsafe practices.

⚠CAUTION

These general instructions deal with the normal installation, operation, and maintenance situations encountered with the equipment described herein. The instructions should not be interpreted to anticipate every possible contingency or to anticipate the final system, crane, or configuration that uses this equipment.

This manual includes instructions and parts information for a variety of hoist types. Therefore, all instructions and parts information may not apply to any one type or size of specific hoist. Disregard those portions of the instructions that do not apply.

Record hoist serial number on the front cover of this manual for identification and future reference to avoid referring to the wrong manual for information or instructions on installation, operation, maintenance, or parts.

Use only the authorized replacement parts in the service and maintenance of this hoist.

⚠WARNING

Equipment described herein is not designed for and should not be used for lifting, supporting, or transporting humans.

Equipment described herein should not be used in conjunction with other equipment unless necessary and/or required safety devices applicable to the system or application are installed by the system designer, system manufacturer, crane manufacturer, installer, or user.

Modifications to upgrade, rerate, or otherwise alter this equipment shall be authorized only by the original equipment manufacturer or qualified professional engineer.

Equipment described herein may be used in the design and manufacture of cranes or monorails. Additional equipment or devices may be required for the crane or monorail to comply with applicable crane design and safety standards. The crane designer, crane manufacturer, or user is responsible to furnish these additional items for compliance. Refer to ASME B30.17, Safety Standard for Cranes and Monorails (with Underhung Trolley or Bridge);and ASME B30.2 Safety Standard for Top-Running Double Girder Cranes. If a below-the-hook lifting device or sling is used with a hoist, refer to ASME B30.9, Safety Standard for Slings, or ASME B30.20, Safety Standard for Below-the-Hook Lifting Device.

Hoists and Cranes, used to handle molten material may require additional equipment or devices. Refer to ANSI Z241.2, Safety Requirements for Melting and Pouring of Metals in the Metalcasting Industry

Electrical equipment described herein is designed and built in compliance with ACCO Material Handling Solutions interpretation of ANSI/NFPA 70, National Electrical Code. The system designer, system manufacturer, crane designer, crane manufacturer, installer, or user is responsible to assure that the installation and associated wiring of these electrical components is in compliance with ANSI/NFPA 70, and all applicable Federal, State, and Local Codes.

Failure to read and comply with any one of the limitations noted herein can result in serious bodily injury or death, and/or property damage.

⚠DANGER

HAZARDOUS VOLTAGES ARE PRESENT IN THE CONTROL BOX, OTHER ELECTRICAL COMPONENTS, AND CONNECTIONS BETWEEN THESE COMPONENTS

Before performing ANY mechanical or electrical maintenance on the equipment, de-energize (disconnect) the main switch supplying power to the equipment; and lock and tag the main switch in the de-energized position. Refer to ANSI Z244.1, Personnel Protection - Lockout/Tagout of Energy Sources.

⚠DANGER

Do not operate the equipment without control enclosure cover or covers in place.

Only trained and competent personnel should inspect and repair this equipment

NOTICE

It is the responsibility of the owner/user to install, inspect, test, maintain, and operate a hoist in accordance with ASME B30.16, Safety standard for Overhead Hoists, OSHA Regulations, and ANSI/NFPA 70, National Electric Code. If the hoist is installed as part of a total lifting system, such as an overhead crane or monorail, it is also the responsibility of the owner/user to comply with the applicable ASME B30 volume that addresses that type of equipment.

It is the responsibility of the owner/user to have all personnel that will install, inspect, test, maintain, and operate a hoist read the contents of this manual and applicable portions of ASME B30.16, Safety Standard for Overhead Hoists, OSHA Regulations, and ANSI/NFPA 70, National Electrical Code. If the hoist is installed as part of a total lifting system, such as an overhead crane, the applicable ASME B30 volume that addresses that type of equipment must also be read by all personnel.

Any ANSI Standards referenced in this manual may be obtained from the American National Standards Institute, 1430 Broadway, New York, New York 10018.

This manual contains information for safe operation of an overhead hoist. Taking percedence over any specific rule, however, is the most important rule of all - " USE COMMON SENSE." Operation of an overhead hoist involves more than operating the controls. The operator must consider and anticipate the motions and actions that will occur as a result of operating the controls.

If the hoist owner/user requires additional information, or if any information in the manual is not clear, contact Acco Material Handling Solutions York, Pennsylvania or the distributor of the hoist. Do not install, inspect, test, maintain, or operate this hoist unless this information is fully understood.

When contacting Acco Material Handling Solutions or the distributor of the hoist, always make reference to the serial number of the hoist.

A regular schedule of inspection of the hoist in accordance with the requirements of ASME B30.16 should be established and records maintained.

⚠WARNING

Before installing, removing, inspecting, or performing any maintenance on a hoist, the main switch shall be de-energized. Lock and tag the main switch in the de-energized position in accordance with ANSI Z244.1. Follow other maintenance procedures outlined in this manual and applicable ASME B30 volumes.

Additional WARNINGS are listed in various portions of this manual. Personnel shall read and follow these WARNINGS. Failure to read and comply with these WARNINGS as well as other instructions or any limitations noted in this manual and applicable ASME B30 volumes could result in serious bodily injury or death, and/or property damage.

1. Features

ACCOLIFT® heavy-duty hoists feature faster speeds and higher capacities than conventional hoists. Workers in automotive plants, heavy equipment manufacturing, paper mills, and related rugged working environments will experience dependability and versatility. Careful consideration has been given to optimize performance.

All hoists are equipped with quality parts and mechanisms to provide proper lifting and traversing of the load. Components undergo numerous tests and inspections, while our production processes meet stringent quality requirements.

Dual Brake System.....by electro-magnetic brake
Overload Alert Sound Limiter.....with "beep" sound when overloaded.
Double Action Over-winding Limiter.....preventing over-lifting or lowering of chain
Push Button Pendant Control Switch.....with emergency stop button

1.1. Mechanism group

ACCOLIFT® Electric Chain Hoists are allocated to mechanism groups in accordance with the following regulations. Under the allowance of the following mechanism groups, the hoist should be operated and should not exceed the nominal values. On each identification plate, the following is indicated.

Hook suspension chain hoist: FEM9.511 (Hoist = FEM 2m 40% ED)
Motor trolley mounted series: FEM9.511 (Hoist / Trolley = FEM 2m / 2m 40/40% ED)

*** FEM Mechanism Group 9.511 (Rules for Design of Serial Lifting Equipment : Classification of Mechanism)**

Mechanism group	1 Bm	1 Am	2 m	3 m	4 m	5 m
Load group	Average operating period per day (h)					
Light k 0.50	2	2-4	4-8	8-16	16	-
Medium 0.50 k 0.63	1	1-2	2-4	4-8	8-16	16
Heavy 0.63 k 0.80	0.5	0.5-1	1-2	2-4	4-8	8-16
Very Heavy 0.80 k 1.00	0.25	0.5	0.5-1	1-2	2-4	4-8

NOTICE

ACCOLIFT® electric chain hoists should be operated under the allowance of the above FEM determination. The above mechanism group is valid for the entire period of operation, and for reasons of operational safety, hoists shall not be operated outside these recommendations.

1.2. Working environment data

Ambient temperature: from -4F to 104F
Protection class: IP54 and IP55
Side pulling angle: max. 3 degrees
Sound level: 80dB (A)

⚠WARNING

ACCOLIFT® electric chain hoists are designed for indoor use. For outdoor use, the hoist shall be located under roof to assure rainproof operation. The operator SHALL

- ▶ NOT expose the hoist to rain or condensation
- ▶ NOT store the hoist in a humid place.
- ▶ COVER the hoist or MOVE it back under roof after use, when it is used outdoors.
- ▶ HANG the hoist on a suitable beam or crane or from the ceiling.

⚠ CAUTION

If the above normal operation conditions are exceeded, or the electric hoist is operated often under adverse conditions, the information in the operating instructions must be adapted accordingly. In this case the manufacturer is to be consulted.

1.3. Hook Suspension Series, Single Speed / Dual Speed

Specifications

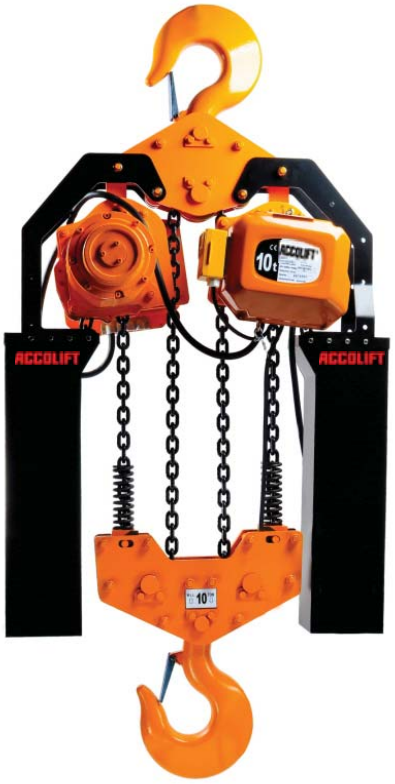
MODEL	SINGLE SPEED	2130020	2130030	2130040	2130050	2130060	2130060	2130065	2130070	2130075	2130080	2130085	2130090
	DUAL SPEED	NA	-VFD	NA	-VFD	-VFD	-VFD-230-1	-VFD	-VFD	-VFD	-VFD	-VFD	-VFD
Capacity(W.L.L) ton		1		2		3			5	7.5	10	15	20
Standard lift ft		20											
Pushbutton cord lengh ft		18											
Lifting speed fpm	SINGLE SPEED	17	27	13	27	17	NA	21	11	7	11	7	5.5
	DUAL SPEED	NA	21/7	NA	21/7	15/5	15/5	21/7	11/4	7/3	11/4	7/3	6/3
Lifting motor V		208-230/460	208-230/460	208-230/460	208-230/460	208-230/460	230	208-230/460	208-230/460	208-230/460	208-230/460	208-230/460	208-230/460
KW(HP)		1.8(2.4)		1.8(2.4)	3.5(4.7)	3.5(4.7)	3.5(4.7)	3.5(4.7)	3.5(4.7)	3.5(4.7)	3.5(4.7)X2	3.5(4.7)X2	3.5(4.7)X2
Load chain dia(inch)xChain fall lines		0.280"x1		0.280"x2	0.441"x1	0.370"x2	0.370"x2	0.441"x1	0.441"x2	0.441"x3	0.441"x4	0.441"x6	0.441"x8
Net weight lbs		165		198	282	337	337	286	384	536	964	1786	2030
Weight for additional 1 foot lift lbs		0.67		1.34	1.81	2.69	2.69	1.81	3.63	5.44	7.26	21.45	28.45

W.L.L.(working load limit): All units tested at 125% of the rated capacity.
Longer lifts affect the chain container size. Please contact the factory or the authorized distributor.

<Model no. 2130020>

<Model no. 2130070>

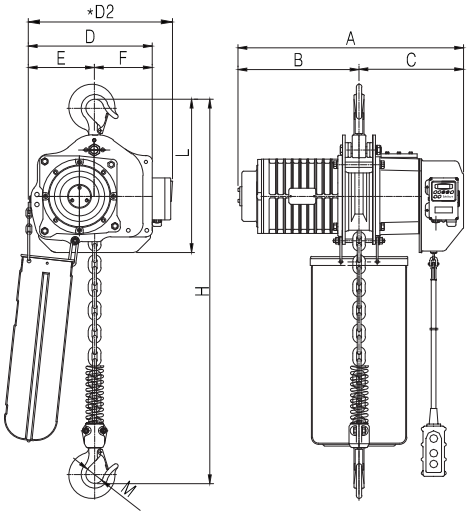
<Model no. 2130080>



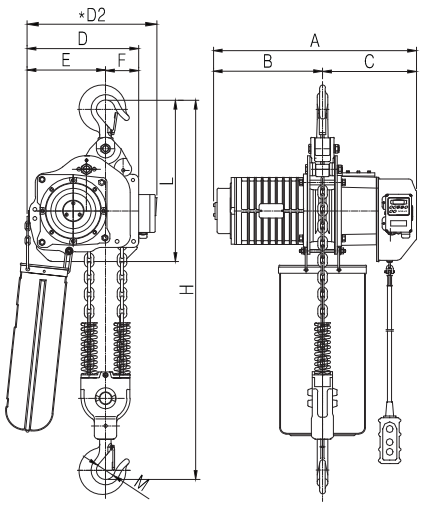
■Dimension (inch)

CODE	SINGLE SPEED	2130020	2130030	2130040	2130050	2130060	2130060	2130065	2130070	2130075	2130080	2130085	2130090
	DUAL SPEED	-VFD	-VFD	-VFD	-VFD	-VFD	-VFD-230-1	-VFD	-VFD	-VFD	-VFD	-VFD	-VFD
* H ; minimum heardroom * hook is produced by the hot forging process and has ±2%variation from nominal dimension	A	22.9		22.9	26.4	26.4	N/A	26.4	26.4	26.4	28.2	30	31.8
		24.9		24.9	27.6	27.6	27.6	27.6	27.6	27.6	28.2	32.4	34.2
	B	12.1		12.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1	15	15.9
												16.2	17.1
	C	10.8		10.8	12.3	12.3	N/A	12.3	12.3	12.3	14.1	15	15.9
		12.8		12.8	13.5	13.5	13.5	13.5	13.5	13.5	14.1	16.2	17.1
	D	14.2		14.2	16.8	16.8	16.8	16.8	16.8	21.2	40.6	45.4	45.4
	E	6.7		8.9	7.7	10.2	10.2	7.7	10.7	12.8	20.3	22.7	22.7
	F	7.5		5.3	9.1	6.6	6.6	9.1	6.1	8.4	20.3	22.7	22.7
	M	1.38		2.1	2.1	2.4	2.4	2.4	2.8	3.5	4.7	4.7	4.7
	H	20.4		30	30	36	36	30.4	41.7	57.7	57.4	70.4	70.4
	L	14.8		19.5	19	22	22	19.4	22.8	30.3	32.2	36.8	36.8

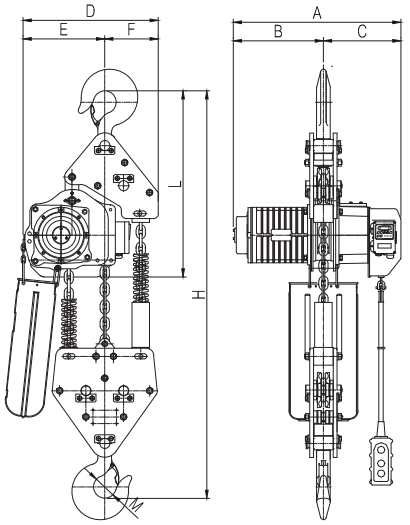
Single Chain-fall



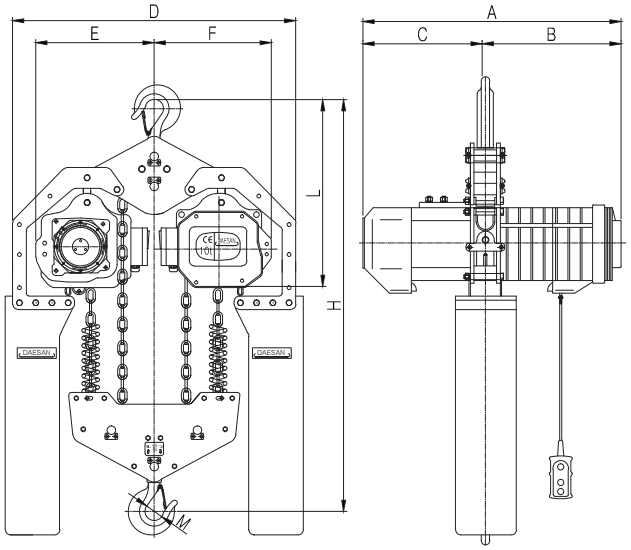
Double Chain-fall



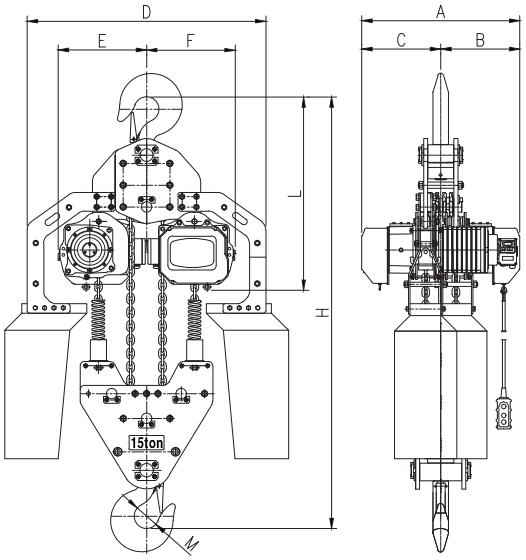
Three Chain-fall



Four Chain-fall



Six&Eight Chain-fall



1.4. Motor Trolley Mounted Series, Single Speed / Dual Speed

Specifications

MODEL		2130120	2130130	2130140	2130150	2130160	2130060	2130165	2130170	2130175	2130180	2130185	2130190
	DUAL SPEED	NA	-VFD	NA	-VFD	-VFD	-VFD-230-1	-VFD	-VFD	-VFD	-VFD	-VFD	-VFD
Capacity(W.L.L) ton		1		2		3			5	7.5	10	15	20
Standard lift ft		20											
Pushbutton cord lengh ft		18											
Lifting speed fpm	SINGLE SPEED	17	27	13	27	17	NA	21	11	7	11	7	5.5
	DUAL SPEED	NA	21/7	NA	21/7	15/5	15/5	21/7	11/4	7/3	11/4	7/3	6/3
Traversing speed fpm	SINGLE SPEED	36				33	NA	33				27	
	DUAL SPEED	NA	50/17	NA	50/17	50/17						40/13	
Lifting motor V		208-230/460	208-230/460	208-230/460	208-230/460	208-230/460	230	208-230/460	208-230/460	208-230/460	208-230/460	208-230/460	208-230/460
KW(HP)		1.8(2.4)		1.8(2.4)	3.5(4.7)	3.5(4.7)	3.5(4.7)	3.5(4.7)	3.5(4.7)	3.5(4.7)	3.5(4.7)X2	3.5(4.7)X2	3.5(4.7)X2
Traversing motor KW(HP)		0.4(0.54)				0.75(1.01)				0.75(1.01)x2			
Load chain dia(inch)xChain fall lines		0.280"x1		0.280"x2	0.441"x1	0.370"x2	0.370"x2	0.441"x1	0.441"x2	0.441"x3	0.441"x4	0.441"x6	0.441"x8
Net weight lbs	SINGLE SPEED	238		293	388	507	NA	449	589	1124	1503	2244	2398
	DUAL SPEED	NA	248	NA	398	517		459	599	1142	1528	2274	2428
I-beam flange width inch		3.25-12								5-12	3.25-12	5.9-12	6.5-12
I-beam min. curve radius inch		32				40			72	NA	NA	NA	NA
Weight for additional 1 foot lift lbs		0.67		1.34	1.81	2.69	2.69	1.81	3.63	5.44	7.26	10.88	14.52

W.L.L.(working load limit): All units tested at 125% of the rated capacity.

Longer lifts affect the chain container size. Please contact the factory or the authorized distributor.

<Model no. 2130120>

<Model no. 2130160>

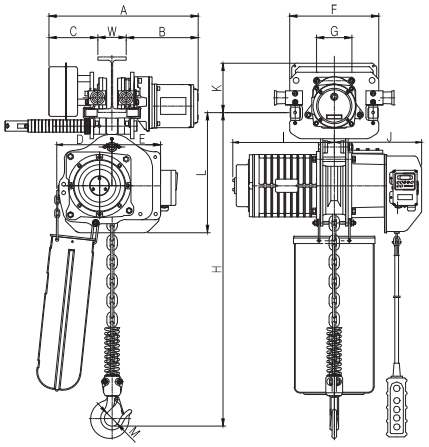
<Model no. 2130180>

■Dimension (inch)

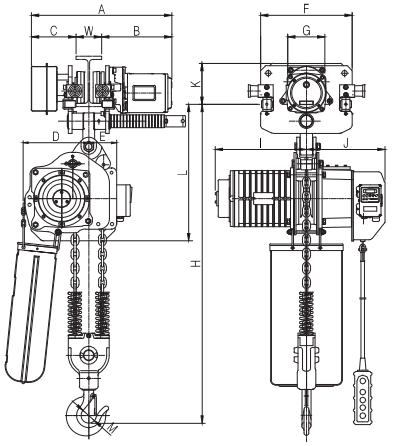
CODE	SINGLE SPEED	2130120	2130130	2130140	2130150	2130160	2130165	2130170	2130175	2130180	2130185	2130190
	DUAL SPEED	-VFD	-VFD	N/A	-VFD	-VFD	-VFD	-VFD	-VFD	-VFD	-VFD	-VFD
	A	16.6+W		16.9+W	16.9+W	17.8+W	17.8+W	18.4+W	18.2+W	18.4+W	20.3+W	20.3+W
		18.6+W		N/A	18.9+W	19.8+W	19.8+W	20.4+W	20.2+W	20.4+W	22.3+W	22.3+W
	B	9.9		10.1	10.1	10.9	10.9	11.2	11.1	11.2	12.7	12.7
	C	6.7		6.8	6.8	6.9	6.9	7.2	7.1	7.2	7.6	7.6
		8.7		N/A	8.8	8.9	8.9	9.2	9.1	9.2	9.6	9.6
	D	6.7		8.9	7.7	10.2	7.7	10.7	N/A	14.1	14.8	15.9
										14.1	16	17.1
calculated as below.	E	7.5		5.3	9.1	6.6	9.1	6.1	N/A	14.1	14.8	15.9
* B=1/2xwidth of										14.1	16	17.1
traversing rail	F	11.8		12.4	12.4	14.2	14.2	16.1	33.8	50.2	56.5	56.5
* 2B=2x1/2xwidth of	G	4.4		4.9	4.9	5.5	5.5	6.1	N/A	43.3	47.9	47.9
traversing rail	I	12.1		12.1	14.1	14.1	14.1	14.1	14.1	33.5	42.9	42.9
* H ; minimum headroom	J	10.8		10.8	12.3	12.3	12.3	12.3	12.3	N/A	N/A	N/A
* hook is produced by the		12.8		N/A	13.5	13.5	13.5	13.5	13.5			
hot forging process and	M	1.38		2.1	2.1	2.4	2.4	2.8	3.5	4.7	4.7	4.7
has ±2%variation from	H	21.5		29.3	28.2	36.2	30.3	41.7	50.1	48.8	59.0(70.7)	
nominal dimension	L	15.5		18.8	18.4	21.7	19.3	23.9	23.4	25.6	24.3(36)	

*( )Dimensions turning radius type

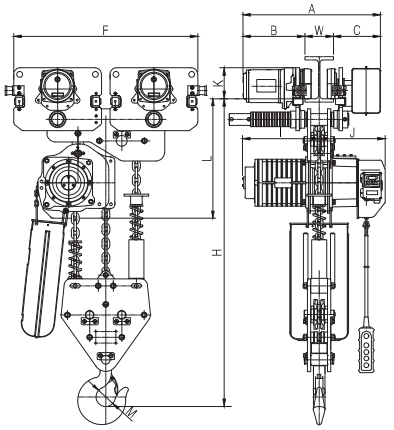
Single Chain-fall



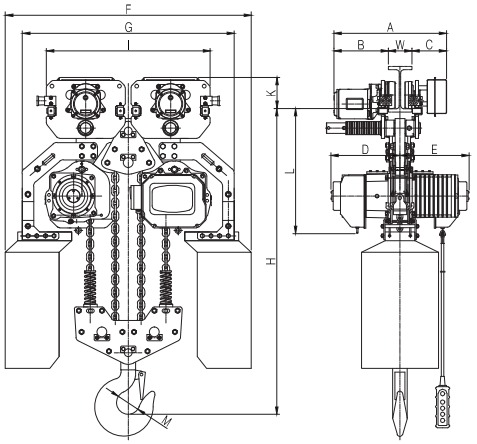
Double Chain-fall



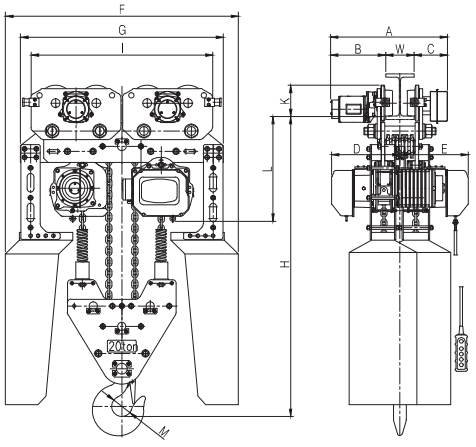
Three Chain-fall



Four Chain-fall



Six&Eight Chain-fall



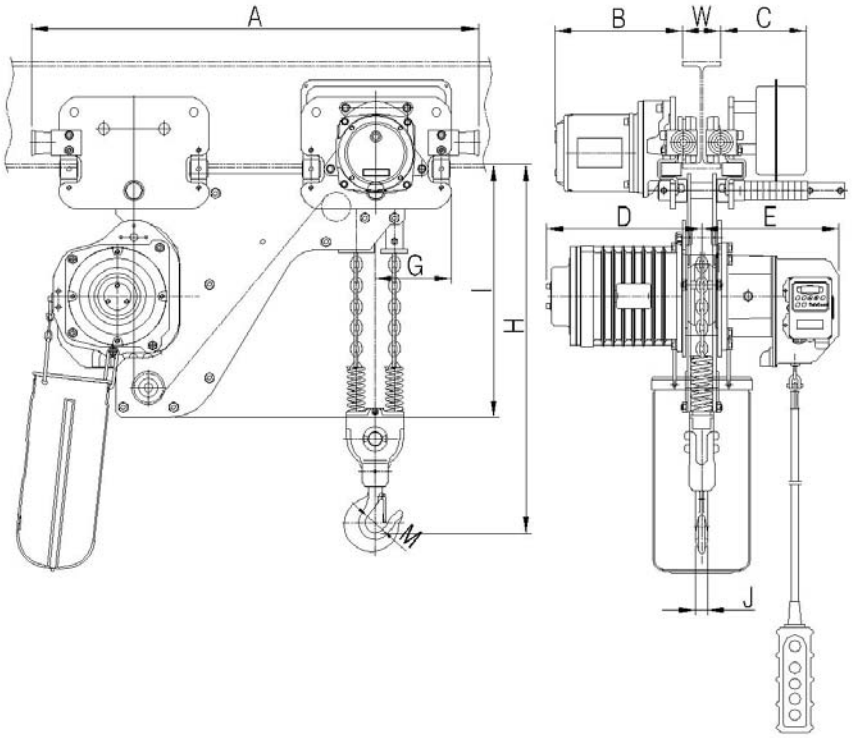
1.5.Low Headroom Chain Hoist

Specifications

MODEL	DUAL SPEED	2130160-VFD-L	2130170-VFD-L
Capacity	ton	3	5
Chain falls	no	2	2
Standard lift	ft	20	20
Push button cord	ft	18	18
Lifting speed	fpm	15/5	11/4
Traversing speed	fpm	65/22	65/22
Hoist motor output	kw(HP)	3.5(4.7)	3.5(4.7)
Trolley motor output	kw(HP)	0.75(1)	0.75(1)
Load chain (diaxpitch)	inch	0.37"x2	0.441"x2
I-beam applied width	inch	3.25-12"	3.25-12"
I-beam min. curve radius	inch	N/A	N/A
Weight	lbs	617	713

■Dimension (inch)

MODEL	DUAL SPEED	2130160-VFD-L	2130170-VFD-L
* The figure "B can be calculated as below. * B=1/2 x width of traversing rail * 2B=2 x 1/2 x width of traversing rail * H = minimum headroom * hook is produced by the hot forging process and has ±2%variation from nominal dimension	A	38.2	40.1
	B	10.9	11.2
	C	8.7	9.2
	D	14.1	14.1
	E	13.5	13.5
	G	7.5	8.2
	H	23.6	27.2
	I	22	22.2
	J	1.4	1.7
	M	2.4	2.8
	W	3.25-12	3.25-12



1.6. Lug Mount Plain Trolley Hoist

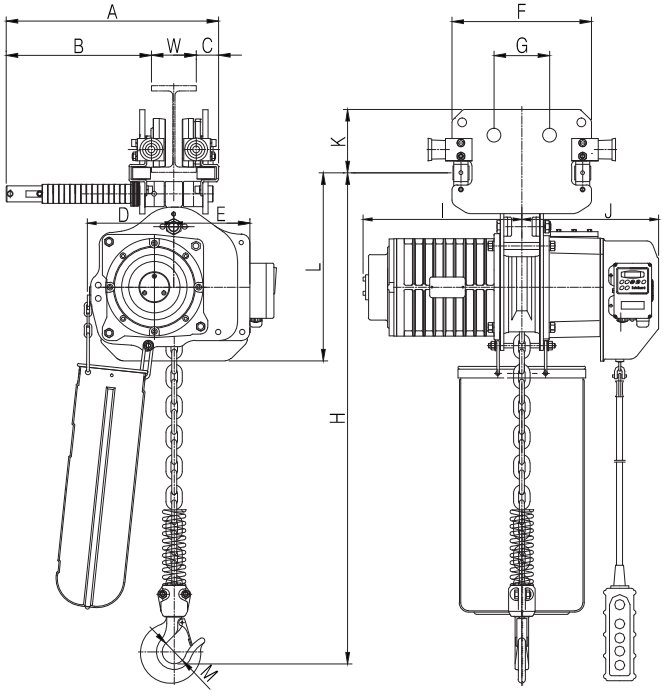
Specifications

MODEL	SINGLE SPEED	2130020-PT	2130030-PT	2130040-PT	2130050-PT	2130060-PT	2130060	2130065-PT	2130070-PT
	DUAL SPEED	NA	-VFD	NA	-VFD	-VFD	-VFD-230-1	-VFD	-VFD
Capacity(W.L.L) ton		1		2		3			5
Standard lift ft		20							
Pushbutton cord lengh ft		18							
Lifting speed fpm	SINGLE SPEED	17	27	13	27	17	NA	21	11
	DUAL SPEED	NA	21/7	NA	21/7	15/5	15/5	21/7	11/4
Traversing speed fpm		MANUAL							
Lifting motor V		208-230/460	208-230/460	208-230/460	208-230/460	208-230/460	230	208-230/460	208-230/460
KW(HP)		1.8(2.4)		1.8(2.4)	3.5(4.7)	3.5(4.7)	3.5(4.7)	3.5(4.7)	3.5(4.7)
Traversing motor KW(HP)		MANUAL							
Load chain dia(inch)xChain fall lines		0.280"x1		0.280"x2	0.441"x1	0.370"x2	0.370"x2	0.441"x1	0.441"x2
Net weight lbs	SINGLE SPEED	174		229	260	404	NA	293	523
	DUAL SPEED	NA	174	NA	260	404		293	523
I-beam flange width inch		3.25-12							
I-beam min. curve radius inch		32				40			72
Weight for additional 1 foot lift lbs		0.67		1.34	1.81	2.69	2.69	1.81	3.63

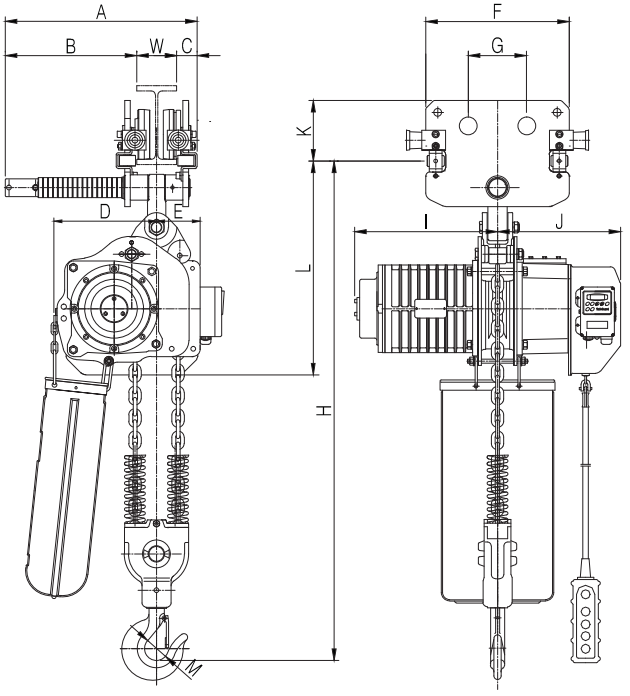
■Dimension (inch)

CODE	SINGLE SPEED	2130020-PT	2130030-PT	2130040-PT	2130050-PT	2130060-PT	2130060-VFD	2130065-PT	2130070-PT
	DUAL SPEED	NA	-VFD	NA	-VFD	-VFD	-230-1-PT	-VFD	-VFD
	A	17.9		18.3	18.3	18.3	18.3	18.3	19.2
	B	12.6		12.9	12.9	13	13	13	13.7
	C	2		2.1	2.1	2	2	2	2.2
	D	6.7		8.9	7.7	10.2	10.2	7.7	10.7
	E	7.5		5.3	9.1	6.6	6.6	9.1	6.1
calculated as below.	F	11.7		12.4	12.4	14.2	14.2	14.2	16.1
* B=1/2xwidth of traversing rail	G	4.4		4.9	4.9	5.5	5.5	5.5	6.1
	I	12.1		12.1	14.1	14.1	14.1	14.1	14.1
* 2B=2x1/2xwidth of	J	10.8		10.8	12.3	12.3	13.5	12.3	12.3
traversing rail		12.8		12.8	13.5	13.5		13.5	13.5
* H ; minimum headroom	K	5.2		5.1	5.1	5.8	5.8	5.8	5.7
* hook is produced by the	M	1.38		2.1	2.1	2.4	2.4	2.4	2.8
hot forging process and	H	21.5		29.3	28.2	36.2	36.2	28.8	41.7
has ±2%variation from	L	15.5		18.8	18.4	21.7	21.7	19.1	23.9
nominal dimension	W	3.25-12							

Single Chain-fall



Double Chain-fall



2. General description of manual

The product is supplied together with the manual that is important to keep readily accessible

- During installation or set-up
- For training operators & the maintenance of the equipment
- For "Safety Precautions" & Operation instructions

2.1. Trolley series and classification of electric wiring

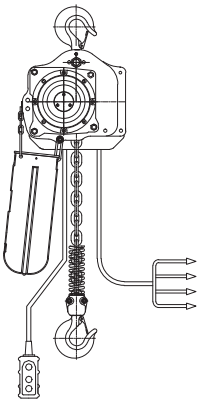
ACCOLIFT ® trolleys are designed to form an integral hoist/trolley combination, keeping the load equally distributed for easy traversing and long life. Motor-driven trolleys are ideal for heavier capacities and longer lift applications. Hook suspension trolleys are available in plain and hand-geared versions that enable close control of horizontal movement.

Motor Trolley

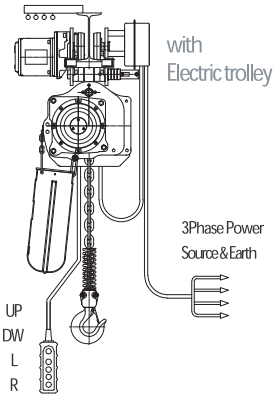
Plain Trolley

Geared Trolley

Hook suspension hoist

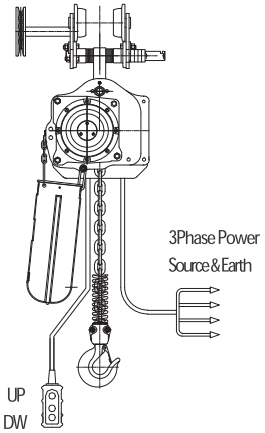


Motor trolley hoist



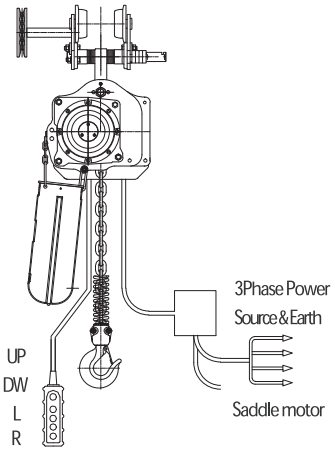
Plain trolley hoist

Geared trolley hoist

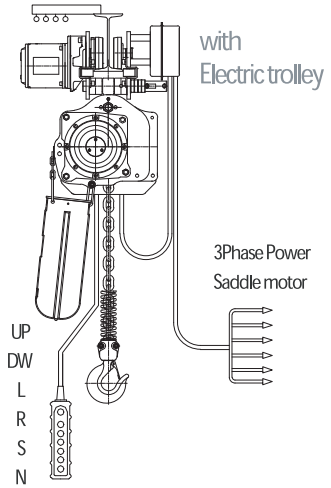


Plain trolley crane-mounted

Geared trolley crane-mounted



Motor trolley crane-mounted



3. Safety precautions

3.1. Warning and Caution

The Safety Alert Symbol is used in this manual to indicate hazards and to alert the reader to information that should be known, understood, and followed in order to avoid SERIOUS BODILY INJURY or DEATH and/or PROPERTY DAMAGE.

⚠WARNING

WARNING symbol indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury. To avoid such a potentially hazardous situation, THE OPERATOR SHALL

* NOT operate a damaged, malfunctioning or unusually performing hoist.
* NOT operate the hoist until you have thoroughly read and understand the manual.
* NOT operate a hoist which has been modified without the manufacturer's approval.
* NOT lift more than rated load for the hoist.
* NOT use hoist with twisted, kinked, damaged, or worn load chain.
* NOT use the hoist to lift, support, or transport people, nor lift or transport loads over or near people.
* NOT operate unless load is centered under hoist.
* NOT attempt to lengthen the load chain or repair damaged load chain.
* Protect the hoist's load chain from weld splatter or other damaging contaminants.
* NOT operate hoist when it is difficult to form a straight line from hook to hook in the direction of loading.
* NOT use load chain as a sling, or wrap chain around the load.
* NOT apply the load to the tip of the hook or to the hook latch.
* NOT apply load unless load chain is properly seated in the chain sheave pockets.
* NOT apply load if bearing prevents equal loading on all load supporting chains.
* NOT operate beyond the limits of the load chain travel.
* NOT leave load supported by the hoist unattended unless specific precautions have been taken.
* NOT allow the load chain or hook to be used as an electrical or welding ground.
* NOT allow the load chain or hook to be touched by a live welding electrode.
* NOT remove or obscure the warnings on the hoist.
* NOT operate a hoist on which the safety placards or decals are missing or illegible.
* NOT operate a hoist unless it has been securely attached to a suitable support.
* NOT operate a hoist unless load slings or other approved single attachments are properly sized and seated in the hook saddle.
* Take up slack carefully - make sure load is balanced and load holding action is secure before continuing.

* Shut down a hoist that malfunctions or performs unusually and report such malfunction.
* Make sure hoist limit switches function properly.
* Warn personnel of an approaching load

⚠ CAUTION

Read and understand this manual before using the hoist. Taking precedence over any specific rule, however, is the most important rule of all: "USE COMMON SENSE"

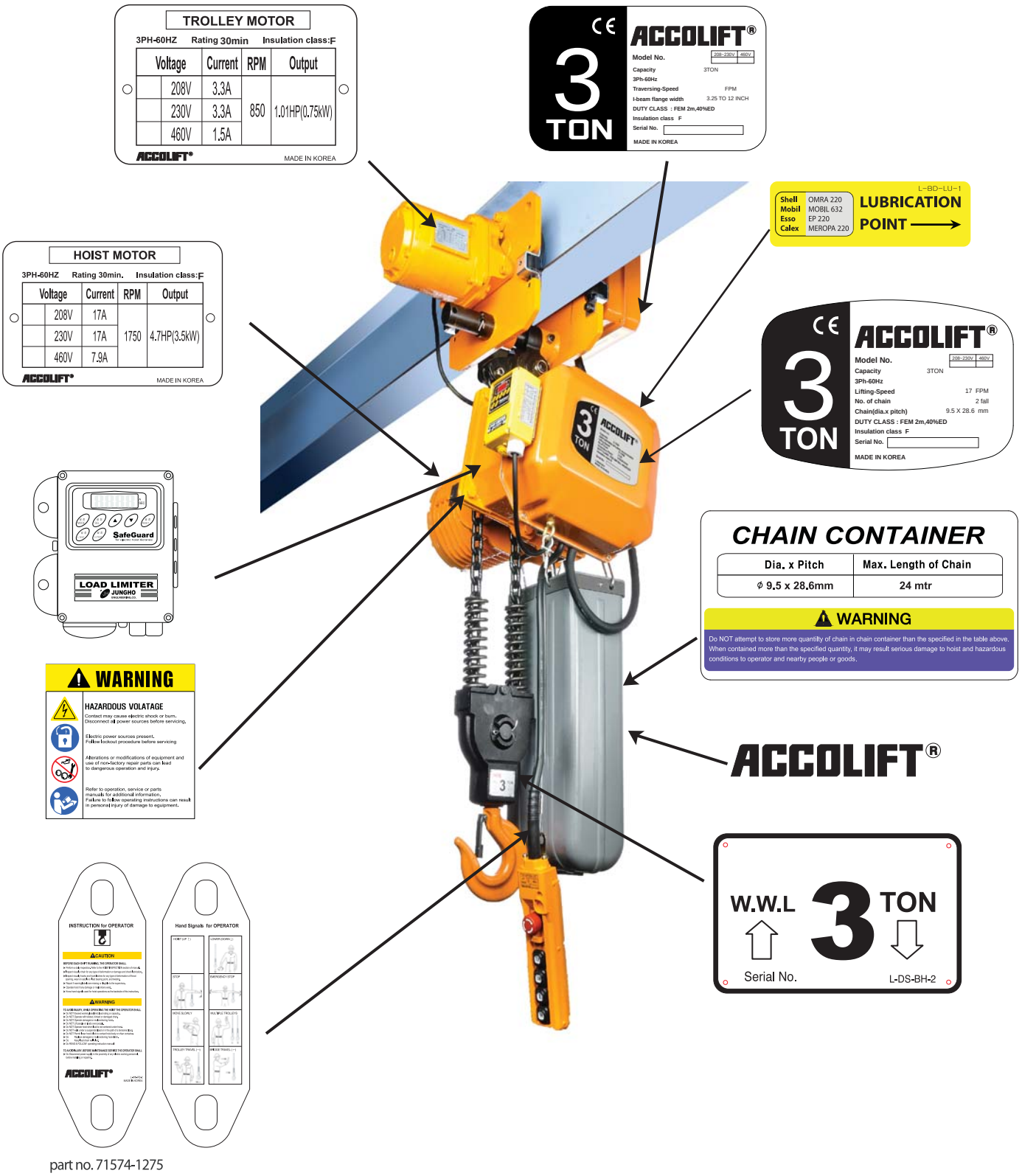
It is the responsibility of the owner / user to

1. Install, inspect, test, maintain, and operate the hoist in accordance with the instruction manual furnished by the manufacturer of the hoist...
2. Train and designate hoist operators, and
3. Train and designate hoist inspectors / maintenance personnel

3.2. Name plate and labels on products.

All labels and name plate shall be attached on the products at the same position where they were originally attached. Do not allow the labels and name plate to become obstructed or defaced.

< Example of MODEL NO. 2130160 >



part no. 71574-1275

4. Installation

Each complete electric chain hoist is load tested at the factory at 125% of the nameplate-rated capacity. the service life of the hoist depends on the way it is installed.

Always keep this manual near the hoist, available to the operator and the person in charge of maintenance. Make sure that all safety rules are followed.

4.1. Checking of product

1. Check the product if there is any damage or deformation during the transportation.
2. Check the specification of the hoist you purchase as listed below.
    a. Model no.
    b. Rated capacity (ton)
    c. Lifting length of load chain (feet or meter)
    d. Power supply
    e. Push button pendant assembly (2button, 4button or 6button)
    f. Specially ordered optional items
    g. Beam width for trolley installation

Store the hoist in its normal operating position without load, away from aggressive atmospheres such as dust or humidity. Make sure that the hoist is always clean and protected from corrosion and is lubricated.

4.2. Installation process

Follow other maintenance procedures outlined in this manual.

1. Handle the hoist by its structure, or by the devices provided for this purpose, or in its original packing.
2. Review the nameplate and warning tags attached to the unit before the installation is started.
3. The hoist should be installed by the technician with the necessary competence.
4. Check that the voltage is in accordance with both the hoist and the voltage at the jobsite (230V, 380V, 440V).
5. Make sure that the hoist attaching structure is rigid.
6. Make sure that the safety rules are followed for harness, clearance of work areas, posting of instructions to be followed in the area.

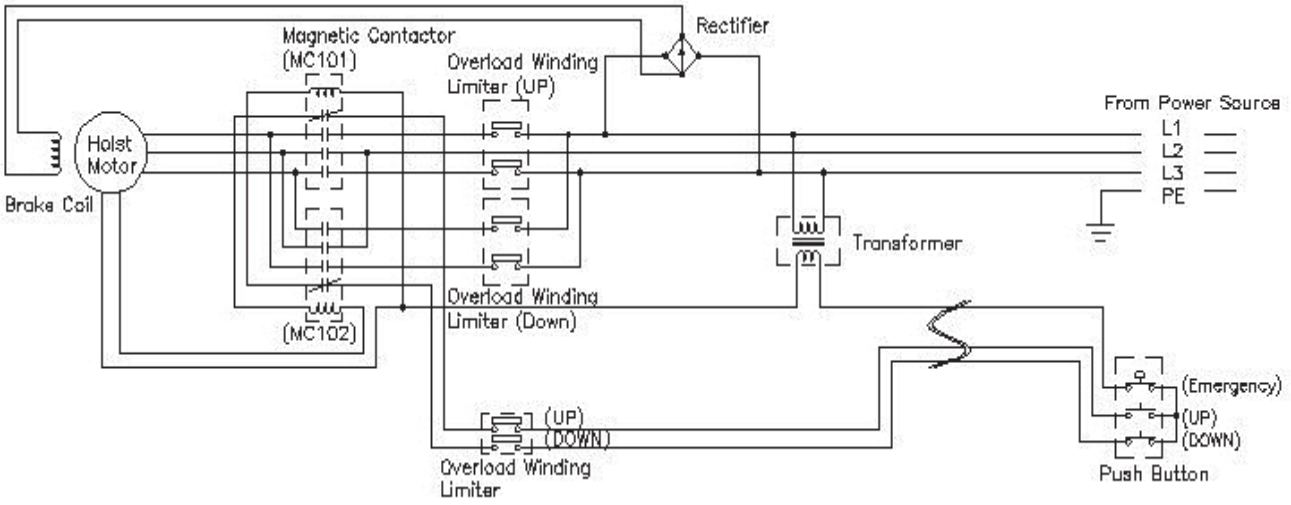
4.2.1. Checking of electricity

⚠WARNING

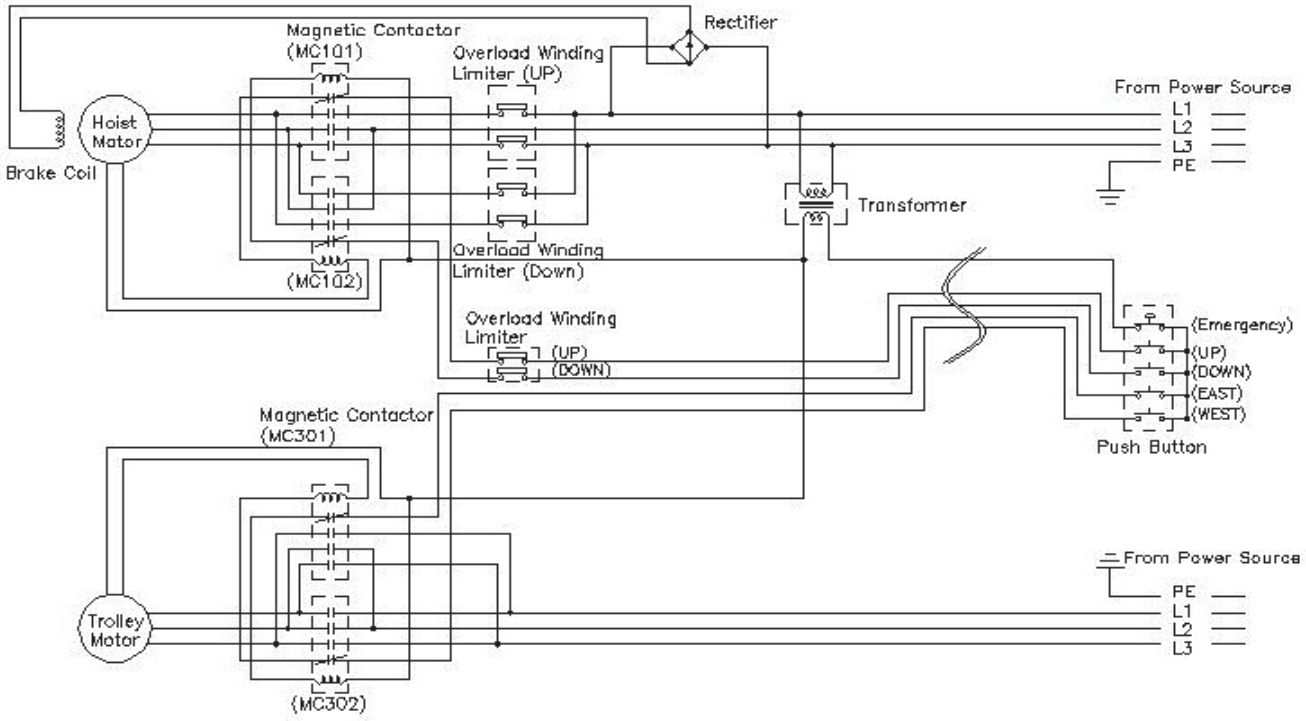
Before installing, removing, inspection, or performing any maintenance on the hoist, the main switch shall be de-energized and locked out and tagged out in accordance with ANSI Z244.1.
Do not use this equipment in hazardous locations.

* the electric chain hoists shall be connected to an earth ground.
* Lock-out and tag-out the main disconnect switch, in the de-energized position, before performing any service on the hoist.
* The customer must supply the power supply cable, the fuses and the main disconnect switch.
* Check that the supply voltage is the same as the nameplate voltage on the hoist.
* Check that the voltage does not vary by more than±10% from the nominal value.
* Do not use conductors smaller than those listed in the manual, to supply power to the hoist.
*Never bypass limit switches, remove limit switch stops, or otherwise defeat limit switch devices.

Electric Wiring Diagram of Hook Suspension Series



Electric Wiring Diagram of Motorized Trolley Mounted Series



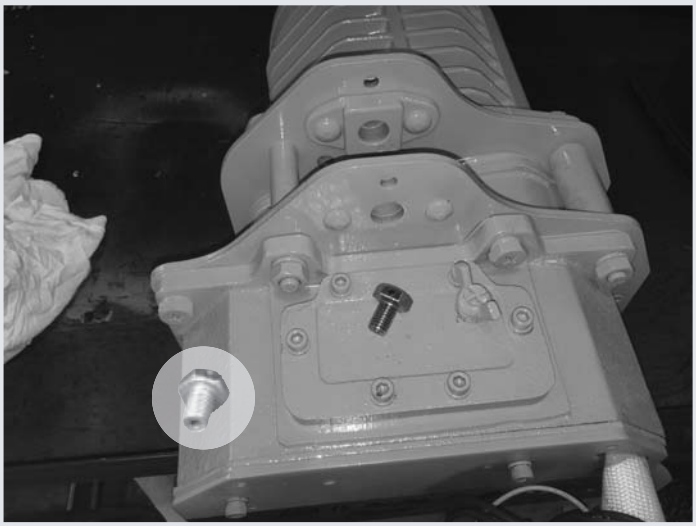
4.2.2. Installation of "BOLT with vent hole" (Vent Bolt)

ACCOLIFT® Electric Chain Hoists are shipped with a "Bolt without Hole" (Solid Bolt) to prevent the possibility of oil leaking during the transportation of the product.

When the temperature of the gear assembly goes up with continued operation, the "BOLT with Vent Hole" (Vent Bolt) relieves the pressure in the gear assembly caused by the increase in temperature.

⚠WARNING

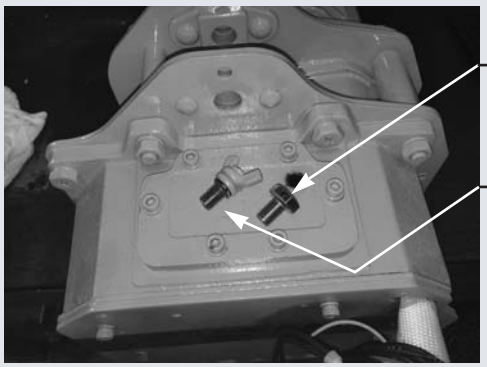
Replacement of Solid Bolt with Vent Bolt



On the hoist, the Solid Bolt is located at the lubrication point. Before the installation of the hoist, the customer shall change the bolt from "BEFORE installation" to "AFTER installation" as shown below

The Vent Bolt functions as the air ventilation device to relieve pressure created by the increase in temperature from operation of the gearing. It helps prevent damage to the seal packing from high pressure.

If NOT changed to "Vent Bolt", a possible hazardous condition can result due to the high pressure in the gear assembly



"AFTER installation"
With Vent Bolt

"BEFORE installation"

As shipped, the hoist has a Solid Bolt at the lubrication point to prevent the possibility of oil leaking due to movement in transportation.

4.2.3. Installation of Chain Container to hoist body

1) Insert the load chain into the chain container.
2) Place the Chain Container support chain onto the Support Metal Plate (part no. CH843) to secure the Chain Container.
3) Insert the Support Pin (part no. CH842) and lock both ends with Cotter Pin (part no. CH852)
4) Line up chains straight so as to not be twisted.
5) Place the remaining Chain Container support chain onto the Support Metal Plate.

4.2.4. Oil lubrication on load chain and into chain container

Please lubricate the load chain, using the plastic oil bottle which is included with the hoist.

NOTICE

Oil Lubrication into Chain Container

After installing the hoist, the oil shall be placed onto the chain and into the chain container (chain bag) before startup.

* If the load chain is used when it's dry, abrasion and noise will result.
* Depending on the oil lubrication, the life of the load chain can vary up to 10 times compared to non-oiled load chain.
* If the load chain is used without oil lubrication before startup, the manufacturer will not be held responsible for possible damage to the load chain.

Maximum Chain-Lift-Length, according to each Chain Container

Longer lifts affect the chain container size. When exceeding the maximum lift specified for a Chain Container, it is strictly prohibited to operate the hoist. For a larger size chain container for longer lifts, please contact the factory or authorized dealer for the Steel Chain Container

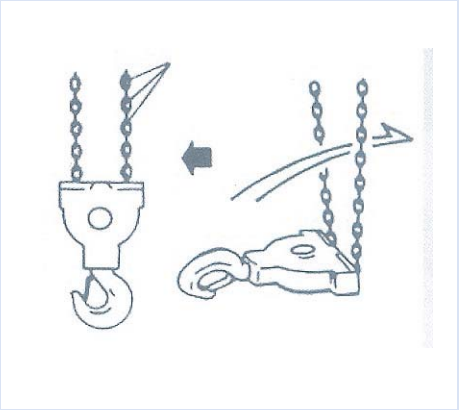
Applied Load Chain : Dia x Pitch		0.280" x 0.827" (7.1mm x 21.0mm)		0.370" x 1.126" (9.5mm x 28.6mm)	0.441" x 1.399" (11.2mm x 34.0mm)						
Capacity (chaib-fall reeving)		1ton (1fall)	2ton (2fall)	3ton (2fall)	2ton (1fall)	3ton (1fall)	5ton (2fall)	7.5ton (3fall)	10ton (4fall)	15ton (6fall)	20ton (8fall)
Plastic chain container	PCCA	60ft lift	30ft lift	N/A	26ft lift	26ft lift	N/A	N/A	N/A	N/A	N/A
	PCCB	130ft lift	65ft lift	40ft lift	60ft lift	60ft lift	30ft lift	N/A	N/A	N/A	N/A
Steel chain container	SCC1	N/A	N/A	65ft lift	92ft lift	92ft lift	46ft lift	N/A	N/A	N/A	N/A
	SCC1-1	154ft lift	77ft lift	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	SCC2	N/A	N/A	106ft lift	147ft lift	147ft lift	73ft lift	N/A	N/A	N/A	N/A
	SCC2-1	269ft lift	134ft lift	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	SCC3	N/A	N/A	82ft lift	N/A	N/A	N/A	87ft lift	130ft lift	Made to order	
	SCC4	N/A	N/A	100ft lift	N/A	N/A	N/A	54ft lift	82ft lift		
	SCC5	N/A	N/A	N/A	N/A	N/A	N/A	32ft lift	48ft lift		
	SCC7	N/A	N/A	N/A	N/A	N/A	N/A	109ft lift	164ft lift		
Canvas Chain Container	CCC	40ft lift	20ft lift	N/A	15ft lift	15ft lift	N/A	N/A	N/A	N/A	N/A

⚠WARNING

DO NOT attempt to store a greater quantity of chain in the chain container than is specified in the table above. When containing more than the specified quantity, it may result in serious damage to the hoist and a hazard to the operator and nearby people or goods.

4.2.5. Checking Load Chain after installation

⚠ CAUTION



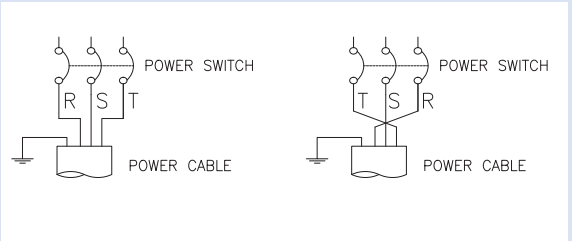
* Befor start-up, the operator shall check the load chain. If it is twisted, it shall not be used until the twist is removed and the chain is straight in line.
* For double chain-falls, a capsized load chain shall not be used. When capsized, the operator shall turn over the bottom hook assembly as shown in the figure. If not, it will cause serious damage to the product.
* On load chain, oil lubrication shall be made with the oil bottle which is included with the hoist. When dry chain with no lubrication is used, it will cause shortened life of the load chain and a possible breakage of the load chain during operation, resulting in damage to the product and/or a hazardous condition to the operator and nearby people or goods.

4.2.6. Incorrect Phase Checking (by exchanging One of Three Black lines)

After installation, the operator shall check UP/DOWN motions by pressing the Push Button Pendant Switch. If hoist does not operate in the proper UP/DOWN direction, it indicates incorrect phasing of input power supply lines.

NOTICE

Before operation under load, operator shall check hoist operation with push button control. If hoist operates in the opposite direction of the push button control, phasing of the input supply lines is incorrect.
In this case, reverse TWO of the THREE power supply phase lines as illustrated.

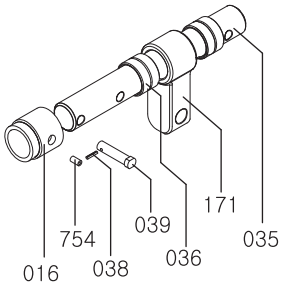


4.3. Installation of the Motorized Trolley Mounted Series

4.3.1. How to install Trolley on the runway I-beam

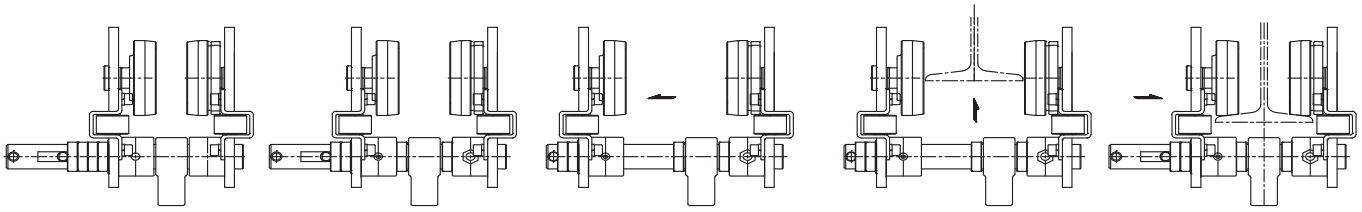
For Trolley, there are THREE types: Motorized trolley, Plain trolley, Geared trolley
First, check the difference between beam flange width and guide roller spacing.

* **Parts to adjust I-Beam Width**



MT016. Bracket A
MT035. Shaft
MT036A. Adjusting Collar
MT036B. Adjusting Washer
MT038. Setting Pin
MT039. Stopper Pin
MT171. Connector
MT754. Setting Screw

* **How to set up the I-Beam Width of Motorized Trolley**

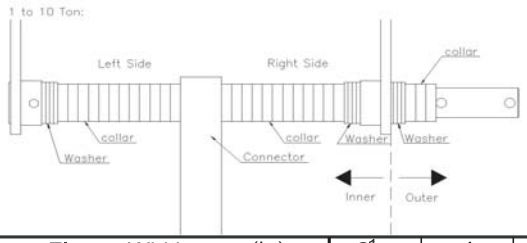


Process ① ② ③ ④ ⑤

Motorized trolley can be used on I-beams different in width only by inserting adjusting collars (0 pcs to 6 pcs.)

① Pull out both "MT039. Stopper Pin" and "MT036. Adjusting Collar"
② Widen TROLLEY up to the maximum width by pulling out "MT035. Shaft"
③ In accordance with the following I-Beam width instruction, please Insert the applied number of collars and washers at the right end and push the trolley to the direction of arrow mark.
④ Insert TROLLEY on I-Beam.
⑤ Locate "MT171. Connector" on the center and line up "MT036. Adjusting Collar" by setting the same number of collars and washers at both ends.

■ Applied Collar Numbers for Each Trolley Capacity on I-Beam.



Each collar width per pcs: 0.492 inch (12.5mm)
Each washer width per pcs: 0.118 inch (3mm)

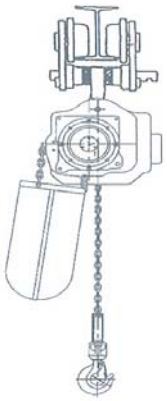
										WASHER	3mm
										COLLAR	12.5mm
Beam Flange Width		(in)	3 1/4	4	5	6	7	8	9	10	11	12
Cap. (Ton)	Spacer Type	(mm)	85	102	127	153	178	203	229	254	279	305
1	Washer	Inner	4	2	2	2	2	2	2	2	2	10
		Outer	6	8	8	8	8	8	8	8	8	0
	collar	Inner	0	2	4	6	8	10	12	14	16	16
		Outer	16	14	12	10	8	6	4	2	0	0
2	Washer	Inner	2	0	0	0	0	0	0	0	0	88
		Outer	6	8	8	8	8	8	8	8	8	0
	collar	Inner	0	2	4	6	8	10	12	14	16	16
		Outer	16	14	12	10	8	6	4	2	0	0
3	Washer	Inner	2	0	0	0	0	0	0	0	0	8
		Outer	6	8	8	8	8	8	8	8	8	0
	collar	Inner	0	2	4	6	8	10	12	14	16	16
		Outer	16	14	12	10	8	6	4	2	0	0
5 7.5 10	Washer	Inner	0	6	6	6	6	6	6	6	6	12
		Outer	12	6	6	6	6	6	6	6	6	0
	collar	Inner	0	0	2	4	6	8	10	12	14	14
		Outer	14	14	12	10	8	6	4	2	0	0
15 20	Washer	Inner	N/A	N/A	N/A	10	18	24	32	38	46	52
		Outer	N/A	N/A	N/A	44	36	30	22	16	8	2
		Inner	N/A	N/A	N/A	N/A	4	10	18	24	2	38
		Outer	N/A	N/A	N/A	N/A	36	30	22	16	8	2

For Beam Flange Widths other than indicated, distribute collars and washers equally on Left Side and Right Side so that total clearance between Beam Flange Width and Trolley Side Guide Rollers is no less than 0.039 inch (1mm) and no more than 0.197 inch (5mm). A difference of one washer between Left Side and Right Side is permissible. No difference in quantity of collars between Left Side and Right Side is permissible.

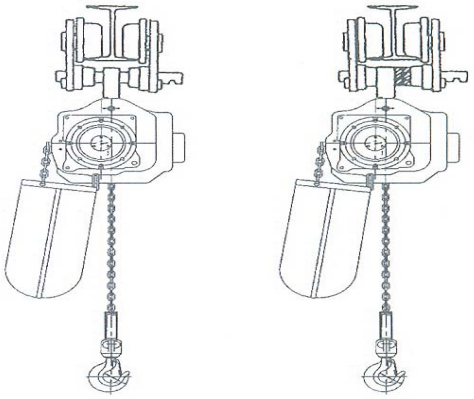
⚠WARNING

RIGHT installation: Fit both sides of the connector with the same number of adjusting collars.
WRONG installation: It can result in serious accidents.

RIGHT Installation



WRONG Installation

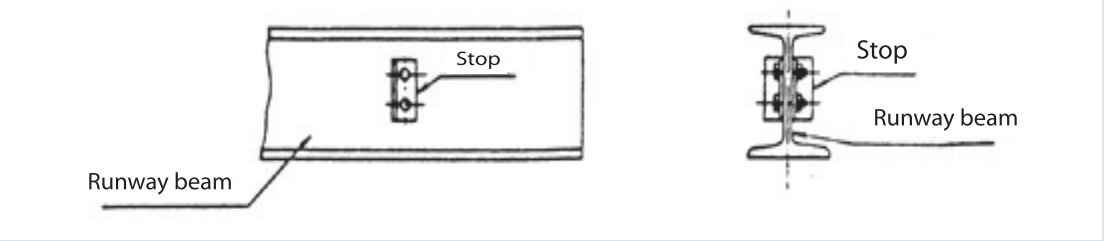


(A) Without collars, the seting of connector become loose and not secure.
(B) With One-sided seting of collars, it shall result in the un-balanced trolley installation.

⚠WARNING

(Customer scope for installation)

1. Customer is strongly recommended to install END STOP as this is the customer's responsibility. To prevent possible falling of trolley from the runway beam, the customer shall install END STOP as follows.



2. For trolley limit switches used as a safety device, they shall be installed in parallel with I-beam at both ends to detect the runway limit of the end of trolley travel. Please refer to the figure for proper installation.

4.3.2. How to connect electric power source ("CIS": customer installation scope under customer responsibility)

① In parallel with I-beam, install the power cable to optimize the trolley movement.
② With each interval of 1.5 meter, the cable wheel shall be installed.
③ The minimum allowable curve radius of I-beam differs with each rated load of hoist.

Please refer to the specification of hoist in manual article no. 1.4. Motor Trolley Mounted Series, Single Speed

4.4. Initial start-up

Once these checks have been completed, proceed as follows (be ready to press the emergency stop button at all times)

1. Start operating the hoist without a load.
2. Check, when not under load, that the movement of the hook corresponds to the direction of the arrows on the pushbutton station.
3. Check the operation of the hoist limit switch: operate the hoist, without a load, until it reaches the upper and lower hook positions and let the limiter slip briefly.
4. Check the operation of the brake: lift up a nominal load and then lower it.
5. Perform a load test with +10% of the nominal load and static tests with +25% of the nominal load on your installation equipped with our hoist.
6. The hoist which you have just purchased should only be used with a maximum load equal to the hoist's rated load. The length of its useful service life depends on the demands placed upon it, the average operating time, the number of start-stops and proper maintenance.

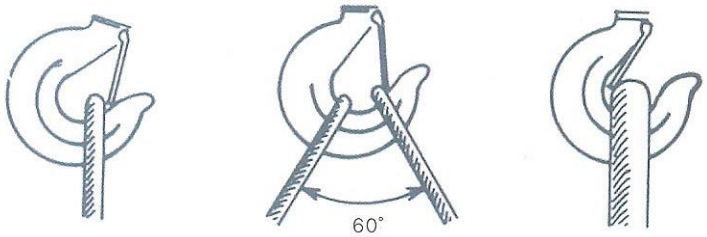
5. Precautions during operation

⚠ CAUTION

Indicates a potentially hazardous situation, which, if not avoided, MAY result in minor or moderate injury. To avoid such a potentially hazardous situation, THE OPERATOR SHALL

1. Perform a daily inspection according to the instruction manual.
2. Inspect the load chain for any type of deformation or damage and check the load chain lubrication.
3. Visually inspect hooks and hook latches for any type of deformation of throat opening, wear on saddle or load bearing point, and twisting.
4. Report missing or illegible warning labels to the supervisor.
5. Not Operate the hoist if any damage or malfunctions exist.
6. Know hand signals used for hoist operation as per instruction manual.
7. Always notify others when a load transport is about to begin.
8. Always make sure that the supporting structures are strong enough to support the weight of the load and hoist.
9. Maintain firm footing or be otherwise secured when operating the hoist.
10. Check brake function by tensioning the hoist prior to each lift operation.
11. Use hook latches. Latches are to retain slings, chains, etc. under slack comditions only.
12. Place slings balanced on the bottom hook. Avoid "Improper" slinging cases shown below.

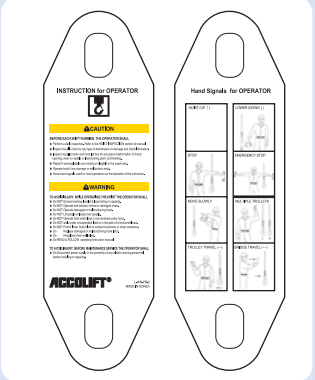
"IMPROPER" SLINGING CASES



13. Make sure the hook latches are closed and not supporting any parts of the load.
14. Make sure the load is free to move and will clear all obstructions.
15. Avoid swinging the load or hook.
16. Make sure hook travel is in the same direction as shown on the controls.
17. Inspect the hoist regularly, replace damaged or worn parts, and keep appropriate records of maintenance.
18. Use only manufacturer's recommended parts when repairing the unit.
19. Lubricate load chain per hoist manufacturer's recommendations.
20. NOT use the hoist's overload limiting clutch to measure load.

21. NOT use limit switches as routine operating stops. They are emergency devices only.
22. NOT allow your attention to be diverted from operating the hoist.
23. NOT allow the hoist to be subjected to sharp contact with other hoists, structures, or objects through misuse.
24. NOT adjust or repair the hoist unless qualified to perform such adjustments or repairs.
25. The hoist should be maintained regularly, following the instructions in this manual.
26. Keep the moving components clean and oiled as indicated in this manual.
27. Make sure that the limit switch stops are in place, and that all limit switches are functioning properly...
28. Before operation, check that the load is correctly fastened and installed on the hook.
29. When moving the load, make sure that it is sufficiently raised and distant from the surrounding machines and other objects so as to avoid all obstacles during operation.
30. Make sure that the hoist is vertical to the load before moving it.
31. If manually moving the hoist, push the load.
32. Avoid rocking the load or the hook when using the traveling trolley or crane, by limiting the starting and braking jerks.
33. Use the material under normal working conditions with ambient temperature, atmosphere.
34. Use only for indoor operation of hoist. For outdoor operation, provide adequate protection to ensure a rainproof environment.
35. NOT operate the hoist if any damage or malfunctions exist; and SHALL report any damage or malfunctions to the supervisor.
36. NOT operate the hoist if tagged-out.
37. NOT lift, lower, or transport personnel by means of the hoist, hoist trolley, hoist hook, or load.

NOTICE



Always read and follow the INSTRUCTION for OPERATOR, which contains the main CAUTION and WARNING instructions.
It shall be assembled onto the Push Button Switch Control regardless of working conditions.
For safer hoisting operation, please refer to the Hand Signals for OPERATOR on the backside.
Part number is 71574-1275.
Replace if lost or illegible.

6. Maintenance and servicing

6.1. Electrical connection

⚠ CAUTION

(customer responsible scope for installation)

Before removing the control box cover, check that the hoist power supply is disconnected and locked and tagged.

* The customer must supply the power supply cable, the fuses and the main disconnect switch (refer to the wiring diagram.)
* Check that the power supply voltage is correct for the hoist.
* Check that the voltage does not vary by more than ±10% from the nominal value.
* Make sure that the main hoist power disconnect switch is de-energized.
* Do not use conductors smaller than those listed in the manual to supply power to the hoist.
* Never bypass limit switches, remove limit switch stops, or otherwise defeat limit switches.

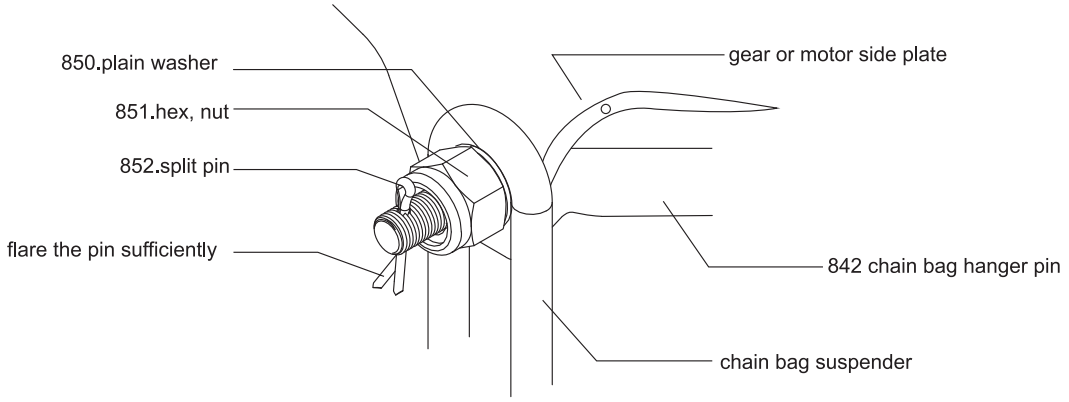
6.2. Chain container (chain bag)

⚠WARNING

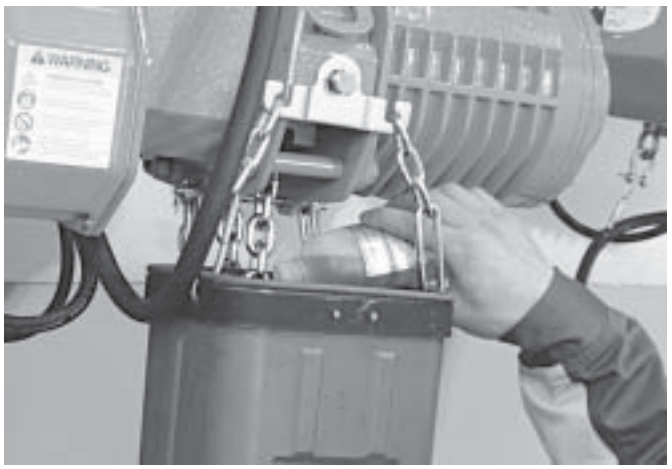
Do not attempt to store more quantity of chain in chain container than that specified in the table. When containing more than the maximum specified quantity, it may result in serious damage to hoist and hazardous conditions to the operator and nearby people or goods. For the hoist with double chain-falls, the chain container should be installed with the unloaded load chain projecting by about 20 inch(50cm). When the chain container is pushed to the sides by the loads, the load chain may gush out or may not smoothly go through the chain hoist body, posing a danger.

* How to install chain container

* Insert the load chain into the chain container.
* Place the container support chain on "CH843. support metal plate" of Chain Container to secure the container.
* Insert "CH842. chain bag support pin" and lock both ends with "CH852. split pin"

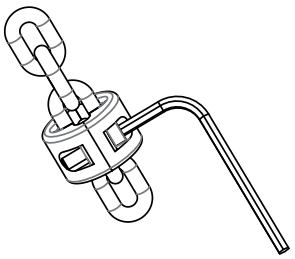


* Line up chains straight so as not to be twisted.
* Place the remaining container support chain on the Support Metal Plate.



6.3. Chain stopper in the chain container.

The chain stopper for slack fall stop is a safety component, not a functional one. make sure that the stop is correctly fitted. The chain stopper of non-loaded side must be fixed 6inch (15cm) from the load chain end as shown in the left figure.



Securely fix using the wrench.

At the time of product installation, securely fix using the wrench. Check monthly for the looseness of the socket bolts and tighten.

6.4. Chain stopper spring

For safe operation, the Chain Stopper spring must be replaced when the free length "L" is short of the dimension in the following table.

*** Standard "L" length**

*** Replacement required**

Capacity	Chainfall (reeving)	Standard "L" length	Replacement required
1ton	1 chain-fall	3.94inch(100mm)	3.54 inch(90mm)
2ton	1 chain-fall	6.77inch(172mm)	6.30inch(160mm)
	2 chain-fall	3.94inch(100mm)	3.54inch(90mm)
3ton	1 chain-fall	6.77inch(172mm)	6.30inch(160mm)
	2 chain-fall		
5ton	2 chain-fall	6.77inch(172mm)	6.30inch(160mm)
7.5ton	3 chain-fall	6.77inch(172mm)	6.30inch(160mm)
10ton	4 chain-fall	6.77inch(172mm)	6.30inch(160mm)
15ton	6 chain-fall	6.77inch(172mm)	6.30inch(160mm)
20ton	8 chain-fall	6.77inch(172mm)	6.30inch(160mm)

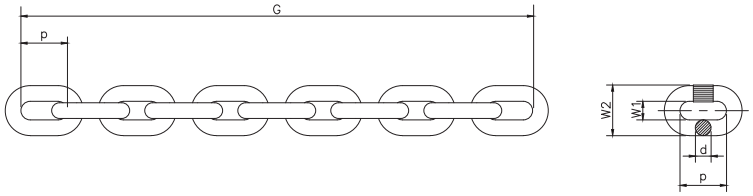
6.5. Load chain

⚠WARNING

Check if the chain is twisted or not.
Never try to use the hoist when the load chains are entangled.
Pull the bottom hook to the normal vertical position before use.
Never use the lifting chain as a sling.
Never twist the lifting chain.
Do not bundle the chain into the chain bucket.
Always keep the chain clean and oiled and check that it is in good condition every day.
Only a genuine, manufacturer's chain may be used.

* Specification of Load Chain

Load chain: diameter x pitch		**0.28" x 0.827"** (7.1mm x 21.0mm)	**0.374" x 1.126"** (9.5mm x 28.6mm)	**0.441" x 1.339"** (11.2mm x 34.0mm)
Class, Grade		DAT, HE G80 RS		
Surface hardness		520-620 HV10(494-589 BHN)		
Manuf. test force min.	KN	39.60	71.00	98.50
Breaking force min.	KN	63.50	113.00	158.00
Stress at breaking force	N/mm2	800	800	800
Breaking elongation min.	%	10	10	10
Working load Limit, 1 fall		2204lbs(1000kgs)	3968lbs(1800kgs)	5511lbs(2500kgs)
Weight per Meter		2.4lbs(1.11kgs)	4.3lbs(1.97kgs)	6.0lbs(2.73kgs)
Dimension (mm)	d	0.280" (7.1mm)	0.374" (9.5mm)	0.441" (11.2mm)
	p	0.827" (21.0mm)	1.126" (28.6mm)	1.339" (34.0mm)
	W1	0.331" (8.4mm)	0.441" (11.2mm)	0.539" (13.7mm)
	W2	0.929" (23.6mm)	1.232" (31.3mm)	1.488" (37.8mm)



6.5.1. Measurement of Wear and Replacement of Load Chain

Dimension of load chain: Dia. x Pitch	**0.28" x 0.827"** (7.1mm x 21.0mm)	**0.374" x 1.126"** (9.5mm x 28.6mm)	**0.441" x 1.339"** (11.2mm x 34.0mm)
Minimum link diameter allowed (d):	0.267" (6.8mm)	0.358" (9.1mm)	0.421" (10.7mm)
Maximum pitch allowed (p):	0.850" (21.6mm)	1.157" (29.4mm)	1.378" (35.0mm)
Maximum Gage Length allowed (G): (11links pitch measurement)	9.350" (237.5mm)	12.727" (323.3mm)	15.158" (385mm)

NOTES: For link diameter, when the wear has increased by more than 5% For pitch, when the wear has increased by more than 3%

Check the load chain for deformation or cracks. In this case, the wear on the chain guide and chain sheave should also be checked and they should be replaced if necessary. If a single link is defective in any way whatsoever, the chain must be replaced. If these limits are exceeded, the chain must be replaced immediately. The gage dimension to be checked shall be measured over 11 links from inside end of link to inside end of link (as shown in figure on previous page).

To remove the chain for 1-fall chain:

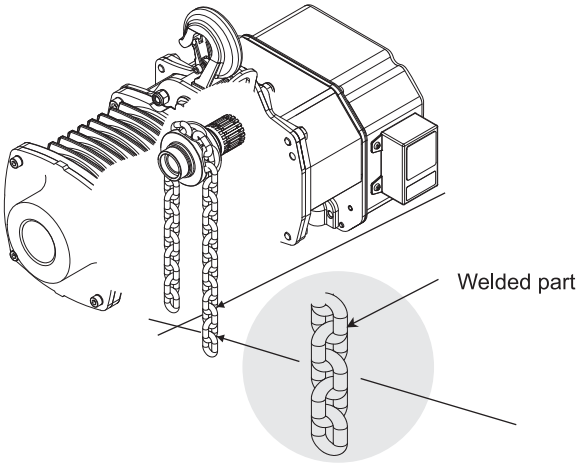
a. Remove the load from the hook.
b. Disassemble the hook block.
c. Lower the chain into the chain container.
d. Remove the chain container and unscrew and remove the lower chain guide.

To remove the chain for 2-fall chain:

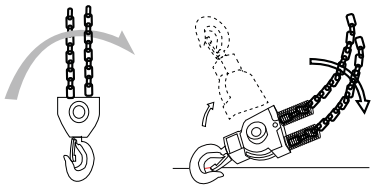
a. Raise the hook block to about 20 inches (50cm) from the hoist body.
b. Remove the chain bucket.
c. Disassemble the fixed point of the chain.
d. Let the rest of the chain slide through the chain sheave.

6.5.2. Checking chain alignment (the welded part outward from the center)

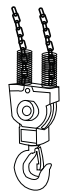
* Before installation, the welded part position should be checked for safe operation. With the welded part of chain links outward from load sheave or hoist center, the load chain should be aligned before installation. If not aligned correctly outward, it can cause a hazardous condition.



* For the safe operation of load chain, make sure that the bottom hook assembly is not upside down or capsized. In this case, the operator shall restore the chain to normal and make sure the welds on the chain links are in alignment. DO NOT use the hoist with twisted chain. For "Abnormal" case, please turn the bottom hook assembly between the chains to align the load chain.



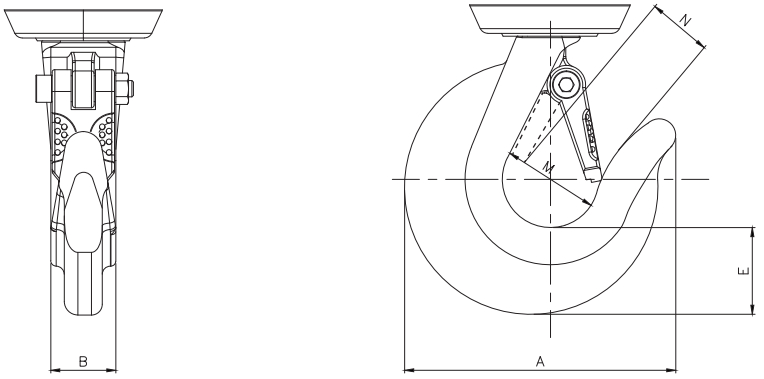
* For the inspection of idler sheave of bottom hook assembly, turn idler sheave by lifting the load chain up and down as per the figure.



6.6. Hook

6.6.1. Measurement of wear on the hook (inch)

Capacity	Standard Hook Dimension					For Maintenance (Replacement required)	
	A	B	E	M	N	*Maximum Throat Opening = Nx105%	Minimum Depth = E x 90%
1ton	3.780	0.945	1.240	1.378	0.925	0.971	1.116
2ton	5.669	1.181	1.693	2.106	1.535	1.611	1.524
3ton	6.634	1.378	1.929	2.362	1.772	1.860	1.736
5ton	7.480	1.713	2.165	2.756	2.205	2.315	1.949
7.5ton	9.213	2.165	3.425	3.543	3.047	3.199	3.083
10,15,20ton	12.717	3.150	4.646	4.724	3.346	3.513	4.181

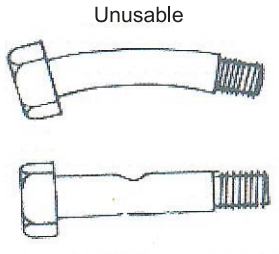


Check hooks for deformation or cracks. Hooks must be replaced if throat opening has increased by more than 5%, or throat opening has any twist from plane of straight hook, or if depth at load bearing point has worn more than 10% of original section dimension(E).
For the wear on the top hook and the load bottom hook, it shall be checked regularly. Measure the throat opening. if the throat opening exceeds the maximum opening allowed, replace the hook. Damaged safety latches shall be replaced immediately. Measure the section dimension E. If this measurement is less than the minimum allowed, replace the hook.

6.6.2. Chain fixing pin on hook

For the double chain-falls, the bottom hook assembly is fastened together with Chain Fixing Pin.

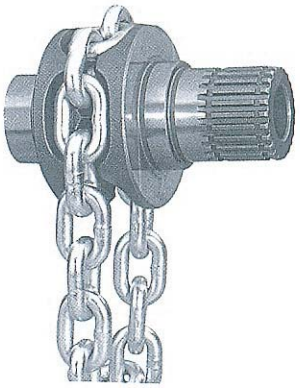
If any deformation is detected, it shall be replaced. Otherwise, the load chain and the hook assembly can fall.



Pin that is bent or pressed is to be replaced.

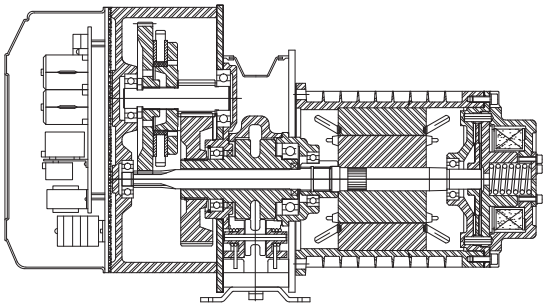
6.7. Load sheave and Chain guide

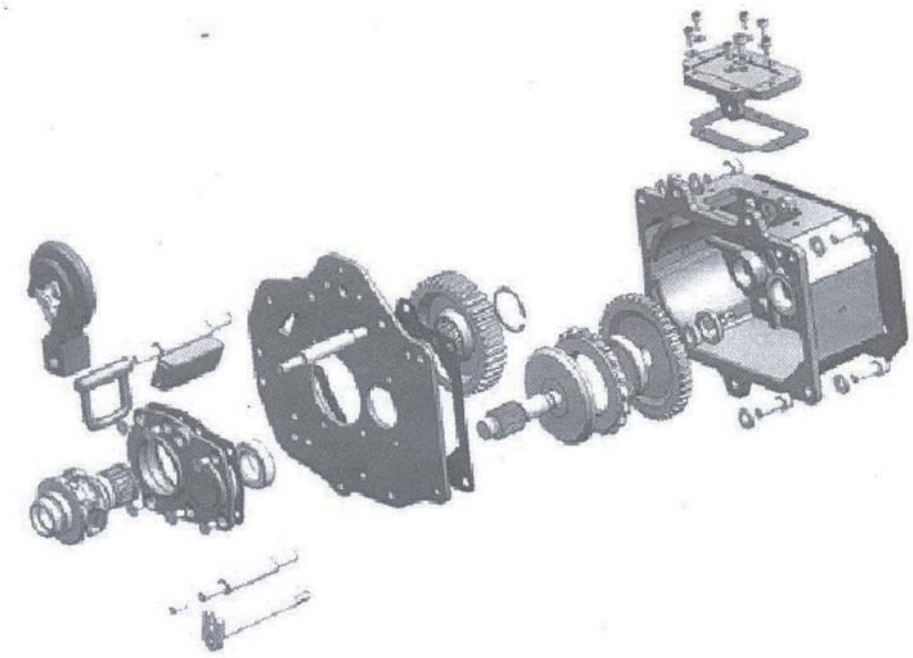
Load sheave ensures perfect positioning of the chain with 5 or 4 pockets for better distribution of the load. Load chain is to be geometrically lined up in accordance with chain guide and load sheave.
Chain guide assures proper engagement of the chain on the load sheave and minimized load chain wear. The chain guide also serves as the trip mechanism for the upper and lower hook travel limit switch. When contacted by the hook travel spring, the chain guide will actuate either the UP or DOWN travel limit switch and stop hoisting motion.



6.8. DUAL brake system.

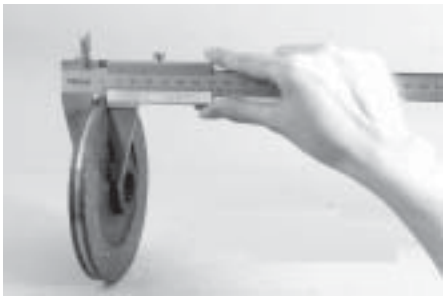
The hoist has both an electrically operated motor brake and a mechanical load brake.
The electro-magnetic brake is
- equipped with a D.C. Solenoid which provides lower electric consumption throughout the process of hoist operation.
- combined with the mechanical brake to constitute a complete dual brake system





6.8.1 Replacement of brake linings

Before disassembling motor brake, the electric power supply shall be turned off.
When the braking function is detected as "POOR" or "ABNORMAL", the motor brake is to be checked. The thickness of the Brake disc assembly can be measured as per the picture on right. According to the following table of "Replacement Thickness of Brake Disc Assembly", the replacement of disc assembly shall be made when it is worn to the "To be Replaced" figures.



* **Replacement of Brake Disc Assembly**

Product	Chain Hoist Body		Motor Trolley
	Motor brake	Mechanical brake	Motor brake
Part no.	CH012. Brake disc ass'y	CH009. Ratchet brake disc ass'y	MT530. Brake disc ass'y
Recommended Inspection period	Every 3 months	Annually	Every 3 months
	Standard thickness → To be Replaced Thickness		
1ton(1chain-fall) 2ton(2chain-falls)	0.394inch → 0.362inch (10mm → 9.2mm)	0.551inch → 0.531inch (14mm → 13.5mm)	4.488inch → 4.331inch (114mm → 110mm)
2ton(1chain-fall) 3ton(1chain-fall) 3ton(2chain-falls) 5ton(2chain-falls) 7.5ton(3chain-falls) 10ton(4chain-falls) 15ton(6chain-falls) 20ton(8chain-falls)	0.394inch → 0.362inch (10mm → 9.2mm)	0.709inch → 0.689inch (18mm → 17.5mm)	

6.9. Motor

Heavy-duty Motor with Overheat Thermal Sensor

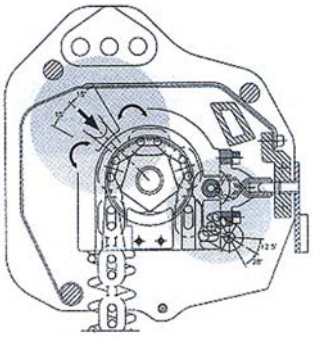
High torque and heavy duty hoist motor with insulation class "F". Frequent operation is efficient with 30min. rating.
With the built-in thermal sensor, it automatically stops the operation to cool down when the motor internal temperature exceeds 135°C. A.C. rectifier provides D.C. voltage for the motor brake.

Type of motor enclosure: TEFC

6.9.1. Motor rating of Hoist and Trolley

Motor	Capacitity, chain fall (reeving)	ACCOLIFT Model no		Motor kW (HP)	Rated current(A)	
		Hook suspension hoist	Motor trolley hoist		208/230V	460V
Hoist motor	1ton, 1chain fall	2130020	2130120	1.5kW (2.0HP)	8.8/8.0	4.0
		2130030 2130030-VFD	2130130 2130130-VFD	1.8kW (2.4HP)	9.2/8.4	4.2
	2ton, 2chain fall	2130040	2130140			
	2ton, 1chain fall	2130050 2130050-VFD	2130150 2130150-VFD	3.5kW (4.7HP)	17.2/15.8	7.9
	3ton, 2chain fall	2130060 2130060-VFD 2130060-VFD-230-1	2130160 2130160-VFD 2130160-VFD-L 2130160-VFD-230-1			
	3ton, 1chain fall	2130065 2130065-VFD	2130165 2130165-VFD			
	5ton, 2chain fall	2130070 2130070-VFD	2130170 2130170-VFD 2130170-VFD-L			
	7.5ton, 3chain fall	2130075 2130075-VFD	2130175 2130175-VFD			
	10ton, 4chain fall	2130080 2130080-VFD	2130180 2130180-VFD	3.5kW (4.7HP)x2	34.4/31.6	15.8
	15ton, 6chain fall	2130090 2130090-VFD	2130190 2130190-VFD			
	20ton, 8chain fall	2130095 2130095-VFD	2130195 2130195-VFD			
Trolley motor	1ton, 1chain fall	n/a	2130120 2130130 2130130-VFD	0.4kW (0.54HP)	3.3/3.0	1.5
	1ton, n/a	n/a	2130510-VFD			
	2ton, 2chain fall	n/a	2130140			
	2ton, 1chain fall	n/a	2130150 2130150-VFD			
	2ton, n/a	n/a	2130520-VFD			
	3ton, 2chain fall	n/a	2130160 2130160-VFD 2130160-VFD-L 2130160-VFD-230-1	0.75kW (1.0HP)	4.8/4.4	2.2
	3ton, 1chain fall	n/a	2130165 2130165-VFD			
	3ton, n/a	n/a	2130530-VFD			
	5ton, 2chain fall	n/a	2130170 2130170-VFD 2130170-VFD-L			
	5ton, n/a	n/a	2130550-VFD			
	7.5ton, 3chain fall	n/a	2130175 2130175-VFD	0.75kW (1.0HP)x2	9.6/8.8	4.4
	10ton, 4chain fall	n/a	2130180 2130180-VFD			
	15ton, 6chain fall	n/a	2130190 2130190-VFD			
	20ton, 8chain fall	n/a	2130195 2130195-VFD			

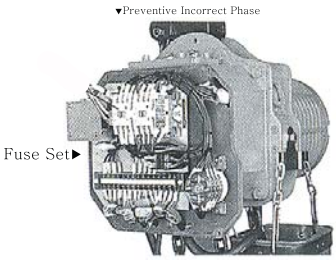
6.10. Double Action Over-winding Limiter (built-in inside)



This is the HOIST over-travel device.
The limit switch works in two steps.
- The 1st step: Interrupts the control circuit
- The 2nd step: Then interrupts the main power circuit.

Operation

When both the load chain and chain stopper spring, assembled to chain box, reaches the maximum upper or lower position, it contacts the chain guide. Rotation of chain guide, rotates the limit assembly that is connected to the chain guide.
This automatically actuates limit and de-energizes either the raising or lowering circuit.



■ Control Transformer Fuses

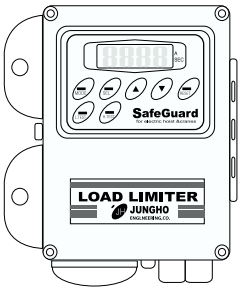
Primary and secondary fusing if the control transformer is provided.

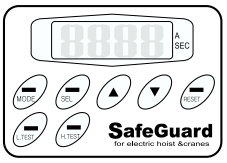
6.12. Push Button Pendant Switch - installed with Emergency stop button (red color)

Rain-proof, IP64 protection, with 2 ,4 or 6 buttons. All models are equipped with Emergency Stop function.
Easy to operate and designed with 115VAC control voltage. It is compact to enable easy one-handed sure grip control. The push button cable is provided with built-in strain relief to help prevent cable damage.

6.13. Overload Alert Sound Limiter (Protector) audible 'beeping' sound

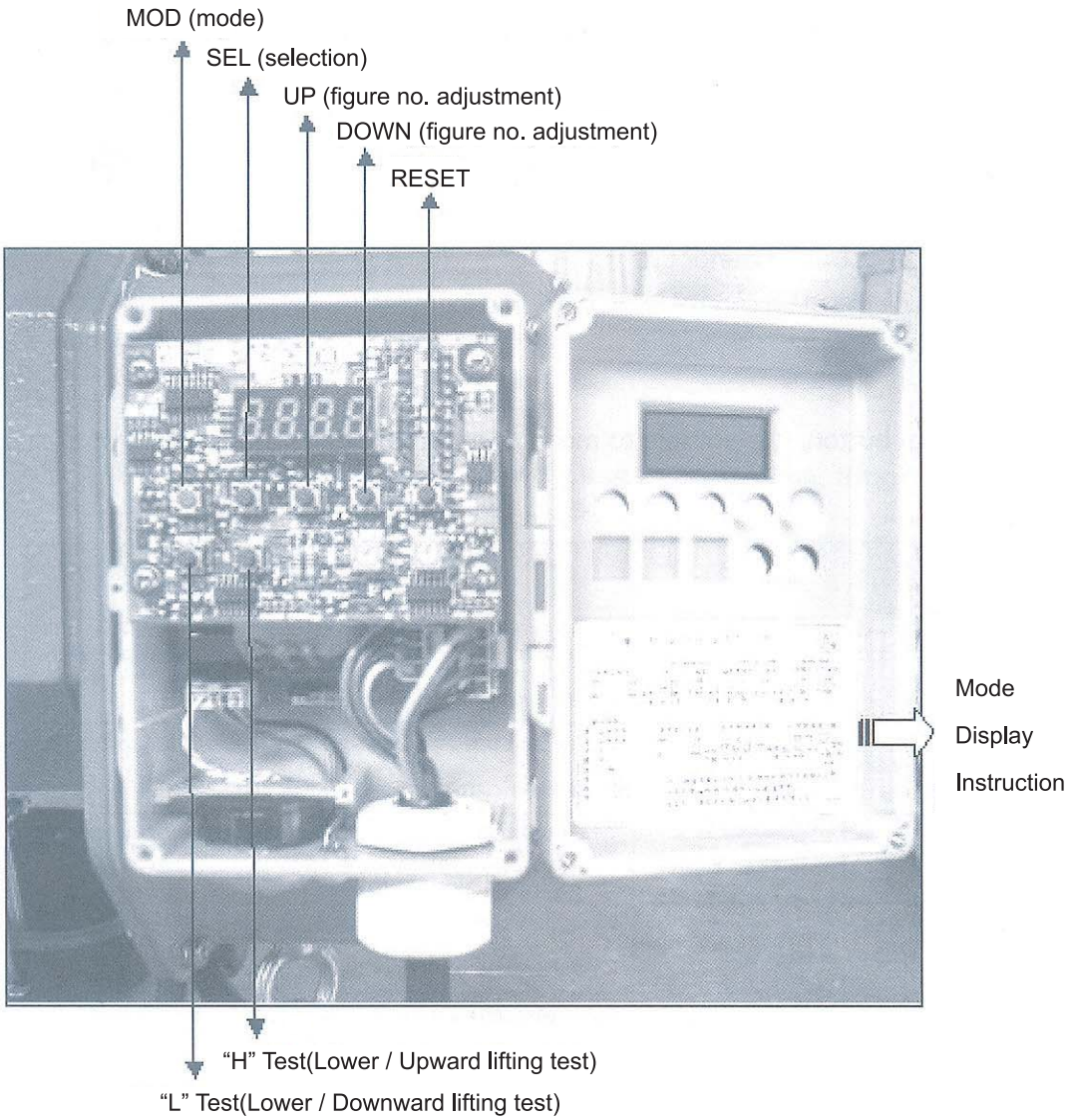
The hoist is provided with an overload limiter that reduces the potential for making hazardous, over-capacity lifts. The limiter is preset at 115% of rated capacity and protects the hoist mechanism from damage due to overloading. Overloading the hoist signals an audible alert to the operator. When the alert “beeping” sounds, the UP-motion will not operate, but the down motion will operate so the overload can be lowered.



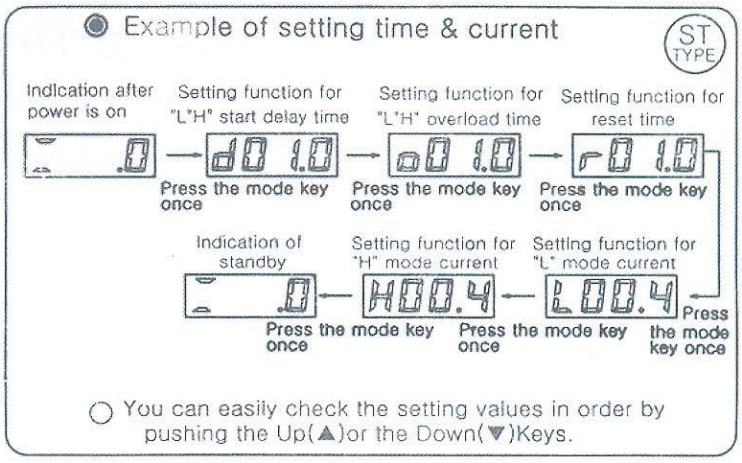


Key legend	Function
LED (display)	indicates the running current of motor and the overload status.
MOD (mode)	is used for inputting or memorizing data. Mode key cannot be controlled outside of the box. When using, open the plastic cover and operate inside the box panel.
SEL (selection)	is for position selection of the required setting value or number.
* UP * DOWN	Both keys are used to change or check the setting valve or number.
RESET	In case of operator's manual control after the overload of motor or the testing, the RESET key makes the reset of RELAY after TRIP from overloading.
"L" Test "H" Test	Both keys are used for testing the operation of high or low speed.

* Description for the Inside Panel of Overload Alert Limiter (How to modify the setting figures)



Mode Display Instruction



6.13.1. Features

1. Reset time and time delay are stored in the Microcomputer. The overload limiter will allow the hoist to be lowered when the overload limiter is actuated.
2. Detail adjustment is available and the time and current can set digitally.
3. The setting is simplified and does not require measuring instruments. Motor current is displayed on the screen during operation.
4. The wiring is simplified by use of an exterior C.T.
5. Service is simplified because the main control P.C.B. is a "plug-in" type.

* MOD (mode) DISPLAY:

By pressing the inside panel button, it is possible to modify. From the outside of box, it is not available to modify the figures.

Step	Functions	Unit figures	Display Example	Reference
Step 1. ⇩	Power on			As the basic setting mode, it is displayed at the time of power-on. it is displayed at the time of power-on
Step 2. ⇩	Start delay time:	second		On the start operation, it allows One(1) second to protect from the excessive current flow.
Step 3. ⇩	Overload time:	second		When overloaded, it allows One(1) second to cross check the instant over-current.
Step 4. ⇩	* "L" Test "H" Test	ampere		It indicates motor current on "Lower / Downward lifting" operation. It indicates motor current on "Higher / Upward lifting" operation
Step 5. ⇩	Power on			As the basic setting mode, it is displayed at the time of power-on. it is displayed at the time of power-on.

Notes: "L" test is only available for Dual Speed Chain Hoist.
For Single Speed Chain Hoist, please set the number of "L" test as the same of "H" test number.

NOTICE

For the setting of each function, set the display to H by pressing MOD key. Then press the key one more time.
When a beep sounds, the display will show STANDBY status and the input memorization of the setting is complete.
You can easily check the setting values in order by pushing ▲UP ▼DOWN keys.

6.13.2. How to arrange "Mode Setting"

⚠WARNING

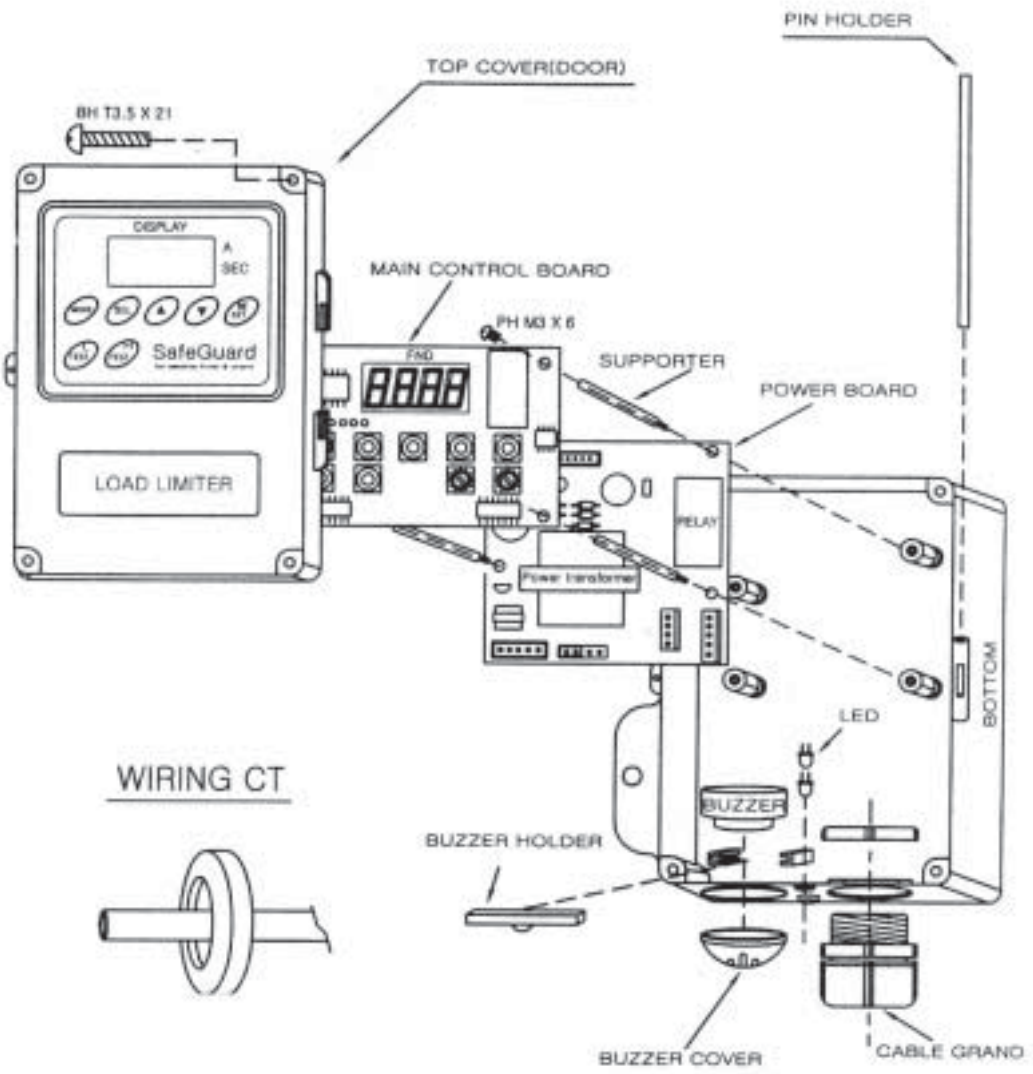
* Only authorized person(s) or the person shall service the electric load limiter.
* This device is composed of digitally controlled circuits. When programming changes are made by unauthorized personnel, it can allow the equipment to be overloaded and result in equipment damage, personal injury, or death.
* Before installing this device, be sure to read the instruction manual carefully.

■ MODE Setting Figures for Overload Alert Limiter (60Hz, Single Speed)

Hoist type	Capacity, Chain-fall	ACCOLIFT	Standard Rating			Recommended Setting Figures of Overload Limiter (according to each MODE setting steps)						
			Motor output kW (HP)	Current (ampere)		Step	Step	Step	Step		Step	
				208 ~ 230V	460V	Start delay time	Over load time	Reset time	"L"(low) mode current (ampere)		"H"(high) mode current (ampere)	
									208 ~ 230V	460V	208 ~ 230V	460V
Hook Suspension Hoist	1Ton, 1chain-fall	2130020(-PT)	1.5kW(2.0HP)	8.8/8.0	4.0	0.7	0.7	0.7	6.4	3.0	7.4	3.5
		2130030(-PT)	1.8kW(2.4HP)	9.2/8.4	4.2							
	2Ton, 2chain-fall	2130040(-PT)										
	2Ton, 1chain-fall	2130050(-PT)	3.5kW(4.7HP)	17.2/15.8	7.9	0.7	0.7	0.7	12.0	5.5	12.5	6.0
	3Ton, 2chain-fall	2130060(-PT)										
	3Ton, 1chain-fall	2130065(-PT)										
	5Ton, 2chain-fall	2130070(-PT)										
	7.5Ton, 3chain-fall	2130075										
	10Ton, 4chain-fall	2130080	3.5kW(4.7HP)	34.4/31.6	15.8	0.7	0.7	0.7	24.0	11.0	25.0	12.0
	15Ton, 6chain-fall	2130090										
	20Ton, 8chain-fall	2130095										
	1Ton, 1chain-fall	2130030-VFD(-PT)	3.5kW(4.7HP)	9.2/8.4	4.2	0.7	0.7	0.7	6.5	3.0	7.2	3.2
	2Ton, 1chain-fall	2130050-VFD(-PT)		17.2/15.8	7.9	0.7	0.7	0.7	12.5	6.0	13.2	6.4
	3Ton, 2chain-fall	2130060-VFD(-PT)										
	3Ton, 1chain-fall	2130065-VFD(-PT)										
	5Ton, 2chain-fall	2130070-VFD(-PT)										
	7.5Ton, 3chain-fall	2130075-VFD										
	10Ton, 4chain-fall	2130080-VFD	3.5kW(4.7HP)x2	34.4/31.6	15.8							
	15Ton, 6chain-fall	2130090-VFD										
	20Ton, 8chain-fall	2130095-VFD										
	3Ton, 2chain-fall	2130060-VFD-230-1(-PT)	3.5kW(4.7HP)	17.2/15.8	7.9	0.7	0.7	0.7	12.5	N/A	13.2	N/A
Motor Trolley Hoist	1Ton, 1chain-fall	2130120	0.4kW(0.54HP)	3.3/3.0	1.5	0.7	0.7	0.7	6.4	3.0	7.4	3.5
		2130130										
	2Ton, 2chain-fall	2130140										
	2Ton, 1chain-fall	2130150	0.75kW(1.0HP)	4.8/4.4	2.2	0.7	0.7	0.7	12.0	5.5	12.5	6.0
	3Ton, 2chain-fall	2130160										
	3Ton, 1chain-fall	2130165										
	5Ton, 2chain-fall	2130170										
	7.5Ton, 3chain-fall	2130175	0.75kW(1.0HP)x2	9.6/8.8	4.4							
	10Ton, 4chain-fall	2130180				0.7	0.7	0.7	24.0	11.0	25.0	12.0
	15Ton, 6chain-fall	2130190										
	20Ton, 8chain-fall	2130195										
	1Ton, 1chain-fall	2130130-VFD	0.4kW(0.54HP)	3.3/3.0	1.5	0.7	0.7	0.7	6.5	3.0	7.2	3.2
	2Ton, 1chain-fall	2130150-VFD				0.7	0.7	0.7	12.5	6.0	13.2	6.4
	3Ton, 2chain-fall	2130160-VFD	0.75kW(1.0HP)	4.8/4.4	2.2							
	3Ton, 1chain-fall	2130165-VFD										
	5Ton, 2chain-fall	2130170-VFD										
	7.5Ton, 3chain-fall	2130175-VFD	0.75kW(1.0HP)x2	9.6/8.8	4.4							
	10Ton, 4chain-fall	2130180-VFD										
	15Ton, 6chain-fall	2130190-VFD										
	20Ton, 8chain-fall	2130195-VFD										
	3Ton, 2chain-fall	2130160-VFD-230-1	0.75kW(1.0HP)	4.8/4.4	2.2	0.7	0.7	0.7	12.5	N/A	13.2	N/A

Notes: "L" (low) mode is only used for Dual Speed Chain Hoist. The figures have no effect on Single Speed Chain Hoists.
For Single Speed Chain Hoist, please set the number of "L" (low) mode the same as "H" (high) mode number.

6.13.3. Assembling figure



* **Specification label**

CONTROL VOLTAGE	☐ AC 48 V	☐ AC 110 V		⚠ WARNING
	☐ AC 220 V	☐ AC V		
F R Q .	50/60 Hz	CAPACITY OF CONTACTING POINT	5A/250V AC	When being operated under the circumstances where input power is frequently turned ON/OFF or is turned OFF for long time, the value of data memorized might be initialized. This matter might cause error operation when overloaded. Please keep in mind that the accident caused by error operation endangers person's life. ☞ Be sure to carefully read this manual before use.
CURRENT	☐ 0.8 ~ 99.9A ☐			
T I M E	0.1 ~ 0.25 SEC	CONSUMING POWER	1.0 VA	
SER.NO.	EX -		PAT.NO. 0267456. 0240833.	

7. Preventive maintenance

7.1. Recommended Periodic Maintenance and Inspection Table

Check	Interval	Qualification of the customer s personnel
Brake operation	Daily	Operator
Visual inspection of the chain	Daily	Operator
Suspension of the control box by the steel wire	Daily	Operator
Cleanness and lubrication of the chain	Monthly	Operator
Limiter operation	Monthly	Operator
Measuring of the wear on the chain	Every 3 months	Operator
Measuring of the wear on the hooks	Every 3 months	Operator
Tightening of the hook block screws	Every 3 months	Operator
Checking of the locking plate screws	Every 3 months	Operator
Lubrication of the idler sprocket	Annually	Operator
Checking of the screw tightening torques and checking for signs of corrosion	Annually	Qualified mechanic
Adjustment of the limiter and brake	Annually	Qualified mechanic
Lubrication of the gears	Lubricated for life	

7.2. Lubrication

Lubrication point	Possible brands	Quantity & Applied model no.	
Chain	Chain lubricating fluid	As required	
Gears	SHELL OMALA 220 MOBIL MOBILGEAR 630 ESSO SPARTAN EP 220 CALTEX MEROPA 220	0.8 liter	1ton (chain-fall reeving 1) 2ton (chain-fall reeving 2)
		2.5 liter	2ton (chain-fall reeving 1) 3ton (chain-fall reeving 2) 3ton (chain-fall reeving 1) 5ton (chain-fall reeving 2) 7.5ton (chain-fall reeving 3)
		2.5 liter per gear box	10ton (chain-fall reeving 4) 15ton (chain-fall reeving 6) 20ton (chain-fall reeving 8)

7.3. Recommended Technical Support for Various Spare Parts

Spare part	To be replaced by	Qualification of the personnel
Upper chain guide	Authorized manufacturer personnel	Qualified mechanic
Output shaft	Authorized manufacturer personnel	Qualified mechanic
Ratchet gear assembly	Authorized manufacturer personnel	Qualified mechanic
Gearing (1st/2nd stage)	Authorized manufacturer personnel	Qualified mechanic
Other sealing and O-rings	Authorized manufacturer personnel	Qualified mechanic
Load limiter	Authorized manufacturer personnel	Qualified electrician
Electric box	Authorized manufacturer personnel	Qualified electrician
PC-board	Authorized manufacturer personnel	Qualified electrician
Overload limiter	Authorized manufacturer personnel	Qualified electrician
Dual brake system	Authorized manufacturer personnel	Qualified electrician
Chain	Customer	Qualified mechanic
Chain container (chain bag)	Customer	Qualified mechanic
Chain stopper	Customer	Qualified mechanic
Suspension hook	Customer	Qualified mechanic
Hook assembly	Customer	Qualified mechanic
Fuses	Customer	Qualified electrician

7.4. Troubleshooting

Problem	Cause	Solution
The chain hoist does not work	The emergency stop button is activated	Deactivate it
	Triggered fuse	Replace the fuse
	Temperature control (optional) activated	Allow to cool down
	Contactor terminal screws loose	Tighten them
	Main switch is off	Turn it on
Impossible to lift the load	Overload	Reduce the load
	Limiter worn or incorrectly adjusted	Adjust or replace it
Braking path of more than 4inch (10 cm)	Braking lining worn	Adjust the brake and replace the brake components if necessary
The travel direction does not correspond to that indicated on the control box	The power supply is incorrectly connected	Change two phases of the power supply
Abnormal noises while the load is being moved	The chain components are not lubricated	Lubricate the components
	Chain is worn	Replace it
	Load sheave or chain guide is worn	Replace the sheave or chain guide
	Idler sheave is worn	Replace it
	A supply phase is missing	Check the connection of the phases

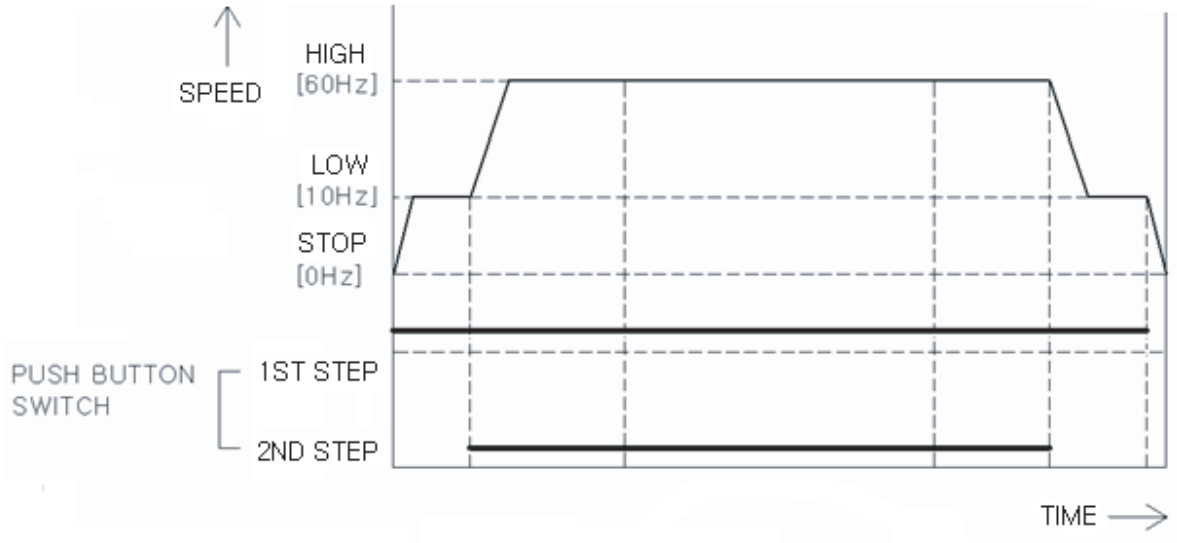
Once the hoist has been used for the FEM class duration, all of the components must be checked by an authorized agent or by the manufacturer. The hoist should no longer be used, unless agreement is obtained from the authorized agent or the manufacturer.

For discarding chain hoist, please remove all greases and oils from the hoist.

8.INVERTER(power flex 4 adjustable frequency AC drive)

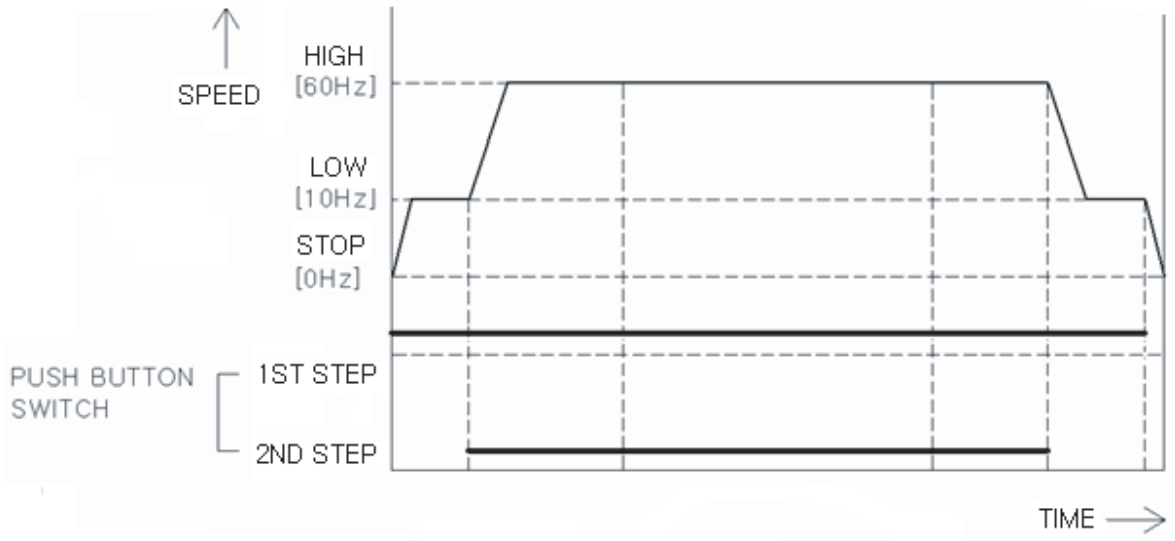
8.1.Operating Hoist(Dual Speed)

- Low speed at the first step, high speed at the second step.
- Acceleration time of 3.0 seconds.



8.2 Motorized Trolley Traversing(Dual Speed)

- Fire step for low speed traversing and second step for high speed traversing.
- Acceleration time of 3.0 seconds and deceleration time of 3.0 seconds.



8.3.Push Button Control for Inverter Hoist

■ Reset Button (Emergency Stop Button)
■ To restore the tripped inverter, press this button

■ Hoist Up
- First Step : Slow Speed
- Second Step : Fast Speed

■ Hoist Down
- First Step : Slow Speed
- Second Step : Fast Speed

■ Reset Button (Emergency Stop Button)
■ To restore the tripped inverter, press this button

■ Hoist Up
- First Step : Slow Speed
- Second Step : Fast Speed

■ Hoist Down
- First Step : Slow Speed
- Second Step : Fast Speed

■ Trolley Forward / Reverse
- First Step : Slow Speed
- Second Step : Fast Speed

8.4.Trial Operation

⚠ DANGER

DISCONNECT POWER AND LOCKOUT DISCONNECTING MEANS BEFORE PERFORMING SERVICE TO ELECTRICAL PARTS OF THIS EQUIPMENT.

The inverter drive contains high voltage capacitors that take time to discharge after removal of power supply. Wait for 3 minutes for capacitors to discharge to safe voltage levels before proceeding with any check ups of electrical parts of this equipment after shutting down the power.

Failure to read and comply with any of the limitations noted herein will result in serious bodily injury or death, and/or property damage.

⚠ WARNING

- Check that all wiring has been completed before performing trial operation.
- Don't change wiring of push button switch.
- To change the acceleration or deceleration time, refer to inverter manual.
- Only authorized personnel should perform the operation. Operating personnel should read and understand all the contents of this manual
- Failure to comply with any of the limitations noted herein can result in serious bodily injury or death and/or property damage.

8. INVERTER PARAMETER SETTINGS

ACCOLIFT 2-STEP SPEED INVERTER SETTINGS

CAPACITY	HOIST Hz SETTING	HOIST ACCEL SETTING	HOIST DECEL SETTING
	SET A70/A71-LIFTING(up/down)	SET P39	SET P40
1TON	16Hz(FPM 7) - 47Hz(FPM 21)	3.0 SEC	0.2 SEC
2TON	16Hz(FPM 7) - 48Hz(FPM 21)	3.0 SEC	0.2 SEC
3TON	18Hz(FPM 5) - 54Hz(FPM 15)	3.0 SEC	0.2 SEC
3TON	25Hz(FPM 7) - 60Hz(FPM 21)	3.0 SEC	0.2 SEC
5TON	25Hz(FPM 4) - 60Hz(FPM 11)	3.0 SEC	0.2 SEC
7.5TON	25Hz(FPM 3) - 60Hz(FPM 7)	3.0 SEC	0.2 SEC
10TON	25Hz(FPM 4) - 60Hz(FPM 11)	3.0 SEC	0.2 SEC
15TON	25Hz(FPM 3) - 60Hz(FPM 7)	3.0 SEC	0.2 SEC
20TON	25Hz(FPM 2) - 68Hz(FPM 6)	3.0 SEC	0.2 SEC

CAPACITY	TROLLEY Hz SETTING	TROLLEY ACCEL SETTING	TROLLEY DECEL SETTING
	SET A70/A71 - TRAVERSING(east/west)	SET P39	SET P40
1TON	21Hz(FPM 17) - 62Hz(FPM 50)	3.0 SEC	3.0 SEC
2TON	21Hz(FPM 17) - 62Hz(FPM 50)	3.0 SEC	3.0 SEC
3TON	23Hz(FPM 17) - 68Hz(FPM 50)	3.0 SEC	3.0 SEC
5TON	23Hz(FPM 17) - 68Hz(FPM 50)	3.0 SEC	3.0 SEC
7.5TON	23Hz(FPM 17) - 68Hz(FPM 50)	3.0 SEC	3.0 SEC
10TON	23Hz(FPM 17) - 68Hz(FPM 50)	3.0 SEC	3.0 SEC
15TON	23Hz(FPM 13) - 68Hz(FPM 40)	3.0 SEC	3.0 SEC
20TON	23Hz(FPM 13) - 68Hz(FPM 40)	3.0 SEC	3.0 SEC

⚠ WARNING

- Do not change any parameter value not indicated in this manual
- Do not set a value that exceeds a parameter range given in inverter manual (PowerFlex 4 Adjustable Frequency AC Drive).
- Make sure to perform trial operation after changing a parameter value. If there is anything wrong, stop the operation immediately and check the values and correct them.

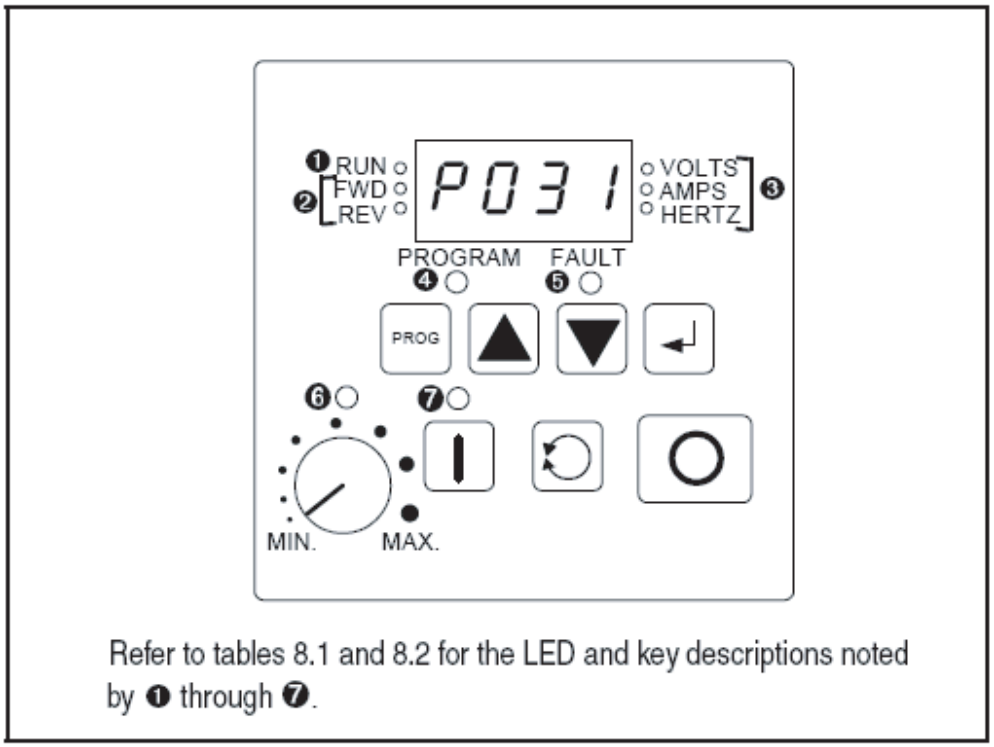
NOTICE

- To change the parameter value, refer to the inverter manual (PowerFlex 4 Adjustable Frequency AC Drive). Before making any changes in the inverter, clear understanding of the inverter manual is required.

8.6. INVERTER SETTING AND CONTROL

Factory-default parameter values allow the drive to be controlled from the integral keypad. No programming is required to start, stop, change direction, or control speed directly from the integral keypad.

8.6.1. Keypad Components



Refer to tables 8.1 and 8.2 for the LED and key descriptions noted by ❶ through ❼.

Figure 8.1 – Integral Keypad

8.6.2. Display Description

The alpha-numeric display indicates the following :

- Parameter number
- Parameter value
- Fault code

8.6.3 LED Description

Refer to figure 8.1 for the location of the LEDs described in table 8.1.

Table 8.1 – LED Descriptions

No.	LED	LED State	Description
❶	RUN	Steady Red	Indicates the drive is running.
❷	FWD REV	Flashing Red	Drive has been commanded to change direction. Indicates actual motor direction while decelerating to zero.
		Steady Red	Indicates the commanded motor direction.
❸	VOLTS AMPS HERTZ	Steady Red	Indicates the units of the parameter value being displayed.
❹	PROGRAM	Steady Red	Indicates the drive is in program mode and the parameter value can be changed.
❺	FAULT	Flashing Red	Indicates drive is faulted.
❻	Pot Status	Steady Green	Indicates potentiometer on integral keypad is active.
❼	Start Key Status	Steady Green	Indicates Start key on integral keypad is active. The Reverse key is also active unless disabled by A095 (Reverse Disable).

8.6.4 Key Descriptions

Refer to figure 8.1 for the location of the keys described in table 8.2.

Table 8.2 – Key Descriptions

Key	Name	Description
	Program	• Enter/exit program mode. • Scroll through parameter groups. • Back up one step in programming menu. • Cancel a change to a parameter value.
	Up Arrow Down Arrow	• Scroll through P and A parameters. • Increase/decrease the value of a flashing digit. • In Display Mode, increases/ decreases internal frequency parameter if that parameter is currently controlling the drive commanded speed.
	Enter	• Display value of P or A parameter. • Save a change to a parameter value. • Scroll through display (d) parameters.
	Potentiometer	Control drive speed. Default is active. Controlled by parameter P038.
	Start	Start the drive. Default is active. Controlled by parameter P036.
	Reverse	Reverse direction of the motor. Default is active. Controlled by parameters P036 and A095.
	Stop	• Stop the drive (if drive is running). • Clear fault (if drive is stopped). Controlled by parameter P037.

8.6.5 Viewing and Adjusting Basic(P) and Advanced (A) Parameters

Parameters are organized into three parameter groups:

- The Basic Parameter Group (Pnnn) contains the most commonly used parameters to simplify the start-up process.
- The Advanced Parameter Group (Annn)contains parameters used for more advanced applications.
- The Displayed Parameter Group (dnnn) contains parameters that indicate actual drive conditions.

Table 8.3 – Viewing and Adjusting Basic (P) and Advanced (A) Parameters

Procedure		Sample Display
Step 1.	Press PROG until the desired parameter group is displayed. The PROGRAM LED will turn on to indicate the drive is in program mode.	
Step 2.	Press ▲ ▼ to scroll through the parameters in the selected parameter group.	
Step 3.	Press ↵ to view the value of the displayed parameter.	
Step 4.	Press ↵ or ▲ ▼. The adjustable value will flash on the display.	
Step 5.	Use ▲ ▼ to adjust the value.	
Step 6.	Press ↵ to accept the value. The value stops flashing.	
Step 7.	Press PROG to return to the parameter number.	

To adjust additional parameters, repeat steps 2 through 7.

To exit a parameter without saving the value, press PROG instead of ↵.

8.6.6 Viewing the Display (d) Parameters

Use the procedure in table 8.4 to view Display parameters.

Table 8.4 – Viewing the Display (d) Parameters

Procedure		Sample Display
Step 1.	Press PROG to scroll through the parameter menus until the Display Group parameters are displayed. The PROGRAM LED will be off to indicate the drive is in display mode.	
Step 2.	Press ↵ to scroll through the Display Group parameters until the desired Display parameter is displayed.	
Step 3.	The parameter value will be displayed 3 seconds after ↵ is released.	

To view additional Display parameters, press ↵ to return to the Display Group parameter list and scroll through the parameter list as described in step 2.

Note that the last user-selected Display parameter is saved when power is removed and is displayed by default when power is re-applied.

* For more detailed inverter operation, refer to the inverter manual -> (PowerFlex 4 Adjustable Frequency AC Drive).

8.7 Trouble Shooting

⚠ DANGER

DISCONNECT POWER AND LOCKOUT DISCONNECTING MEANS BEFORE PERFORMING SERVICE TO ELECTRICAL PARTS OF THIS EQUIPMENT.
Only a qualified electrician should perform service to electrical parts of this equipment.

■ For trouble shooting of the inverter unit, refer to the inverter manual and respond accorkingly.

Example of typical problem

1) Motor doesn't work.
2) Motor rotates backward.
3) Trolley travels at a speed excessively different from the rated speed.
4) Acceleration or deceleration is not smooth.
5) Excessive current runs to the motor

8.8 Prevent Leakage Current & Noise Effect

8.8.1 Prevent Leakage Current Problem

⚠ WARNING

■ Leakage current generated through the inverter's input/output line or motor electrostatic capacitance may badly affect other equipment.

■ Since the amount of leakage current depends on carrier frequency (number of switching pulses per second) or the length of the input / output line, take the following preventative measures.

* Solution => Provide an inductive filter or line reactor.

8.8.2 Prevent Noise Effect Problem

⚠ WARNING

■ Noise generated through the power supply line of the inverter's main or control circuit may badly affect other electronics, in particular, measuring instruments and radios, such as those listed below;

=> Position Detector, Pressure Sensor, Proximity Switch, AM radio, Telephone.

Solution

- Provide a separate power supply for the inverter and the connected equipment.
- Keep wiring of different types of circuits apart from each other.
- Use shielded wires for weak current and signal circuits and twisted pair wires. for the power supply of weak current signals.
- Provide a noise filter at the incoming power supply circuit of the inverter.

8.9 Maintenance and Inspection

■ Operator shall perform a daily inspection according to this manual including :

1) Does hoist operate according to the push button control?
2) Is there any noise or vibration while operating? Is there any brake slip?
3) Does the limit switch properly operate?
4) Are all warning labels in place and in readable condition?

■ If any kind of problem is detected, stop the operation immediately and report it to the person in charge.

⚠ DANGER

HAZARDOUS VOLTAGES ARE PRESENT IN THE CONTROL BOX, OTHER ELECTRICAL COMPONENTS, AND CONNECTIONS BETWEEN THESE COMPONENTS.

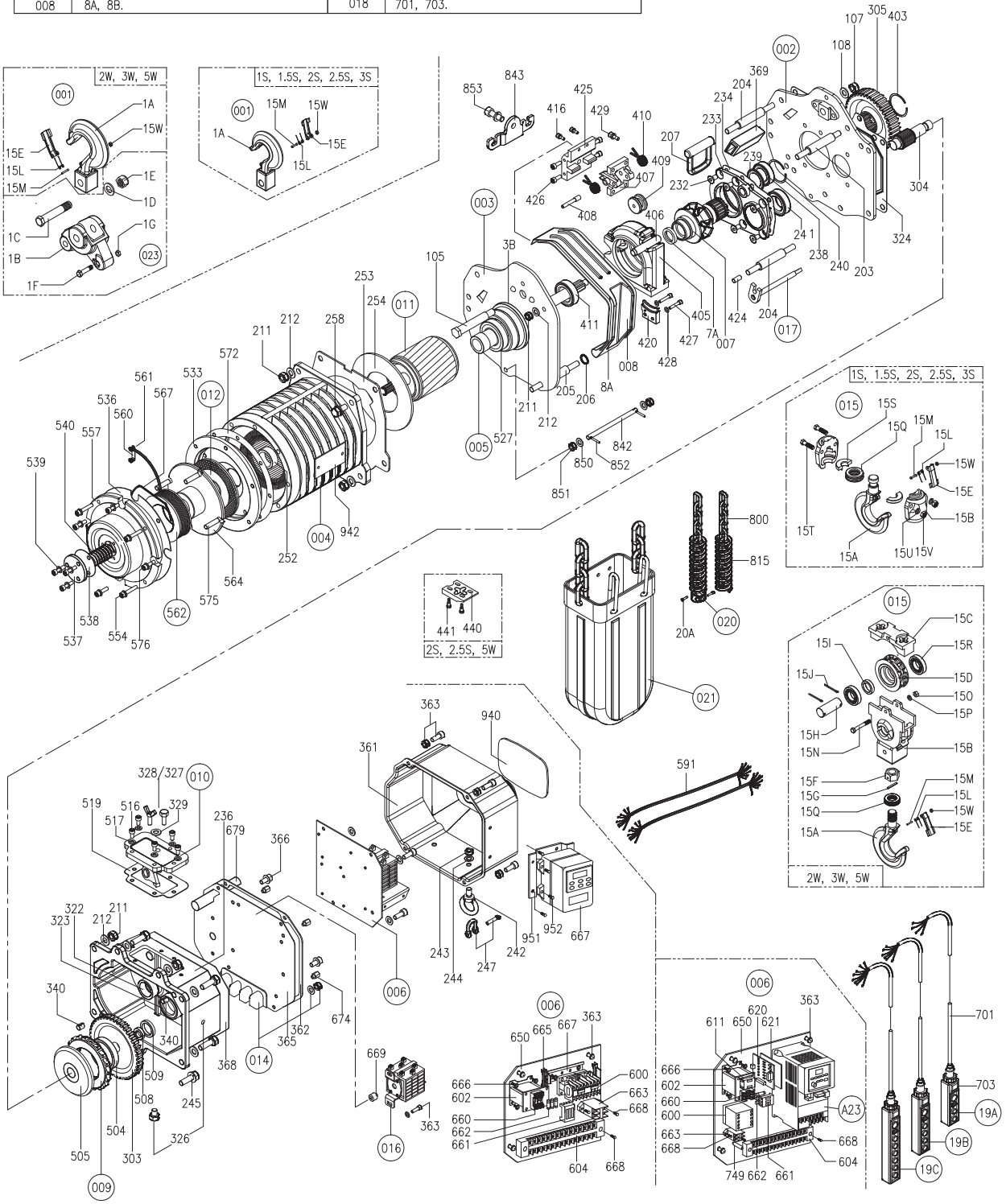
Before performing ANY mechanical or electrical maintenance on the equipment, de-energize (disconnect) the main switch supplying power to the equipment : and lock and tag the main switch in the de-energized position. Refer to ANSI Z244.1, Personnel Protection - Lockout/ Tagout of Energy Sources. Before checking power supply or electric control parts for hoist, wait 3 minutes before proceeding with any check-ups after shutting down the power.
Do not operate the equipment without control enclosure cover or covers in place.
Only trained and competent personnel should inspect and repair this equipment

■ Before turning on the power, make sure that the product has been properly wired without any shorted connections or loose screws.
■ Disconnect the inverter unit before performing the insulation resistance or withstand voltage test.

9. Parts illustrations

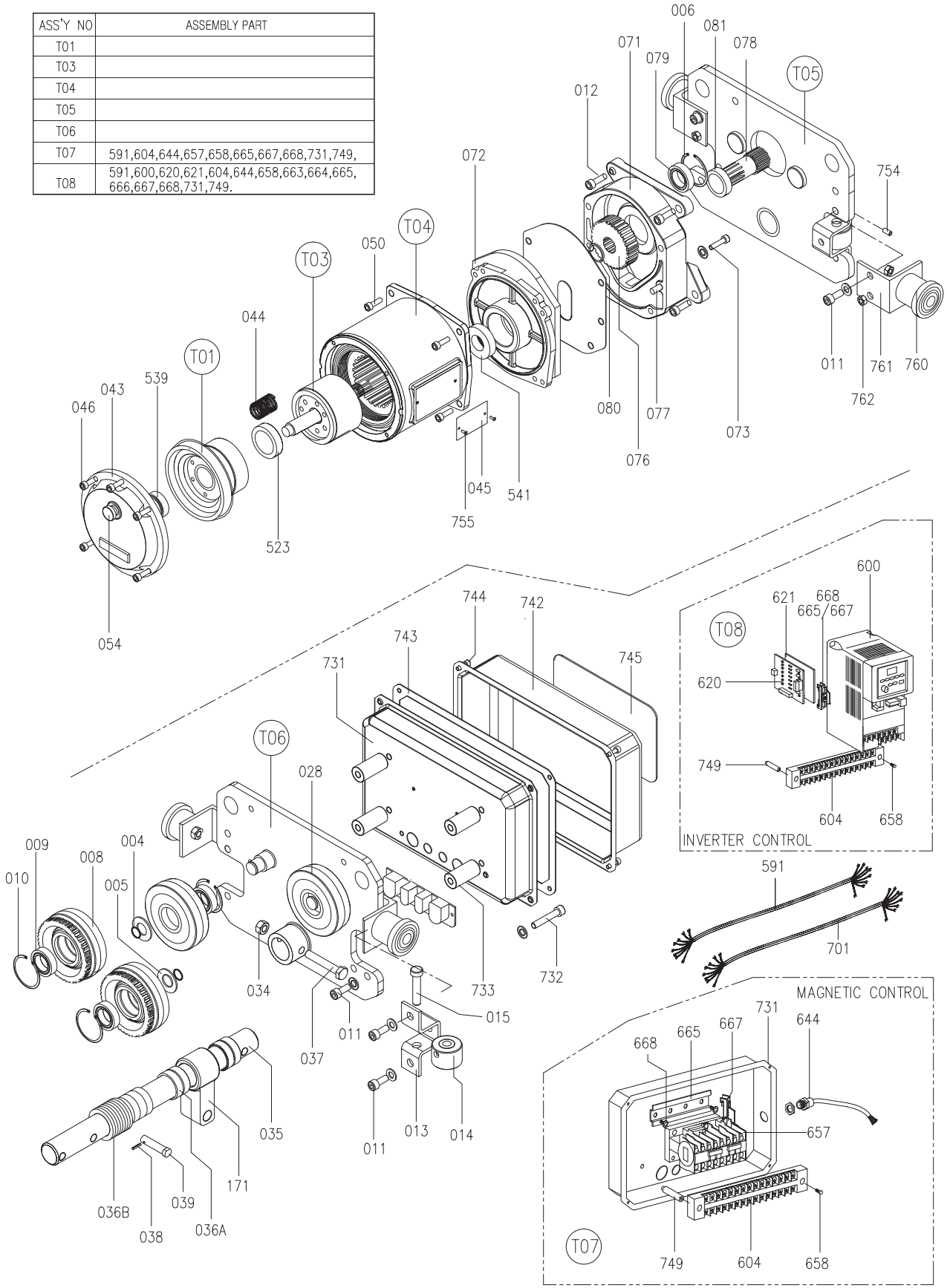
9.1.Exploded View of CH(chain hoist) Parts

ASS'Y NO	ASSEMBLY PART	ASS'Y NO	ASSEMBLY PART	ASS'Y NO	ASSEMBLY PART
001	1A, 15G, 15H, 15I, 15S	009		020	20A, 20B.
002		010		021	
003		011		022	
004		012			W-TYPE
005		014	A14	015	15A,15B,15C,15D,15E,15F,15G,15H,15I,15J,15K
006	A16, 600, 602, 604, 650, 660, 661,	015	15A,15B,15C,15D,15E,15F,15G,15H,15I,15J,15S		15L,15M,15N,15O,15P,15Q,15R,15S.
	662, 663, 665, 666, 667, 668.	016			
007	7A, 7B.	017			
008	8A, 8B.	018	701, 703.		

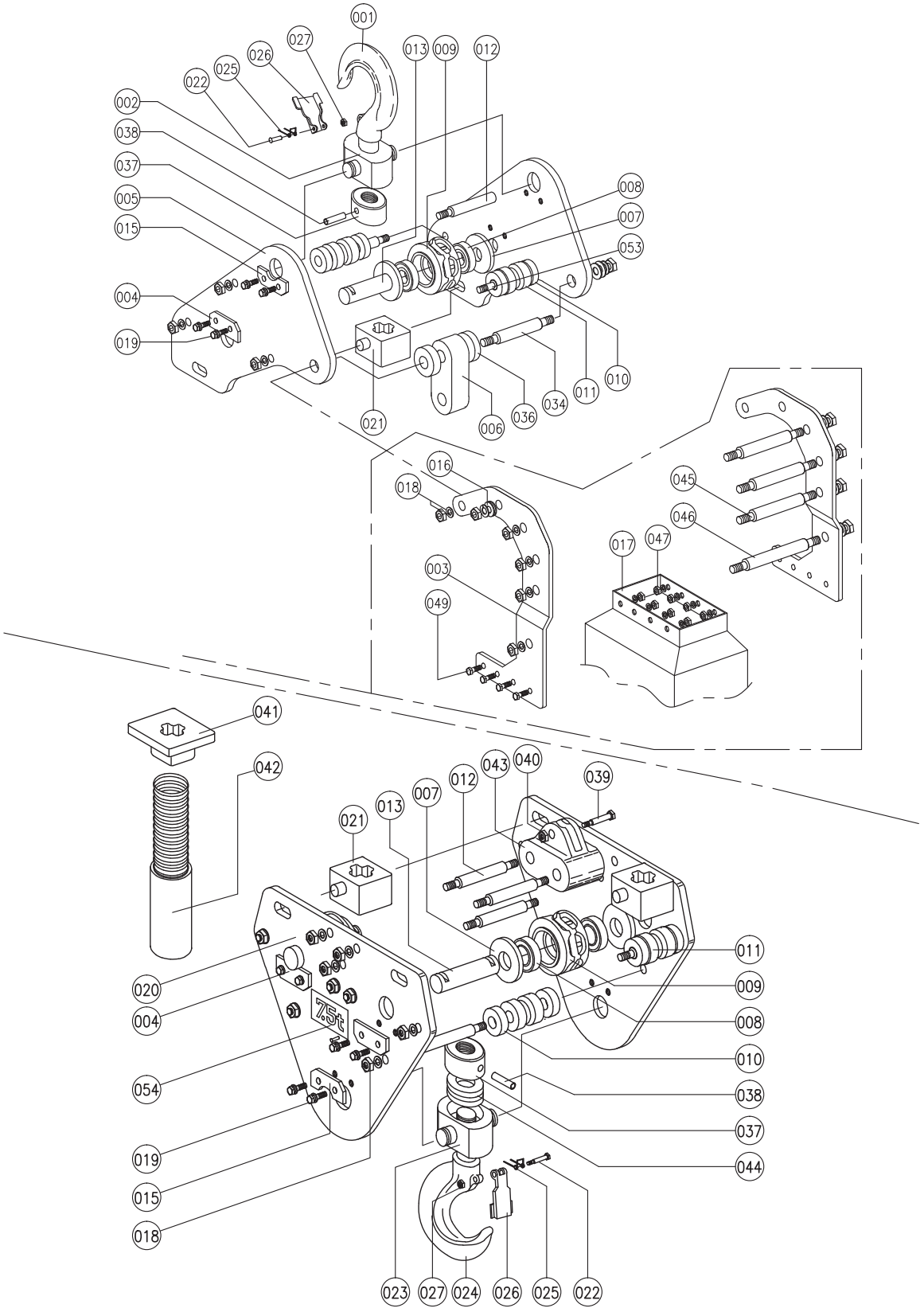


9.2.Exploded View of MT(Motor Trolley) Parts

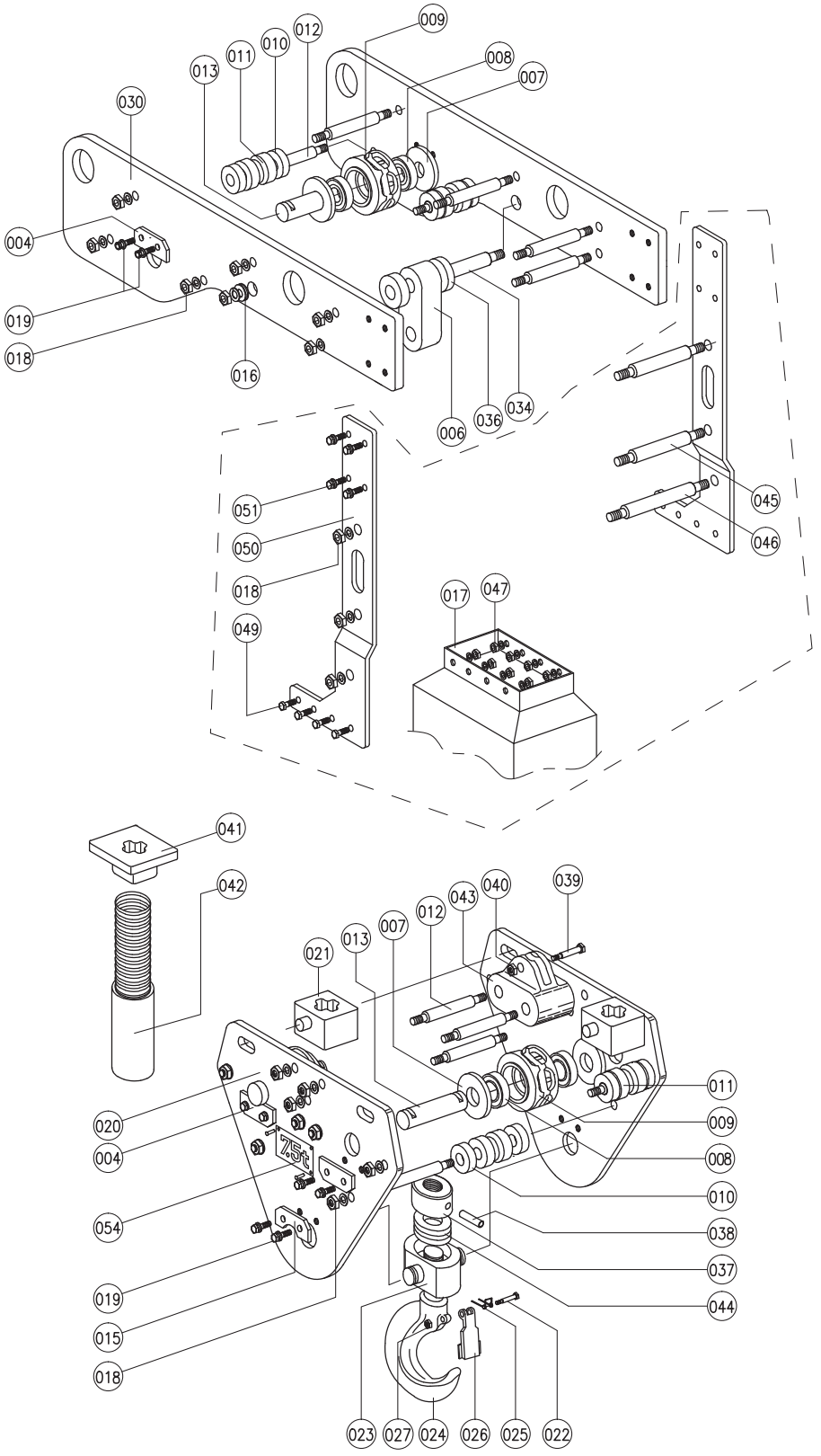
ASS'Y NO	ASSEMBLY PART
T01	
T03	
T04	
T05	
T06	
T07	591,604,644,657,658,665,667,668,731,749,
T08	591,600,620,621,604,644,658,663,664,665, 666,667,668,731,749.



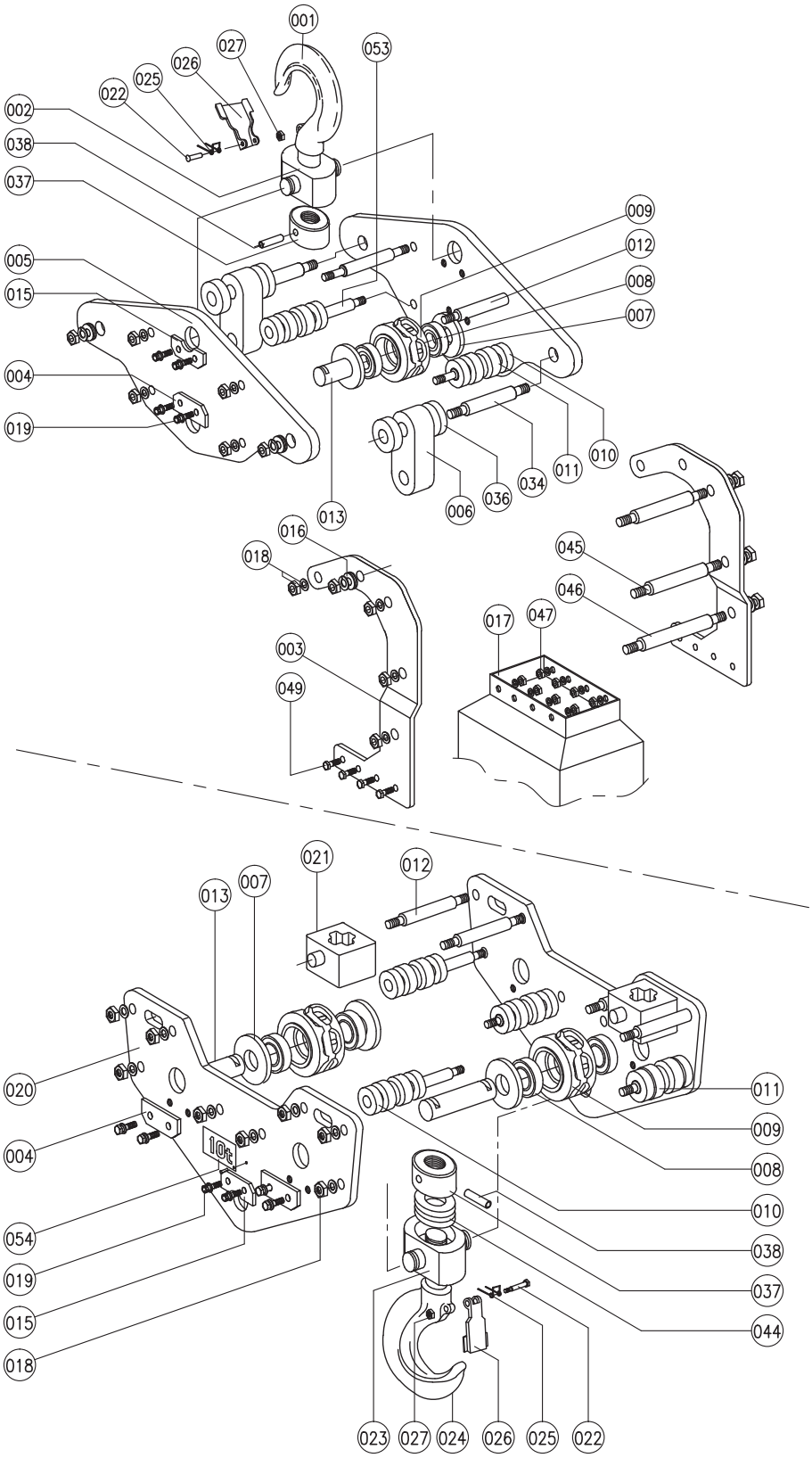
9.3.Exploded View of Hook mounted CH(chain hoist) Parts for 7.5ton Capacity only

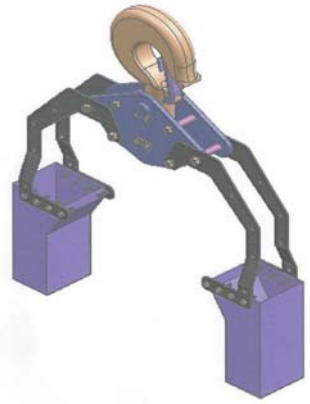


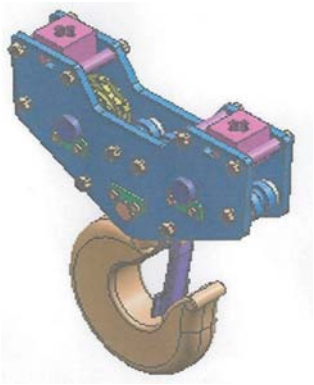
9.4.Exploded View of Trolley mounted CH(chain hoist) Parts for 7.5ton Capacity only



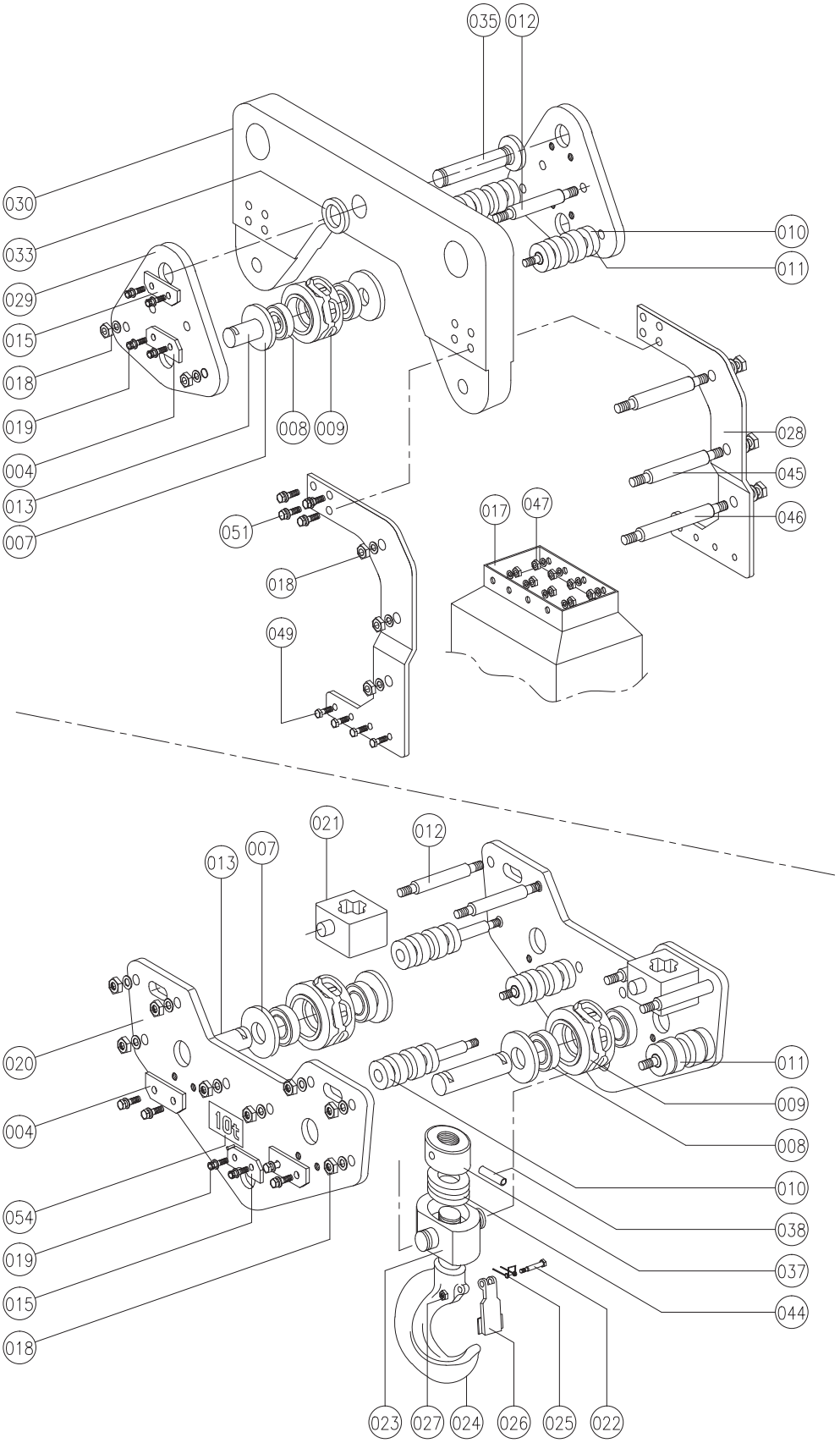
9.5.Exploded View of Hook mounted CH(chain hoist) Parts for 10ton Capacity only



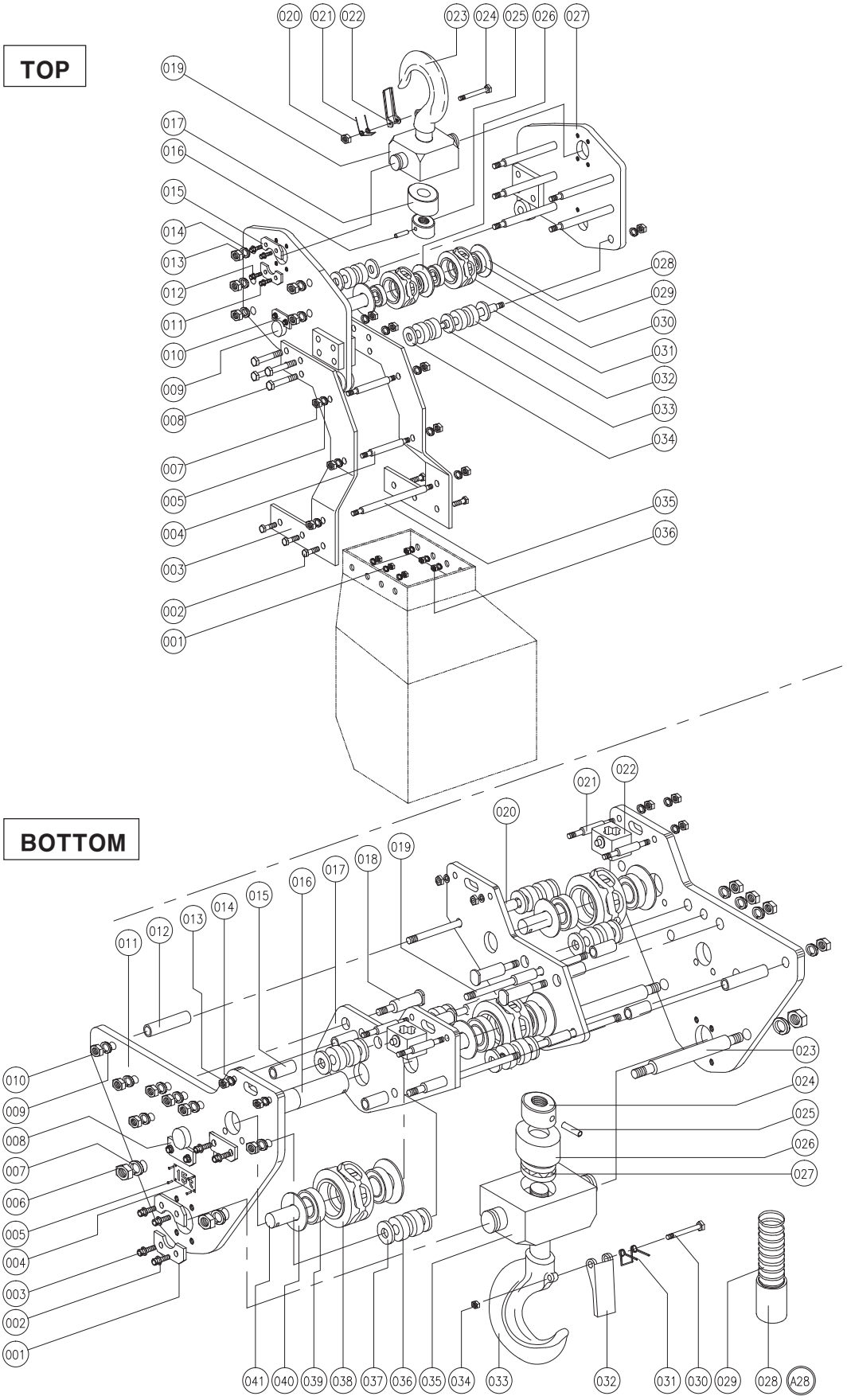




9.6.Exploded View of Trolley mounted CH(chain hoist) Parts for 10ton Capacity only

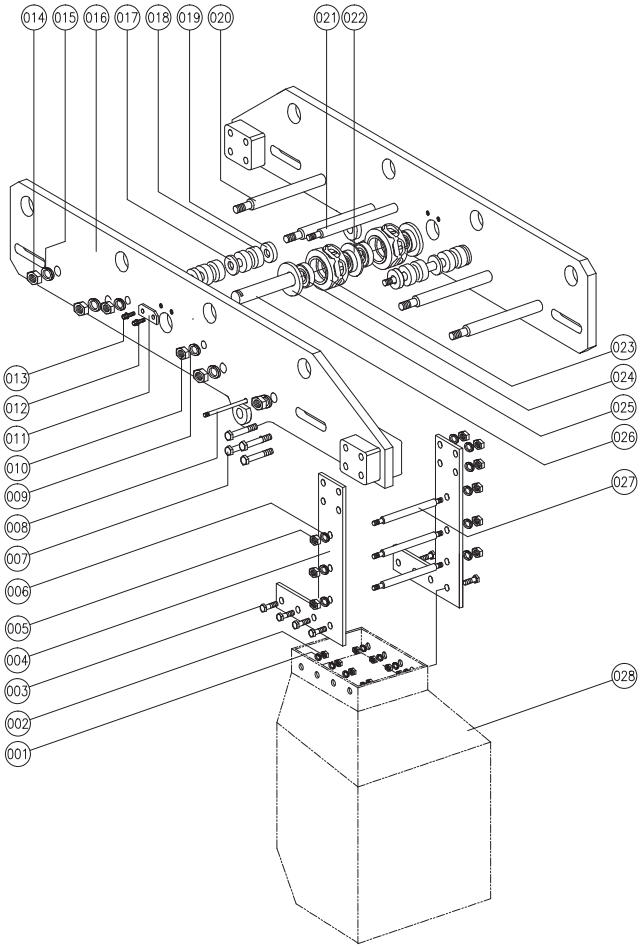


9.7.Exploded View of Hook mounted CH(chain hoist) Parts for 15,20ton Capacity only

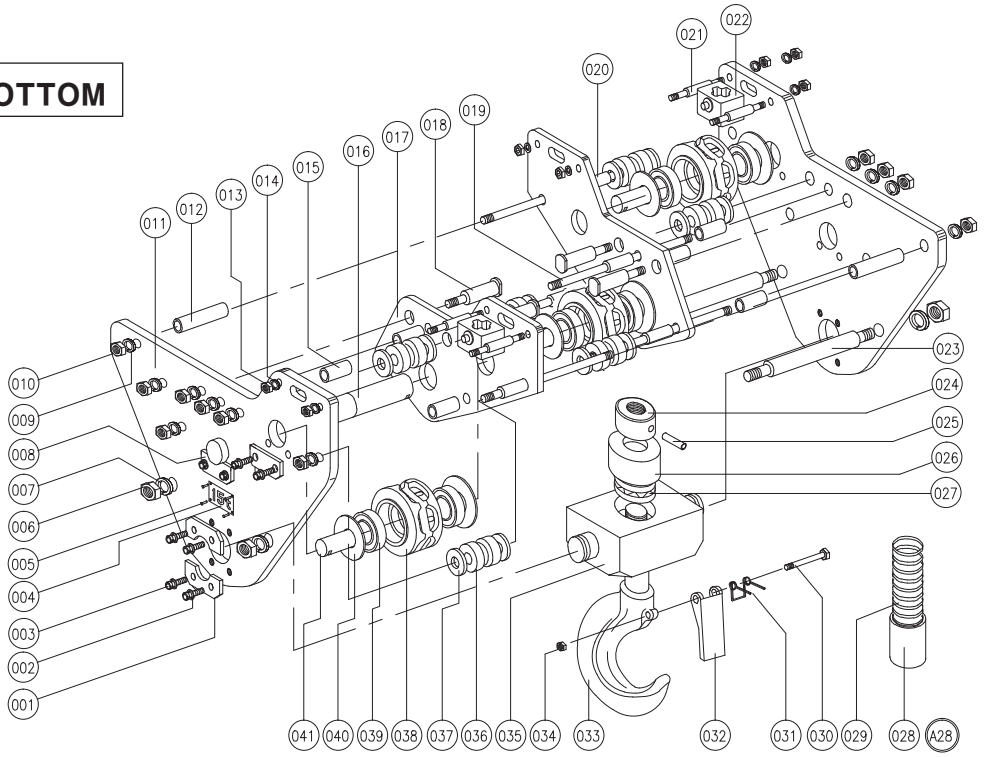


9.8.Exploded View of Trolley mounted CH(chain hoist) Parts for 15,20ton Capacity only

TOP

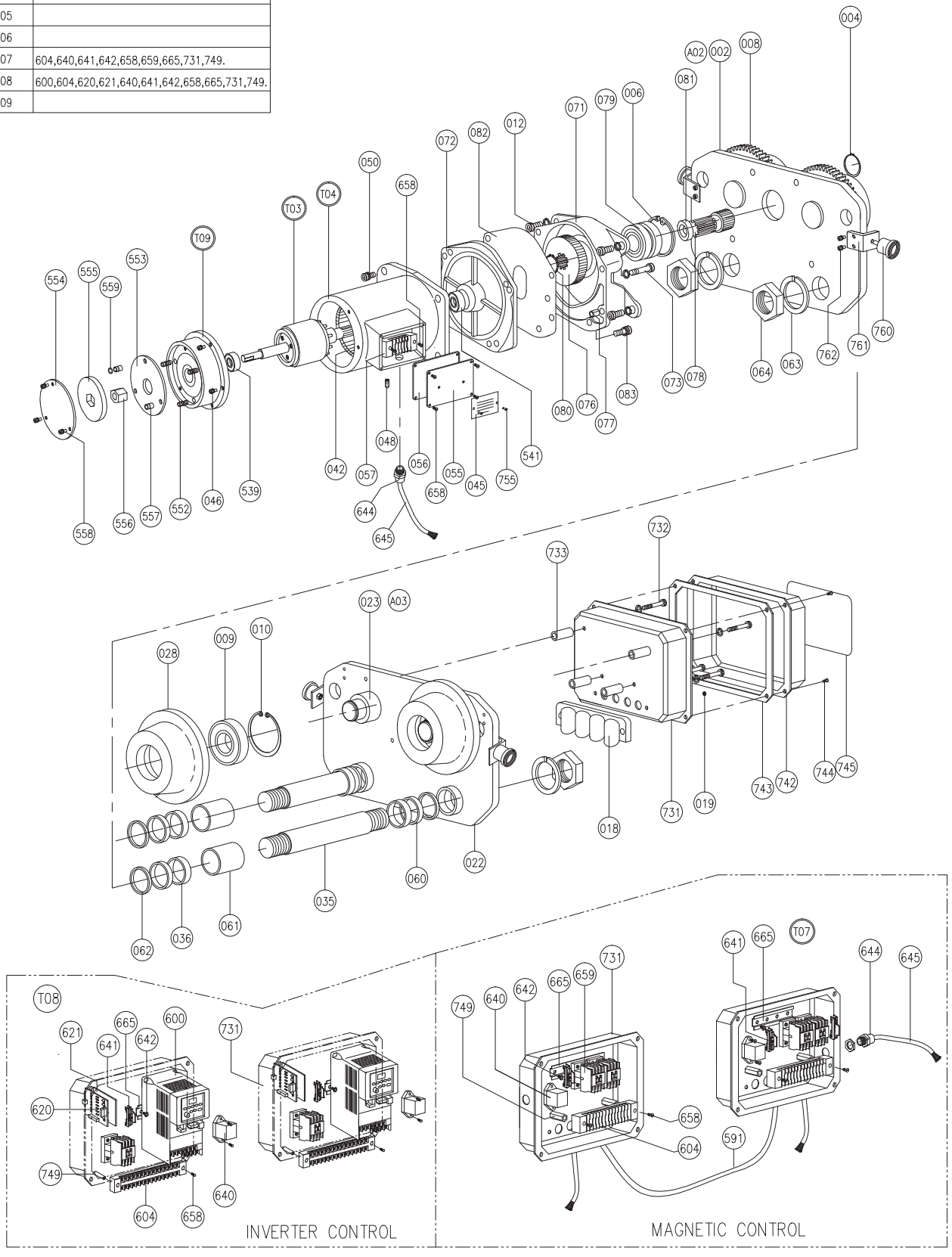


BOTTOM



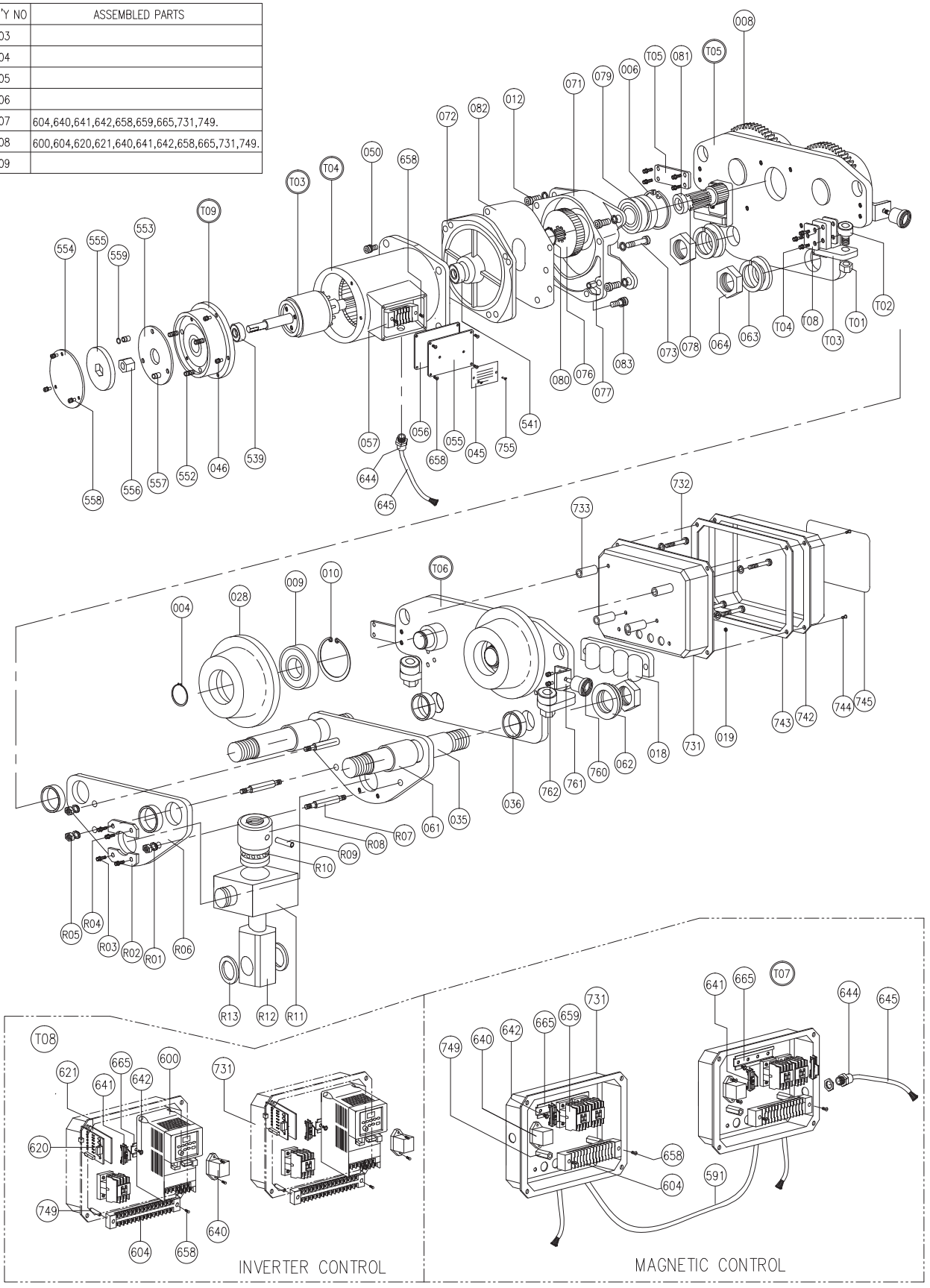
9.9.Exploded View of MT(Motor trolley) Parts(15,20T)

ASS'Y NO	ASSEMBLED PARTS
T03	
T04	
T05	
T06	
T07	604,640,641,642,658,659,665,731,749.
T08	600,604,620,621,640,641,642,658,665,731,749.
T09	

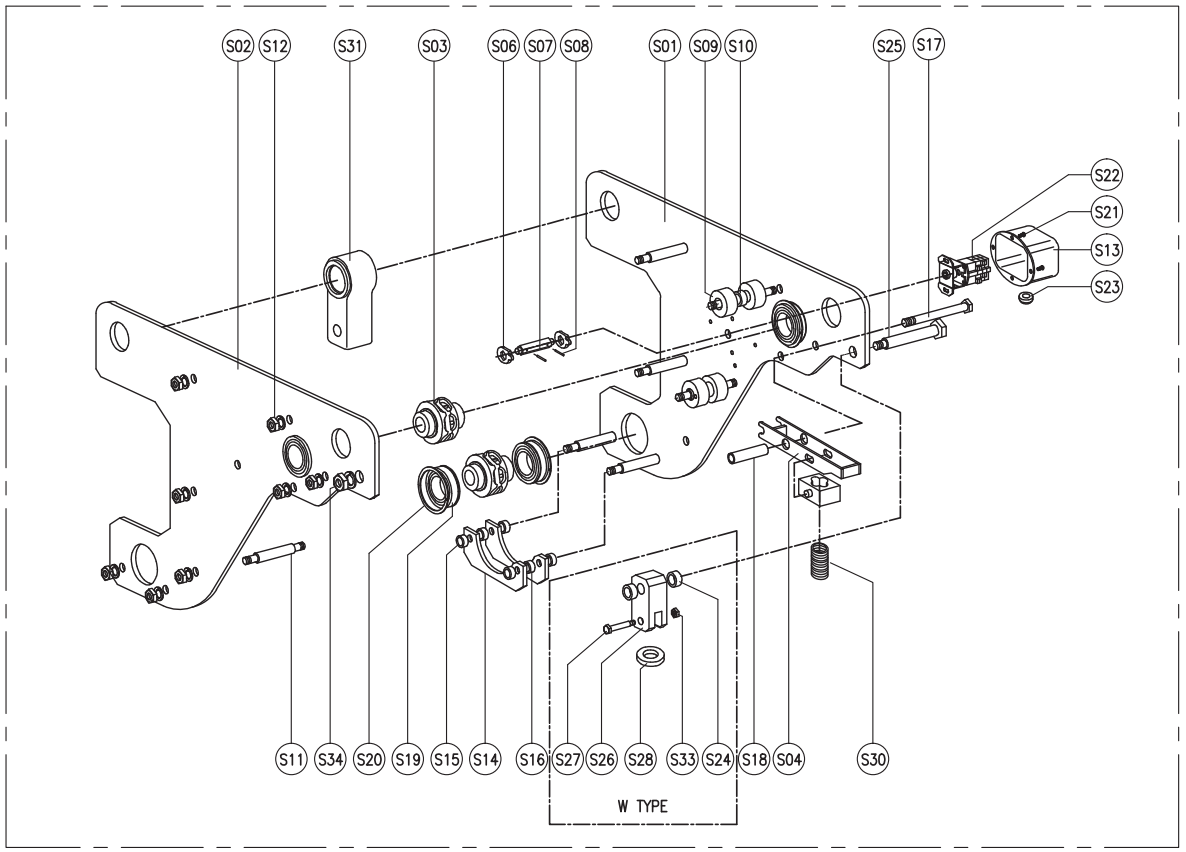


9.10.Exploded View of MT(Motor trolley) Parts(15,20T) (Swiveling Trolley Type)

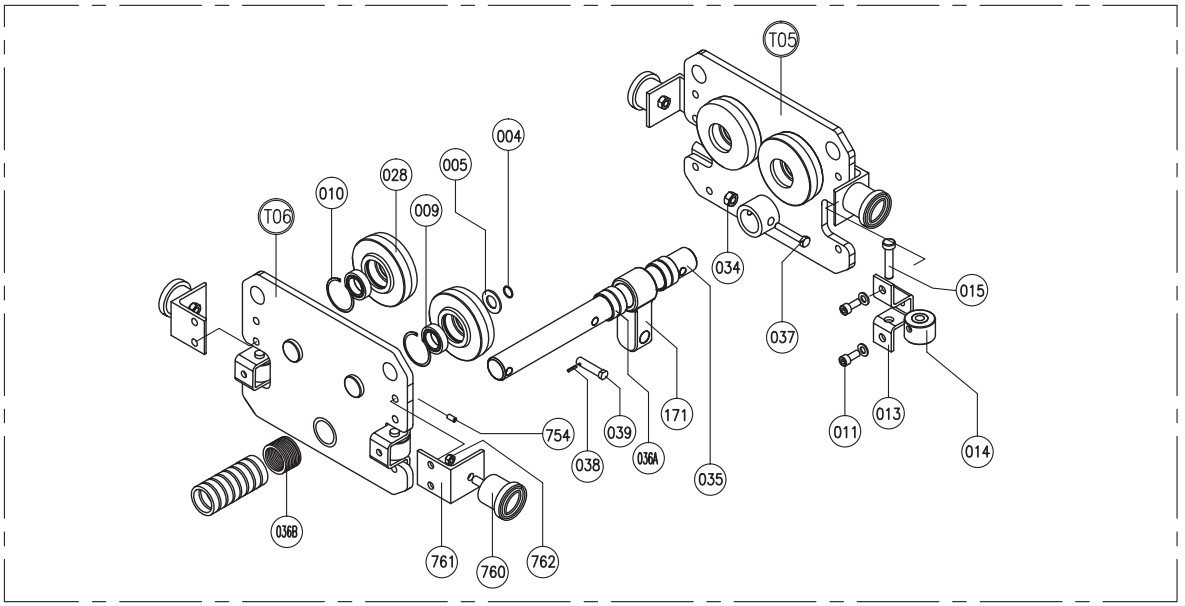
ASS'Y NO	ASSEMBLED PARTS
T03	
T04	
T05	
T06	
T07	604,640,641,642,658,659,665,731,749.
T08	600,604,620,621,640,641,642,658,665,731,749.
T09	



9.11.Exploded View of 3&5TON Low Headroom Hoist (Load Block)



9.12.Exploded View of Lug mount trolley kit 1,2,3,5ton capacity



9.13.Part list

*PARTS OF ACCOLIFT CHAIN HOIST

Capacity-Chain-falls (How to read out)		1S	2W	3W	2S	3S	5W
		1Ton 1Chain-fall	2Ton 2Chain-fall	3Ton 2Chain-fall	2Ton 1Chain-fall	3Ton 1Chain-fall	5Ton 2Chain-fall
ACCOLIFT MODEL NO. (HOOK Mounted)		2130020 2130030	2130040	2130060	2130050	2130065	2130070
ACCOLIFT MODEL NO. (MOTOR TROLLEY MOUNTED)		2130120 2130130	2130140	2130160	2130150	2130165	2130170
DESCRIPTION							
CHA01	TOP HOOK ASS'Y	71574-1001	71574-2001	71574-3001	71574-2001	71574-3508	71574-5001
CH001A	TOP HOOK	71574-1002	71574-2002	71574-3002	71574-2002	71574-3509	71574-5002
CH001B	ARM OF TOP HOOK	N/A	71574-2003	71574-3003	N/A	N/A	71574-5003
CH001C	CONNECTING BOLT	N/A	71574-2004	71574-3004	N/A	N/A	71574-5004
CH001F	CHAIN ANCHORAGE BOLT	N/A	71574-2005	71574-3005	N/A	N/A	71574-5005
CHA02	GEAR SIDE PLATE ASS'Y	71574-1006		71574-3006			
CHA03	MOTOR SIDE PLATE ASS'Y	71574-1007		71574-3007			
CHA04	MOTOR CASE & STATOR ASS'Y MOTOR=>A : 1800RPM(27FPM), B : 1200RPM(17FPM)	71574-1008A	71574-2008	71574-3008			
		71574-1008B					
CH004	MOTOR CASE&STATOR ASS'Y(208->230V), INVERTER HOIST	71574-1208	71574-2208				
	MOTOR CASE&STATOR ASS'Y(460V), INVERTER HOIST	71574-1209	71574-2209				
CHA05	1ST GEAR ASS'Y	71574-1009		71574-3009			
CHA06	ELECTRIC EQUIPMENT ASS'Y, WITH THE BOARD SETTING OF PARTS	71574-1010		71574-3010			
CH006	48VOLT CONTROL ASSEMBLY,230VOLT HOIST	71574-1306		71574-2306			
	48VOLT CONTROL ASSEMBLY,430VOLT HOIST	71574-1307		71574-2307			
	110VOLT CONTROL ASSEMBLY,230VOLT HOIST	71574-1308		71574-2308			
	110VOLT CONTROL ASSEMBLY,460VOLT HOIST	71574-1309		71574-2309			
CH007	LOAD SHEAVE	71574-1012		71574-3012	71574-4042		
CH007A	OIL SEAL	71574-1269		71574-3269			
CH008	SHEAVE COVER	71574-1013		71574-3013			
CH008A	SHEAVE COVER PACKING	71574-1446		71574-3446			
CH009	RATCHET GEAR ASS'Y	71574-1014		71574-3014			
CH010	PAWL COVER ASS'Y	71574-1015		71574-3015			
CH011	ROTOR ASS'Y	71574-1016		71574-3016			
CH012	BRAKE DISC ASS'Y	71574-1017		71574-3017			
CH014	CORD HOLDER ASS'Y	71574-1018					
CH015	BOTTOM HOOK ASS'Y	71574-1019	71574-2019	71574-3019	71574-4019	71574-3510	71574-5019
CH015A	BOTTOM HOOK ONLY	71574-1020	71574-2020	71574-3020	71574-4020	71574-3511	71574-5020
CH015B	BOTTOM HOOK COVER SET	71574-1021	71574-2021	71574-3021	71574-4021		71574-5021

*7.5Ton parts are same as 5ton(x1) and 10,15,20Ton parts are same as 5ton(x2) except for top and bottom hook assembly.

*PARTS OF ACCOLIFT CHAIN HOIST

Capacity-Chain-falls (How to read out)		1S	2W	3W	2S	3S	5W
		1Ton 1Chain-fall	2Ton 2Chain-fall	3Ton 2Chain-fall	2Ton 1Chain-fall	3Ton 1Chain-fall	5Ton 2Chain-fall
ACCOLIFT MODEL NO. (HOOK Mounted)		2130020 2130030	2130040	2130060	2130050	2130065	2130070
ACCOLIFT MODEL NO. (MOTOR TROLLEY MOUNTED)		2130120 2130130	2130140	2130160	2130150	2130165	2130170
DESCRIPTION							
CH015C	BOTTOM HOOK CHAIN GUIDE	NA	71574-2022	71574-3022	N/A	N/A	71574-5022
CH015D	IDLE SHEAVE	NA	71574-2023	71574-3023	N/A	N/A	71574-5023
CH015 E/L/M/W	SAFETY LATCH SET	71574-1030	71574-2030	71574-3030	71574-2030	71574-3030	71574-5030
CH015F	HEX NUT	NA	71574-2272	71574-3272	N/A	N/A	71574-5272
CH015G	SPRING PIN	N/A	71574-2273	71574-3273	N/A	N/A	71574-5273
CH015H	IDLE SHEAVE PIN	N/A	71574-2024	71574-3024	N/A	N/A	71574-5024
CH015I	IDLE SHEAVE COLLAR	N/A	71574-2025	71574-3025	N/A	N/A	71574-5025
CH015J	COTTER PIN	N/A	71574-2026	71574-3026	N/A	N/A	71574-5026
CH015N	HEX BOLT	N/A	71574-2027	71574-3027	N/A	N/A	71574-5027
CH015Q	THRUST BEARING FOR 1 CHAIN REEVING BOTTOM HOOK	71574-1028	N/A	N/A	71574-4028		N/A
CH015Q	THRUST BEARING FOR 2 CHAIN REEVING BOTTOM HOOK	N/A	71574-2029	71574-3029	N/A		71574-5029
CH015R	BALL BEARING	N/A	71574-2274	71574-3274	N/A		71574-5274
CH015S	SPLIT RING	71574-1260	N/A		71574-4260	71574-4260	N/A
CH015T	HEX BOLT	71574-1261	N/A		71574-4261	71574-4261	N/A
CH015U	SPRING WASHER	71574-1262	N/A		71574-4262	71574-4262	N/A
CH015V	HEX NUT	71574-1263	N/A		71574-4263	71574-4263	N/A
CH015O	SPRING WASHER	N/A	71574-2028	71574-3028	N/A	N/A	71574-5028
CH015P	HEX NUT	N/A	71574-2028	71574-3028	N/A	N/A	71574-5028
CH015W	HEX NUT	71574-1264	71574-2264				71574-5264
CH016	LIMIT CAM SWITCH ASS'Y	71574-1032	71574-3032				
	LIMIT CAM SWITCH ASS'Y, INVERTER HOIST	71574-1276	71574-2276				
CH017	LIMIT SWITCH LEVER ASS'Y	71574-1033	71574-3033				
CH019A	PUSH BUTTON ASS'Y, 1STEP 2POINTS(U/DW)	71574-1034					
	PUSH BUTTON ASS'Y, 2STEP 2POINTS(U/DW)	71574-1206					
CH019B	PUSH BUTTON ASS'Y, 1STEP 4POINTS(U/DW/L/R)	71574-1035					
	PUSH BUTTON ASS'Y, 2STEP 4POINTS(U/DW/L/R)	71574-1207					
CH019C	PUSH BUTTON ASS'Y, 1STEP 6POINTS(U/DW/L/R/S/N))	71574-1036					
	PUSH BUTTON ASS'Y, 2STEP 6POINTS(U/DW/L/R/S/N))	71574-1259					
CH020	CHAIN STOPPER	71574-1237	71574-3037	71574-4037			

*7.5Ton parts are same as 5ton(x1) and 10,15,20Ton parts are same as 5ton(x2) except for top and bottom hook assembly.

*PARTS OF ACCOLIFT CHAIN HOIST

Capacity-Chain-falls (How to read out)		1S 1Ton 1Chain-fall	2W 2Ton 2Chain-fall	3W 3Ton 2Chain-fall	2S 2Ton 1Chain-fall	3S 3Ton 1Chain-fall	5W 5Ton 2Chain-fall
ACCOLIFT MODEL NO. (HOOK Mounted)		2130020 2130030	2130040	2130060	2130050	2130065	2130070
ACCOLIFT MODEL NO. (MOTOR TROLLEY MOUNTED)		2130120 2130130	2130140	2130160	2130150	2130165	2130170
DESCRIPTION(MAXIMUM LIFT)							
CH021A	CHAIN CONTAINER ASS'Y	60ft	30ft	N/A	26ft		N/A
PCCA		71574-1038					
CH021B	CHAIN CONTAINER ASS'Y	130ft	65ft	40ft	60ft		30ft
PCCB		71574-1039					
CH021C	CHAIN CONTAINER ASS'Y	N/A	N/A	65ft	92ft		46ft
SCC1		71574-1293					
CH021C	CHAIN CONTAINER ASS'Y	154ft	77ft	N/A			
SCC1-1		71574-1525					
CH021C	CHAIN CONTAINER ASS'Y	N/A	N/A	106ft	147ft		73ft
SCC2		71574-1253					
CH021C	CHAIN CONTAINER ASS'Y	269ft	134ft	N/A			
SCC2-1		71574-1526					
CH021D	CANVAS CHAIN CONTAINER	40ft	20ft	N/A	15ft		N/A
CCC		71574-1264					
CH105	PACKING, SPRING COVER	71574-1040		71574-3040			
CH107	HEX WRENCH BOLT, 6MMx20MM	71574-1041		71574-3041			
CH203	BRAKE SPRING	71574-1042		71574-3042			
CH204	HEX WRENCH BOLT S/W	71574-1043		71574-3043			
CH205	BRAKE STATOR	N/A		71574-3226			
CH206	CORD PRESSING METAL	N/A		71574-3044			

*7.5Ton parts are same as 5ton(x1) and 10,15,20Ton parts are same as 5ton(x2) except for top and bottom hook assembly.

*PARTS OF ACCOLIFT CHAIN HOIST

Capacity-Chain-falls (How to read out)		1S	2W	3W	2S	3S	5W
		1Ton 1Chain-fall	2Ton 2Chain-fall	3Ton 2Chain-fall	2Ton 1Chain-fall	3Ton 1Chain-fall	5Ton 2Chain-fall
ACCOLIFT MODEL NO. (HOOK Mounted)		2130020 2130030	2130040	2130060	2130050	2130065	2130070
ACCOLIFT MODEL NO. (MOTOR TROLLEY MOUNTED)		2130120 2130130	2130140	2130160	2130150	2130165	2130170
DESCRIPTION							
CH207	HANGER HOLDING METAL	71574-1045					
CH211	HEX NUT, M10(1,2ton) M12(3,2,5,7.5,10,15,20ton)	71574-1046		71574-3046			
CH212	SPRING WASHER, M10(1,2ton) M12(3,2,5,7.5,10,15,20ton)	71574-1447		71574-3447			
CH232	SUNK BOLT, M8x15(1,2ton) M10x15(3,2,5,7.5,10,15,20ton)	71574-1047		71574-3047			
CH233	FLANGE B	71574-1048		71574-3048			
CH234	PACKING FLANGE B	71574-1448		71574-3448			
CH235	PACKING GEAR CASE	71574-1449		71574-3449			
CH236	GEAR CASE	71574-1049		71574-3049			
CH238	BALL BEARING, 6008ZZ(1,2ton) 6010ZZ(3,2,5,7.5,10,15,20ton)	71574-1050		71574-3050			
CH239	OIL SEAL (A)	71574-1051		71574-3051			
CH240	SNAP RING	71574-1052		71574-3052			
CH241	BALL BEARING, 6204ZZ(1,2ton) 6306ZZ(3,2,5,7.5,10,15,20ton)	71574-1053		71574-3053			
CH242	EYE BOLT ASS'Y, 8MM	71574-1054					
CH245	HEX BOLT S/W	71574-1055		71574-3055			
CH247	SHACKLE	71574-1056					
CH252	BALL BEARING, 6204DD(1,2ton) 6205DD(3,2,5,7.5,10,15,20ton)	71574-1057		71574-3057			
CH253	PACKING, MOTOR CASE	71574-1218		71574-3218			
CH254	PLATE, LOCATING	71574-1219		71574-3219			
CH258	HEX BOLT S/W	71574-1058		71574-3058			
CH303	2ND GEAR	71574-1303		71574-3303			
CH304	3RD GEAR	71574-1304		71574-3304	71574-4304	71574-3512	71574-5304
CH305	4TH GEAR	71574-1305		71574-3305	71574-4305	71574-5305	
CH322	BALL BEARING, 6301DD(1,2ton) 6303DD(3,2,5,7.5,10,15,20ton)	71574-1059		71574-3059			
CH323	BALL BEARING, 6203DD(1,2ton) 6305DD(3,2,5,7.5,10,15,20ton)	71574-1060		71574-3060			
CH324	PACKING FOR GEAR CASE	71574-1061		71574-3061			
CH326	HEX BOLT	71574-1062					
CH327	VENT BOLT	71574-1063					
CH329	PACKING, VENT BOLT	71574-1220					
CH340	SPRING PIN	71574-1065					
CH361	ELECTRIC COMPONENT CASE	71574-1066		71574-3066			
	ELECTRIC COMPONENT CASE (INVERTER HOIST)	71574-1205		71574-2205			
CH362	PACKING COMPONENT CASE	71574-1067		71574-3067			

*7.5Ton parts are same as 5ton(x1) and 10,15,20Ton parts are same as 5ton(x2) except for top and bottom hook assembly.

*PARTS OF ACCOLIFT CHAIN HOIST

Capacity-Chain-falls (How to read out)		1S	2W	3W	2S	3S	5W
		1Ton 1Chain-fall	2Ton 2Chain-fall	3Ton 2Chain-fall	2Ton 1Chain-fall	3Ton 1Chain-fall	5Ton 2Chain-fall
ACCOLIFT MODEL NO. (HOOK Mounted)		2130020 2130030	2130040	2130060	2130050	2130065	2130070
ACCOLIFT MODEL NO. (MOTOR TROLLEY MOUNTED)		2130120 2130130	2130140	2130160	2130150	2130165	2130170
DESCRIPTION							
CH363	HEX WRENCH BOLT (M6X12)	71574-1068					
CH366	HEX WRENCH BOLT	71574-1069		71574-3069			
CH368	ADIABATIC PACKING	71574-1070		71574-3070			
CH369	LEAD WIRE	71574-1071		71574-3071			
CH405	CHAIN GUIDE	71574-1072		71574-3072	71574-4072		
CH406	ANTIROTATION PIN	71574-1073		71574-3073			
CH407	ROLLER BOARD	71574-1074		71574-3074			
CH408	ROLLER PIN	71574-1075		71574-3075			
CH409	ROLLER	71574-1076		71574-3076	71574-4076		
CH410	INTERMEDIATE STICK SPRING	71574-1077		71574-3077			
CH411	BALL BEARING, 6008ZZ(1,2ton)/6210ZZ(3,2,5ton)	71574-1078		71574-3078			
CH416	MACHINE SCREW S/W, 5MMx10MM	71574-1079					
CH420	STRIPPER	71574-1080		71574-3080	71574-4080		
CH424	SPRING PIN	71574-1081					
CH425	HOLDING BOARD FOR SPRING	71574-1082		71574-3082			
CH426	HEX WRENCH BOLT	71574-1083		71574-3083			
CH427	HEX WRENCH BOLT	71574-1300		71574-3300			
CH428	SPRING WASHER	71574-1084		71574-3084			
CH429	HEX WRENCH BOLT	71574-1085		71574-3085			
CH504	BUSHING FOR RATCHET DISC	71574-1086		71574-3086			
CH505	DISC HUB	71574-1087		71574-3087			
CH508	SPLIT RING	71574-1088		71574-3088			
CH509	STOPPER RING	71574-1089		71574-3089			
CH516	HEX WRENCH BOLT	71574-1090		71574-3090			
CH519	PACKING, PAWL COVER	71574-1222		71574-3222			
CH527	BALLBEARING, 6206ZZ(1,2ton)/6008ZZ(3,2,5ton)	71574-1091		71574-3091			

*7.5Ton parts are same as 5ton(x1) and 10,15,20Ton parts are same as 5ton(x2) except for top and bottom hook assembly.

*PARTS OF ACCOLIFT CHAIN HOIST

Capacity-Chain-falls (How to read out)		1S	2W	3W	2S	3S	5W	7.5W	10W	15W	20W
		1Ton 1Chain-fall	2Ton 2Chain-fall	3Ton 2Chain-fall	2Ton 1Chain-fall	3Ton 1Chain-fall	5Ton 2Chain-fall	7.5Ton 3Chain-fall	10Ton 4Chain-fall	15Ton 6Chain-fall	20Ton 8Chain-fall
ACCOLIFT MODEL NO. (HOOK Mounted)		2130020 2130030	2130040	2130060	2130050	2130065	2130070	2130075	2130080	2130085	2130090
ACCOLIFT MODEL NO. (MOTOR TROLLEY MOUNTED)		2130120 2130130	2130140	2130160	2130150	2130165	2130170	2130175	2130180	2130185	2130190
DESCRIPTION											
CH533	BEARING SUPPORT	71574-1092		71574-3092							
CH536	PACKING, BRAKE STATOR	71574-1223		71574-3223							
CH537	SPRING COVER	71574-1093		71574-3093							
CH538	PACKING, SPRING COVER	71574-1225		71574-3225							
CH539	HEX WRENCH BOLT, 6MMx20MM	71574-1094									
CH540	BRAKE SPRING	71574-1095		71574-3095							
CH554	HEX WRENCH BOLT S/W	71574-1096		71574-3096							
CH557	BRAKE STATOR	71574-1097		71574-3097							
CH560	CORD PRESSING METAL	71574-1098									
CH561	MACHINE SCREW, SPRING WASHER, PLAIN WASHER	71574-1271									
CH562	BRAKE COIL ASSEMBLY (230/460)	71574-1099		71574-3099							
CH564	MOVING CORE	71574-1100		71574-3100							
CH567	SNAP RING	71574-1101		71574-3101							
CH572	PACKING, BEARING SUPPORT	71574-1224		71574-3224							
CH575	SPRING PIN	71574-1102		71574-3102							
CH576	HEX WRENCH BOLT, S/W 6MMx25MM	71574-1103		71574-3103							
CH591	POWER+CONTROL ASS'Y	71574-1104		71574-3104							
CH600	MAGNETIC CONTACTOR, 48V CONTROL	71574-1514		71574-3514							
	MAGNETIC CONTACTOR, 110V CONTROL	71574-1105		71574-3105							
	MAGNETIC CONTACTOR, 48V CONTROL, INVERTER HOIST	71574-1515	N/A	71574-1515							
	MAGNETIC CONTACTOR, 110V CONTROL, INVERTER HOIST	71574-1198	N/A	71574-1198							
CHA23	INVERTER (208V->230V)	71574-1192	N/A	71574-2192							
	INVERER (460V)	71574-1193	N/A	71574-2193							
CH602	TRANSFORMER, 48V CONTROL	71574-1316							71574-6316		
	TRANSFORMER, 110V CONTROL	71574-1107							71574-6107		
	TRANSFORMER, 48VOLT CONTROL, INVERTER HOIST	71574-1196									
	TRANSFORMER, 110VOLT CONTROL, INVERTER HOIST	71574-1277									
CH604	TERMINAL BLOCK	71574-1108		71574-3109							
	TERMINAL BLOCK, INVERTER HOIST	71574-1197		71574-2197							
CH620	INTERFACE, 48VOLT CONTROLS	71574-1200	N/A	71574-1200							
	INTERFACE, 110VOLT CONTROLS	71574-1291	N/A	71574-1291							
CH621	INTERFACE BOARD	71574-1201	N/A	71574-2201							
CH622	TERMINAL BLOCK BOARD	71574-1202	N/A								
CH660	FUSE HOLDER	71574-1110									
CH661	FUSE HOLDER COVER	71574-1451									
CH662	FUSE	71574-1111							71574-6111		
	FUSE, INVERTER HOIST	71574-1111									
CH663	DPM (AC->DC RECTIFIER)	71574-1112									
CH667	LOAD LIMITER ASS'Y	71574-1113									
CH669	JOINT PIPE	71574-1114									

*7.5Ton parts are same as 5ton(x1) and 10,15,20Ton parts are same as 5ton(x2) except for top and bottom hook assembly and where shown above.

*PARTS OF ACCOLIFT CHAIN HOIST

Capacity-Chain-falls (How to read out)		1S	2W	3W	2S	3S	5W
		1Ton 1Chain-fall	2Ton 2Chain-fall	3Ton 2Chain-fall	2Ton 1Chain-fall	3Ton 1Chain-fall	5Ton 2Chain-fall
ACCOLIFT MODEL NO. (HOOK Mounted)		2130020 2130030	2130040	2130060	2130050	2130065	2130070
ACCOLIFT MODEL NO. (MOTOR TROLLEY MOUNTED)		2130120 2130130	2130140	2130160	2130150	2130165	2130170
DESCRIPTION							
CH701A	PUSH BUTTON CABLE LINE 0.030"(0.75m2)DIA. x 5COND FOR U/DW	71574-1116					
CH701B	PUSH BUTTON CABLE LINE 0.030"(0.75mm²)DIA. x 7CONDUCTOR FOR U/DW/L/R, FOR 2STEP U/DW	71574-1117					
CH701C	PUSH BUTTON CABLE LINE 0.030"(0.75mm²)DIA. x 9CONDUCTOR FOR U/DW/L/R/S/N, FOR 2STEP U/DW/L/R	71574-1118					
CH749	HEX STAY PIN	71574-1204		71574-2204			
CH800A	LOAD CHAIN 0.280" DIA. (7.1x21.0MM)	70011-9		N/A			
CH800B	LOAD CHAIN 0.370" DIA. (9.5x28.6MM)	N/A		70011-10	N/A		
CH800C	LOAD CHAIN 0.441" DIA. (11.2x34.0MM)	N/A			70011-11		
CH815	CHAIN STOPPER SPRING	71574-1122		71574-3122	71574-4122		
CH842	CHAIN BAG SUPPORT PIN	71574-1123		71574-3123			
CH843	CHAIN BAG SUPPORT METAL	71574-1124		71574-3124			
CH850	PLAIN WASHER	71574-1125		71574-3125			
CH851	HEX NUT	71574-1290		71574-3290			
CH852	COTTER PIN, 1/8 INCH * 3/4 INCH	71574-1126					
CH853	HEX WRENCH BOLT, 10MM*20MM	71574-1127					
CH900	OIL BOTTLE FOR CHAIN LUBRICATION	71574-1128					
CH940	NAME PLATE, MAIN	71574-1129	71574-2129	71574-3129	71574-4129	71574-3513	71574-5129
CH942	NAME PLATE, MOTOR	71574-1130	71574-2130	71574-3130			
CH943	LABEL, WARNING	71574-1131					
CH944	LABEL, OIL LUBRICATION	71574-1132					

*7.5Ton parts are same as 5ton(x1) and 10,15,20Ton parts are same as 5ton(x2) except for top and bottom hook assembly.

*PARTS OF MOTOR TROLLEY

CAPACITY of MOTOR TROLLEY		1TON	2TON	3TON	5TON	7.5TON	10TON
ACCOLIFT MODEL NO. (MOTOR TROLLEY MOUNTED)		2130120 2130130	2130140 2130150	2130160 2130165	2130170	2130175	2130180
PART NO.	DESCRIPTION						
MTT05	GEAR SIDE PLATE ASS'Y	71574-1133	71574-2133	71574-3133	71574-5133	71574-7133	71574-5133
MT004	SNAP RING	71574-1134	71574-2134		71574-5134		
MT005	PLAIN WASHER	71574-1135	71574-2135	71574-3135	71574-5135		
MT006	SNAP RING	71574-1136					
MT008	GEAR ROLLER	71574-1137	71574-2137	71574-3137	71574-5137		
MT009	BALL BEARING 6203ZZ (1T), 6205ZZ (2T), 6305ZZ (3T), 6307ZZ(5T)	71574-1138	71574-2138	71574-3138	71574-5137		
MT010	SNAP RING	71574-1139	71574-2139	71574-3139	71574-5139		
MT011	BOLT WITH HEX, HOLE	71574-1140					
MT012	BOLT WITH HEX, HOLE	71574-1141					
MT013	GUIDE ROLLER BODY	71574-1142					
MT014	GUIDE ROLLER	71574-1143		71574-3143			
MT015	GUIDE ROLLER PIN	71574-1144					
MT018	CORD HOLDER ASS'Y	71574-1147					
MTT06	PLAIN SIDE PLATE ASS'Y	71574-1148	71574-2148	71574-3148	71574-5148	71574-7148	71574-5148
MT028	PLAIN ROLLER WITH BEARING 6203ZZ	71574-1150	71574-2150	71574-3150	71574-5150		
MT034	HEX NUT	71574-1151	71574-2151		71574-5151		
MT035	SHAFT	71574-1152	71574-2152	71574-3152	71574-5152	71574-7152	71574-5152
MT036A	ADJUSTING COLLAR	71574-1153	71574-2153	71574-3153	71574-5153		
MT036B	ADJUSTING WASHER	71574-1227	71574-2227	71574-3227	71574-5227		
MT037	STOPPER BOLT	71574-1154	71574-2154	71574-3154	71574-5154		
MT038	COTTER PIN	71574-1155		71574-3155			
MT039	STOPPER PIN	71574-1228	71574-2228	71574-3228	71574-5228		
MTT04	MOTOR CASE & STATOR ASS'Y (230V/460V)	71574-1156		71574-3156			
	MOTOR CASE & STATOR ASS'Y (208V->230V),INVERTER TYPE	71574-1267		71574-3267			
	MOTOR CASE & STATOR ASS'Y (460V),INVERTER TYPE	71574-1268		71574-3268			
MT043	BRAKE COVER	71574-1157					
MT044	BRAKE SPRING	71574-1158					

*7.5,10,15 and 20Ton trolley parts are same as 5ton (x2) except for top trolley mount and where shown above.

*PARTS OF MOTOR TROLLEY

CAPACITY of MOTOR TROLLEY		1TON	2TON	3TON	5TON
ACCOLIFT MODEL NO. (MOTOR TROLLEY MOUNTED)		2130120 2130130	2130140 2130150	2130160 2130165	2130170
PART NO.	DESCRIPTION				
MT045	NAME PLATE, MOTOR	71574-1159		71574-3159	
MT046	H/T WITH WRENCH BOLT	71574-1160			
MT050	BOLT WITH HEX,HOLE, 8MM x 25MM	71574-1162			
MT054	COVER PLUG	71574-1163			
MT071	GEAR CASE	71574-1164			
MT072	FLANGE	71574-1165			
MT T03	ROTOR ASS'Y	71574-1166		71574-3166	
MT076	2ND GEAR	71574-1167			
MT077	SPRING PIN, 8MM x 18MM	71574-1168			
MT078	3RD GEAR	71574-1169		71574-3169	71574-5169
MT079	BALL BEARING	71574-1170			
MT080	SNAP RING	71574-1171			
MT081	COLLAR FOR 3RD GEAR	71574-1172			
MT082	PACKING FOR FLANGE	71574-1173			

*7.5,10,15 and 20Ton trolley parts are same as 5ton (x2) except for top trolley mount.

*PARTS OF MOTOR TROLLEY

CAPACITY of MOTOR TROLLEY		1TON	2TON	3TON	5TON	7.5TON	10TON
ACCOLIFT MODEL NO. (MOTOR TROLLEY MOUNTED)		2130120 2130130	2130140 2130150	2130160 2130165	2130170	2130175	2130180
PART NO.	DESCRIPTION						
MT171	CONNECTOR-PARALLEL	71574-1174	71574-2174	71574-3174	71574-5174	N/A	
MT171	CONNECTOR-CROSS	71574-1265	71574-2265	71574-3265	71574-5265	N/A	
MT523	BUMPER RUBBER	71574-1175					
MTT01	BRAKE DISC ASS'Y	71574-1177					
MT539	BALL BEARING	71574-1178					
MT541	BALL BEARING	71574-1179					
MT591	POWER CORD	71574-1452		71574-2452			
MT600	INVERTER (208V->230V)	71574-1194		71574-3194			
	INVERTER (460V)	71574-1195		71574-3195			
MT604	TERMINAL BLOCK	71574-1210					
MT620	INTERFACE, 48VOLT CONTROLS	71574-1211					
	INTERFACE, 110VOLT CONTROLS	71574-1292					
MT621	INTERFACE BOARD	71574-1212					
MT644	CABLE HOLDER	71574-1457					
MT657	MAGNETIC CONTACTOR, 48V CONTROL, AM-12	71574-1318					
	MAGNETIC CONTACTOR, 110V CONTROL, AM-12	71574-1180					
MT658	MACHINE SCREW S/W	71574-1458					
MT665	CHANNEL	71574-1459					
MT667	CHANNEL STOPPER	71574-1460					
MT668	MACHINE SCREW S/W, P/W	71574-1461					
MT701	CONTROL CABLE LINE 0.050"(1.25M2)x8CORE	71574-1181		71574-3181			
MT731	CONTROL BOX	71574-1182					
	CONTROL BOX, INVERTER TYPE	71574-1215					
MT732	BOLT W/HEX, HOLE	71574-1183					
MT733	SUPPORT BAR	71574-1184					
MT742	CONTROL BOX COVER	71574-1185					
	CONTROL BOX COVER, INVERTER HOIST	71574-1216					
MT743	CONTROL BOX COVER PACKING	71574-1186					
MT744	MACHINE SCREW, CONTROL BOX COVER	71574-1310					
MT745	NAME PLATE, MAIN	71574-1187	71574-2187	71574-3187	71574-5187	71574-7187	71574-6187
MT749	HEX STAY PIN	71574-1214					
MT754	SET SCREW	71574-1188	71574-2188	71574-3188	71574-5188	71574-7188	71574-6188
MT755	RIVET	71574-1189					
MT756	LEAD PACKING	71574-1190					
MT760	BUMPER STOPPER	71574-1313					
MT761	BUMPER BRACKET	71574-1314					
MT762	HEX NUT	71574-1499					
MTT07	CONTACTOR HOIST ELECTRIC PART A'SSY, INCLUDING ELECTRIC BOARD PANEL AND PARTS	71574-1191		71574-3191			
MTT08	INVERTER HOIST ELECTRIC PART A'SSY, INCLUDING ELECTRIC BOARD PANEL AND PARTS	71574-1516		71574-3516			

*7.5,10,15 and 20Ton trolley parts are same as 5ton (x2) except for top trolley mount and where shown above.

* 7.5, 10TON HOOK MOUNTED HOIST PARTS

CAPACITY-CHAIN-FALLS		7.5TON 3CHAIN FALL	10TON 4CHAIN FALL
ACCOLIFT MODEL NO (HOOK MOUNTED)		2130075	2130080
PART NO	DESCRIPTION		
CH001	TOP HOOK	71574-7228	71574-6228
CH002	UP TURNING	71574-6229	
CH003	CHAIN BOX HANGER	71574-7230	71574-6230
CH004	KEY PLATE A	71574-6231	
CH005	UP LOAD BLOCK PLATE	71574-7232	71574-6232
CH006	HOIST CONNECTOR	71574-7233	71574-6233
CH007	COLLAR B	71574-6025	
CH008	NEEDLE BEARING	71574-6234	
CH009	IDLE SHEAVE	71574-6023	
CH010	COLLAR A	71574-6235	
CH011	CHAIN GUIDE ROLLER	71574-6236	
CH012	STAY BOLT A	71574-6237	
CH013	IDLE SHEAVE PIN	71574-6024	
CH015	KEY PLATE C	71574-6238	
CH016	PLAIN WASHER	71574-6283	
CH017	CHAIN BOX OF 11.2MMx34.0MM STEEL CHAIN BOX SCC5 98 FEET LENGTH	FOR MAX LIFT = 32.6FT	FOR MAX LIFT = 49FT
		71574-6239	
CH018	HEX NUT S/W	71574-6240	
CH019	HEX BOLT S/W	71574-6241	
CH020	BOTTOM LOAD BLOCK PLATE	71574-7242	71574-6242
CH021	CHAIN GUIDE	71574-6022	
CH022	HEX WRENCH BOLT S/W	71574-6243	
CH023	BOTTOM TURNING	71574-6244	
CH024	BOTTOM HOOK	71574-7020	71574-6020
CH025	SAFETY LATCH SPRING	71574-7245	71574-6245
CH026	SAFETY LATCH	71574-7246	71574-6246
CH027	U NUT	71574-7247	71574-6247
CH022/025/026/027 SAFETY LATCH SET		71574-7030	71574-6030
CH034	STAY BOLT B	71574-6254	
CH036	COLLAR	71574-6255	
CH037	HOOK NUT	71574-6272	
CH038	SPRING PIN	71574-6273	
CH039	CHAIN ANCHORAGE BOLT	71574-7284	N/A
CH040	U NUT	71574-7285	N/A
CH041	CHAIN GUIDE STOPPER	71574-7286	N/A
CH042	STOPPER SPRING PIPE	71574-7287	N/A
CH043	CHAIN ANCHORAGE METAL	71574-7288	N/A
CH044	THRUST BEARING	71574-6029	
CH045	HANGER STAY BOLT A	71574-7278	
CH046	HANGER STAY BOLT B	71574-7279	
CH047	HEX NUT S/W	71574-7280	
CH049	HEX BOLT	71574-7281	
CH053	STAY BOLT C	71574-7226	
CH054	HOOK NAME PLATE	71574-7282	71574-6282

*7.5Ton parts are same as 5ton(x1) and 10Ton parts are same as 5ton(x2) except for top and bottom hook assembly parts on this page.

* 7.5, 10TON TROLLEY MOUNTED HOIST PARTS

CAPACITY-CHAIN-FALLS		7.5TON 3CHAIN FALL	10TON 4CHAIN FALL
ACCOLIFT MODEL NO (HOOK MOUNTED)		2130175	2130180
PART NO	DESCRIPTION		
CH004	KEY PLATE A	71574-6231	
CH006	HOIST CONNECTOR	71574-7233	71574-6233
CH007	COLLAR B	71574-6025	
CH008	NEEDLE BEARING	71574-6234	
CH009	IDLE SHEAVE	71574-6023	
CH010	COLLAR A	71574-6235	
CH011	CHAIN GUIDE ROLLER	71574-6236	
CH012	STAY BOLT A	71574-6237	
CH013	IDLE SHEAVE PIN	71574-6024	
CH015	KEY PLATE C	71574-6238	
CH016	PLAIN WASHER	71574-6283	
CH017	CHAIN BOX OF 11.2MMx34.0MM STEEL CHAIN BOX SCC5 98 FEET LENGTH	FOR MAX LIFT = 32.6FT	FOR MAX LIFT = 49FT
		71574-6239	
CH018	HEX NUT S/W	71574-6240	
CH019	HEX BOLT S/W	71574-6241	
CH020	BOTTOM LOAD BLOCK PLATE	71574-7242	71574-6242
CH021	CHAIN GUIDE	71574-6022	
CH022	HEX WRENCH BOLT S/W	71574-6243	
CH023	BOTTOM TURNING	71574-6244	
CH024	BOTTOM HOOK	71574-7020	71574-6020
CH025	SAFETY LATCH SPRING	71574-7245	71574-6245
CH026	SAFETY LATCH	71574-7246	71574-6246
CH027	U NUT	71574-7247	71574-6247
CH028	CHAIN BOX HANGER	N/A	71574-6248
CH022/025/026/027 SAFETY LATCH SET		71574-7030	71574-6030
CH030	CONNECTION PLATE/CONNECTOR	71574-7250	71574-6250
CH033	COLLAR C	N/A	71574-6252
CH034	STAY BOLT B	71574-6254	
CH035	CONNECTOR PIN	N/A	71574-6256
CH036	COLLAR	71574-6255	
CH037	HOOK NUT	71574-6272	
CH038	SPRING PIN	71574-6273	
CH039	CHAIN ANCHORAGE BOLT	71574-7284	N/A
CH040	U NUT	71574-7285	N/A
CH041	CHAIN GUIDE STOPPER	71574-7286	N/A
CH042	STOPPER SPRING PIPE	71574-7287	N/A
CH043	CHAIN ANCHORAGE METAL	71574-7288	N/A
CH044	THRUST BEARING	71574-6029	
CH045	HANGER STAY BOLT A	71574-7278	
CH046	HANGER STAY BOLT B	71574-7279	
CH047	HEX NUT S/W	71574-7280	
CH049	HEX BOLT	71574-7281	
CH050	CHAIN BOX HANGER	71574-7248	N/A
CH051	HEX BOLT S/W	71574-7289	71574-6289
CH054	HOOK NAME PLATE	71574-7282	71574-6282

*7.5Ton parts are same as 5ton(x1) and 10Ton parts are same as 5ton(x2) except for top trolley mount and bottom hook assembly parts on this page

15, 20TON HOOK MOUNTED HOIST PARTS

C APACITY-CHAIN-FALLS		15TON 6 Chain -Fall	20TON 8 Chain -Fall
ACCOLIFT MODEL NO(HOOK MOUNTED)		2130090	2130095
PART NO	DESCRIPTION		
CHT001	SPRING WASHER	71574-8319	71574-9319
CHT002	HEX BOLT	71574-8281	71574-9281
CHT003	CHAIN BOX HANGER	71574-8230	71574-9230
CHT004	STAY BOLT	71574-8278	71574-9278
CHT005	SPRING WASHER	71574-8320	71574-9320
CHT007	HEX NUT	71574-8240	71574-9240
CHT008	HEX BOLT	71574-8321	71574-9321
CHT009	IDLE SHEAVE PIN	71574-8024	71574-9024
CHT010	KEY PLATE(A)	71574-8231	71574-9231
CHT011	HEX WRENCH BOLT	71574-8241	71574-9241
CHT012	SPRING WASHER	71574-8322	71574-9322
CHT013	HEX NUT	71574-8323	71574-9323
CHT014	SPRING WASHER	71574-8324	71574-9324
CHT015	KEY PLATE(B)	71574-8238	71574-9238
CHT016	SPRING PIN	71574-8273	71574-9273
CHT017	SUPPORT RING	71574-8325	71574-9325
CHT019	TURNING(TOP)	71574-8229	71574-9229
CHT020	U-NUT	71574-8326	71574-9326
CHT021	SAFETY LATCH SPRING	71574-8327	71574-9327
CHT022	SAFETY LATCH	71574-8328	71574-9328
CHT023	HOOK	71574-8228	71574-9228
CHT024	HEX WRENCH BOLT	71574-8329	71574-9329
CHT025	HOOK NUT	71574-8272	71574-9272
CHT026	GUIDE COLLAR(D)	71574-8330	71574-9330
CHT027	LOAD BLOCK PLATE(TOP)	71574-8232	71574-9232
CHT028	GUIDE COLLAR(B)	71574-8025	71574-9025
CHT029	NEEDLE BEARING	71574-8234	71574-9234
CHT030	IDLE SHEAVE	71574-8023	71574-9023
CHT031	STAY BOLT(K)	71574-8254	71574-9254
CHT032	CHAIN GUIDE ROLLER(B)	71574-8236	71574-9236
CHT033	GUIDE COLLAR (C)	71574-8255	71574-9255
CHT034	GUIDE COLLAR (A)	71574-8235	71574-9235

15, 20TON HOOK MOUNTED HOIST PARTS

CAPACITY-CHAIN-FALLS		15TON 6 Chain-Fall	20TON 8Chain-Fall
ACCOLIFT MODEL NO(HOOK MOUNTED)		2130090	2130095
PART NO	DESCRIPTION		
CHT035	STAY BOLT (M)	71574-8279	71574-9279
CHT036	HEX NUT	71574-8280	71574-9280
CHB001	KEY PLATE(B)	71574-8238	71574-9238
CHB002	SPRING WASHER	71574-8331	71574-9331
CHB003	HEX WRENCH BOLT	71574-8241	71574-9241
CHB004	BOTTOM HOOK NAME PLATE	71574-8282	71574-9282
CHB005	NAME PLATE RIVET	71574-8332	71574-9332
CHB006	HEX NUT	71574-8333	71574-9333
CHB007	SPRING WASHER	71574-8334	71574-9334
CHB008	KEY PLATE(A)	71574-8331	71574-9231
CHB009	SPRING WASHER	71574-8335	71574-9335
CHB010	HEX NUT	71574-8240	71574-9240
CHB011	LOAD BLOCK PLATE	71574-8242	71574-9242
CHB012	STAY PIPE(E)	71574-8336	71574-9336
CHB013	HEX NUT	71574-8337	71574-9337
CHB014	SPRING WASHER	71574-8338	71574-9338
CHB015	STAY PIPE(D)	71574-8339	71574-9339
CHB016	IDLE SHEAVE PIN	71574-8024	71574-9024
CHB017	SUB SIDE PLATE	71574-8340	71574-9340
CHB018	BOLT(R.B)	71574-8341	71574-9341
CHB019	STAY BOLT(H)	71574-8342	71574-9342
CHB020	STAY BOLT(J)	71574-8343	71574-9343
CHB021	STAY BOLT(I)	71574-8344	71574-9344
CHB022	CHAIN GUIDE (C)	71574-8022	71574-9022
CHB023	STAY BOLT (G)	71574-8345	71574-9345
CHB024	H OOK NUT	71574-8272	71574-9272
CHB025	SPRING PIN	71574-8273	71574-9273
CHB026	BEARING CASE	71574-8346	71574-9346
CHB027	THRUST BEARING	71574-8029	71574-9029
CHB028	STOPPER SPRING PIPE	71574-8347	71574-9347
CHB029	STOPPER SPRING	71574-8122	71574-9122
CHB030	H EX BOLT	71574-8243	71574-9243
CHB031	SAFETY LATCH SPRING	71574-8245	71574-9245
CHB032	SAFETY LATCH	71574-8246	71574-9246
CHB033	HOOK	71574-8020	71574-9020
CHB034	U -NUT	71574-8247	71574-9247

15, 20TON HOOK MOUNTED HOIST PARTS

CAPACITY-CHAIN-FALLS		15TON 6Chain-Fall	20TON 8Chain-Fall
ACCOLIFT MODEL NO(HOOK MOUNTED)		2130090	2130095
PART NO	DESCRIPTION		
CHB035	TURNING (BOTTOM)	71574-8244	71574-9244
CHB036	CHAIN GUIDE ROLLER(B)	71574-8236	71574-9236
CHB037	GUIDE COLLAR(A)	71574-8235	71574-9235
CHB038	IDLE SHEAVE	71574-8023	71574-9023
CHB039	NEEDLE BEARING	71574-8234	71574-9234
CHB040	GUIDE COLLAR(B)	71574-8025	71574-9025
CHB041	IDLE SHEAVE PIN(F)	71574-8024	71574-9024
CHBA28	STOPPER SPRING PIPE ASS'Y	71574-8348	71574-9348
CHM001	SPRING WASHER	71574-8349	71574-9349
CHM002	HEX NUT	71574-8350	71574-9350
CHM003	HEX BOLT	71574-8351	71574-9351
CHM004	CHAIN BOX HANGER	71574-8352	71574-9352
CHM005	HEX NUT	71574-8353	71574-9353
CHM006	SPRING WASHER	71574-8354	71574-9354
CHM007	HEX BOLT	71574-8355	71574-9355
CHM008	CHAIN BAG SUPPORT PIN	71574-8356	71574-9356
CHM009	SPRING WASHER	71574-8357	71574-9357
CHM010	HEX NUT	71574-8358	71574-9358
CHM011	KEY PLATE(A)	71574-8359	71574-9359
CHM012	HEX WRENCH BOLT	71574-8360	71574-9360
CHM013	SPRING WASHER	71574-8361	71574-9361
CHM014	HEX NUT	71574-8362	71574-9362
CHM015	SPRING WASHER	71574-8363	71574-9363
CHM016	CONNECTING PLATE	71574-8364	71574-9364
CHM017	GUIDE COLLAR(A)	71574-8365	71574-9365
CHM018	CHAIN GUIDE ROLLER(B)	71574-8366	71574-9366
CHM019	GUIDE COLLAR(E)	71574-8367	71574-9367
CHM020	STAY BOLT(L)	71574-8368	71574-9368
CHM021	STAY BOLT(O)	71574-8369	71574-9369
CHM022	GUIDE COLLAR(B)	71574-8370	71574-9370
CHM023	IDLE SHEAVE	71574-8371	71574-9371
CHM024	NEEDLE BEARING	71574-8372	71574-9372
CHM025	GUIDE COLLAR(D)	71574-8373	71574-9373
CHM026	IDLE SHEAVE PIN(E)	71574-8374	71574-9374
CHM027	STAY BOLT (M)	71574-8375	71574-9375
CHM028	CHAIN BOX	MADE TO ORDER	MADE TO ORDER

15, 20 TON PARTS OF MOTOR TROLLEY

CAPACITY		15-20TON
ACCOLIFT MODEL NO(TROLLEY MOUNTED)		2130190 & 2130195
PART NO	DESCRIPTION	
MT004	SNAP RING	71574-8134
MT006	SNAP RING	71574-8136
MT008	GEAR ROLLER	71574-8137
MT009	BALL BEARING	71574-8138
MT010	SNAP RING	71574-8139
MT012	HEX WRENCH BOLT S/W	71574-8376
MT018	CORD HOLDER ASS'Y	71574-8147
MT019	HEX NUT	71574-8377
MT028	PLAIN ROLLER	71574-8150
MT035	SHAFT	71574-8152
MT036	ADJUSTING COLLAR B	71574-8153
MT045	MOTOR NAME PLATE	71574-8159
MT046	HEX WRENCH BOLT S/W	71574-8160
MT048	SPRING PIN	71574-8378
MT050	HEX WRENCH BOLT S/W	71574-8162
MT055	TERMINAL BLOCK COVER	71574-8379
MT056	PACKING COVER	71574-8380
MT057	TERMINAL BLOCK	71574-8381
MT060	ADJUSTING COLLAR A	71574-8382
MT061	STAY PIPE	71574-8383
MT062	ADJUSTING COLLAR C	71574-8384
MT063	SPRING WASHER	71574-8385
MT064	HEX NUT	71574-8386
MT071	GEAR CASE	71574-8164
MT072	FLANGE	71574-8165
MT073	HEX WRENCH BOLT S/W	71574-8387

15,20 TON PARTS OF MOTOR TROLLEY

CAPACITY		15-20TON
ACCOLIFT MODEL NO(TROLLEY MOUNTED)		2130190 & 2130195
PART NO	DESCRIPTION	
MT074	ROTOR SHAFT	71574-8388
MT075	ROTOR	71574-8166
MT076	2ND GEAR	71574-8167
MT077	SPRING PIN	71574-8168
MT078	3RD GEAR	71574-8169
MT079	BALL BEARING	71574-8170
MT080	SNAP RING	71574-8171
MT081	COLLAR FOR 3RD GEAR	71574-8172
MT082	PACKING	71574-8173
MT083	HEX WRENCH BOLT S/W	71574-8389
MT539	BALL BEARING	71574-8178
MT541	BALL BEARING	71574-8179
MT550	BRAKE STATOR	71574-8390
MT551	BRAKE COIL	71574-8391
MT552	BRAKE SPRING	71574-8392
MT553	MOVING PLATE	71574-8393
MT554	BRAKE COVER	71574-8394
MT555	BRAKE LINING	71574-8395
MT556	HEX HUB	71574-8396
MT557	STAY PIPE	71574-8397
MT558	HEX WRENCH BOLT S/W	71574-8398
MT559	O RING	71574-8399
MT591	CONTROL CABLE ASS'Y	71574-8400
MT604	TERMINAL BLOCK	71574-8401
MT640	DPM	71574-8402
MT641	CHANNEL STOPPER	71574-8403
MT642	MACHINE SCREW S/W	71574-8404
MT644	CABLE LOCKER	71574-8405
MT645	MOTOR CABLE	71574-8406
MT657	MAGNETIC CONNECTOR SWITCH	71574-8180

15, 20TON PARTS OF MOTOR TROLLEY

CAPACITY		15-20TON
ACCOLIFT MODEL NO(TROLLEY MOUNTED)		2130190 & 2130195
PART NO	DESCRIPTION	
MT658	MACHINE SCREW S/W	71574-8407
MT659	MAIN MAGNETIC CONNECTOR	71574-8408
MT665	CHANNEL	71574-8409
MT731	CONTROL BOX	71574-8182
MT732	HEX WRENCH BOLT S/W	71574-8183
MT733	SUPPORT BAR	71574-8184
MT742	CONTROL BOX COVER	71574-8185
MT743	PACKING FOR CONTROL BOX	71574-8186
MT744	MACHINE SCREW S/W	71574-8410
MT745	N AME PLATE	71574-8187
MT749	H EX STAY PIN	71574-8411
MT755	R IVET	71574-8189
MT760	B UMPER STOPPER	71574-8412
MT761	B UMPER BRACKET	71574-8413
MT762	H EX BOLT S/W	71574-8414
MTA01	M OTOR ASS'Y	71574-8415
MTA02	G EAR SIDE PLATE ASS'Y	71574-8416
MTA03	P LAIN SIDE PLATE ASS'Y	71574-8417
MTA05	E , EQUIPMENT ASS'Y	71574-8418
MTA06	B RAKE STATOR ASS'Y	71574-8419
MTA07	ROTOR ASS'Y	71574-8420

PARTS OF MOTOR TROLLEY (SWIVELING TROLLEY)

CAPACITY		15-20TON
ACCOLIFT MODEL NO(TROLLEY MOUNTED)		
PART NO	DESCRIPTION	
MT004	SNAP RING	71574-8134
MT006	SNAP RING	71574-8136
MT008	GEAR ROLLER	71574-8137
MT009	BALL BEARING	71574-8138
MT010	SNAP RING	71574-8139
MT012	HEX WRENCH BOLT S/W	71574-8376
MT018	CORD HOLDER ASS'Y	71574-8147
MT019	HEX NUT	71574-8377
MT028	PLAIN ROLLER	71574-8150
MT035	SHAFT	71574-8152
MT036	ADJUSTING COLLAR B	71574-8153
MT045	MOTOR NAME PLATE	71574-8159
MT046	HEX WRENCH BOLT S/W	71574-8160
MT048	SPRING PIN	71574-8378
MT050	HEX WRENCH BOLT S/W	71574-8162
MT055	TERMINAL BLOCK COVER	71574-8379
MT056	PACKING COVER	71574-8380
MT057	TERMINAL BLOCK	71574-8381
MT061	STAY PIPE	71574-8383
MT062	ADJUSTING COLLAR C	71574-8384
MT063	SPRING WASHER	71574-8385
MT064	HEX NUT	71574-8386
MT071	GEAR CASE	71574-8164
MT072	FLANGE	71574-8165
MT073	HEX WRENCH BOLT S/W	71574-8387
MT074	ROTOR SHAFT	71574-8388
MT075	ROTOR	71574-8166
MT076	2ND GEAR	71574-8167
MT077	SPRING PIN	71574-8168
MT078	3RD GEAR	71574-8169
MT079	BALL BEARING	71574-8170
MT080	SNAP RING	71574-8171
MT081	COLLAR FOR 3RD GEAR	71574-8172
MT082	PACKING	71574-8173
MT083	HEX WRENCH BOLT S/W	71574-8389

PARTS OF MOTOR TROLLEY (SWIVELING TROLLEY)

CAPACITY		15-20TON
ACCOLIFT MODEL NO(TROLLEY MOUNTED)		
PART NO	DESCRIPTION	
MT539	BALL BEARING	71574-8178
MT541	BALL BEARING	71574-8179
MT550	BRAKE STATOR	71574-8390
MT551	BRAKE COIL	71574-8391
MT552	BRAKE SPRING	71574-8392
MT553	MOVING PLATE	71574-8393
MT554	BRAKE COVER	71574-8394
MT555	BRAKE LINING	71574-8395
MT556	HEX HUB	71574-8396
MT557	STAY PIPE	71574-8397
MT558	HEX WRENCH BOLT S/W	71574-8398
MT559	O RING	71574-8399
MT591	CONTROL CABLE ASS'Y	71574-8400
MT604	TERMINAL BLOCK	71574-8401
MT640	DPM	71574-8402
MT641	CHANNEL STOPPER	71574-8403
MT642	MACHINE SCREW S/W	71574-8404
MT644	CABLE LOCKER	71574-8405
MT645	MOTOR CABLE	71574-8406
MT657	MAGNETIC CONNECTOR SWITCH	71574-8180
MT658	MACHINE SCREW S/W	71574-8407
MT659	MAIN MAGNETIC CONNECTOR	71574-8408
MT665	CHANNEL	71574-8409
MT731	CONTROL BOX	71574-8182
MT732	HEX WRENCH BOLT S/W	71574-8183
MT733	SUPPORT BAR	71574-8184
MT742	CONTROL BOX COVER	71574-8185
MT743	PACKING FOR CONTROL BOX	71574-8186
MT744	MACHINE SCREW S/W	71574-8410
MT745	N AME PLATE	71574-8187
MT749	H EX STAY PIN	71574-8411
MT755	RIVET	71574-8189

PARTS OF MOTOR TROLLEY (SWIVELING TROLLEY)

CAPACITY		15-20TON
ACCOLIFT MODEL NO(TROLLEY MOUNTED)		
PART NO	DESCRIPTION	
MT760	BUMPER STOPPER	71574-8412
MT761	BUMPER BRACKET	71574-8413
MT762	HEX BOLT S/W	71574-8414
MTR01	SPRING WASHER	71574-8420
MTR02	KEY PLATE (B)	71574-8421
MTR03	SPRING WASHER	71574-8422
MTR04	HEX WRENCH BOLT	71574-8423
MTR05	HEX NUT	71574-8424
MTR06	TURNING PLATE	71574-8425
MTR07	STAY BOLT (O)	71574-8426
MTR08	NUT	71574-8427
MTR09	SPRING PIN	71574-8428
MTR10	THRUST BEARING	71574-8429
MTR11	TURNING	71574-8430
MTR12	TURNING SHAFT	71574-8431
MTR13	COLLAR	71574-8432
MTT01	HEX NUT	71574-8433
MTT02	CAM FOLLOWER	71574-8434
MTT03	GUIDE PLATE	71574-8435
MTT04	HEX WRENCH BOLT S/W	71574-8436
MTT05	CONNECTION PLATE	71574-8437
MTT06	PLAIN SIDE PLATE	71574-8438
MTT07	GEAR SIDE PLATE	71574-8439
MTT08	SUPPORT PLATE	71574-8440
MTA01	MOTOR ASS'Y	71574-8441
MTA02	GEAR SIDE PLATE ASS'Y	71574-8442
MTA03	PLAIN SIDE PLATE ASS'Y	71574-8443
MTA05	E, EQUIPMENT ASS'Y	71574-8444
MTA06	B RAKE STATOR ASS'Y	71574-8445

PARTS OF LOW HEADROOM HOIST(LOAD BLOCK)

CAPACITY		3TON	5TON
ACCOLIFT MODEL NO		2130160-VFD-L	2130170-VFD-L
PART NO	DESCRIPTION		
LBS01	LIMIT SIDE PLATE	71574-3466	71574-5466
LBS02	SIDE PLATE	71574-3467	71574-5467
LBS03	IDLE SHEAVE	71574-3468	71574-5468
LBS04	LIMIT CAM PLATE ASS'Y	71574-3469	71574-5469
LBS06	OPERATING PLATE	71574-3470	
LBS07	OPERATING HEX SHAFT	71574-3471	
LBS08	SPRING PIN	71574-3472	
LBS09	GUIDE ROLLER	71574-3473	
LBS10	ROLLER COLLAR	71574-3474	
LBS11	STAY BOLT	71574-3475	
LBS12	HEX NUT S/W	71574-3476	
LBS13	LIMIT SWITCH CAP	71574-3477	
LBS14	CHAIN GUIDE(B)	71574-3478	
LBS15	CHAIN GUID COLLAR (OUT)	71574-3479	
LBS16	CHAIN GUID COLLAR (IN)	71574-3480	
LBS17	LIMIT CAM BOLT	71574-3481	
LBS18	BUSH	71574-3482	
LBS19	BALL BEARING	71574-3483	
LBS20	SNAP RING	71574-3484	
LBS21	HEX BOLT W/ CROSS & S/W	71574-3485	
LBS22	LIMIT SWITCH A'SSY	71574-3486	
LBS23	CABLE ROCKER	71574-3487	
LBS24	MATAL COLLAR	71574-3488	71574-5488
LBS25	HEX BOLT	71574-3489	71574-5489
LBS26	CHAIN ANCHORAGE METAL	71574-3490	71574-5490
LBS27	CHAIN ANCHORAGE BOLT	71574-3491	71574-5491
LBS28	STOPPER COLLAR	71574-3492	71574-5492
LBS30	STOPER SPRING	71574-3493	71574-5493
LBS31	CONNECTOR	71574-3494	71574-5494
LBS33	U NUT	71574-3495	71574-5495
LBS34	HEX NUT S/W	71574-3496	71574-5496

PARTS OF LUG MOUNT TROLLEY KIT

CAPACITY		1TON	2TON	3TON	5TON
ACCOLIFT MODEL NO		2130410	2130420	2130430	2130450
PART NO	DESCRIPTION				
PTT05	PLAIN SIDE PLATE ASS'Y A	71574-1497	71574-2497	71574-3497	71574-5497
PTT06	PLAIN SIDE PLATE ASS'Y B	71574-1498	71574-2498	71574-3498	71574-5498
PT004	SNAP RING	71574-1134	71574-2134		71574-5134
PT005	PLAIN WASHER	71574-1135	71574-2135	71574-3135	71574-5135
PT009	BALL BEARING	71574-1138	71574-2138	71574-3138	71574-5138
PT010	SNAP RING	71574-1139	71574-2139	71574-3139	71574-5139
PT011	HEX WRENCH BOLT S/W	71574-1140			
PT013	GUIDE ROLLER BODY	71574-1142			
PT014	GUIDE ROLLER	71574-1143		71574-3143	
PT015	GUIDE ROLLER PIN	71574-1142			
PT028	PLAIN ROLLER	71574-1150	71574-2150	71574-3150	71574-5150
PT034	HEX NUT	71574-1151	71574-2151		71574-5151
PT035	SHAFT	71574-1152	71574-2152	71574-3152	71574-5152
PT036A	ADJUSTING COLLAR	71574-1153	71574-2153	71574-3153	71574-5152
PT036B	ADJUSTING WASHER	71574-1227	71574-2227	71574-3227	71574-5227
PT037	STOPPER BOLT	71574-1154	71574-2154	71574-3154	71574-5154
PT038	COTTER PIN	71574-1156			
PT039	STOPPER PIN	71574-1228	71574-2228	71574-3228	71574-5228
PT171	CONNECTOR-PARALLEL MOUNT	71574-1174	71574-2174	71574-3174	71574-5174
PT171	CONNECTOR-COROSS MOUNT	71574-1265	71574-2265	71574-3265	71574-5265
PT754	SET SCREW	71574-1188	71574-2188	71574-3188	71574-5188
PT760	BUMPER STOPPER	71574-1313			
PT761	BUMPER BRACKET	71574-1314			
PT762	HEX NUT	71574-1499			

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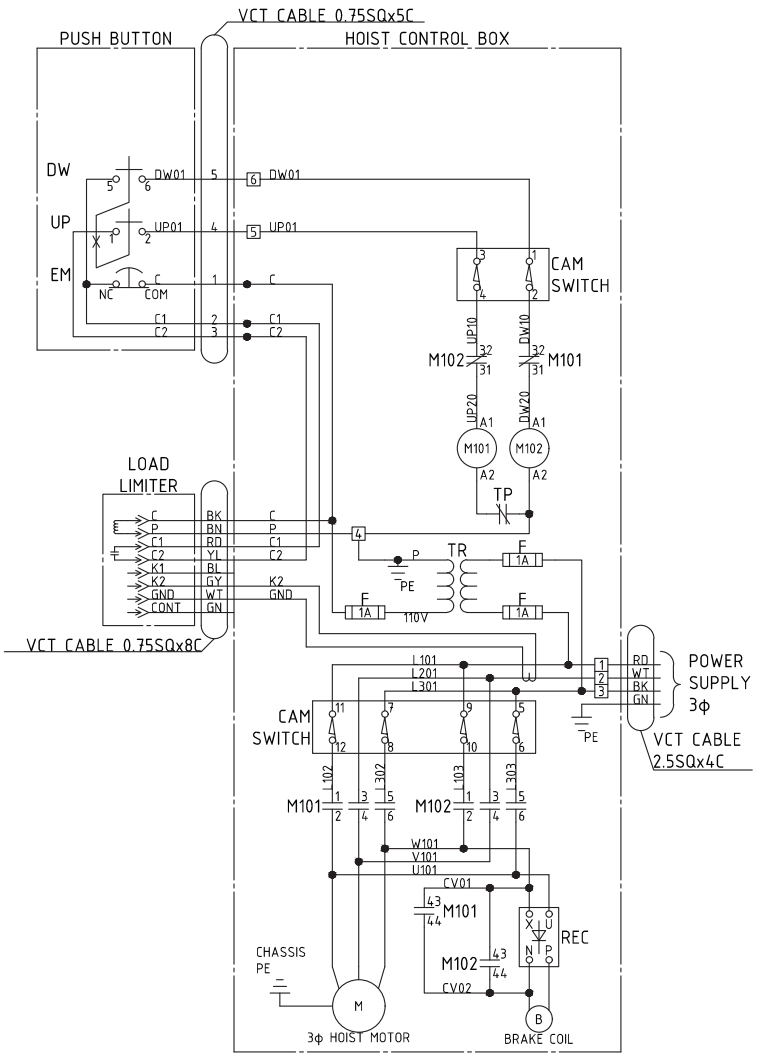
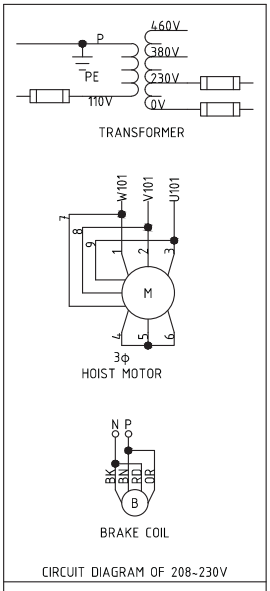
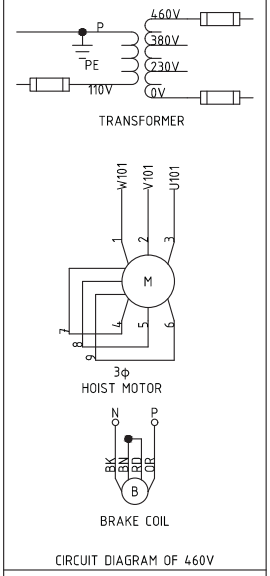
■ Electric Wiring Diagram of Hook Suspension Series

2130020 ~ 2130040, 2130020-PT ~ 2130040-PT





CIRCUIT DIAGRAM OF 208~230V



CIRCUIT DIAGRAM OF 460V

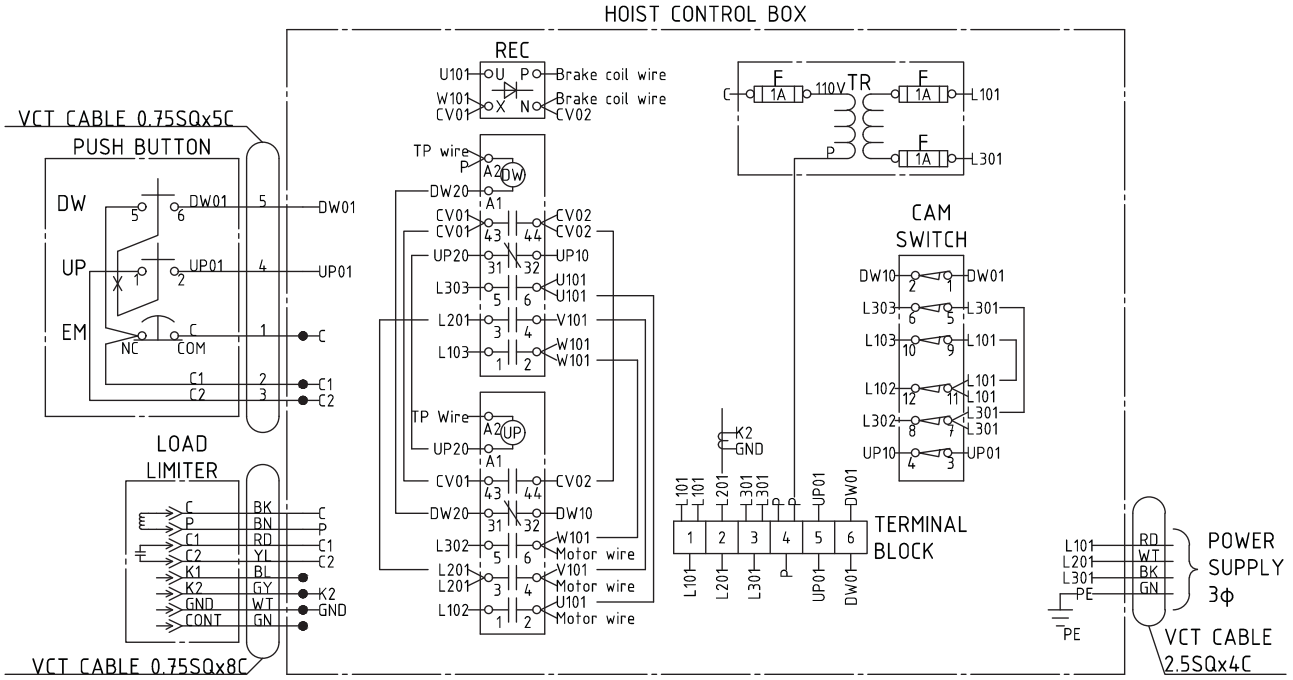
NOTE
1. POWER WIRE : 2.5SQ BLACK
2. CONTROL WIRE : 1.5SQ RED
3. EARTH WIRE : 2.5SQ GREEN

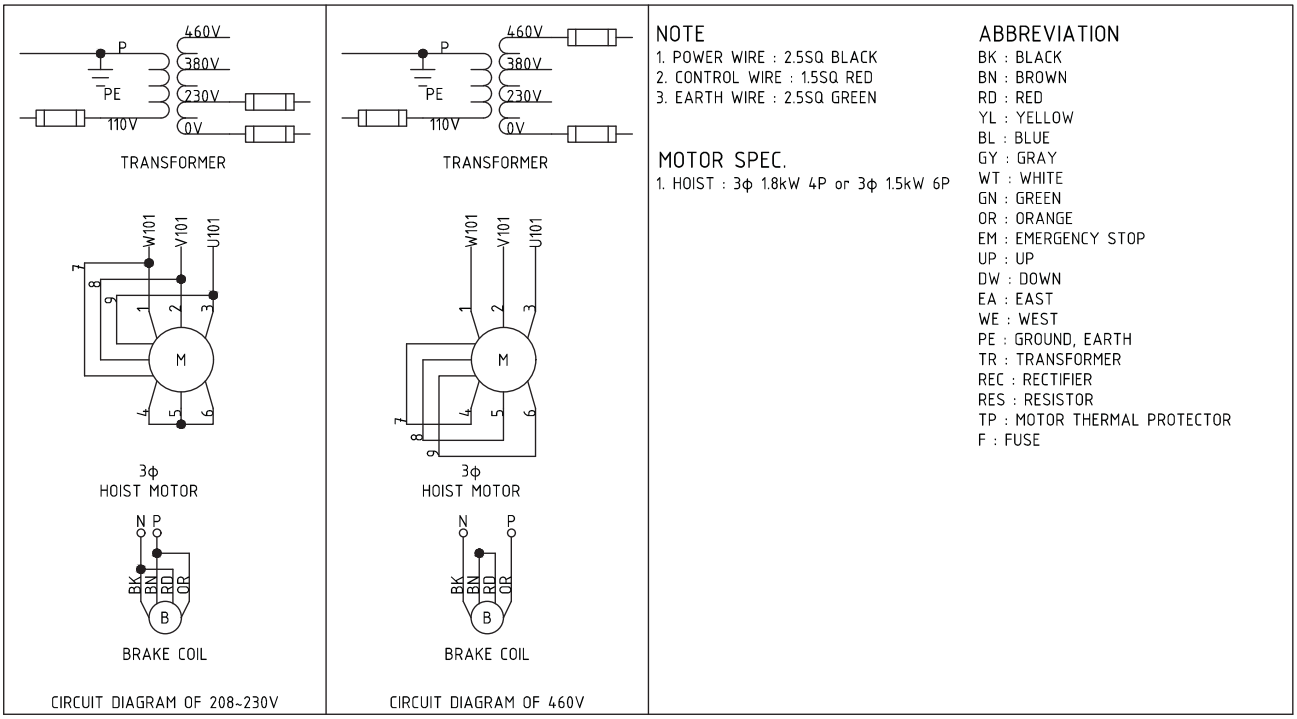
MOTOR SPEC.
1. HOIST : 3φ 1.8kW 4P or 3φ 1.5kW 6P

ABBREVIATION
BK : BLACK
BN : BROWN
RD : RED
YL : YELLOW
BL : BLUE
GY : GRAY
WT : WHITE
GN : GREEN
OR : ORANGE
EM : EMERGENCY STOP
UP : UP
DW : DOWN
EA : EAST
WE : WEST
PE : GROUND, EARTH
TR : TRANSFORMER
REC : RECTIFIER
RES : RESISTOR
TP : MOTOR THERMAL PROTECTOR
F : FUSE

■ Electric Connection Drawing of Hook Suspension Series

2130020 ~ 2130040, 2130020-PT ~ 2130040-PT





NOTE
1. POWER WIRE : 2.5SQ BLACK
2. CONTROL WIRE : 1.5SQ RED
3. EARTH WIRE : 2.5SQ GREEN

MOTOR SPEC.
1. HOIST : 3φ 1.8kW 4P or 3φ 1.5kW 6P

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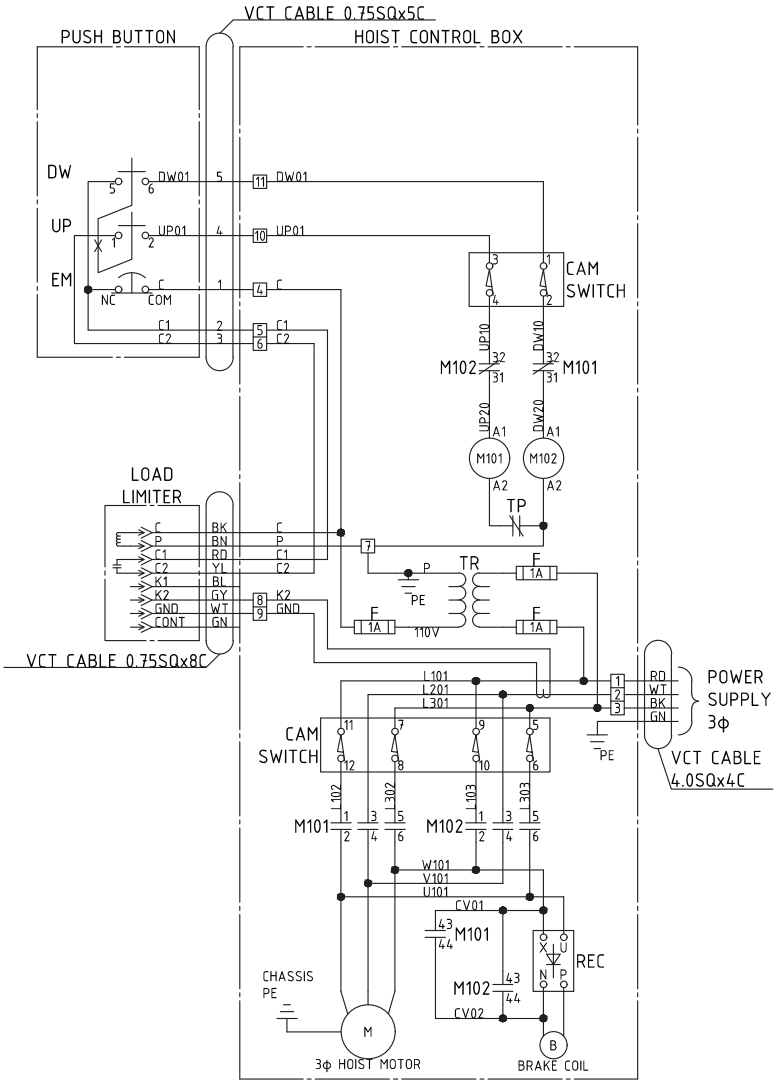
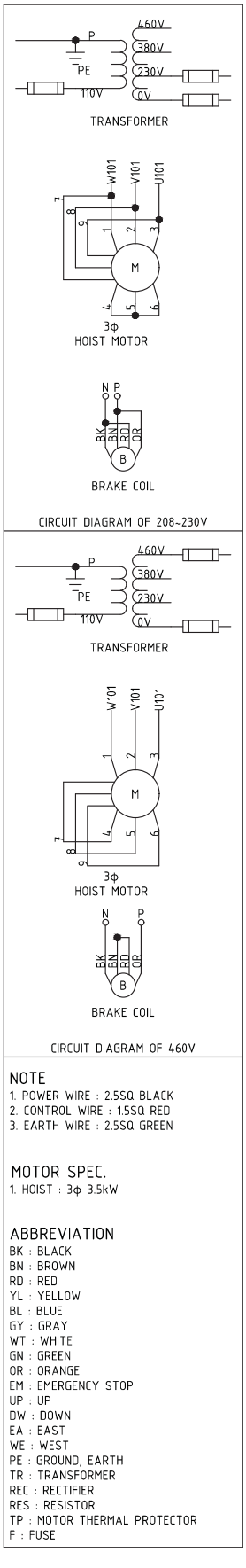
RES : RESISTOR
TP : MOTOR THERMAL PROTECTOR
F : FUSE

■ Electric Wiring Diagram of Hook Suspension Series

2130050 ~ 2130075, 2130050-PT ~ 2130070-PT





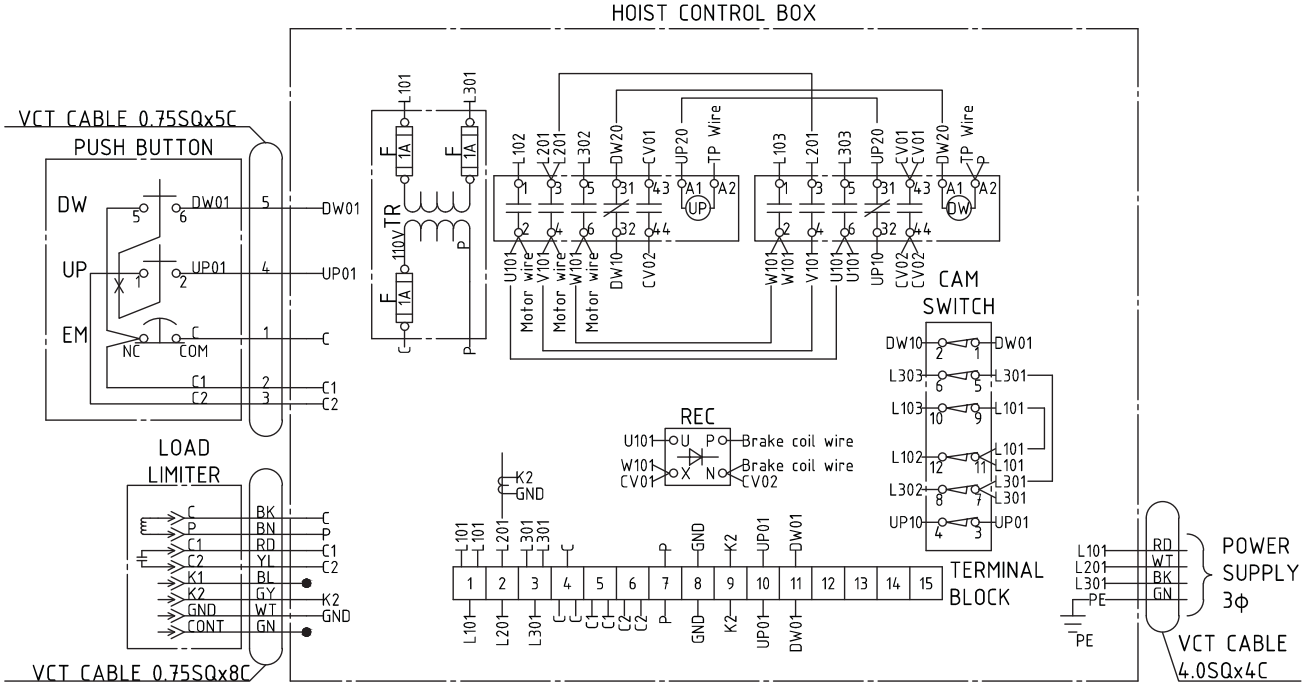
NOTE
1. POWER WIRE : 2.5SQ BLACK
2. CONTROL WIRE : 1.5SQ RED
3. EARTH WIRE : 2.5SQ GREEN

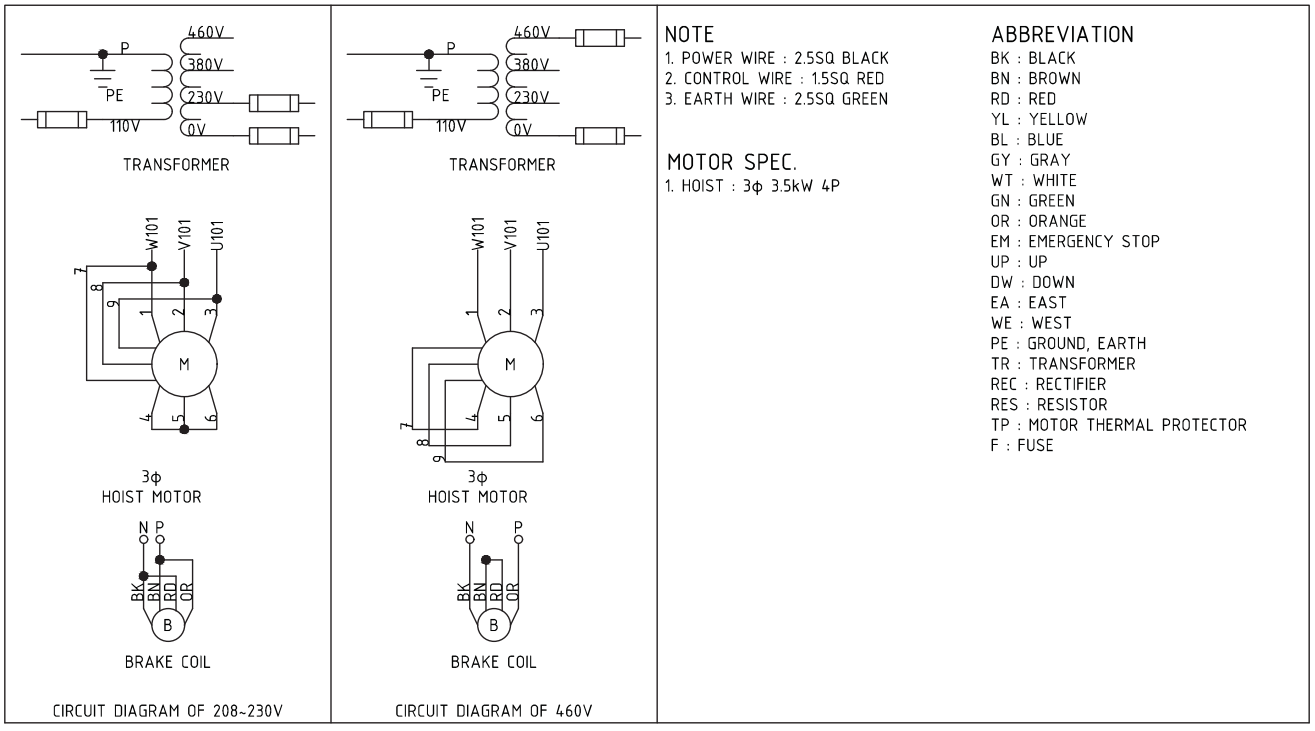
MOTOR SPEC.
1. HOIST : 3φ 3.5kW

ABBREVIATION
BK : BLACK
BN : BROWN
RD : RED
YL : YELLOW
BL : BLUE
GY : GRAY
WT : WHITE
GN : GREEN
OR : ORANGE
EM : EMERGENCY STOP
UP : UP
DW : DOWN
EA : EAST
WE : WEST
PE : GROUND, EARTH
TR : TRANSFORMER
REC : RECTIFIER
RES : RESISTOR
TP : MOTOR THERMAL PROTECTOR
F : FUSE

■ Electric Connection Drawing of Hook Suspension Series

2130050 ~ 2130075, 2130050-PT ~ 2130070-PT





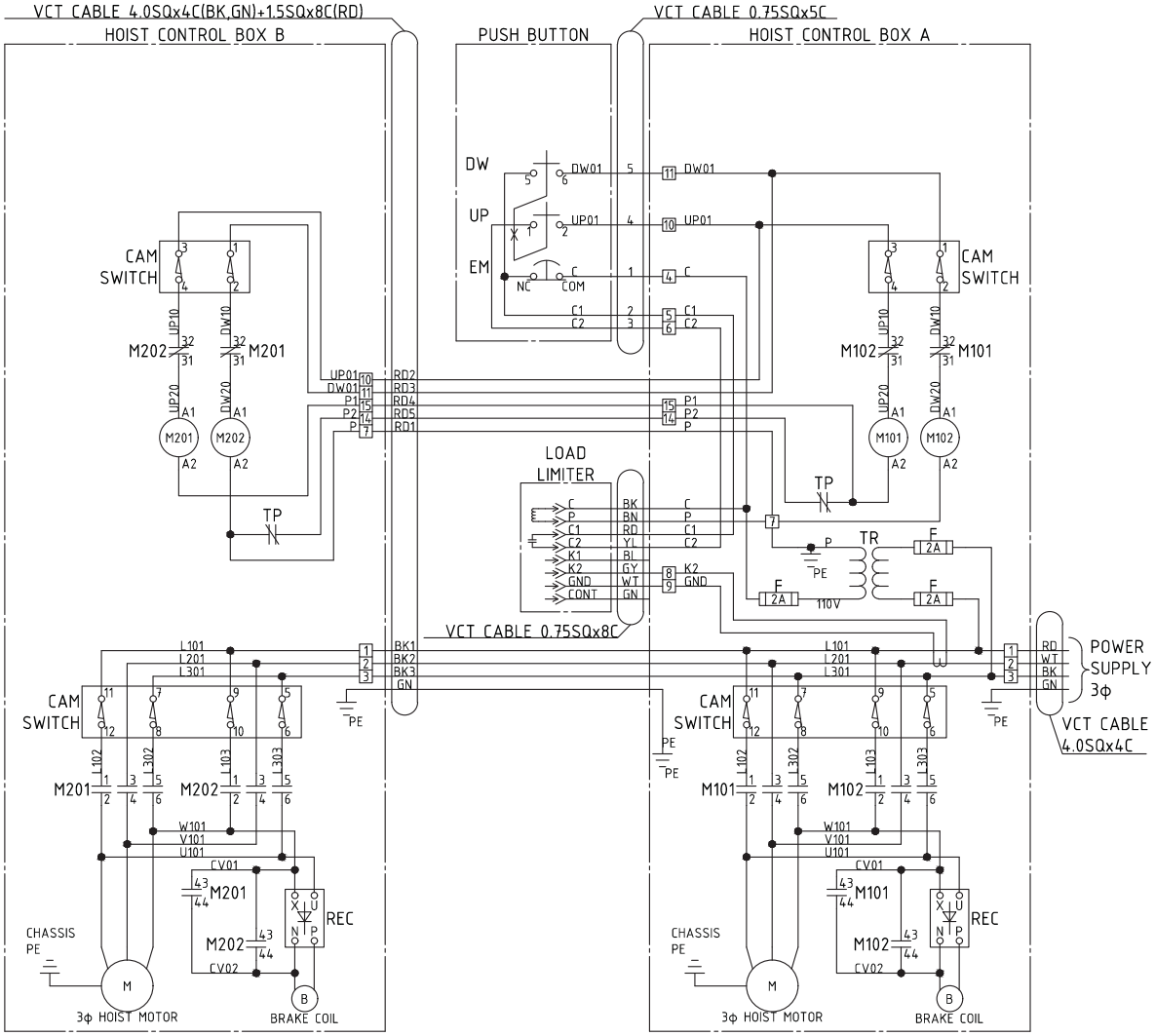
NOTE
1. POWER WIRE : 2.5SQ BLACK
2. CONTROL WIRE : 1.5SQ RED
3. EARTH WIRE : 2.5SQ GREEN

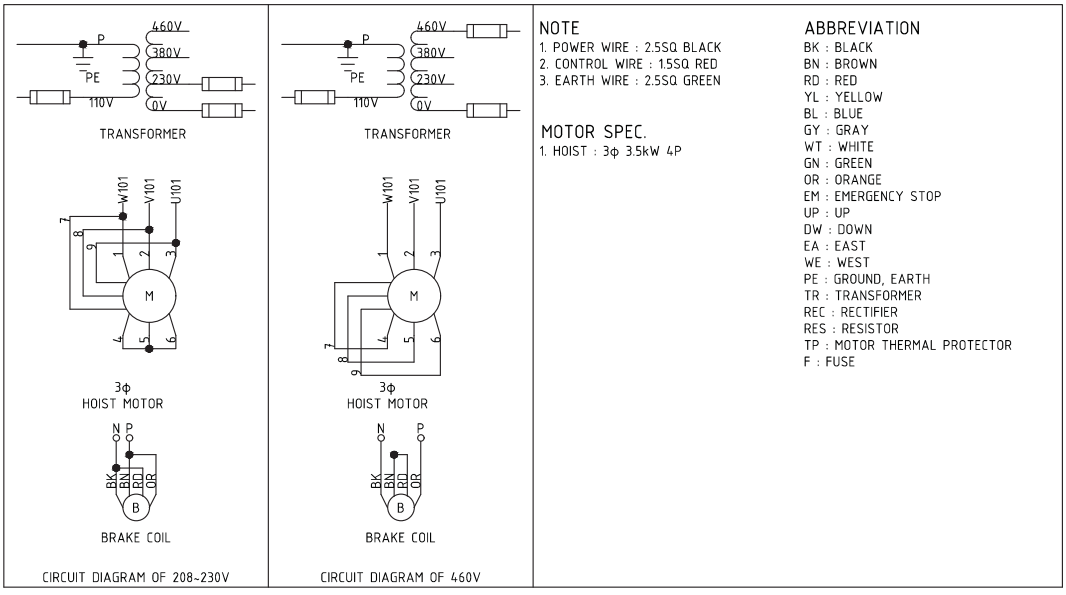
MOTOR SPEC.
1. HOIST : 3φ 3.5kW 4P

ABBREVIATION
BK : BLACK
BN : BROWN
RD : RED
YL : YELLOW
BL : BLUE
GY : GRAY
WT : WHITE
GN : GREEN
OR : ORANGE
EM : EMERGENCY STOP
UP : UP
DW : DOWN
EA : EAST
WE : WEST
PE : GROUND, EARTH
TR : TRANSFORMER
REC : RECTIFIER
RES : RESISTOR
TP : MOTOR THERMAL PROTECTOR
F : FUSE

■ Electric Wiring Diagram of Hook Suspension Series

2130080, 2130090, 2130095





NOTE
1. POWER WIRE : 2.5SQ BLACK
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3. EARTH WIRE : 2.5SQ GREEN

MOTOR SPEC.
1. HOIST : 3φ 3.5kW 4P

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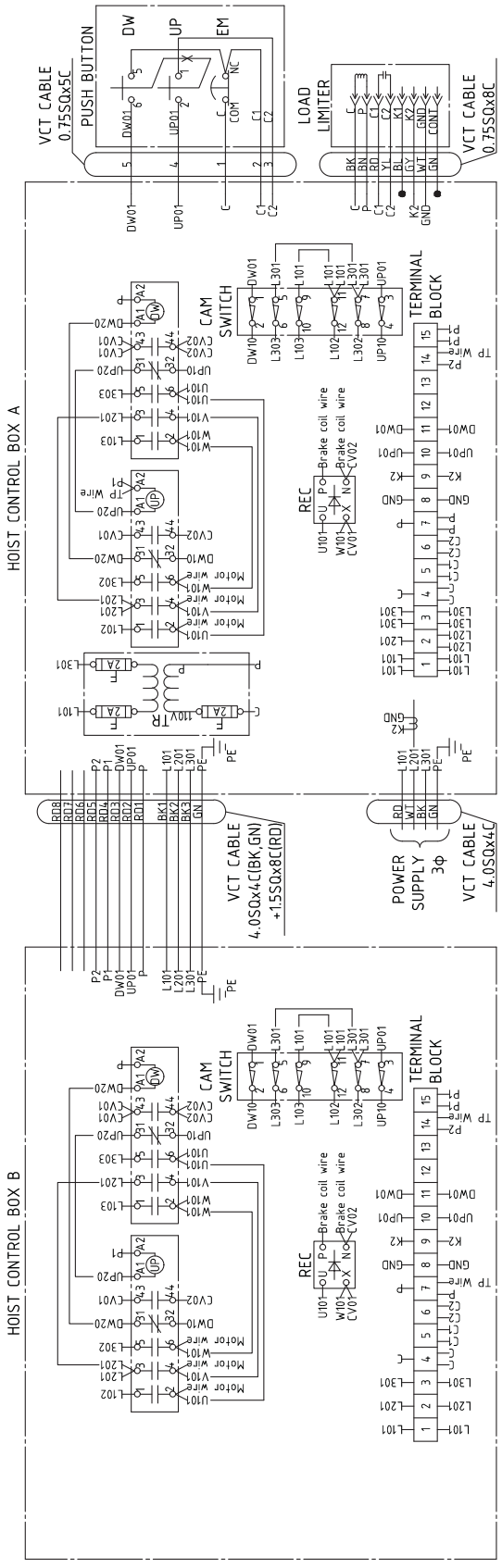
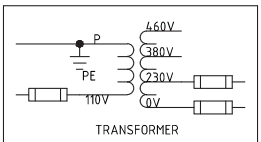
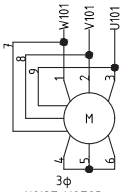
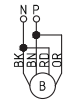
■ Electric Connection Drawing of Hook Suspension Series

2130080, 2130090, 2130095

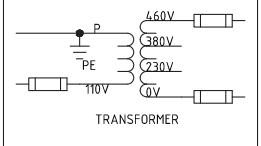


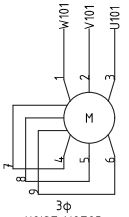


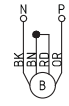




CIRCUIT DIAGRAM OF 208~230V







CIRCUIT DIAGRAM OF 460V

NOTE
1. POWER WIRE : 2.5SQ BLACK
2. CONTROL WIRE : 1.5SQ RED
3. EARTH WIRE : 2.5SQ GREEN

MOTOR SPEC.
1. HOIST : 3φ 3.5kW 4P

ABBREVIATION
BK : BLACK
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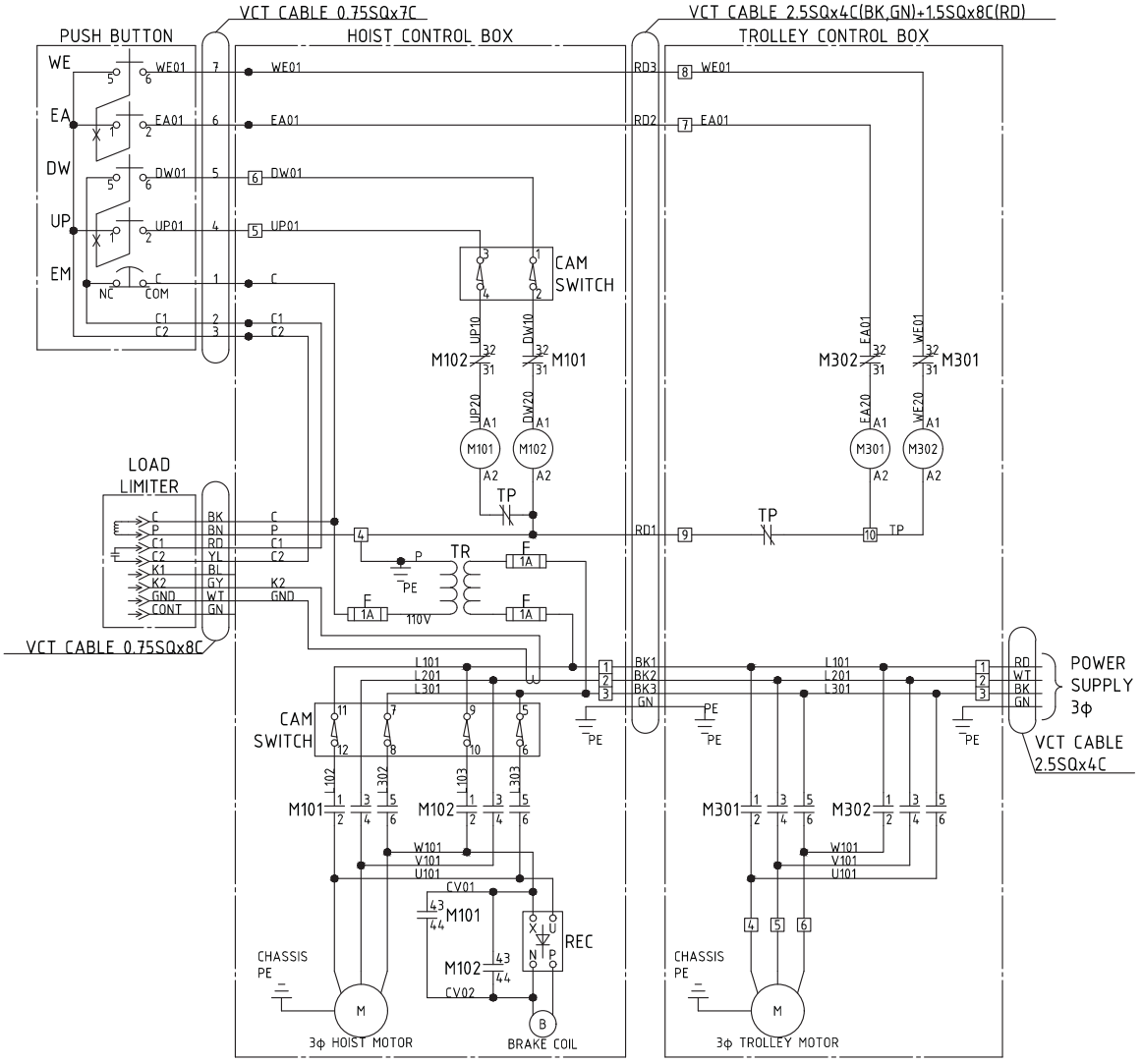
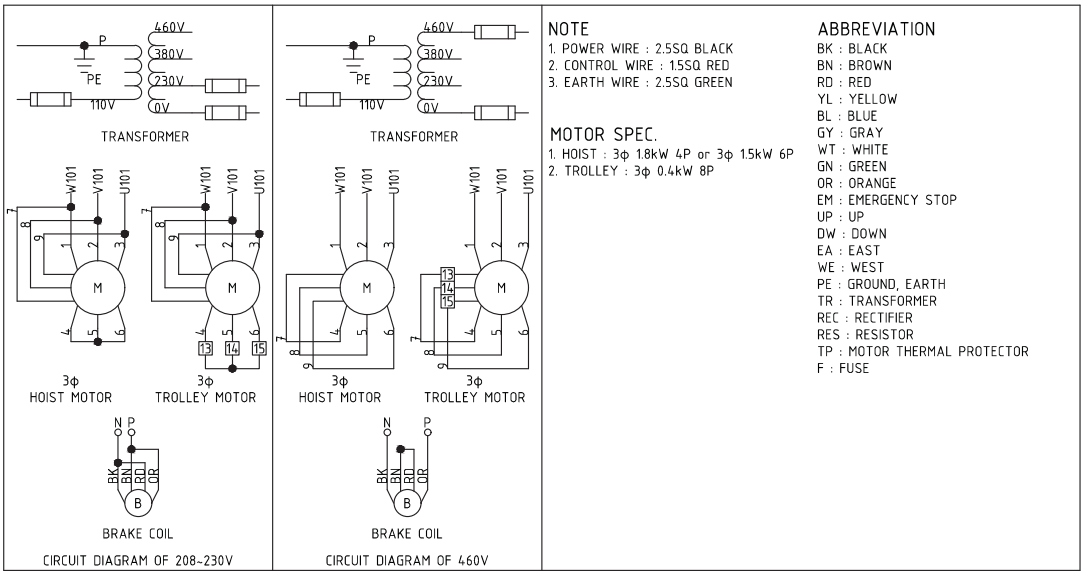
F : FUSE

■ Electric Wiring Diagram of Motorized Trolley

2130120 ~ 2130140





NOTE

1. POWER WIRE : 2.5SQ BLACK
2. CONTROL WIRE : 1.5SQ RED
3. EARTH WIRE : 2.5SQ GREEN

MOTOR SPEC.

1. HOIST : 3φ 1.8kW 4P or 3φ 1.5kW 6P
2. TROLLEY : 3φ 0.4kW 8P

ABBREVIATION

BK : BLACK
BN : BROWN
RD : RED
YL : YELLOW
BL : BLUE
GY : GRAY
WT : WHITE
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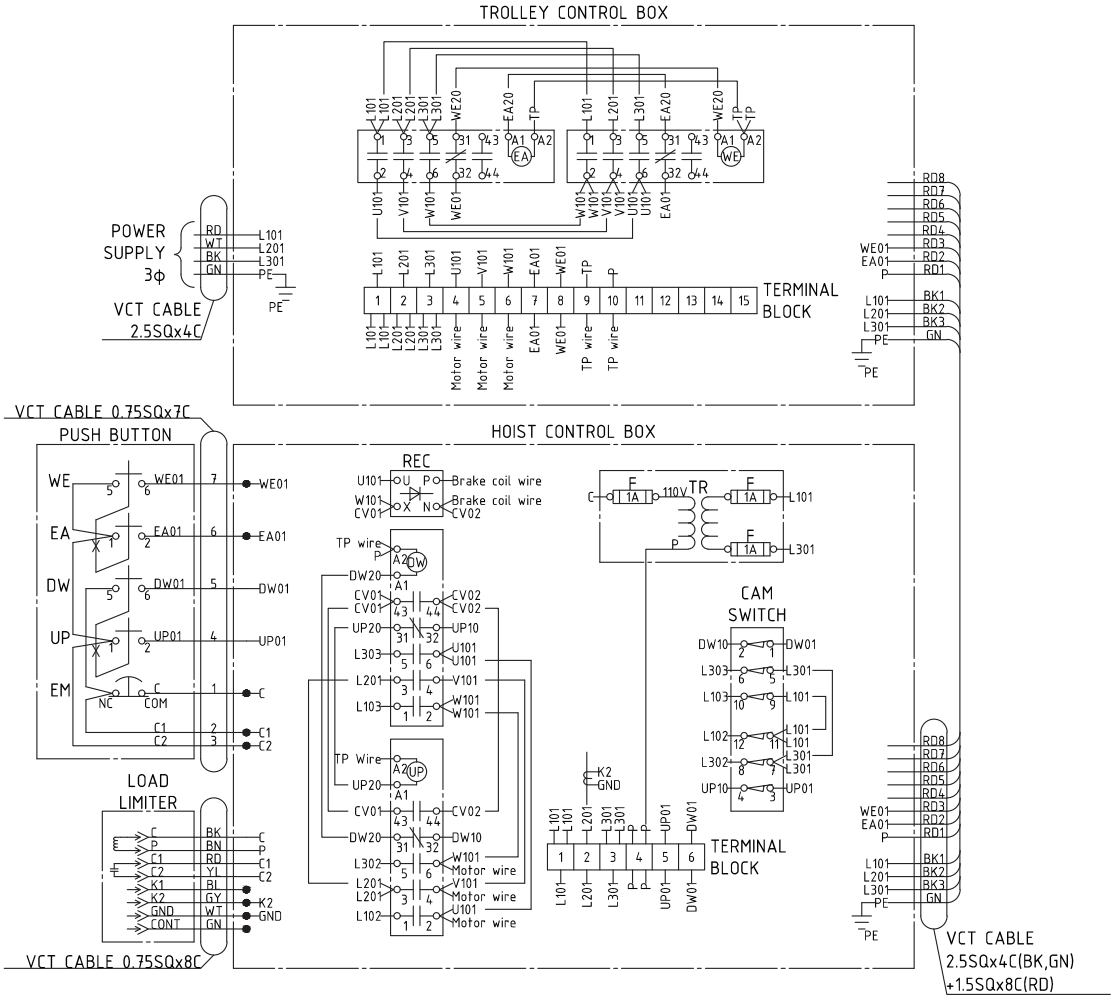
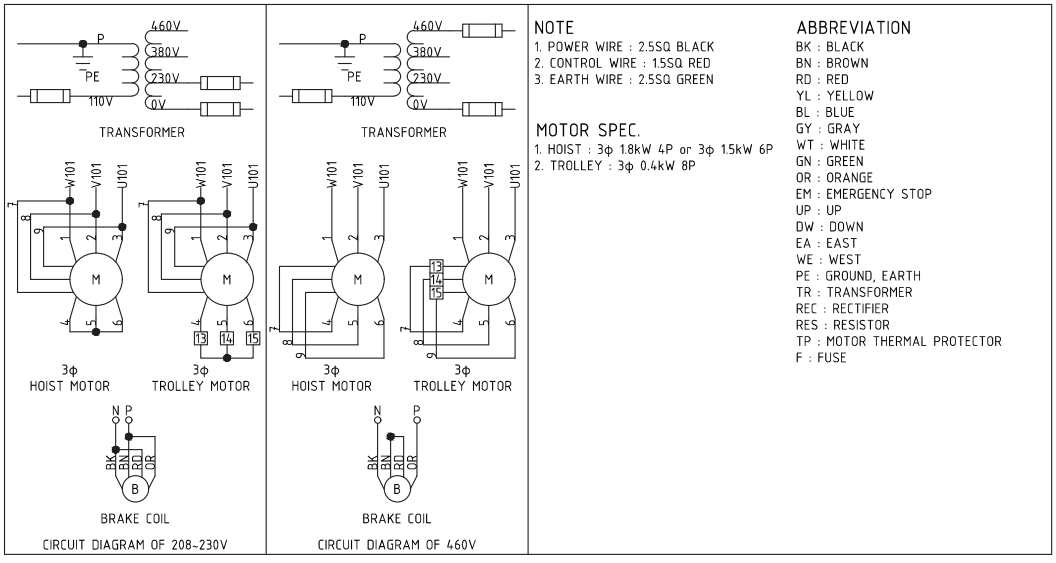
REC : RECTIFIER
RES : RESISTOR
TP : MOTOR THERMAL PROTECTOR
F : FUSE

■ Electric Connection Drawing of Motorized Trolley

2130120 ~ 2130140





NOTE
1. POWER WIRE : 2.5SQ BLACK
2. CONTROL WIRE : 1.5SQ RED
3. EARTH WIRE : 2.5SQ GREEN

MOTOR SPEC.
1. HOIST : 3φ 1.8kW 4P or 3φ 1.5kW 6P
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ABBREVIATION
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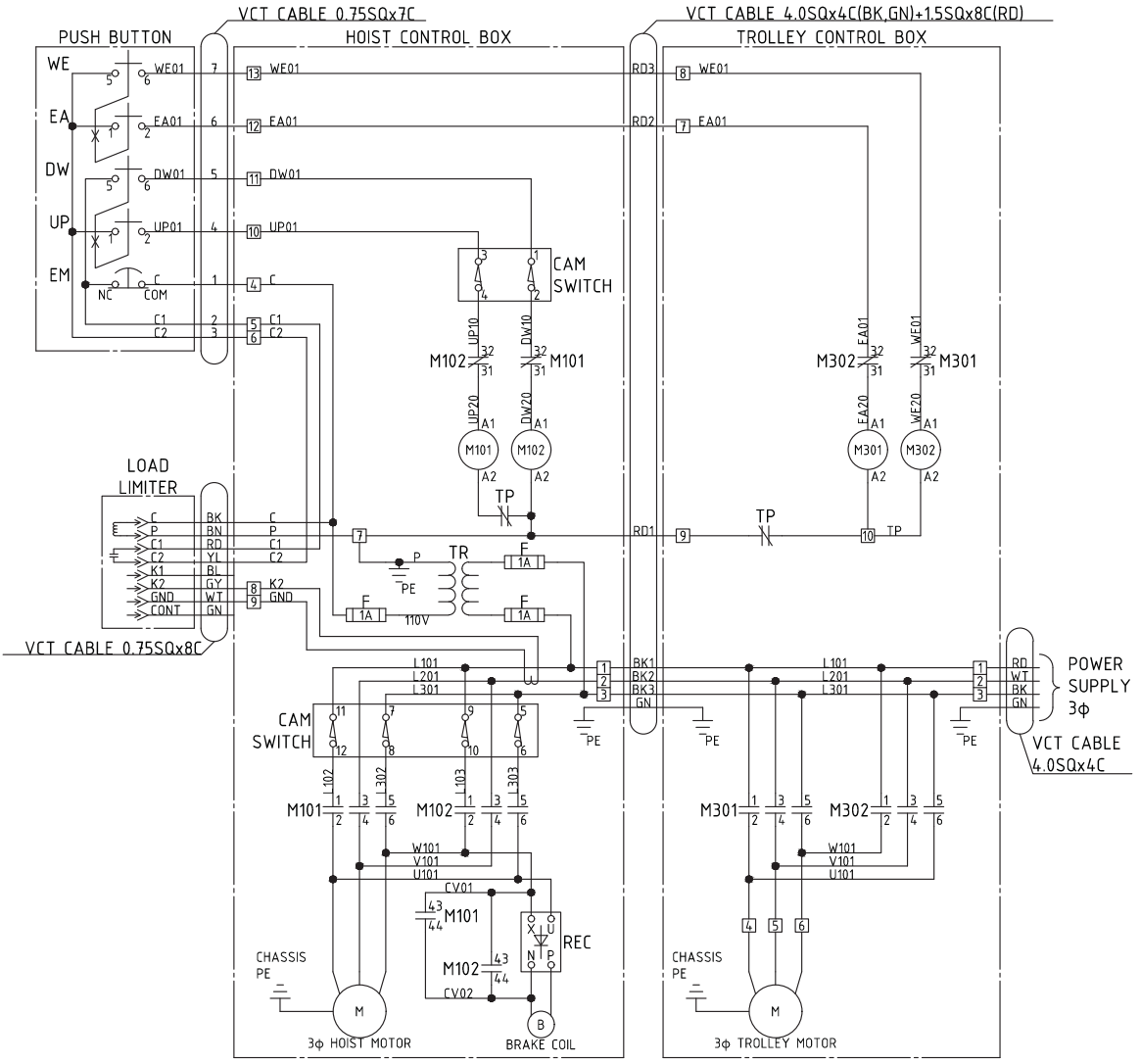
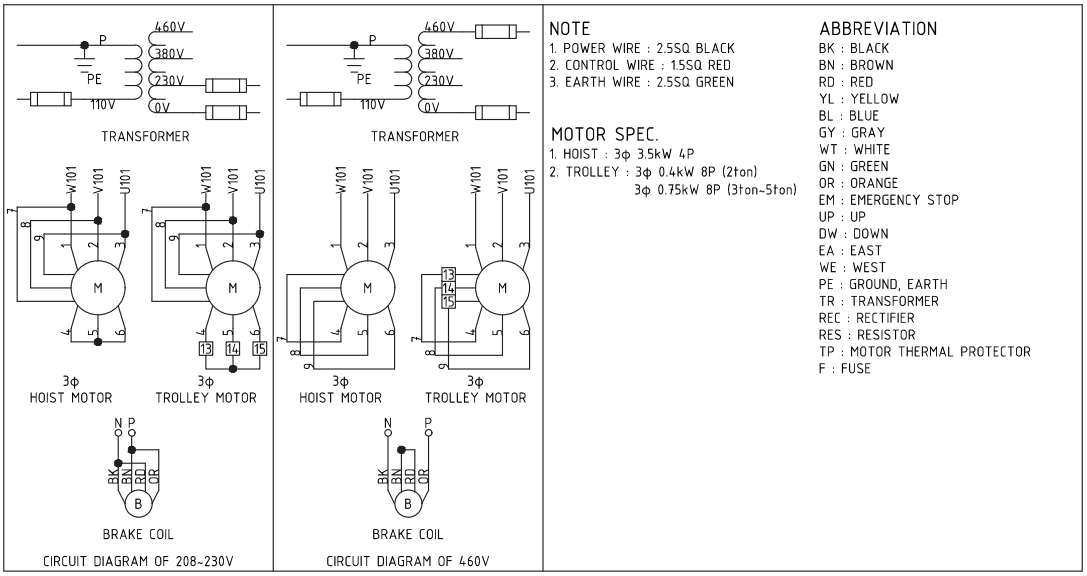
■ Electric Wiring Diagram of Motorized Trolley

2130150 ~ 2130170





NOTE
1. POWER WIRE : 2.5SQ BLACK
2. CONTROL WIRE : 1.5SQ RED
3. EARTH WIRE : 2.5SQ GREEN

MOTOR SPEC.
1. HOIST : 3φ 3.5kW 4P
2. TROLLEY : 3φ 0.4kW 8P (2ton)
   3φ 0.75kW 8P (3ton~5ton)

ABBREVIATION
BK : BLACK
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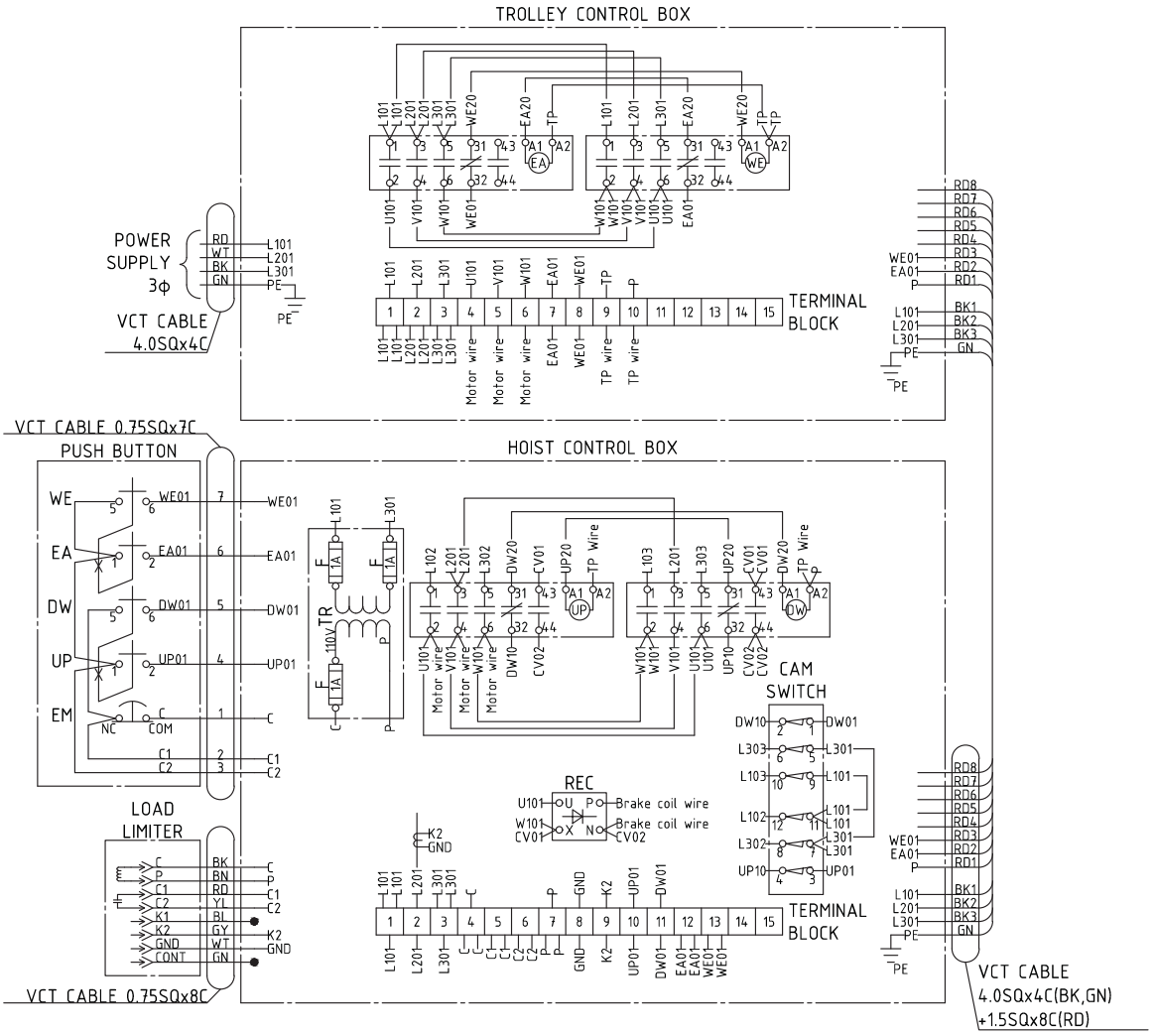
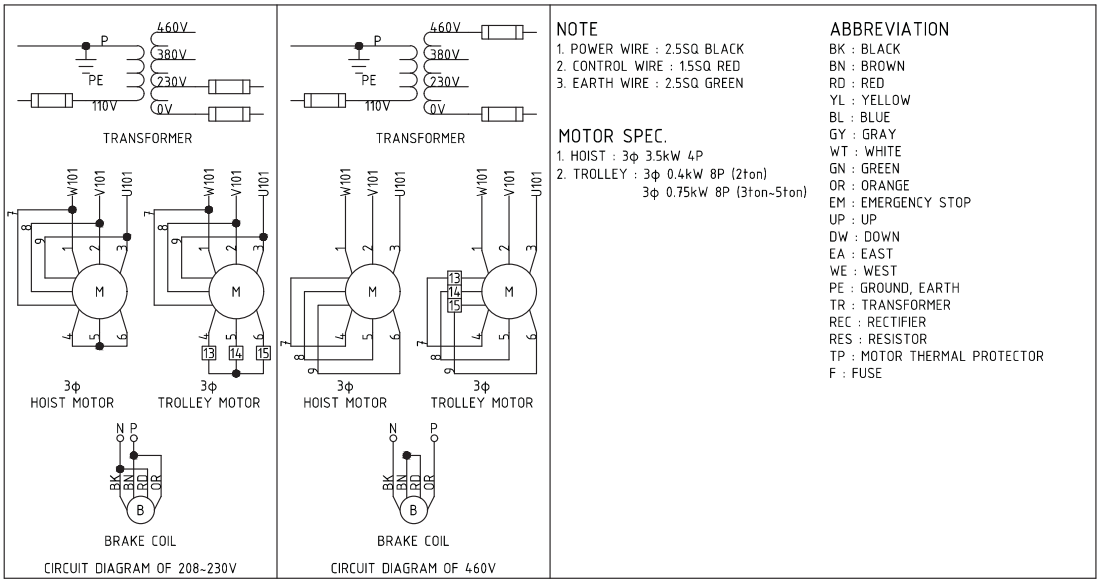
F : FUSE

■ Electric Connection Drawing of Motorized Trolley

2130150 ~ 2130170





NOTE
1. POWER WIRE : 2.5SQ BLACK
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3. EARTH WIRE : 2.5SQ GREEN

MOTOR SPEC.
1. HOIST : 3φ 3.5kW 4P
2. TROLLEY : 3φ 0.4kW 8P (2ton)
3φ 0.75kW 8P (3ton~5ton)

ABBREVIATION
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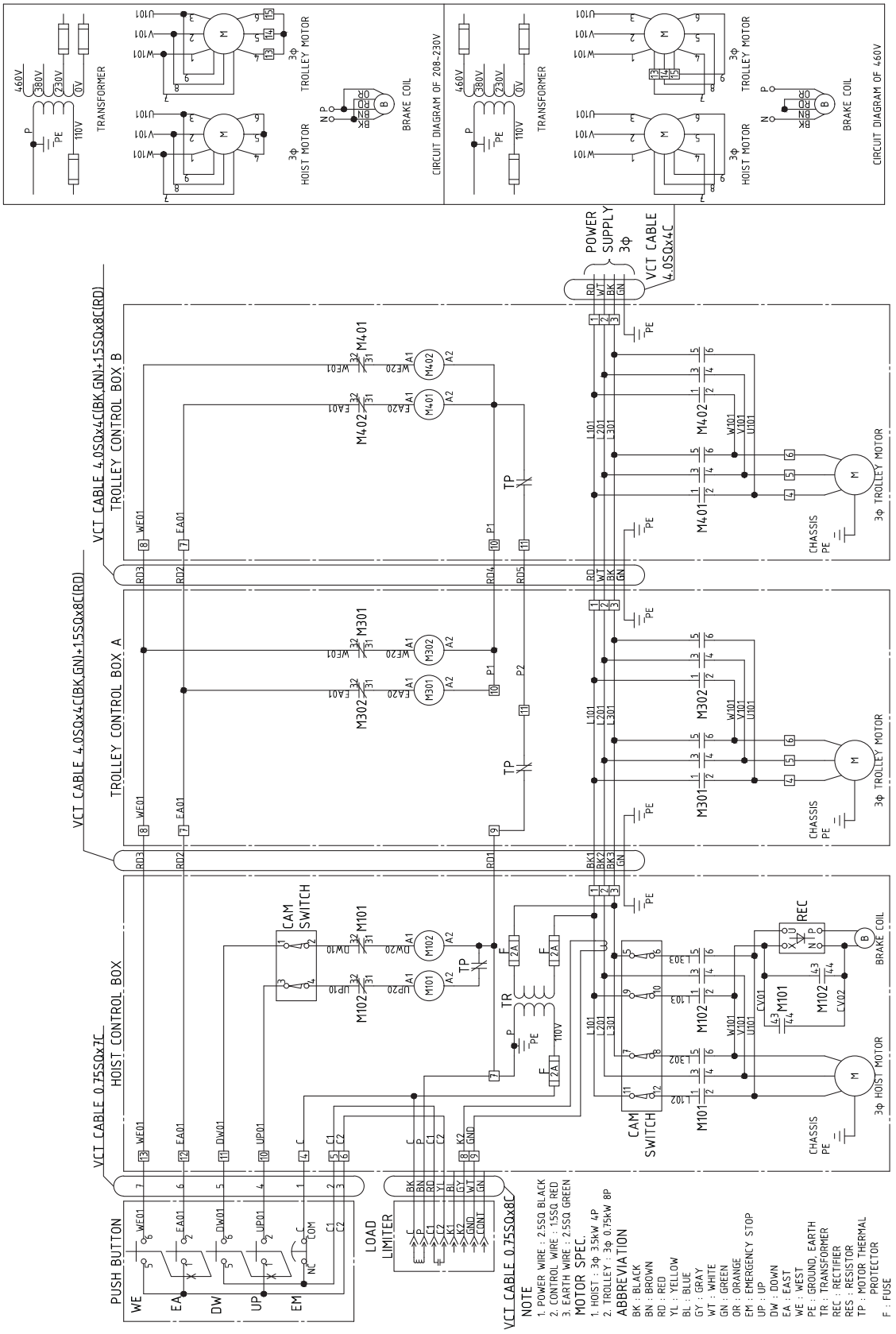
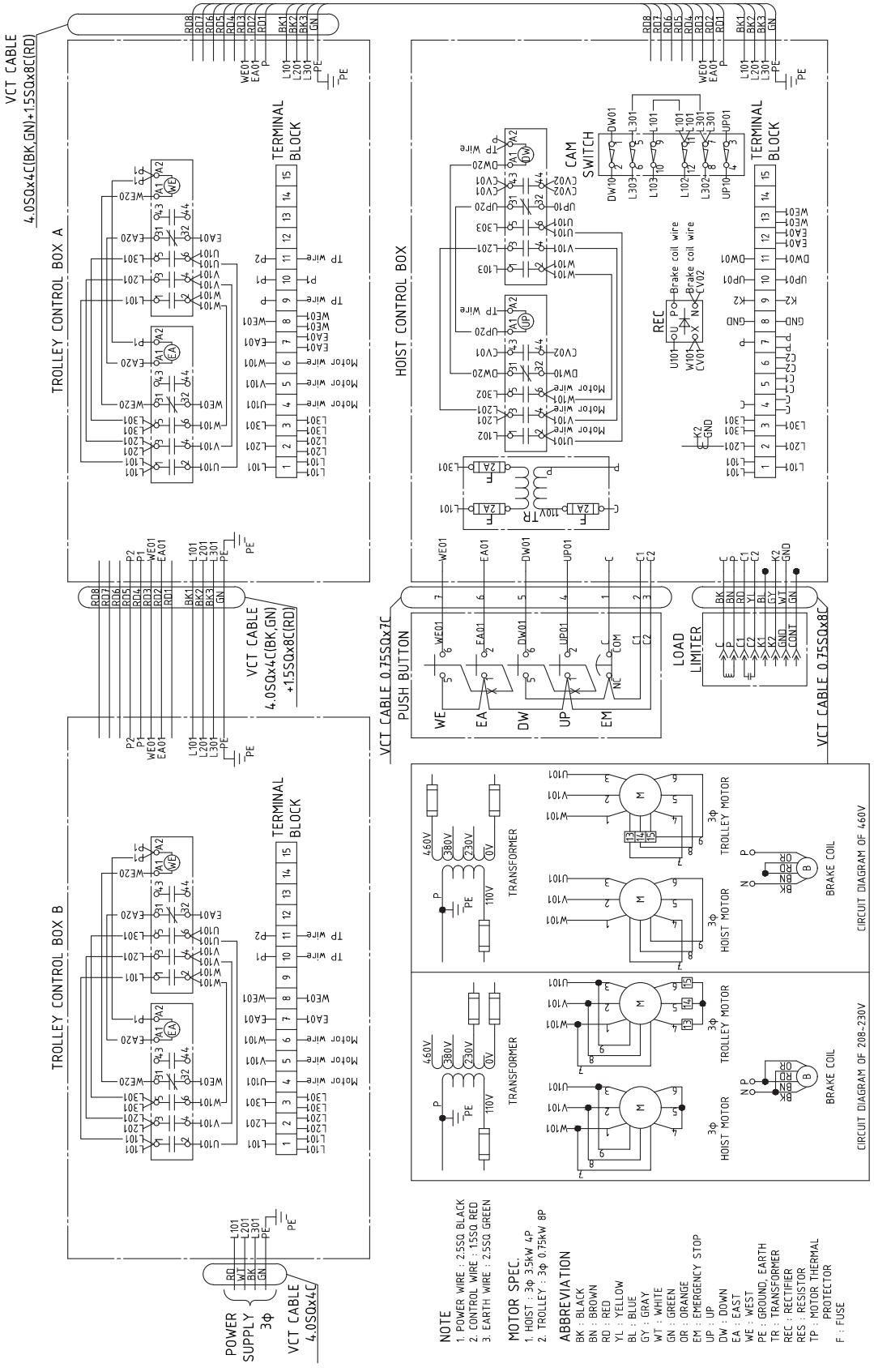
Electric Wiring Diagram of Motorized Trolley
2130175

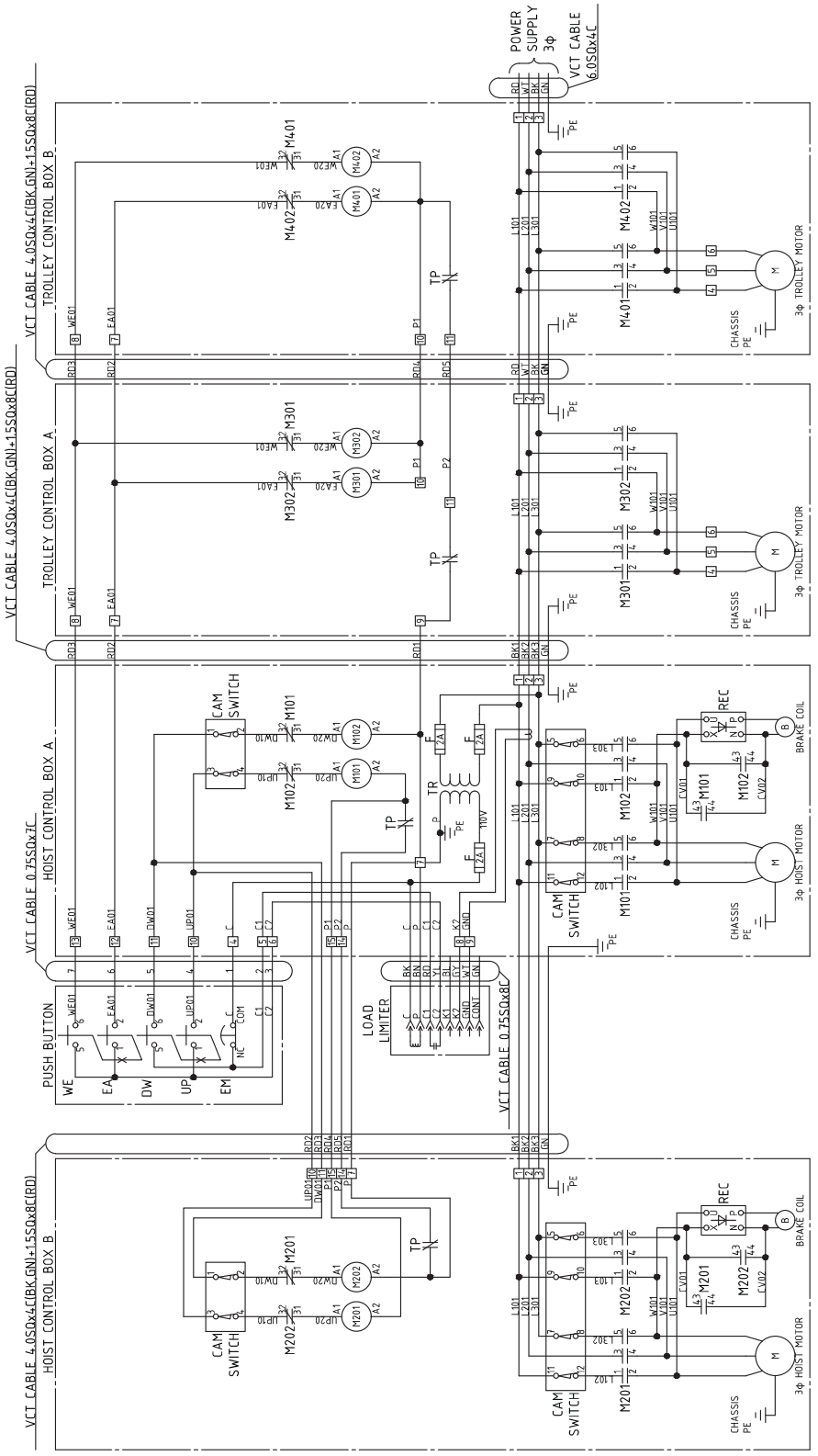


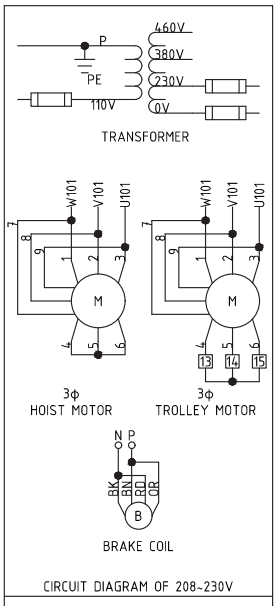
■ Electric Connection Drawing of Motorized Trolley

2130175

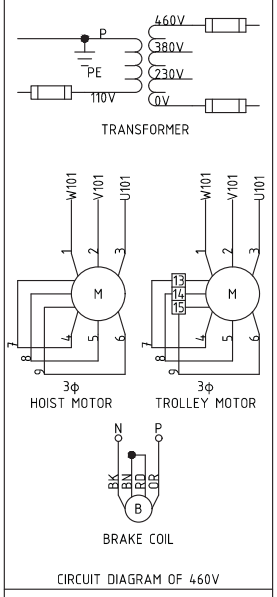


■ Electric Wiring Diagram of Motorized Trolley
2130180





CIRCUIT DIAGRAM OF 208~230V



CIRCUIT DIAGRAM OF 460V

NOTE
1. POWER WIRE : 2.5SQ BLACK
2. CONTROL WIRE : 1.5SQ RED
3. EARTH WIRE : 2.5SQ GREEN

MOTOR SPEC.
1. HOIST : 3φ 3.5kW 4P
2. TROLLEY : 3φ 0.75kW 8P

ABBREVIATION
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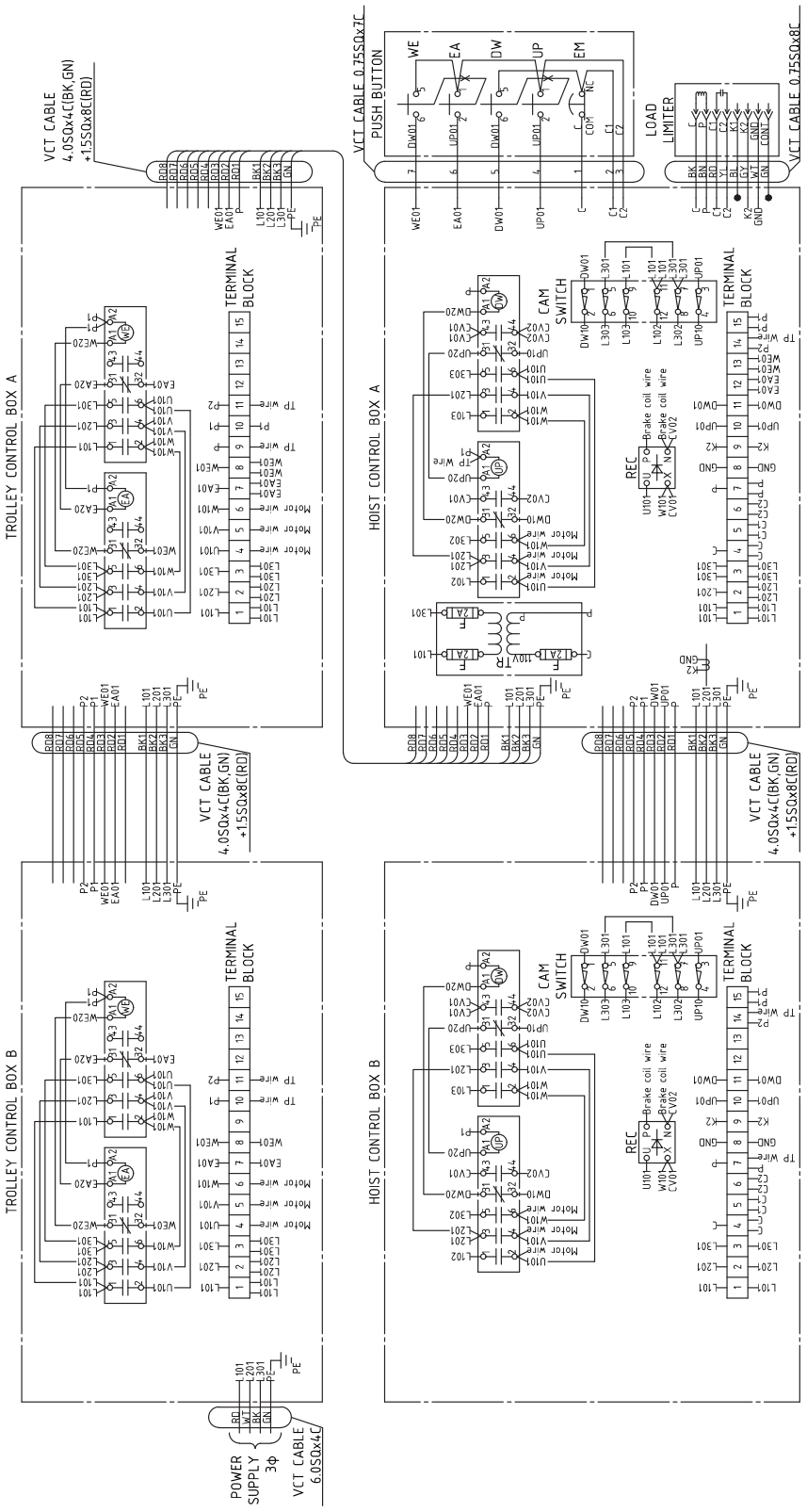
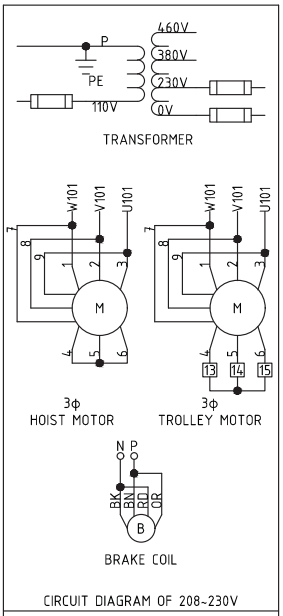
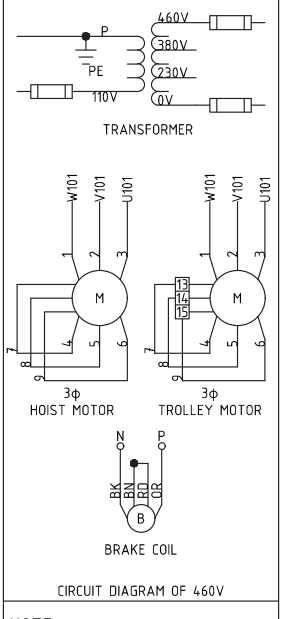
■ Electric Connection Drawing of Motorized Trolley

2130180







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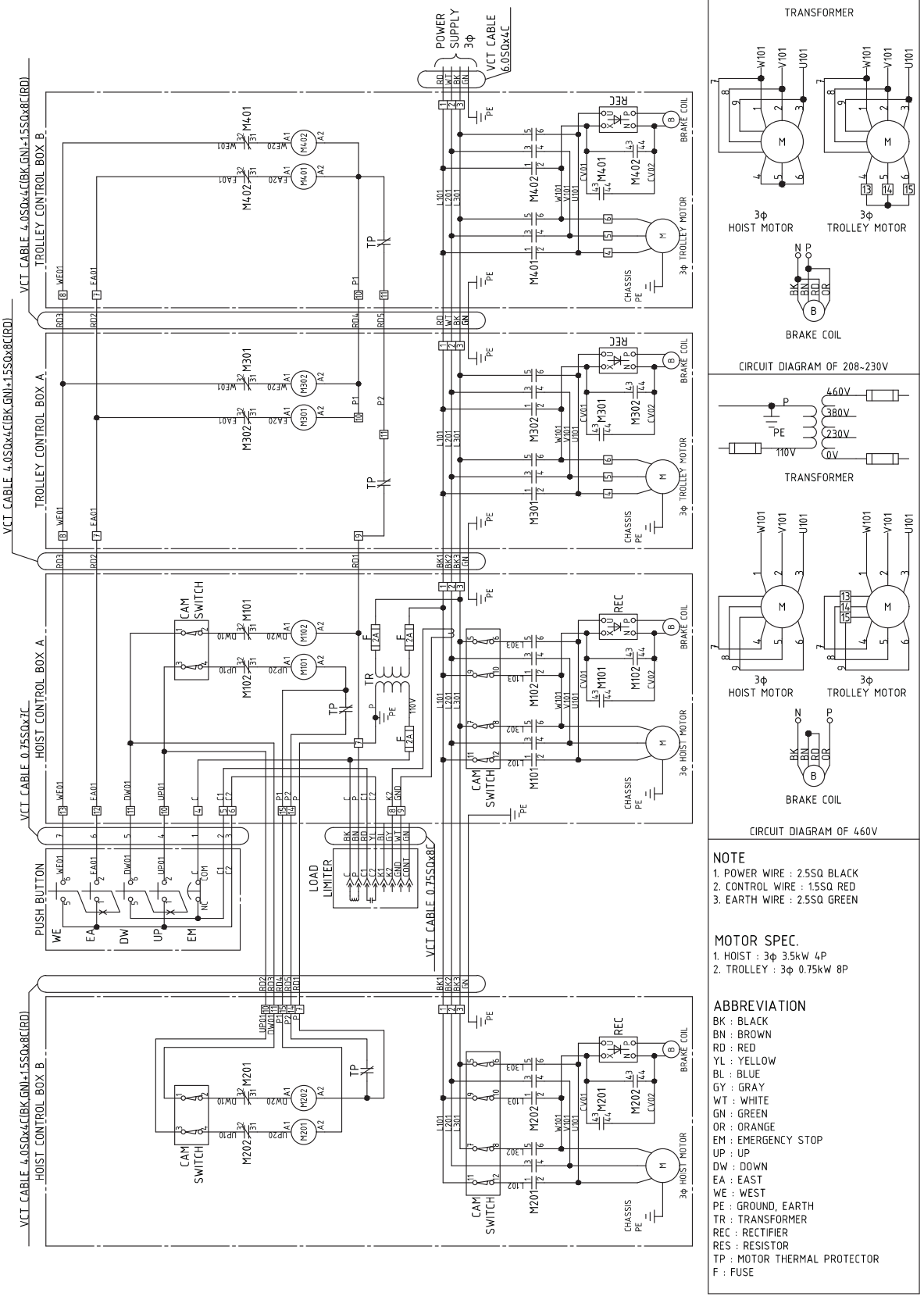
■ Electric Wiring Diagram of Motorized Trolley

2130190,2130195



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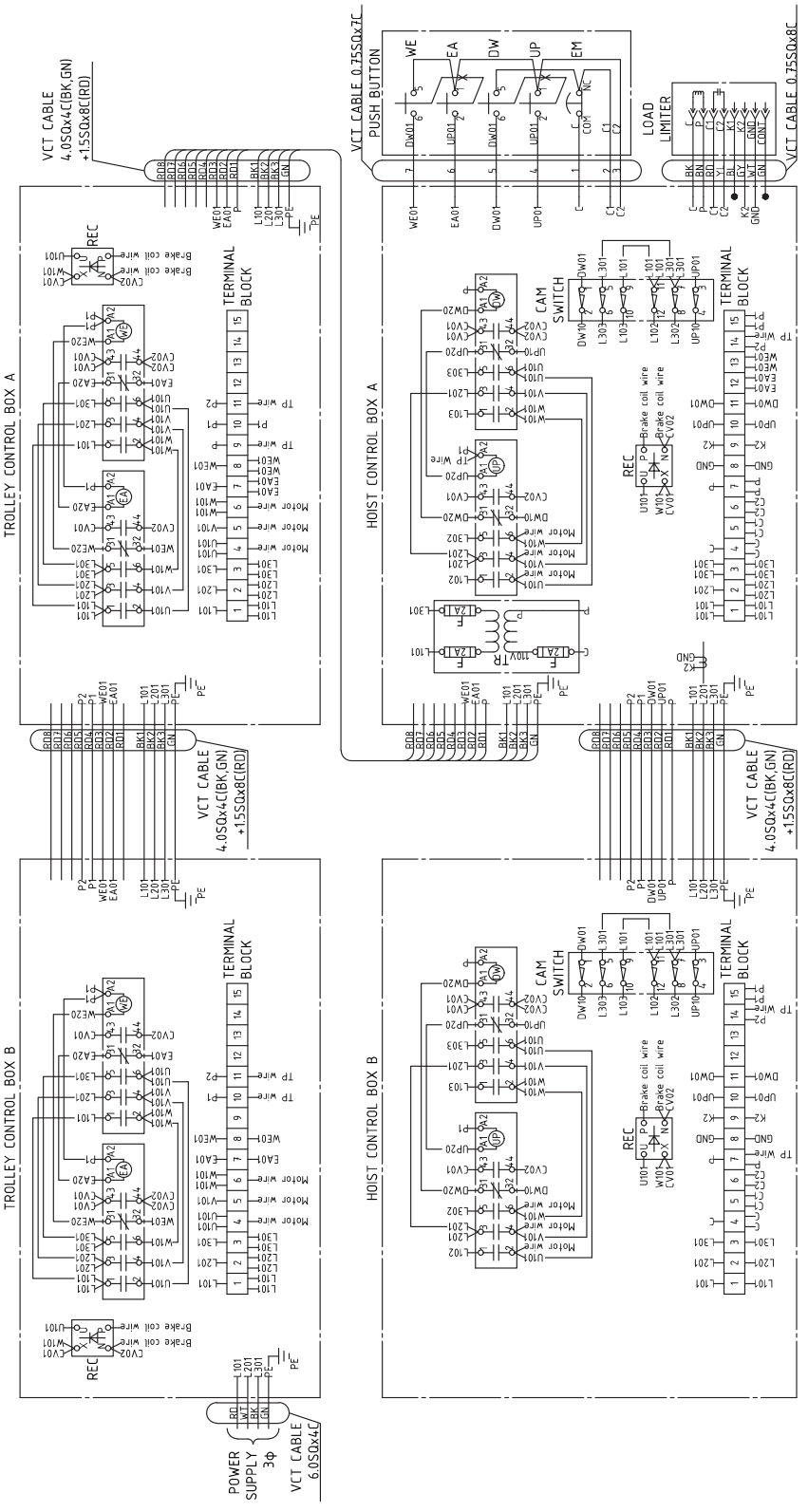
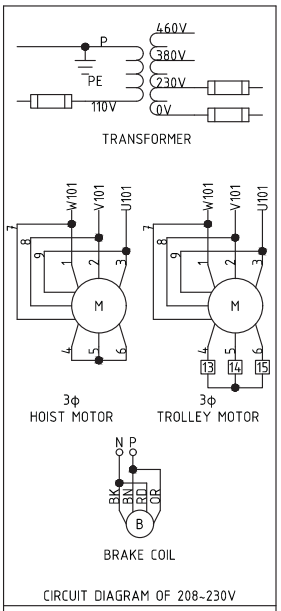
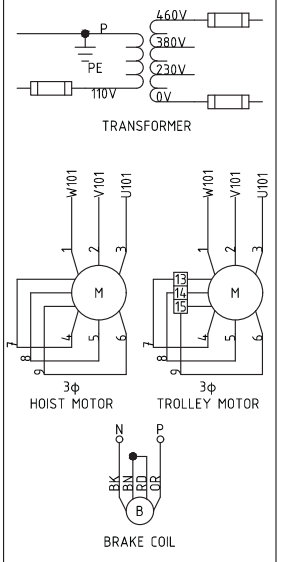
■ Electric Connection Drawing of Motorized Trolley

2130190, 2130195





CIRCUIT DIAGRAM OF 208~230V



CIRCUIT DIAGRAM OF 460V

NOTE
1. POWER WIRE : 2.5SQ BLACK
2. CONTROL WIRE : 1.5SQ RED
3. EARTH WIRE : 2.5SQ GREEN

MOTOR SPEC.
1. HOIST : 3φ 3.5kW 4P
2. TROLLEY : 3φ 0.75kW 8P

ABBREVIATION
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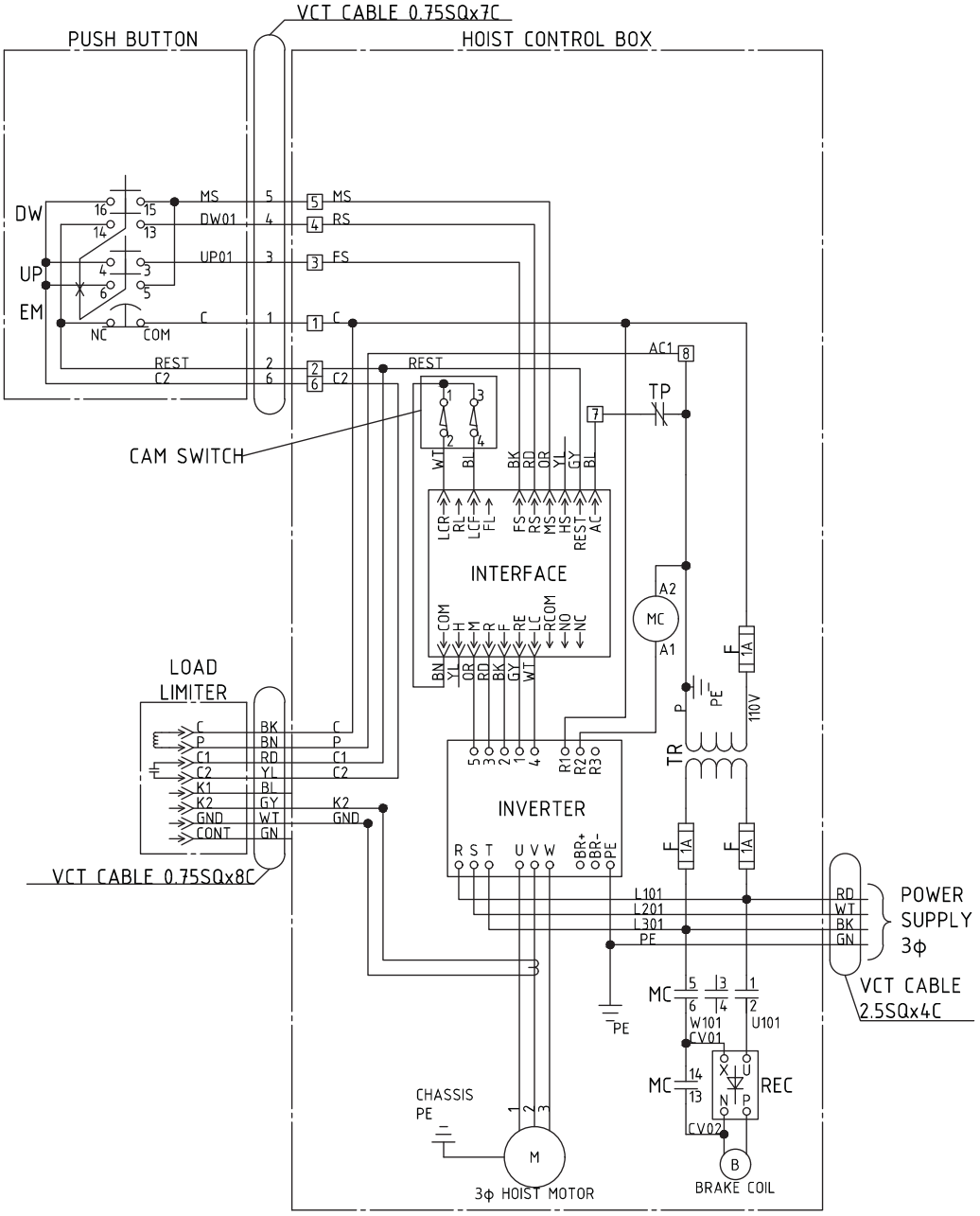
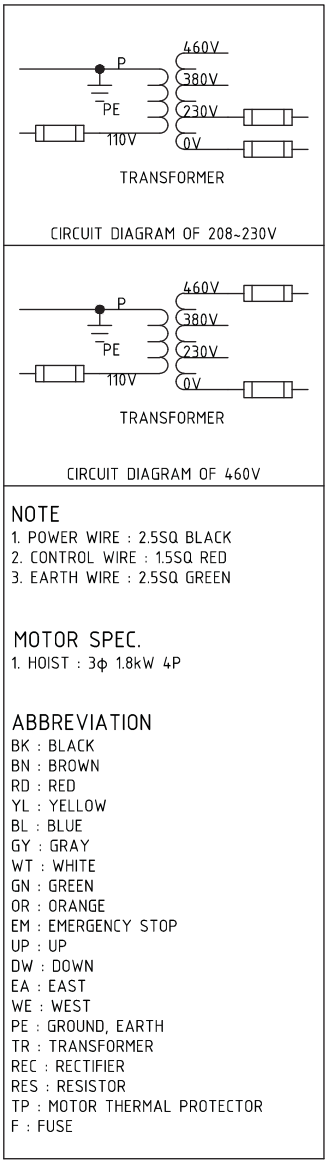
■ Electric Wiring Diagram of Motorized Trolley

2130030-VFD, 2130030-VFD-PT





NOTE
1. POWER WIRE : 2.5SQ BLACK
2. CONTROL WIRE : 1.5SQ RED
3. EARTH WIRE : 2.5SQ GREEN

MOTOR SPEC.
1. HOIST : 3φ 1.8kW 4P

ABBREVIATION
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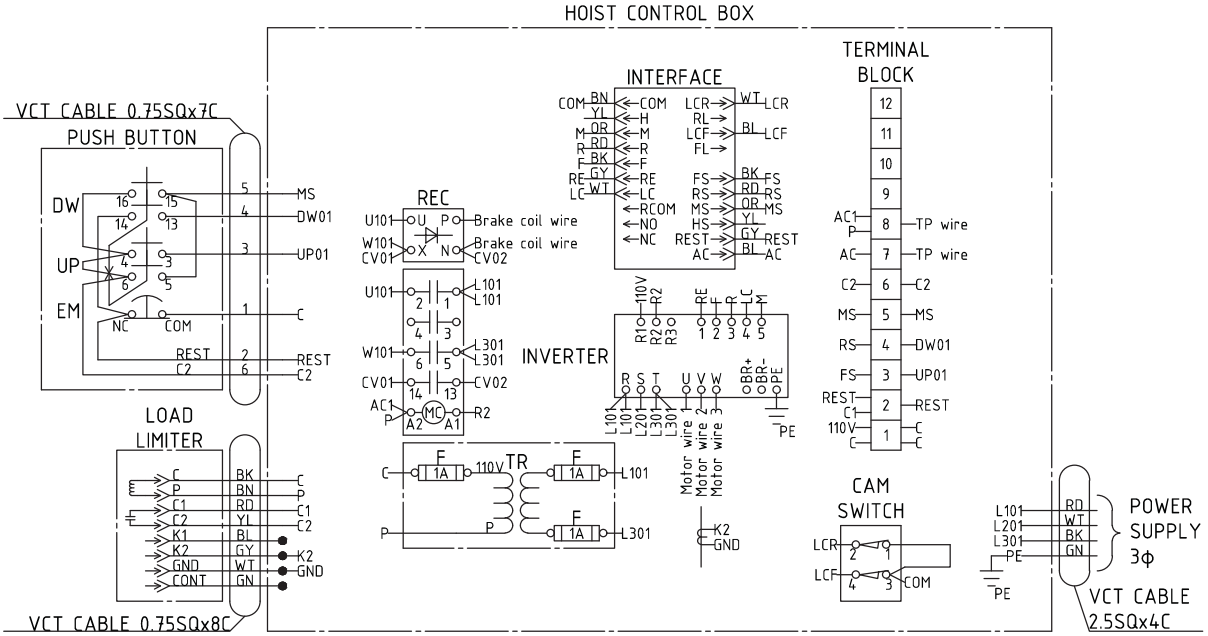
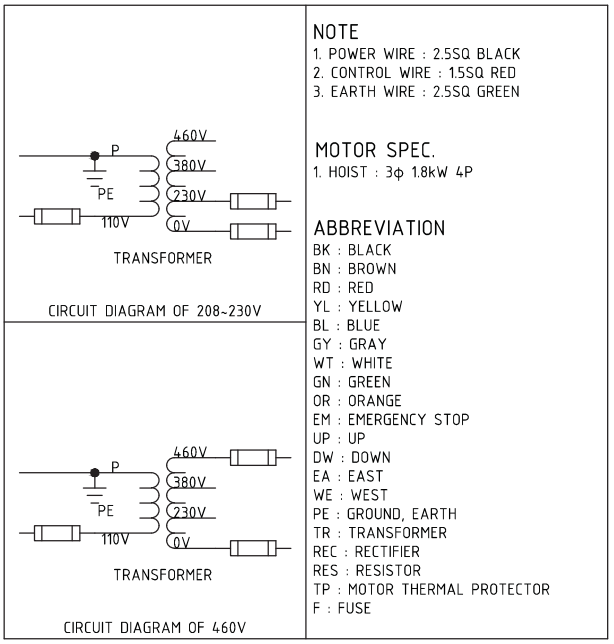
TP : MOTOR THERMAL PROTECTOR
F : FUSE

■ Electric Connection Drawing of Motorized Trolley

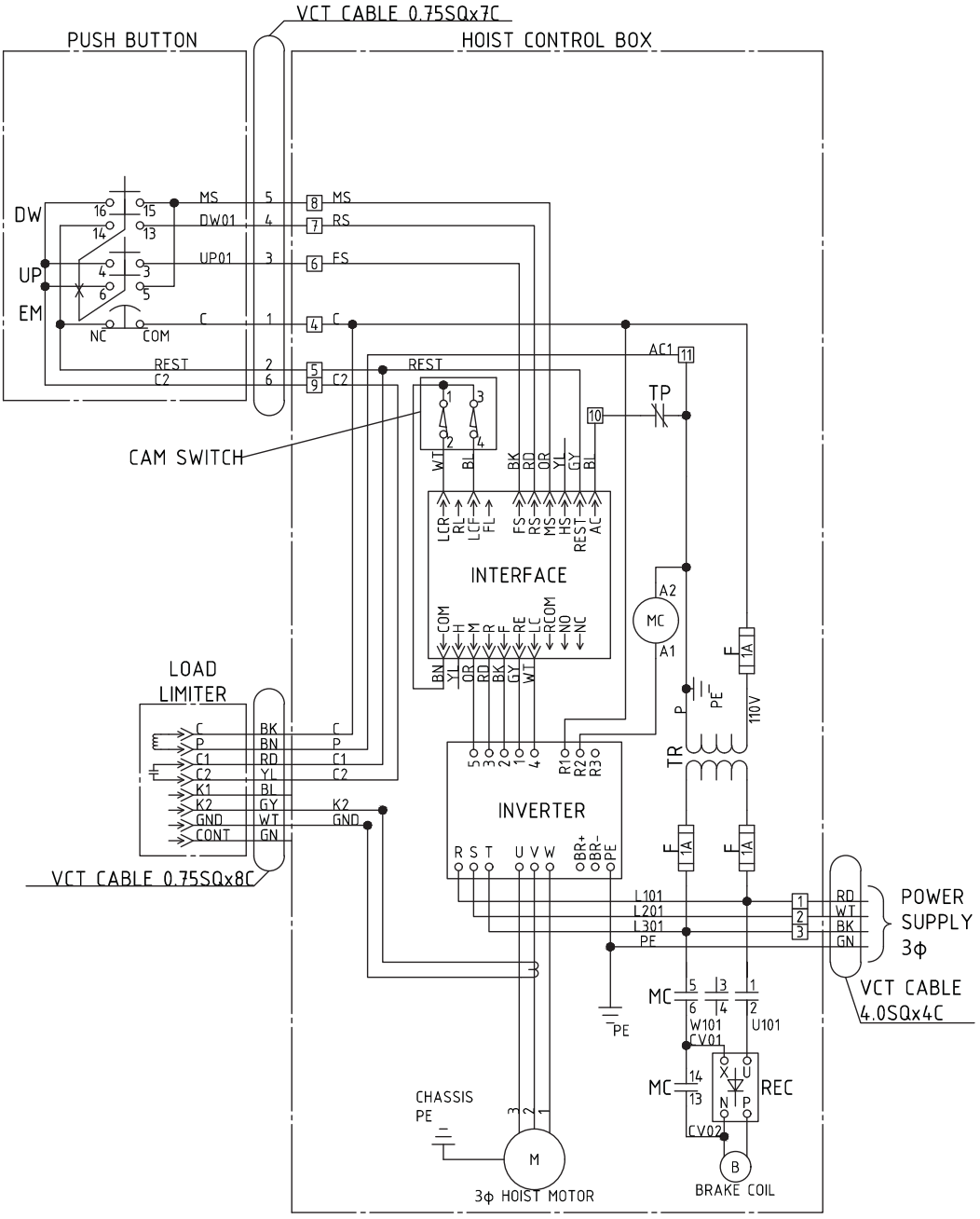
2130030-VFD, 2130030-VFD-PT

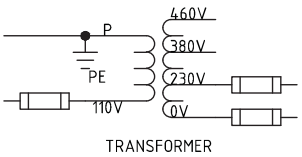




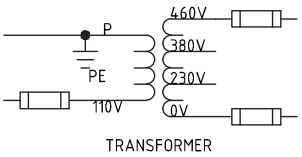
■ Electric Wiring Diagram of Motorized Trolley

2130050-VFD ~ 2130075-VFD, 2130050-VFD-PT ~ 2130070-VFD-PT





CIRCUIT DIAGRAM OF 208~230V



CIRCUIT DIAGRAM OF 460V

NOTE

1. POWER WIRE : 2.5SQ BLACK
2. CONTROL WIRE : 1.5SQ RED
3. EARTH WIRE : 2.5SQ GREEN

MOTOR SPEC.

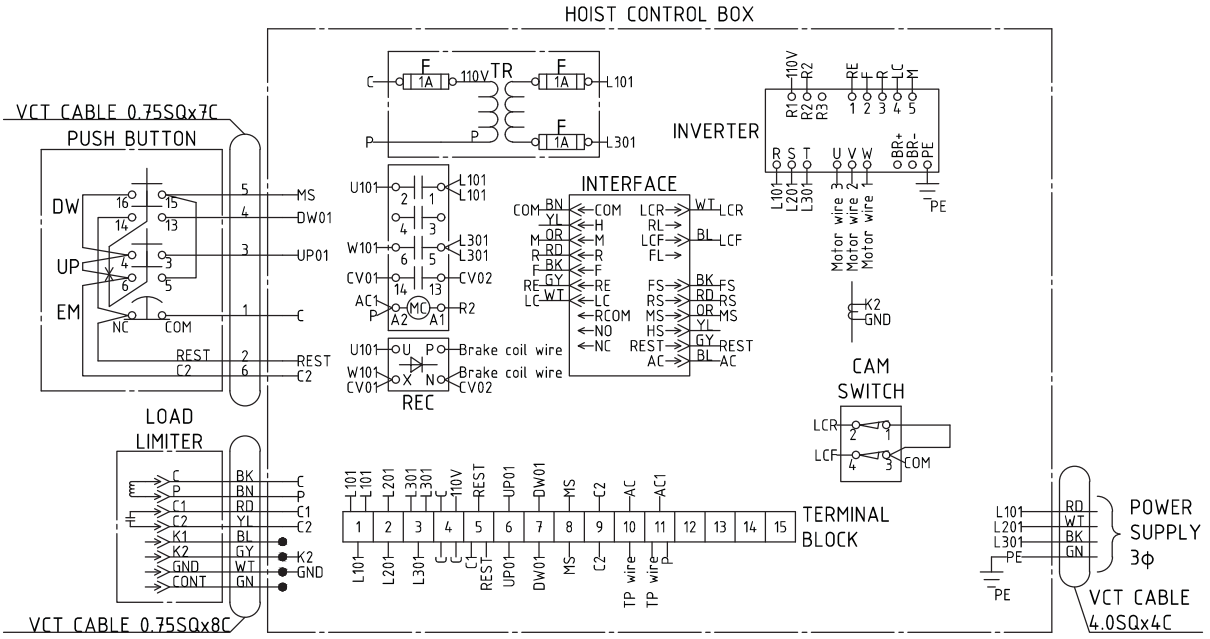
1. HOIST : 3φ 3.5kW 4P

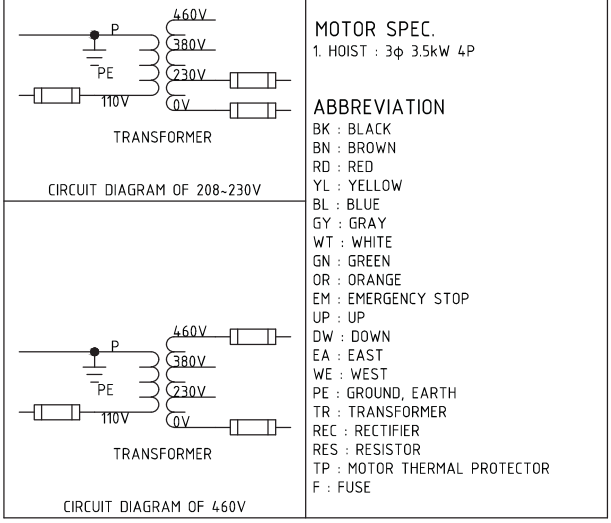
ABBREVIATION

BK : BLACK
BN : BROWN
RD : RED
YL : YELLOW
BL : BLUE
GY : GRAY
WT : WHITE
GN : GREEN
OR : ORANGE
EM : EMERGENCY STOP
UP : UP
DW : DOWN
EA : EAST
WE : WEST
PE : GROUND, EARTH
TR : TRANSFORMER
REC : RECTIFIER
RES : RESISTOR
TP : MOTOR THERMAL PROTECTOR
F : FUSE

■ Electric Connection Drawing of Motorized Trolley

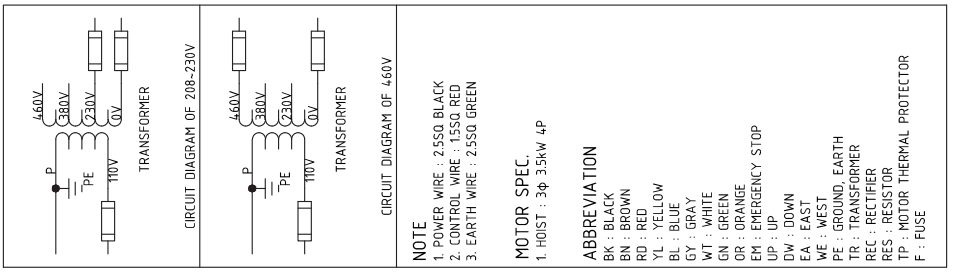
2130050-VFD ~ 2130075-VFD, 2130050-VFD-PT ~ 2130070-VFD-PT

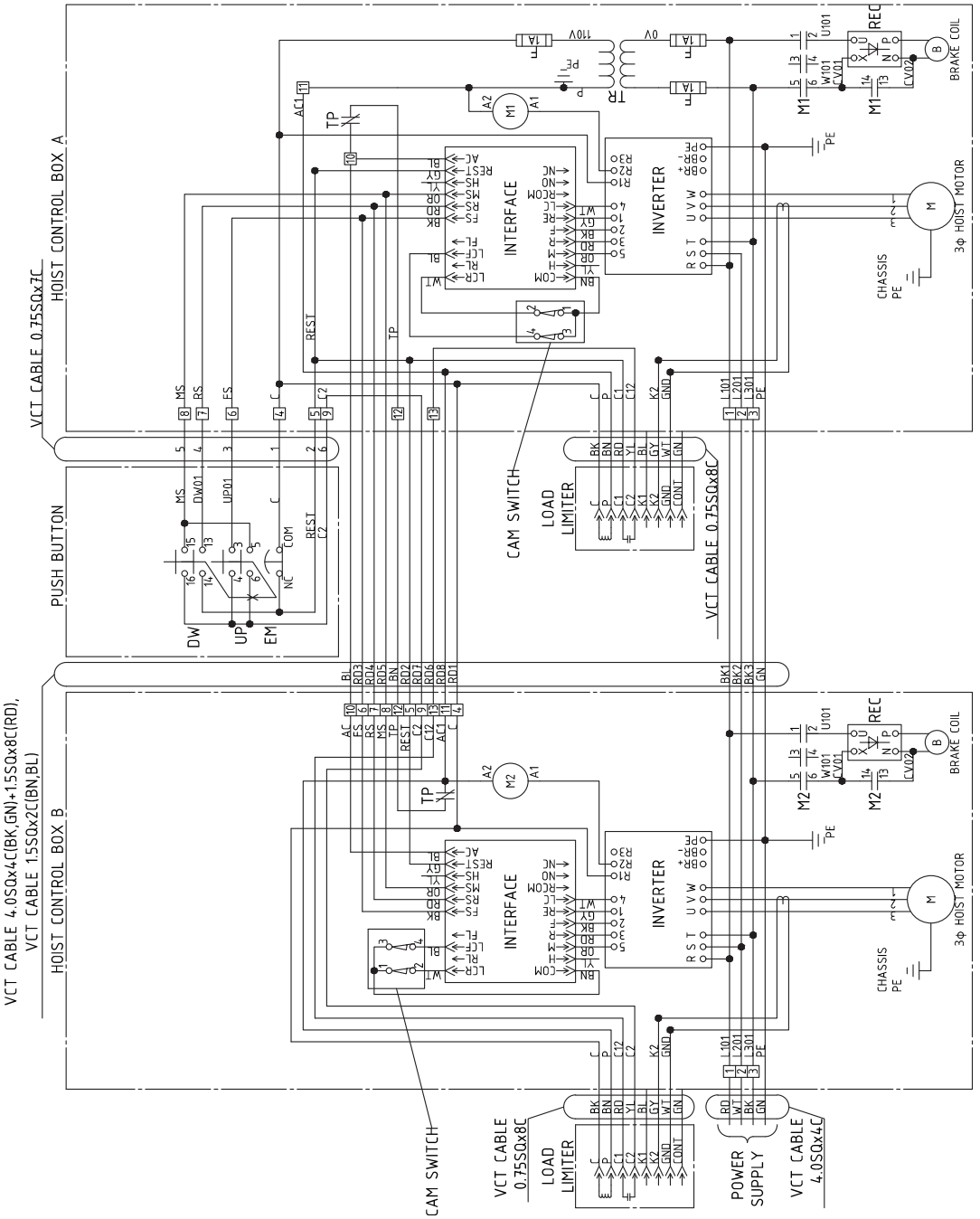




■ Electric Wiring Diagram of Motorized Trolley

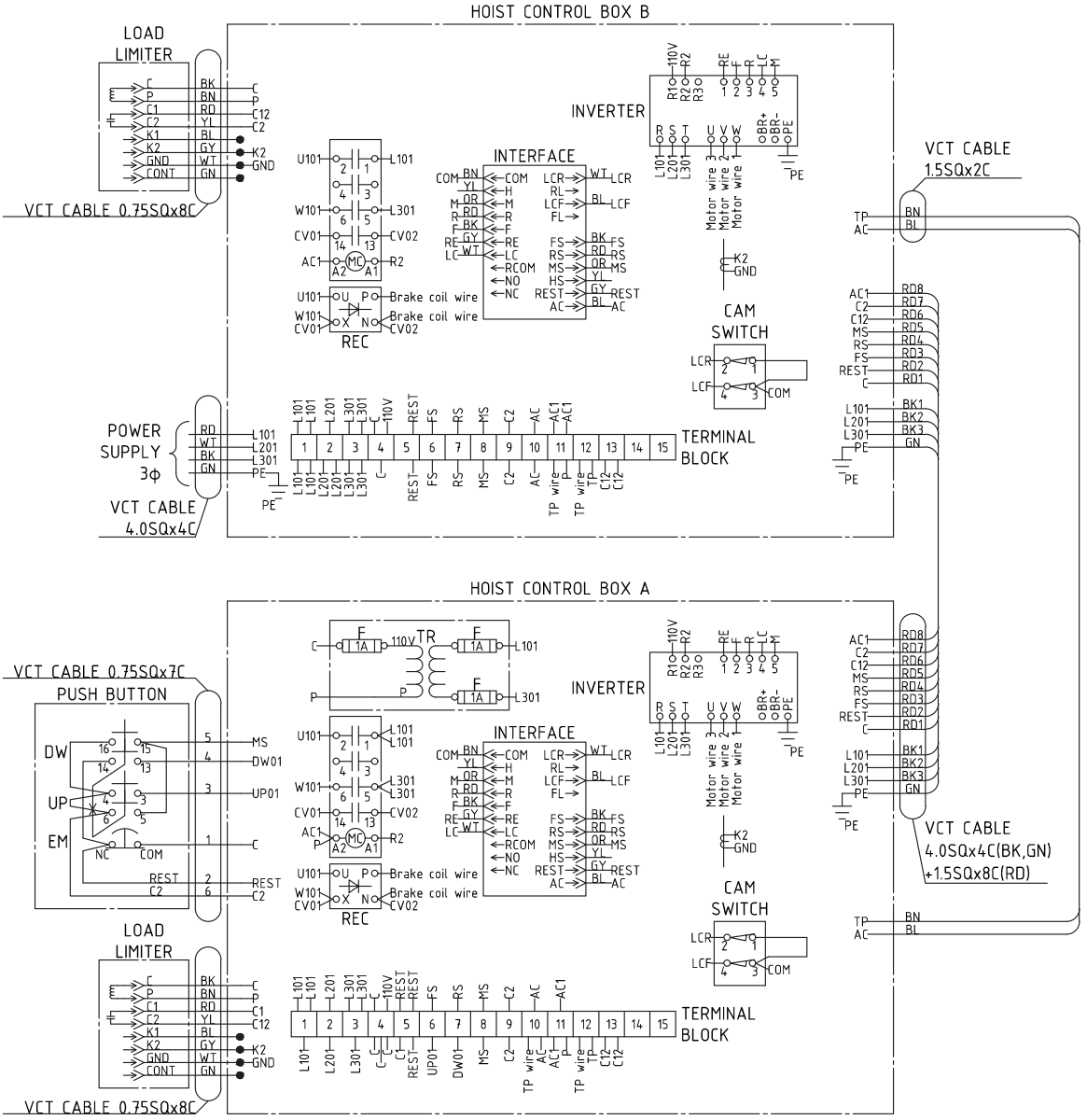
2130080-VFD ~ 2130095-VFD

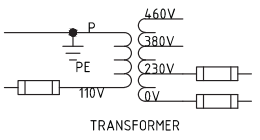




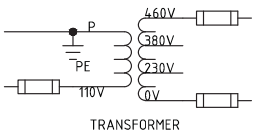
■ Electric Connection Drawing of Motorized Trolley

2130080-VFD ~ 2130095-VFD





CIRCUIT DIAGRAM OF 208~230V



CIRCUIT DIAGRAM OF 460V

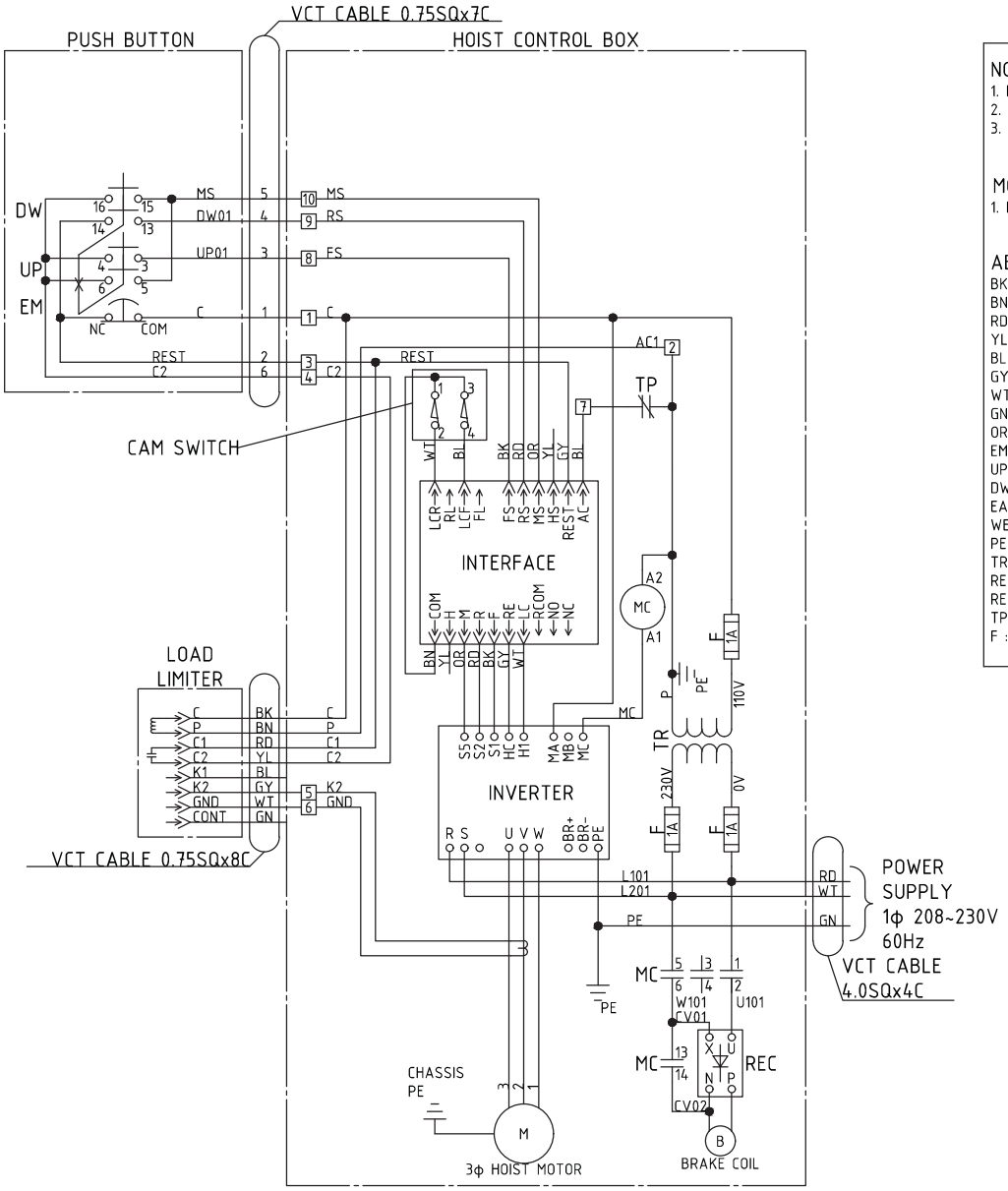
NOTE
1. POWER WIRE : 2.5SQ BLACK
2. CONTROL WIRE : 1.5SQ RED
3. EARTH WIRE : 2.5SQ GREEN

MOTOR SPEC.
1. HOIST : 3φ 3.5kW 4P

ABBREVIATION
BK : BLACK
BN : BROWN
RD : RED
YL : YELLOW
BL : BLUE
GY : GRAY
WT : WHITE
GN : GREEN
OR : ORANGE
EM : EMERGENCY STOP
UP : UP
DW : DOWN
EA : EAST
WE : WEST
PE : GROUND, EARTH
TR : TRANSFORMER
REC : RECTIFIER
RES : RESISTOR
TP : MOTOR THERMAL PROTECTOR
F : FUSE

■ Electric Wiring Diagram of Motorized Trolley

2130060-VFD-230-1, 2130060-VFD-230-1-PT



NOTE
1. POWER WIRE : 2.5SQ BLACK
2. CONTROL WIRE : 1.5SQ RED
3. EARTH WIRE : 2.5SQ GREEN

MOTOR SPEC.
1. HOIST : 3φ 3.5kW 4P

ABBREVIATION
BK : BLACK
BN : BROWN
RD : RED
YL : YELLOW
BL : BLUE
GY : GRAY
WT : WHITE
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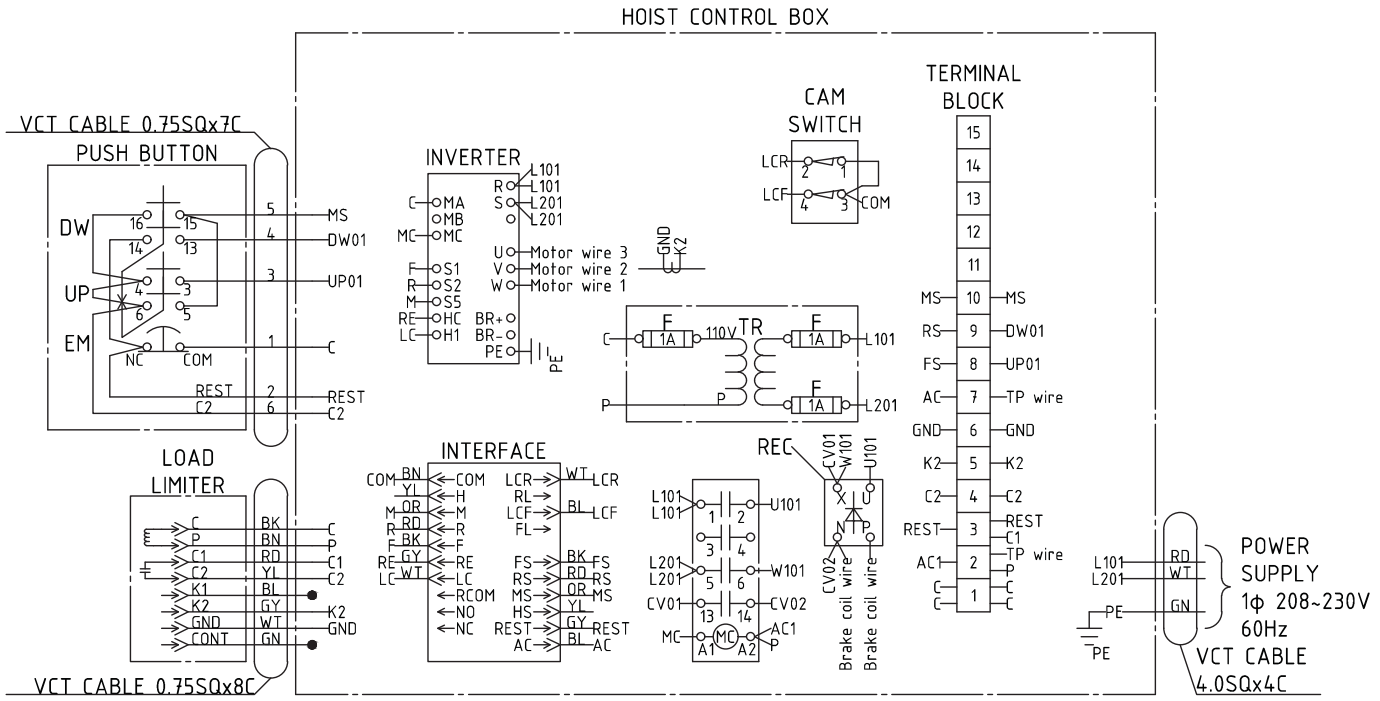
DW : DOWN
EA : EAST
WE : WEST
PE : GROUND, EARTH
TR : TRANSFORMER
REC : RECTIFIER
RES : RESISTOR
TP : MOTOR THERMAL PROTECTOR
F : FUSE

■ Electric Connection Drawing of Motorized Trolley

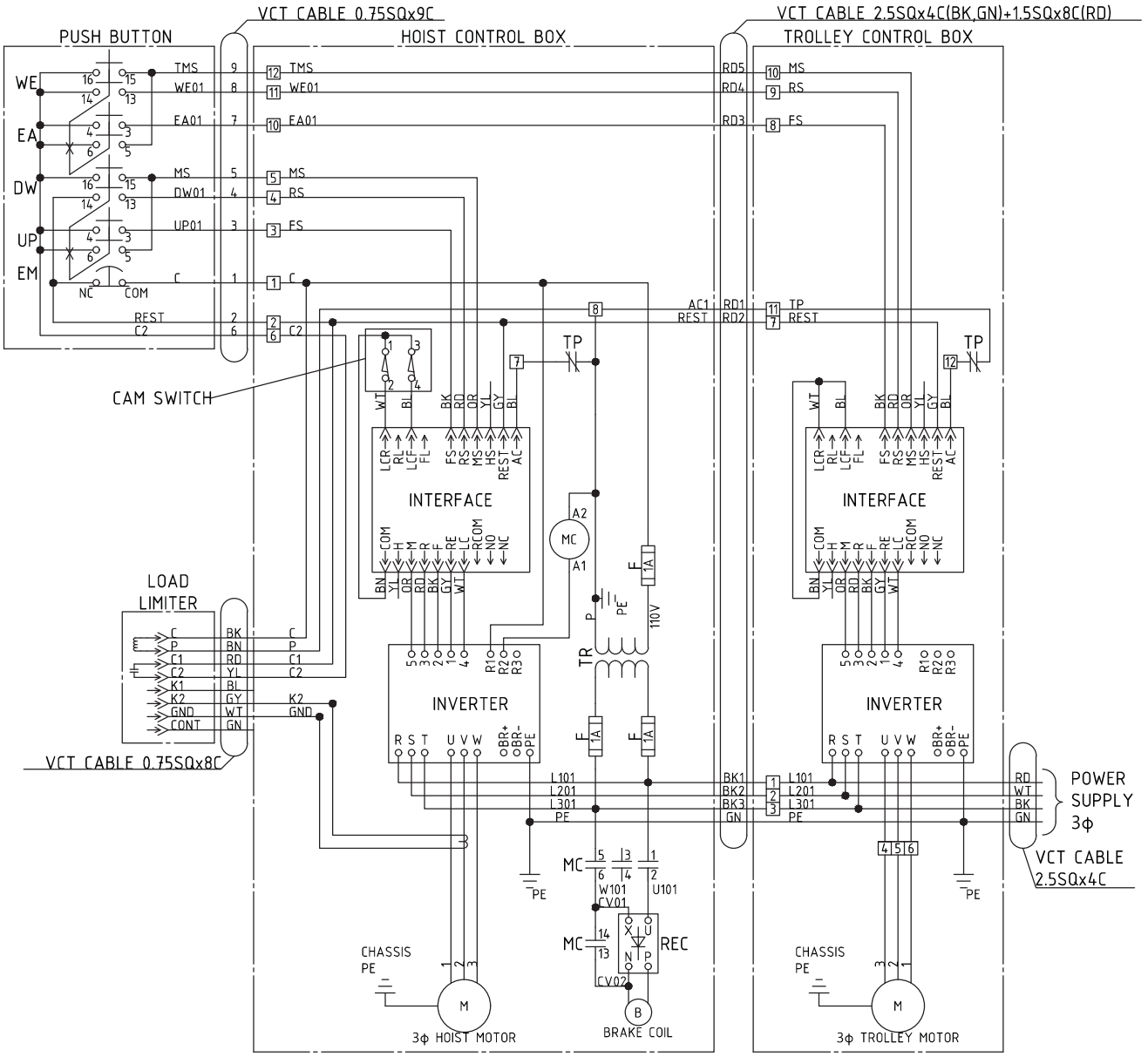
2130060-VFD-230-1, 2130060-VFD-230-1-PT

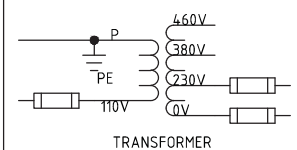


NOTE	ABBREVIATION
1. POWER WIRE : 2.5SQ BLACK	BK : BLACK
2. CONTROL WIRE : 1.5SQ RED	BN : BROWN
3. EARTH WIRE : 2.5SQ GREEN	RD : RED
	YL : YELLOW
MOTOR SPEC.	BL : BLUE
1. HOIST : 3φ 3.5kW 4P	GY : GRAY
	WT : WHITE
	GN : GREEN
	OR : ORANGE
	EM : EMERGENCY STOP
	UP : UP
	DW : DOWN
	EA : EAST
	WE : WEST
	PE : GROUND, EARTH
	TR : TRANSFORMER
	REC : RECTIFIER
	RES : RESISTOR
	TP : MOTOR THERMAL PROTECTOR
	F : FUSE

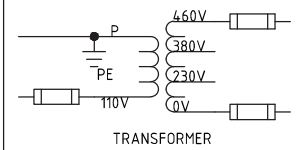
■ Electric Wiring Diagram of Motorized Trolley

2130130-VFD





CIRCUIT DIAGRAM OF 208~230V



CIRCUIT DIAGRAM OF 460V

NOTE
1. POWER WIRE : 2.5SQ BLACK
2. CONTROL WIRE : 1.5SQ RED
3. EARTH WIRE : 2.5SQ GREEN

MOTOR SPEC.
1. HOIST : 3φ 1.8kW 4P
2. TROLLEY : 3φ 0.4kW 6P

ABBREVIATION
BK : BLACK
BN : BROWN
RD : RED
YL : YELLOW
BL : BLUE
GY : GRAY
WT : WHITE
GN : GREEN
OR : ORANGE
EM : EMERGENCY STOP
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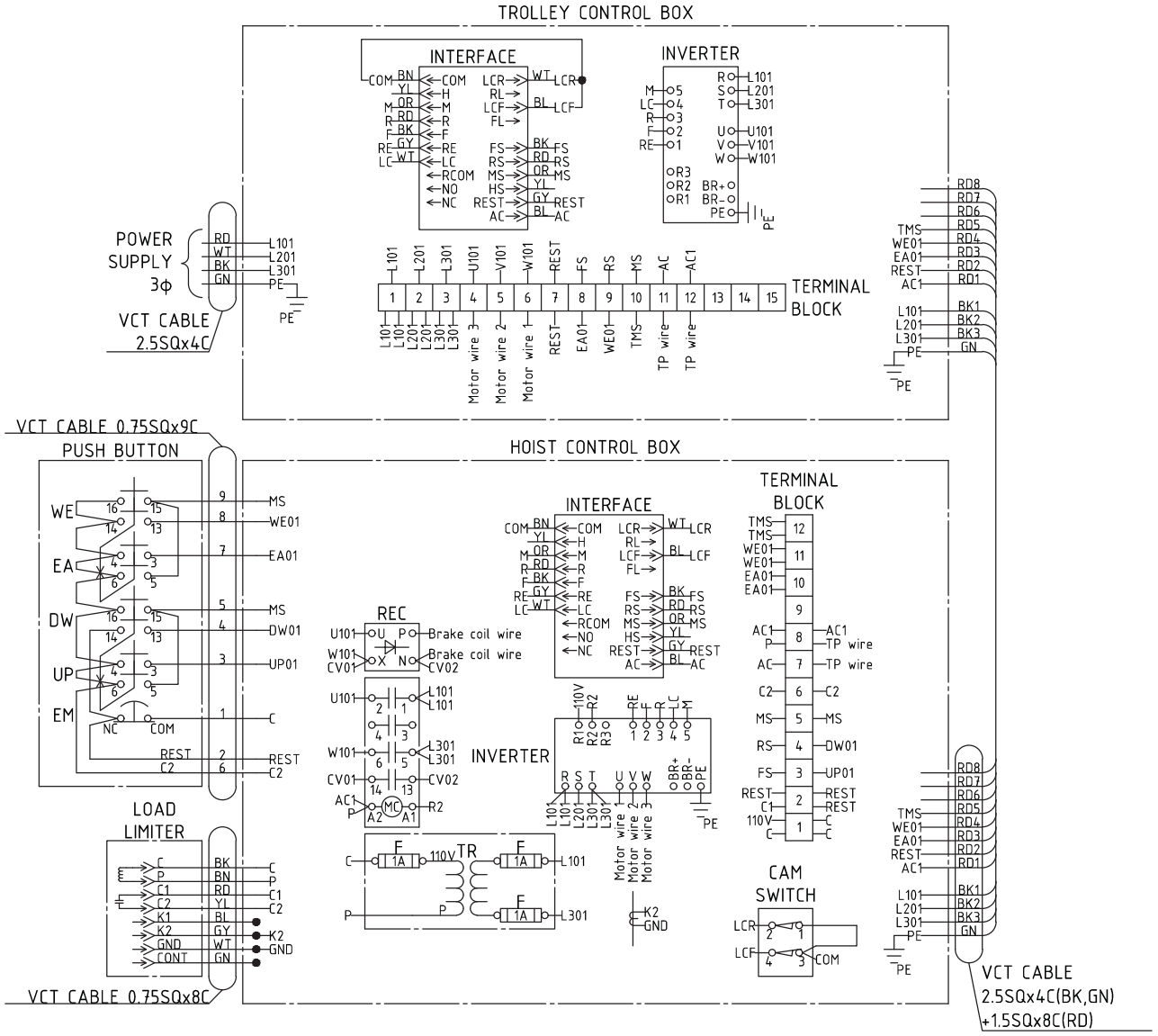
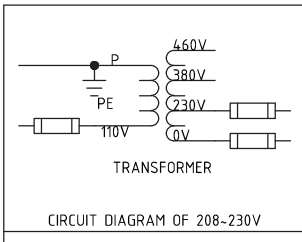
REC : RECTIFIER
RES : RESISTOR
TP : MOTOR THERMAL PROTECTOR
F : FUSE

■ Electric Connection Drawing of Motorized Trolley

2130130-VFD





NOTE
1. POWER WIRE : 2.5SQ BLACK
2. CONTROL WIRE : 1.5SQ RED
3. EARTH WIRE : 2.5SQ GREEN

MOTOR SPEC.
1. HOIST : 3φ 1.8kW 4P
2. TROLLEY : 3φ 0.4kW 6P

ABBREVIATION
BK : BLACK
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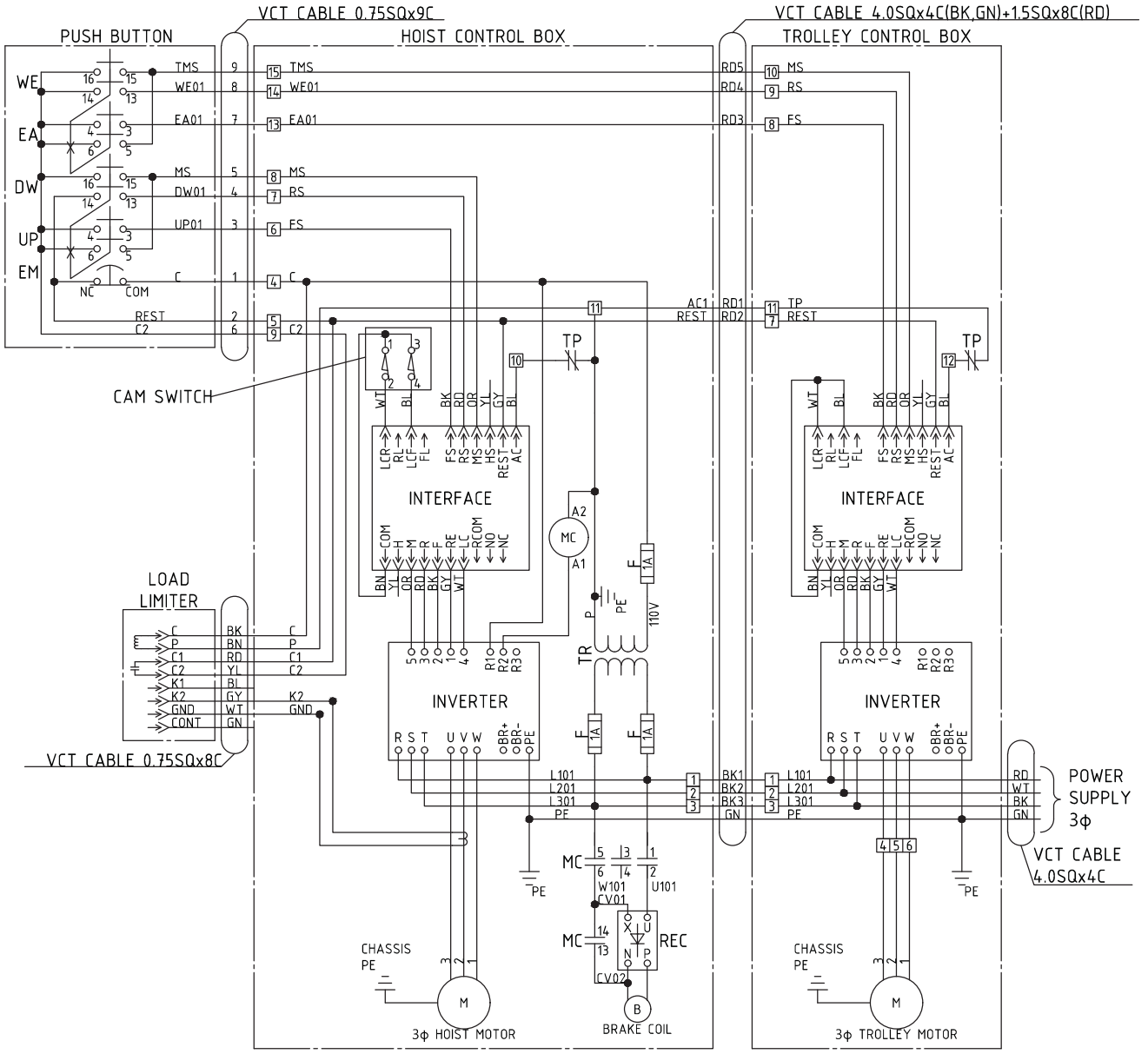
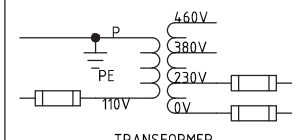
RES : RESISTOR
TP : MOTOR THERMAL PROTECTOR
F : FUSE

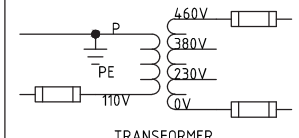
■ Electric Wiring Diagram of Motorized Trolley

2130150-VFD ~ 2130170-VFD





CIRCUIT DIAGRAM OF 208~230V



CIRCUIT DIAGRAM OF 460V

NOTE

1. POWER WIRE : 2.5SQ BLACK
2. CONTROL WIRE : 1.5SQ RED
3. EARTH WIRE : 2.5SQ GREEN

MOTOR SPEC.

1. HOIST : 3φ 3.5kW 4P
2. TROLLEY : 3φ 0.4kW 6P (2ton)
   3φ 0.75kW 6P (3ton~5ton)

ABBREVIATION

BK : BLACK
BN : BROWN
RD : RED
YL : YELLOW
BL : BLUE
GY : GRAY
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GN : GREEN
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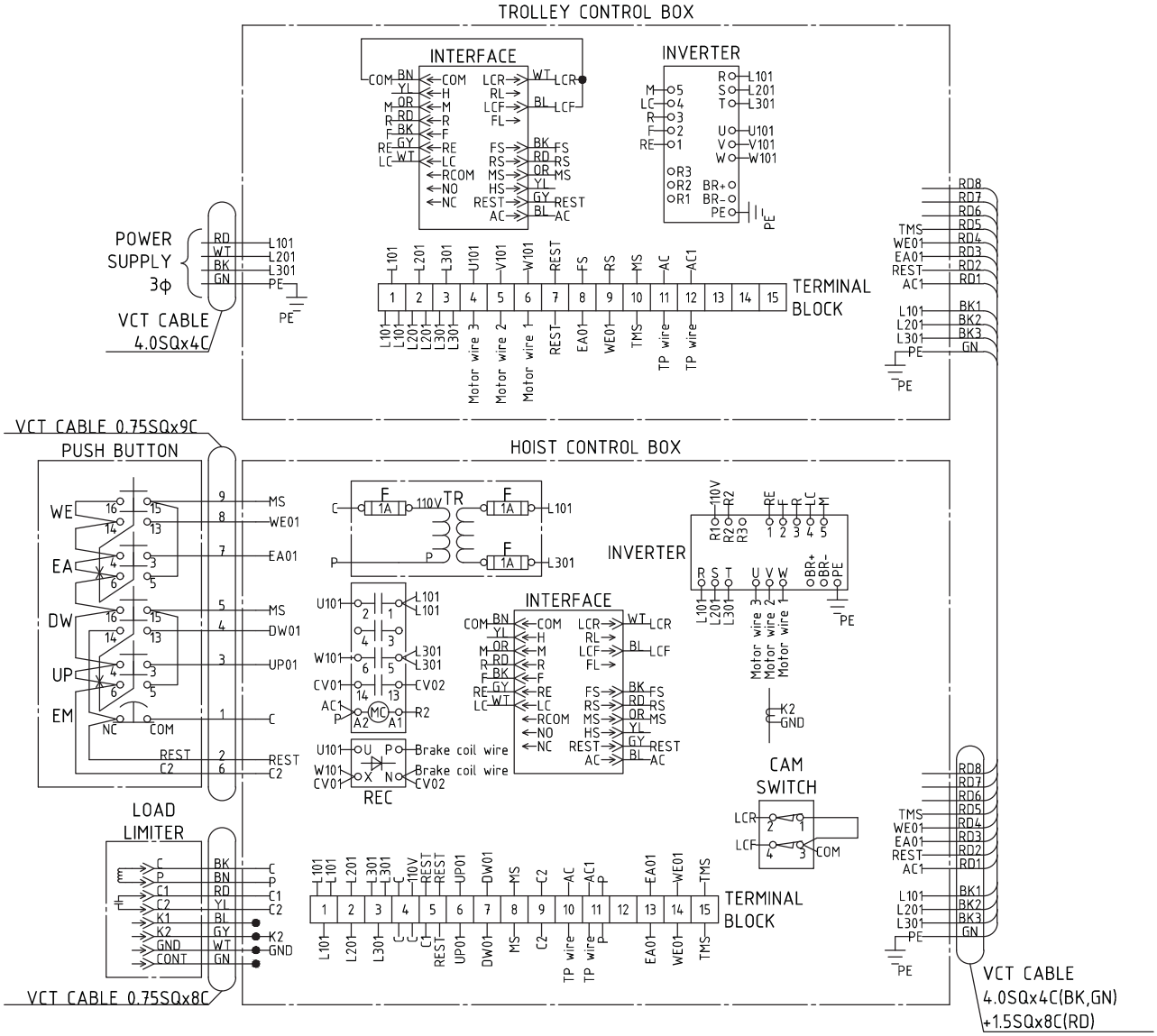
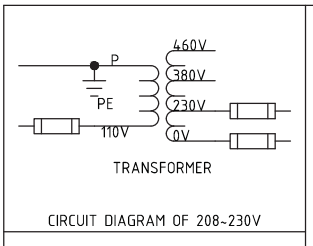
REC : RECTIFIER
RES : RESISTOR
TP : MOTOR THERMAL PROTECTOR
F : FUSE

■ Electric Connection Drawing of Motorized Trolley

2130150-VFD ~ 2130170-VFD





NOTE

1. POWER WIRE : 2.5SQ BLACK
2. CONTROL WIRE : 1.5SQ RED
3. EARTH WIRE : 2.5SQ GREEN

MOTOR SPEC.

1. HOIST : 3φ 3.5kW 4P
2. TROLLEY : 3φ 0.4kW 6P (2ton)
   3φ 0.75kW 6P (3ton~5ton)

ABBREVIATION

BK : BLACK
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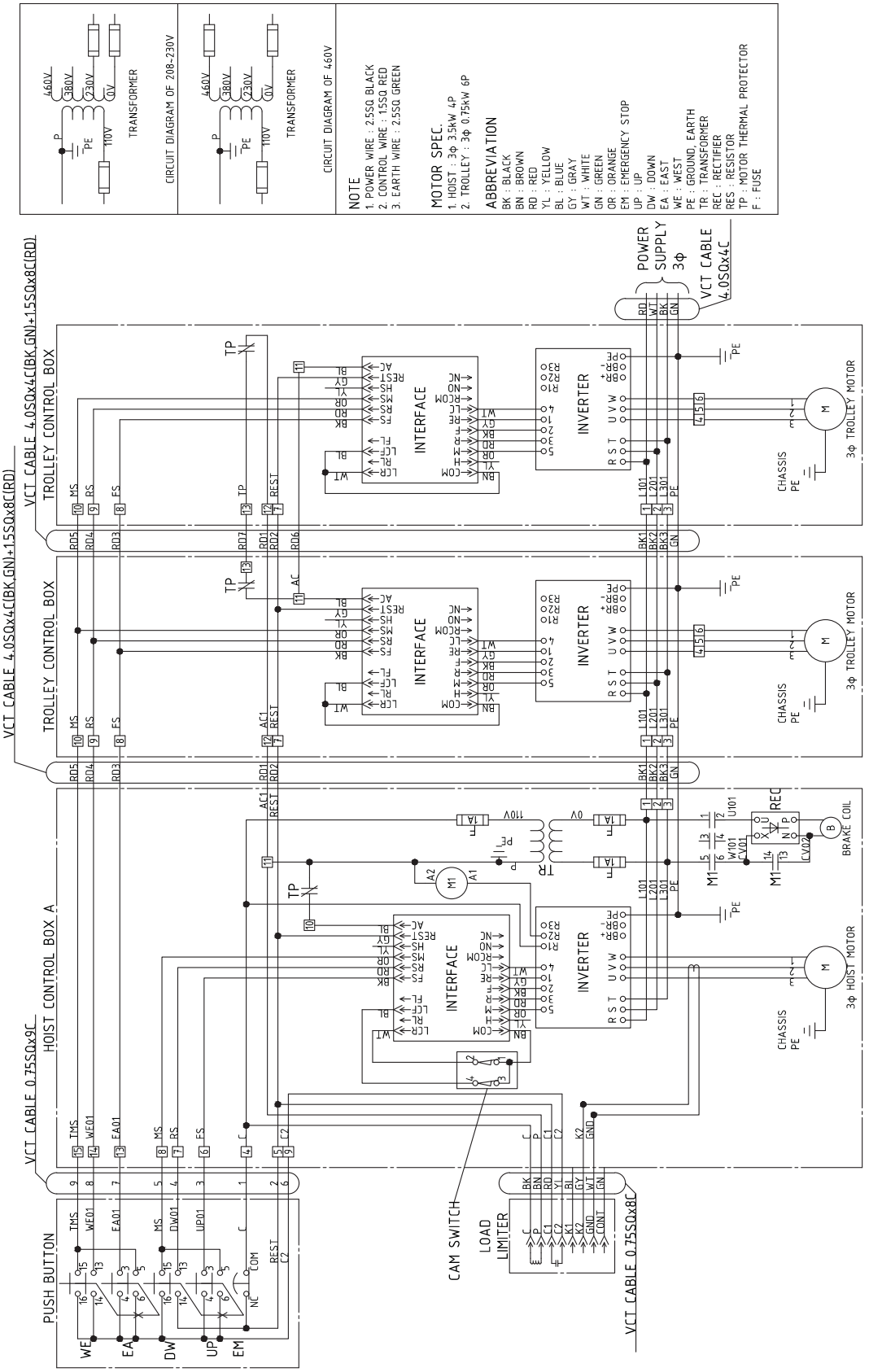
TR : TRANSFORMER
REC : RECTIFIER
RES : RESISTOR
TP : MOTOR THERMAL PROTECTOR
F : FUSE

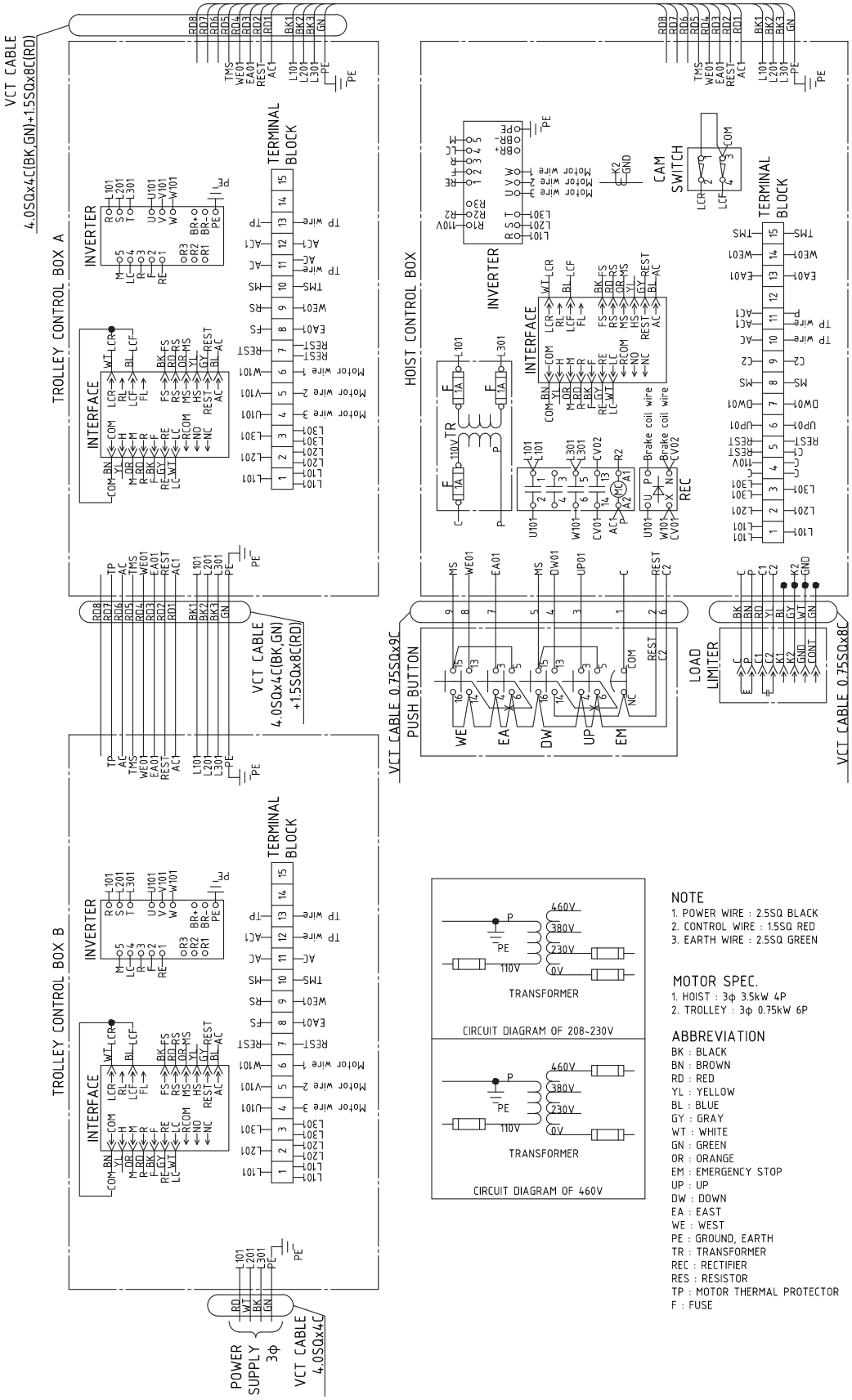
■ Electric Wiring Diagram of Motorized Trolley

2130175-VFD



■ Electric Connection Drawing of Motorized Trolley

2130175-VFD



NOTE
1. POWER WIRE : 2.5SQ BLACK
2. CONTROL WIRE : 1.5SQ RED
3. EARTH WIRE : 2.5SQ GREEN

MOTOR SPEC.
1. HOIST : 3φ 3.5kW 4P
2. TROLLEY : 3φ 0.75kW 6P

ABBREVIATION
BK : BLACK
BN : BROWN
RD : RED
YL : YELLOW
BL : BLUE
GY : GRAY
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GN : GREEN
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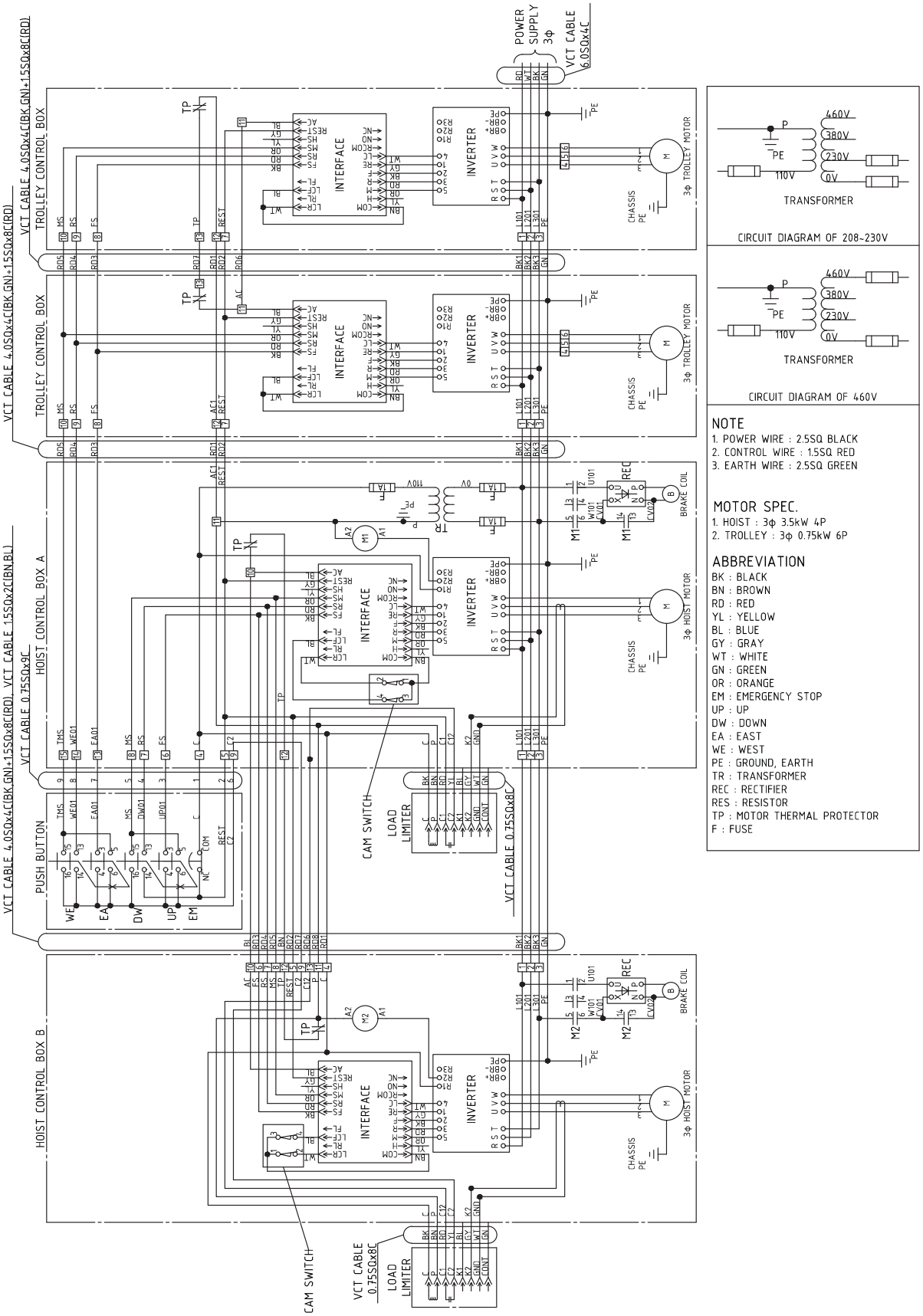
EM : EMERGENCY STOP
UP : UP
DW : DOWN
EA : EAST
WE : WEST
PE : GROUND, EARTH
TR : TRANSFORMER
REC : RECTIFIER
RES : RESISTOR
TP : MOTOR THERMAL PROTECTOR
F : FUSE

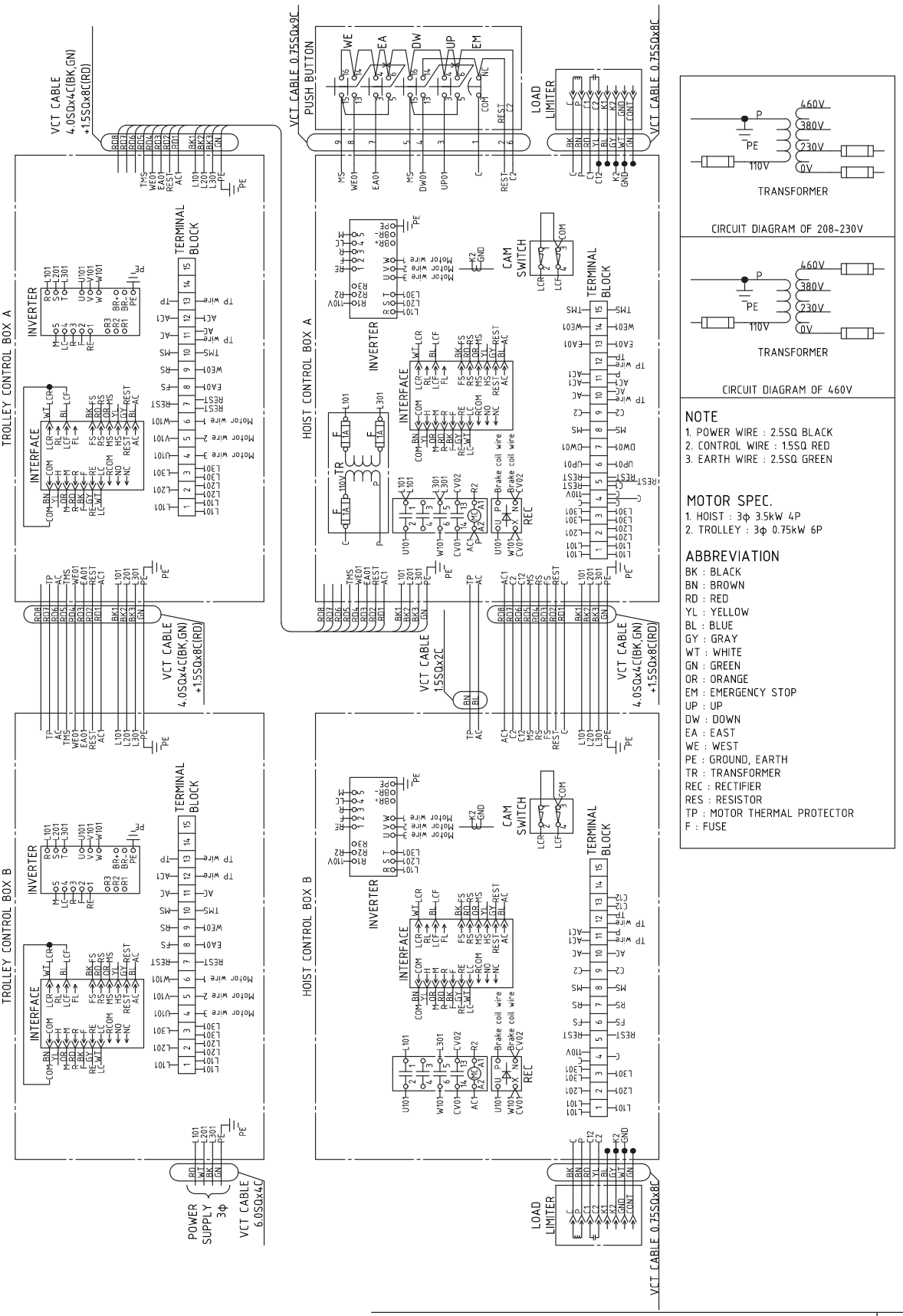
■ Electric Wiring Diagram of Motorized Trolley

2130180-VFD



■ Electric Connection Drawing of Motorized Trolley

2130180-VFD



NOTE

1. POWER WIRE : 2.5SQ BLACK
2. CONTROL WIRE : 1.5SQ RED
3. EARTH WIRE : 2.5SQ GREEN

MOTOR SPEC.

1. HOIST : 3φ 3.5kW 4P
2. TROLLEY : 3φ 0.75kW 6P

ABBREVIATION

BK : BLACK
BN : BROWN
RD : RED
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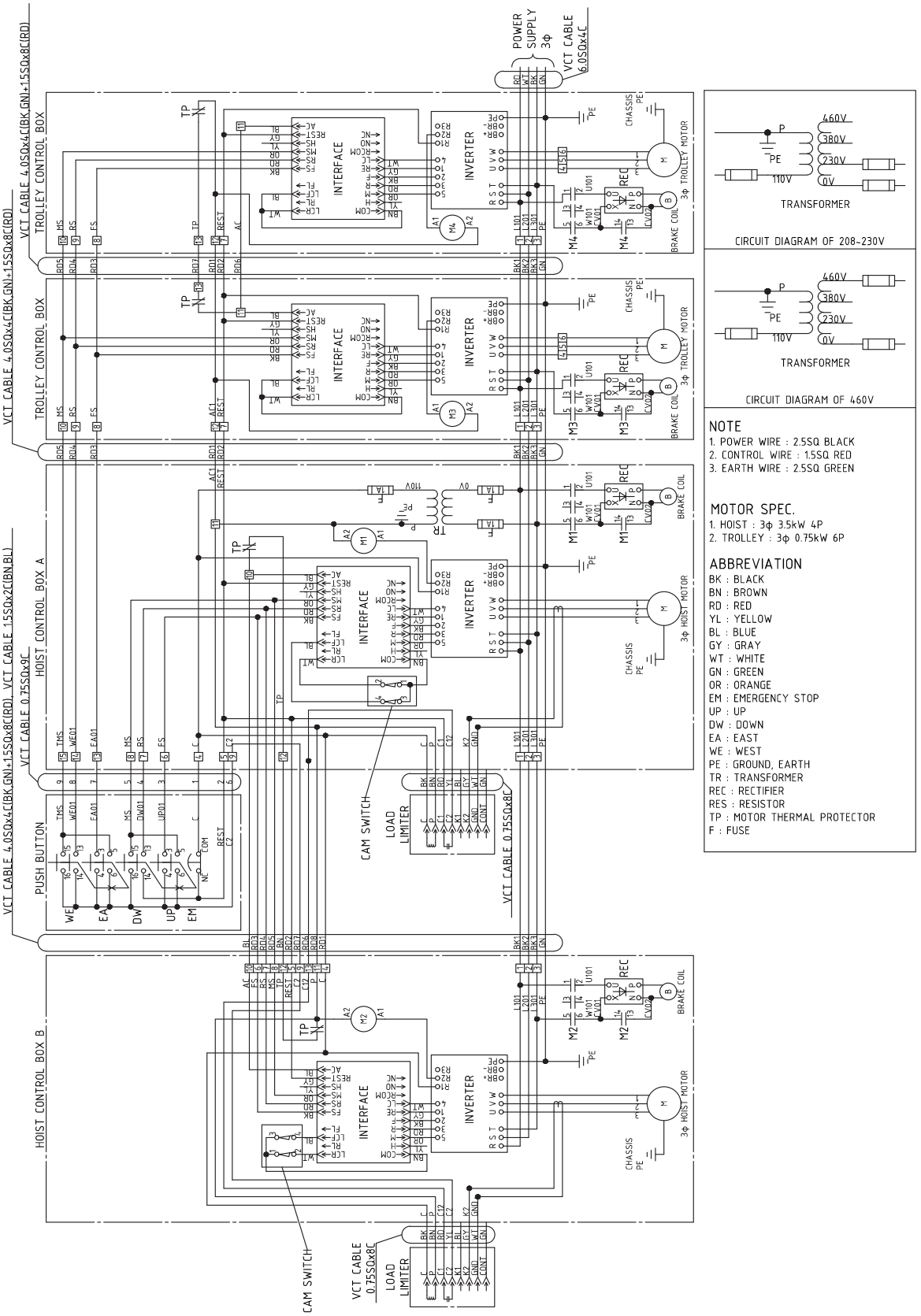
TR : TRANSFORMER
REC : RECTIFIER
RES : RESISTOR
TP : MOTOR THERMAL PROTECTOR
F : FUSE

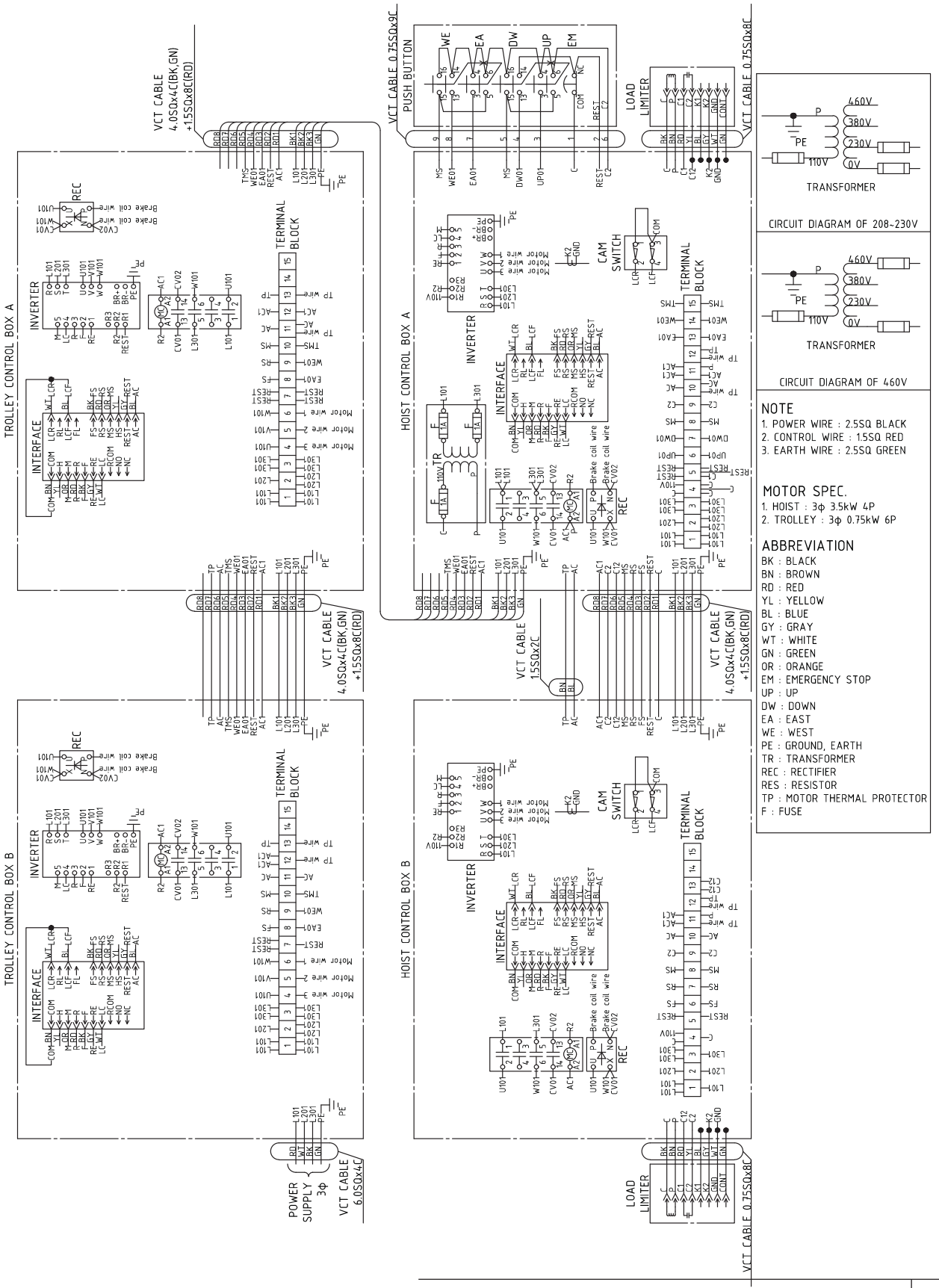
■ Electric Wiring Diagram of Motorized Trolley

2130190-VFD, 2130195-VFD



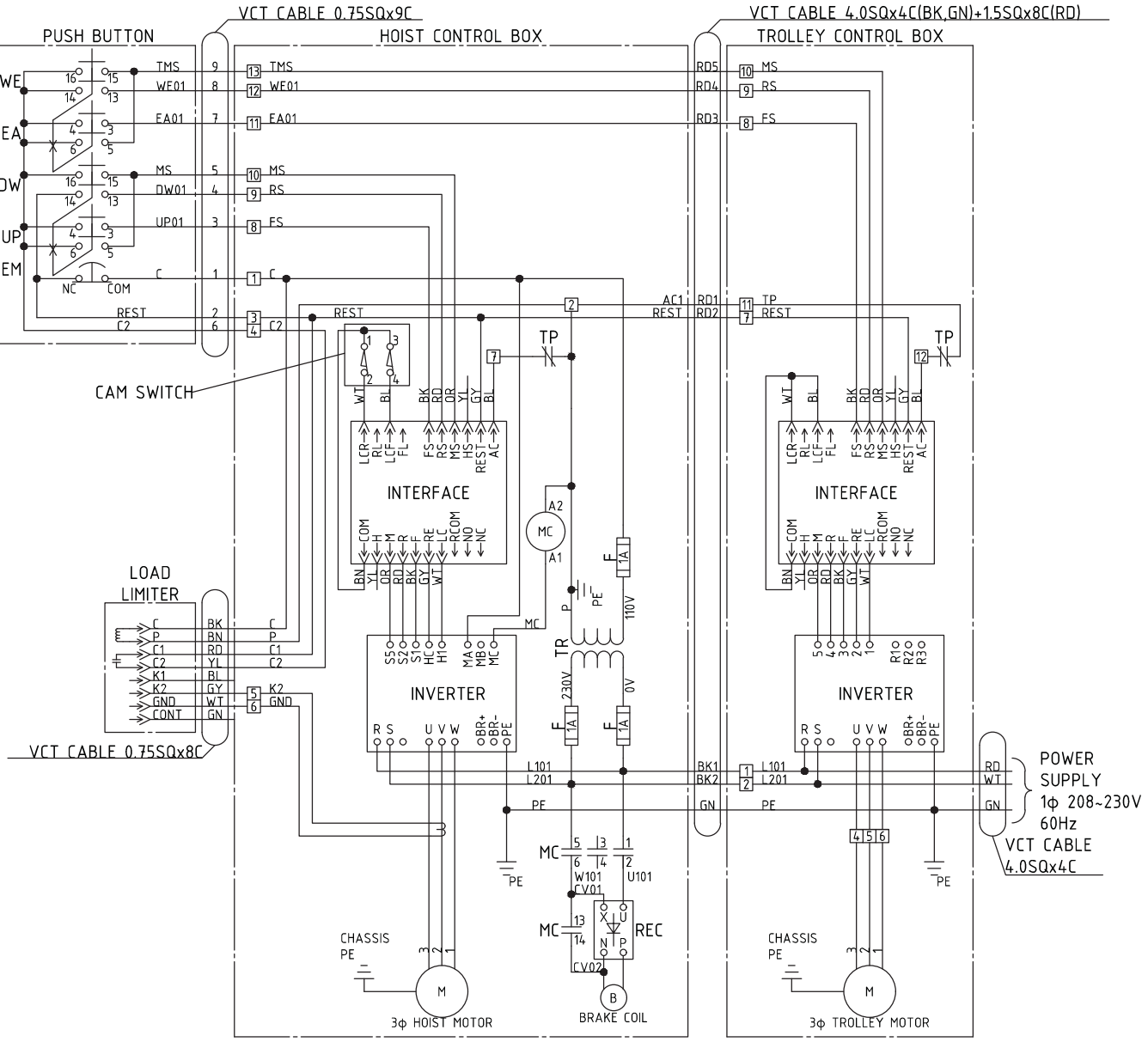
■ Electric Connection Drawing of Motorized Trolley

2130190-VFD, 2130195-VFD



■ Electric Wiring Diagram of Motorized Trolley

2130160-VFD-230-1



NOTE
1. POWER WIRE : 2.5SQ BLACK
2. CONTROL WIRE : 1.5SQ RED
3. EARTH WIRE : 2.5SQ GREEN

MOTOR SPEC.
1. HOIST : 3φ 3.5kW 4P
2. TROLLEY : 3φ 0.75kW 6P

ABBREVIATION
BK : BLACK
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RD : RED
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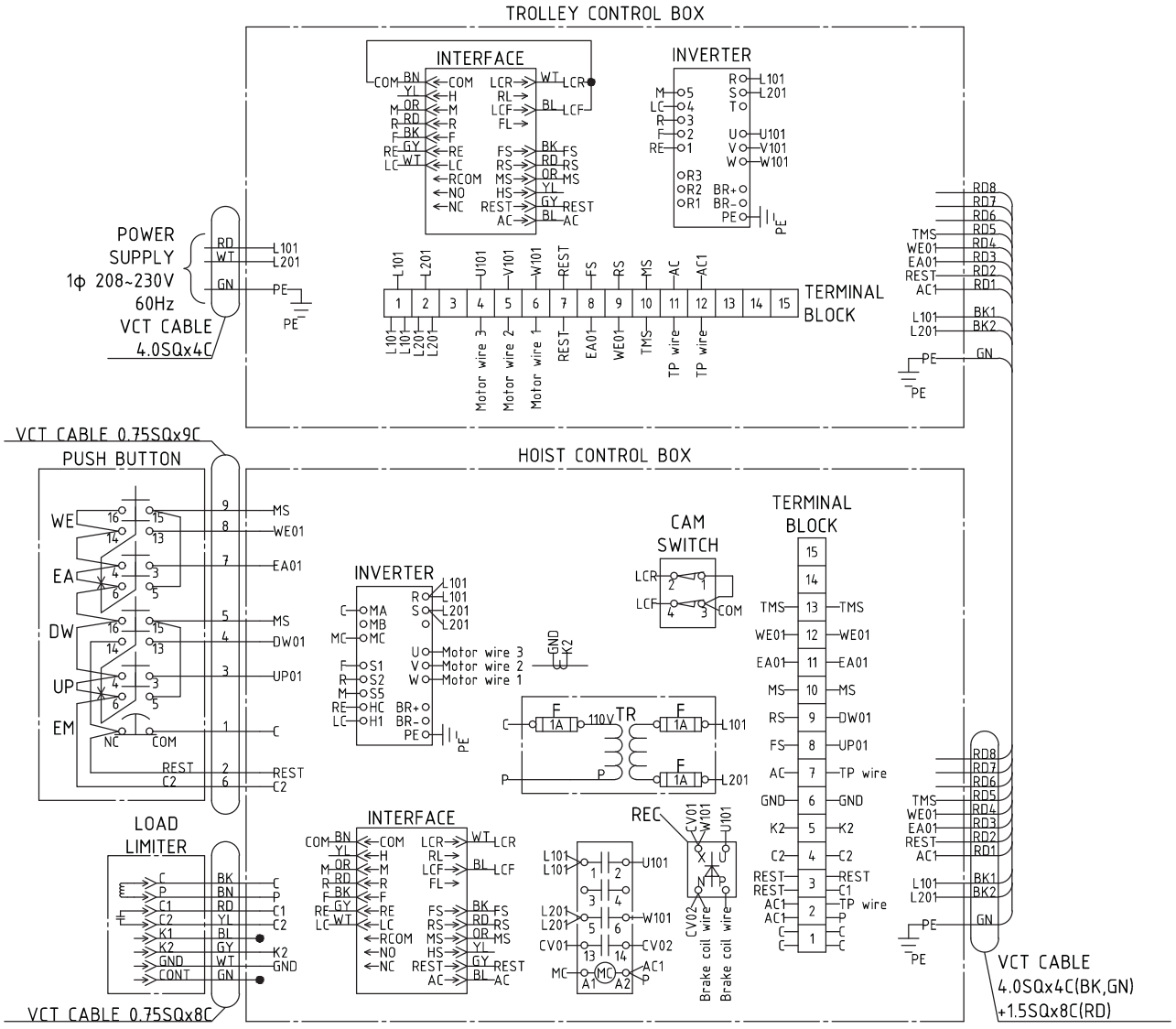
TR : TRANSFORMER
REC : RECTIFIER
RES : RESISTOR
TP : MOTOR THERMAL PROTECTOR
F : FUSE

■ Electric Connection Drawing of Motorized Trolley

2130160-VFD-230-1



NOTE

1. POWER WIRE : 2.5SQ BLACK
2. CONTROL WIRE : 1.5SQ RED
3. EARTH WIRE : 2.5SQ GREEN

MOTOR SPEC.

1. HOIST : 3φ 3.5kW 4P
2. TROLLEY : 3φ 0.75kW 6P

ABBREVIATION

BK : BLACK
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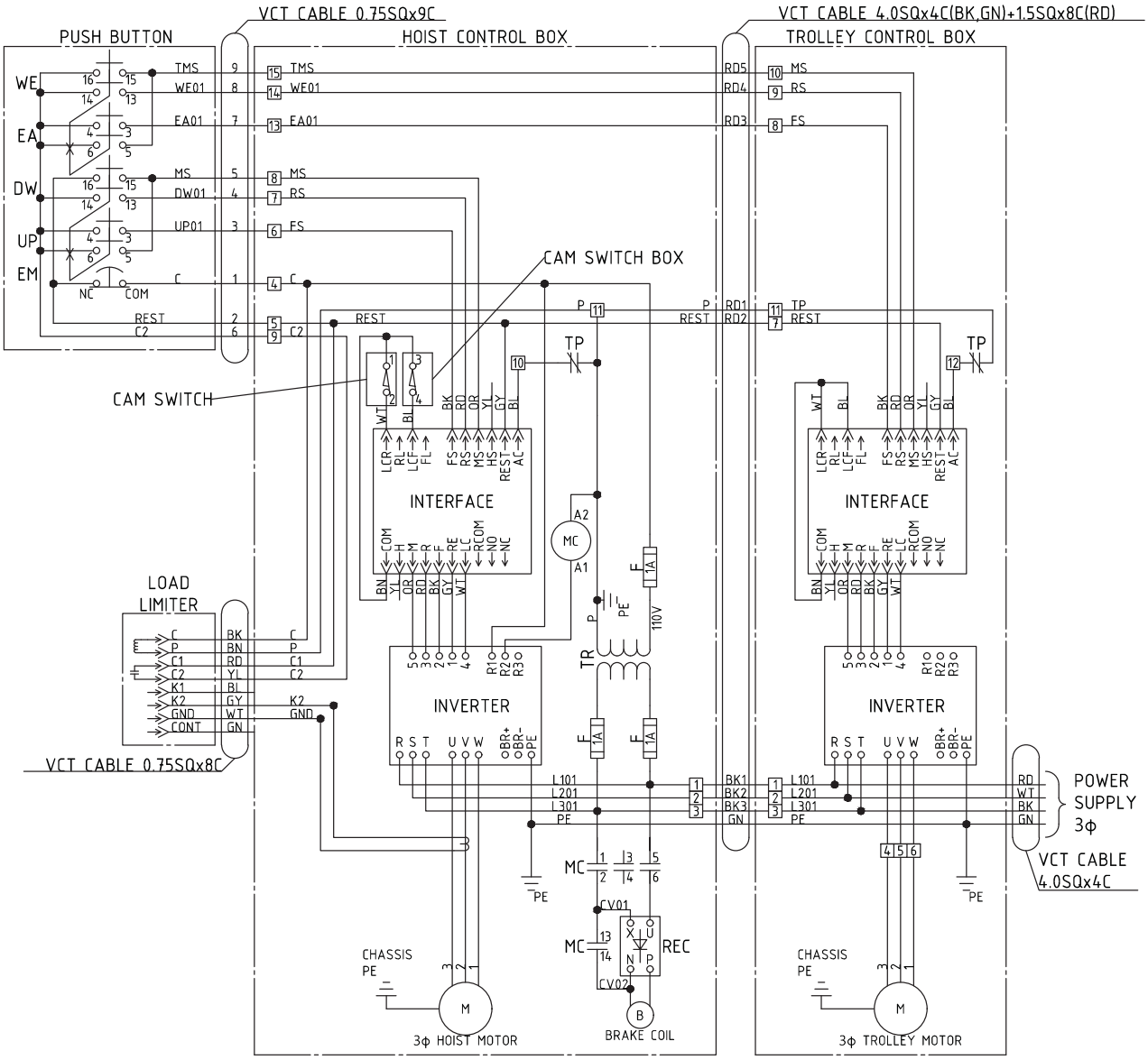
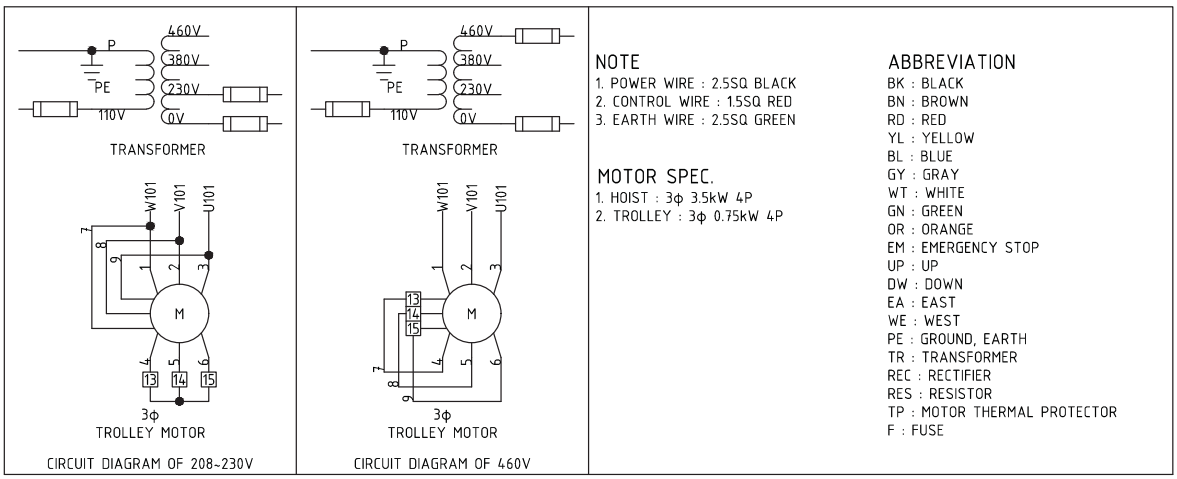
TR : TRANSFORMER
REC : RECTIFIER
RES : RESISTOR
TP : MOTOR THERMAL PROTECTOR
F : FUSE

■ Electric Wiring Diagram of Low Headroom

2130160-VFD-L, 2130170-VFD-L





NOTE

1. POWER WIRE : 2.5SQ BLACK
2. CONTROL WIRE : 1.5SQ RED
3. EARTH WIRE : 2.5SQ GREEN

MOTOR SPEC.

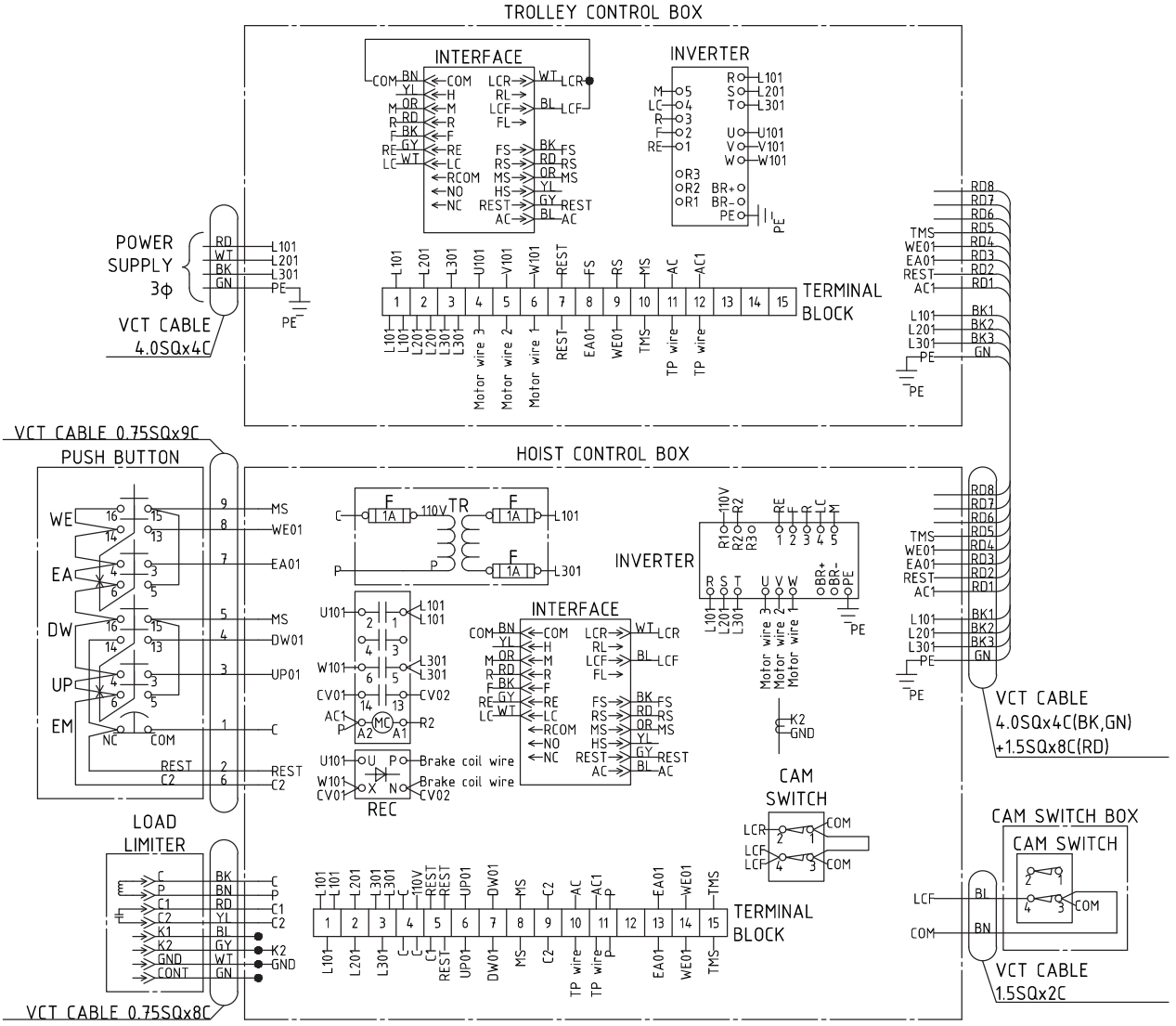
1. HOIST : 3φ 3.5kW 4P
2. TROLLEY : 3φ 0.75kW 4P

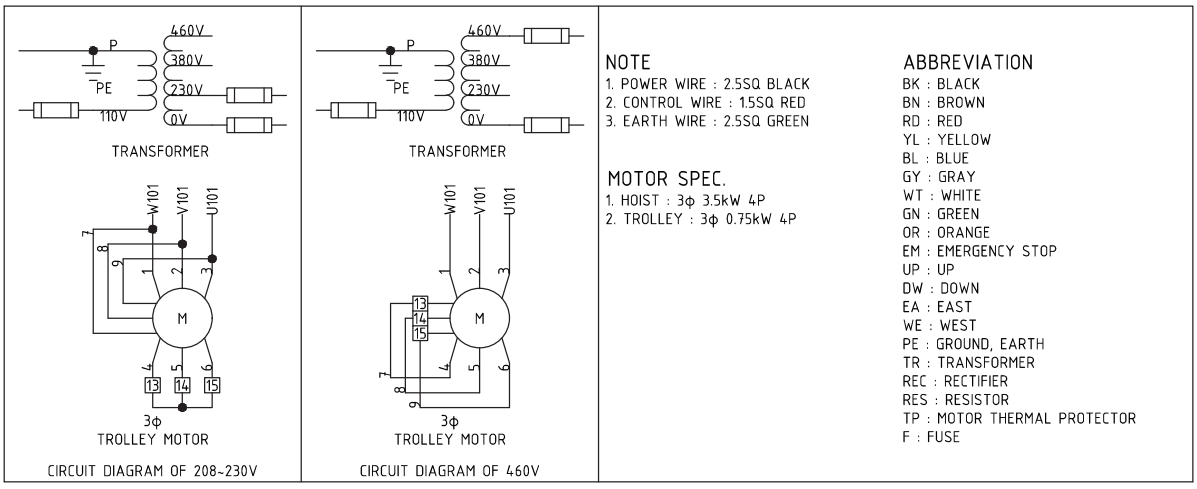
ABBREVIATION

BK : BLACK
BN : BROWN
RD : RED
YL : YELLOW
BL : BLUE
GY : GRAY
WT : WHITE
GN : GREEN
OR : ORANGE
EM : EMERGENCY STOP
UP : UP
DW : DOWN
EA : EAST
WE : WEST
PE : GROUND, EARTH
TR : TRANSFORMER
REC : RECTIFIER
RES : RESISTOR
TP : MOTOR THERMAL PROTECTOR
F : FUSE

■ Electric Connection Drawing of Low Headroom Hoist

2130160-VFD-L, 2130170-VFD-L





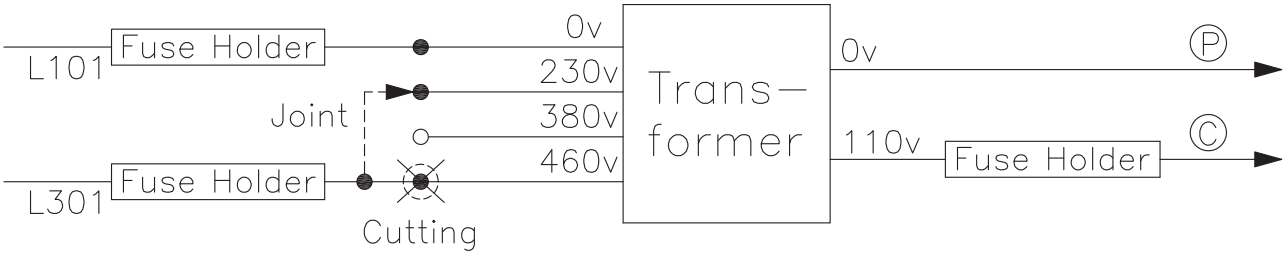
10. Motor Voltage change(Important)

⚠WARNING

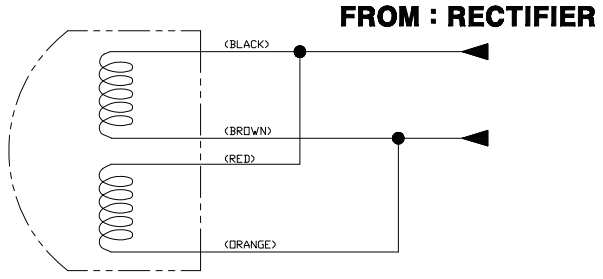
■Motor Voltage change (Important)

1. Please change the current setting figures of the load limiter to its appropriate voltage.
   - ● check the chart on page 48 and 139 for the reference.
2. Transformer Voltage Change

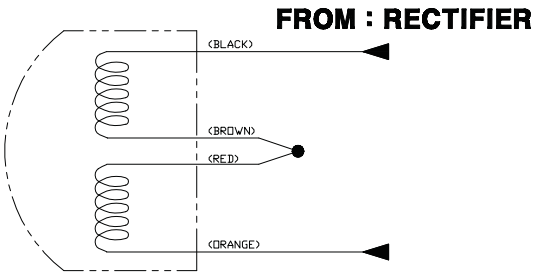
   Example : As shown below, disconnect the Fuse Holder Wire Which connected to 460V of the Transformer and connect the disconnected Fuse Holder wire to 230V of the Trans Former.
3. Brake coil Voltage Change
   - ● check the drawing from page 138 for the reference



NOTE
Fuse : 250v 1A
250v 2A (10,15,20TON)



230V BRAKE COIL CIRCUIT DIAGRAM



460V BRAKE COIL CIRCUIT DIAGRAM

11. Load Limiter Setting Data

■ Load Limiter Setting Data (ACCO 208~230V / 460V Combined)

POWER SOURCE	MODEL		Load Limiter Setting				
			D (start Delay time)	O (Overload time)	R (Reset time)	L	H
208~230V 60Hz	2130020(-PT) 2130030(-PT) 2130040(-PT)	2130120 2130130 2130140	0.7	0.7	0.7	6.4	7.4
	2130050(-PT) 2130060(-PT) 2130065(-PT) 2130070(-PT) 2130075	2130150 2130160 2130165 2130170 2130175	0.7	0.7	0.7	12.0	12.5
	2130080 2130090 2130095	2130180 2130190 2130195	0.7	0.7	0.7	24.0	25.0
	2130030-VFD(-PT)	2130130-VFD	0.7	0.7	0.7	6.5	7.2
	2130050-VFD(-PT) 2130060-VFD(-PT) 2130060-VFD-230-1(-PT) 2130065-VFD(-PT) 2130070-VFD(-PT) 2130075-VFD 2130080-VFD 2130090-VFD 2130095-VFD	2130150-VFD 2130160-VFD 2130160-VFD-230-1 2130165-VFD 2130170-VFD 2130175-VFD 2130180-VFD 2130190-VFD 2130195-VFD	0.7	0.7	0.7	12.5	13.2
460V 60Hz	2130020(-PT) 2130030(-PT) 2130040(-PT)	2130120 2130130 2130140	0.7	0.7	0.7	3.0	3.5
	2130050(-PT) 2130060(-PT) 2130065(-PT) 2130070(-PT) 2130075	2130150 2130160 2130165 2130170 2130175	0.7	0.7	0.7	5.5	6.0
	2130080 2130090 2130095	2130180 2130190 2130195	0.7	0.7	0.7	11.0	12.0
	2130030-VFD(-PT)	2130130-VFD	0.7	0.7	0.7	3.0	3.2
	2130050-VFD(-PT) 2130060-VFD(-PT) 2130065-VFD(-PT) 2130070-VFD(-PT) 2130075-VFD 2130080-VFD 2130090-VFD 2130095-VFD	2130150-VFD 2130160-VFD 2130165-VFD 2130170-VFD 2130175-VFD 2130180-VFD 2130190-VFD 2130195-VFD	0.7	0.7	0.7	6.0	6.4

NOTICE

Above Setting figures are tested at 125% of rated capacity

GENERAL CONDITIONS OF WARRANTY

WARRANTIES: The seller warrants to the original using Buyer thereof that the goods sold under this Agreement are free from defects in workmanship and materials for a period of one year from the date of shipment to the original using Buyer. No other express warranties are given and no affirmation of Seller or Seller's agents, by word or action, shall constitute a warranty. No warranty is made for components and accessories made by others when such items are warranted by their respective manufacturers.

Installation or operation of the equipment in any manner other than as recommended by Seller, shall void the warranty.

Any variations in details between the goods furnished herein and those covered in Buyer's specifications are due to standards of manufacture not to be construed as exceptions to the specifications.

DISCLAIMER OF IMPLIED WARRANTIES:

(a) SELLER MAKES NO WARRANTY OF MERCHANTABILITY IN RESPECT TO THE GOODS SOLD UNDER THIS AGREEMENT.

(b) This sale is made WITHOUT ANY WARRANTY BY SELLER THAT THE GOODS ARE SUITABLE FOR ANY PARTICULAR PURPOSE.

(c) Buyer hereby waives all other warranties, guarantees, obligations, liabilities, rights, and remedies arising by law or otherwise including any obligation or liability of the Seller arising from tort, and Buyer shall indemnify Seller from any liability, loss, damage, or claim arising from Buyer's tortuous use of the goods sold hereby.

REMEDIES:

(a) Under no conditions shall any goods be returned to Seller without its prior written consent.

(b) The Buyer's sole and exclusive remedy for breach of any warranty is limited to Seller furnishing, at its expense, duplicate or repaired parts F.O.B. Seller's plant with installation at Buyer's expense if discovery of a claimed defect occurs during the allowable warranty period, and if Seller's inspection determines a defect exists.

(c) The quantity of material shown by invoice shall in all cases govern settlement for shortages, unless notice of shortage, appropriately documented, is given to the carrier and the Seller upon delivery by the Carrier.

(d) Claims for errors, deficiencies or imperfections shall be deemed waived by the Buyer unless Seller is notified in writing of the basis of such claims within 10 days after discovery of claimed defect and such discovery occurs within the warranted period.

(e) Neither Buyer nor User shall be entitled under this Agreement to recover from Seller any incidental or consequential damages of any nature including but not limited to the cost of any labor expended by others in connection with the goods sold hereby by reason of any alleged nonconformity or breach of warranty on the part of the Seller, nor costs of material or account thereof, nor any lost profits whether determinable or speculative.

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